IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

REDACTED DEFENDANTS' APPENDIX TO RESPONSE IN OPPOSITION TO MOTION FOR PRELIMINARY INJUNCTION

Given the numerous reports, studies, and attachments referenced in Defendants Secretary Marstiller and the Agency for Health Care Administration's response in opposition, for ease of reference, the Defendants provide this appendix. Appendix cites are referred to as "App." in the response in opposition. Below is a table of contents.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on October 3, 2022, I electronically filed the foregoing with the Clerk of Court by using CM/ECF, which automatically serves all counsel of record for the parties who have appeared.

/s/ Mohammad O. Jazil
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Appendix Attachment

1

Florida Medicaid

Generally Accepted Professional Medical Standards Determination on the Treatment of Gender Dysphoria

June 2022

Ron DeSantis, Governor
Simone Marstiller, Secretary

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Introductory Remarks and Abstract

Generally Accepted Professional Medical Standards

The Secretary of the Florida Agency for Health Care Administration requested that the Division of Florida Medicaid review the treatment of gender dysphoria for a coverage determination pursuant to Rule 59G-1.035, Florida Administrative Code (F.A.C.) (See Attachment A for the Secretary's Letter to Deputy Secretary Tom Wallace). The treatment reviewed within this report included "sex reassignment treatment," which refers to medical services used to obtain the primary and/or secondary physical sexual characteristics of a male or female. As a condition of coverage, sex reassignment treatment must be "consistent with generally accepted professional medical standards (GAPMS) and not experimental or investigational" (Rule 59G-1.035, F.A.C., see Attachment B for the complete rule text).

The determination process requires that "the Deputy Secretary for Medicaid will make the final determination as to whether the health service is consistent with GAPMS and not experimental or investigational" (Rule 59G-1.035, F.A.C.). In making that determination, Rule 59G-1.035, F.A.C., identifies several factors for consideration. Among other things, the rule contemplates the consideration of "recommendations or assessments by clinical or technical experts on the subject or field" (Rule 59G-1.035(4)(f), F.A.C.). Accordingly, this report attaches five assessments from subject-matter experts:

- **Attachment C:** Romina Brignardello-Petersen, DDS, MSc, PhD and Wojtek Wiercioch, MSc, PhD: *Effects of Gender Affirming Therapies in People with Gender Dysphoria: Evaluation of the Best Available Evidence*. 16 May 2022.
- **Attachment D:** James Cantor, PhD: *Science of Gender Dysphoria and Transsexualism*. 17 May 2022.
- **Attachment E:** Quentin Van Meter, MD: *Concerns about Affirmation of an Incongruent Gender in a Child or Adolescent*. 17 May 2022.
- **Attachment F:** Patrick Lappert, MD: *Surgical Procedures and Gender Dysphoria*. 17 May 2022.
- **Attachment G:** G. Kevin Donovan, MD: *Medical Experimentation without Informed Consent: An Ethicist's View of Transgender Treatment for Children*. 16 May 2022.

Abstract

Available medical literature provides insufficient evidence that sex reassignment through medical intervention is a safe and effective treatment for gender dysphoria. Studies presenting the benefits to mental health, including those claiming that the services prevent suicide, are either low or very low quality and rely on unreliable methods such as surveys and retrospective analyses, both of which are cross-sectional and highly biased. Rather, the available evidence demonstrates that these treatments cause irreversible physical changes and side effects that can affect long-term health.

Five clinical and technical expert assessments attached to this report recommend against the use of such interventions to treat what is categorized as a mental health disorder (See attachments):

- **Health Care Research:** Brignardello-Petersen and Wiercioch performed a systematic review that graded a multitude of studies. They conclude

that evidence supporting sex reassignment treatments is low or very low quality.

- **Clinical Psychology:** Cantor provided a review of literature on all aspects of the subject, covering therapies, lack of research on suicidality, practice guidelines, and Western European coverage requirements.
- **Plastic Surgery:** Lappert provided an evaluation explaining how surgical interventions are cosmetic with little to no supporting evidence to improve mental health, particularly those altering the chest.
- **Pediatric Endocrinology:** Van Meter explains how children and adolescent brains are in continuous phases of development and how puberty suppression and cross-sex hormones can potentially affect appropriate neural maturation.
- **Bioethics:** Donovan provides additional insight on the bioethics of administering these treatments, asserting that children and adolescents cannot provide truly informed consent.

Following a review of available literature, clinical guidelines, and coverage by other insurers and nations, Florida Medicaid has determined that the research supporting sex reassignment treatment is insufficient to demonstrate efficacy and safety. In addition, numerous studies, including the reports provided by the clinical and technical experts listed above, identify poor methods and the certainty of irreversible physical changes. Considering the weak evidence supporting the use of puberty suppression, cross-sex hormones, and surgical procedures when compared to the stronger research demonstrating the permanent effects they cause, these treatments do not conform to GAPMS and are experimental and investigational.

Health Service Summary

Gender Dysphoria

Frequently used to describe individuals whose gender identity conflicts with their natural-born sex, the term gender dysphoria has a history of evolving definitions during the past decades (Note: This report uses the term "gender" in reference to the construct of male and female identities and the term "sex" when regarding biological characteristics). Prior to the publication of the *Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders* (DSM-V), the American Psychiatric Association (APA) used the diagnosis of gender identity disorder (GID) to describe individuals who sought to transition to the opposite gender. However, behavioral health clinicians sought a revision after determining that using GID created stigma for those who received the diagnosis. This is despite the APA having adopted GID to replace the previous diagnosis of transsexualism for the exact same reason (APA, 2017).[1]

When crafting its new definition and terminology, the APA sought to remove the stigma of classifying as a disorder the questioning of one's gender identity by focusing instead on the psychological distress that such questioning can evoke. This approach argues that individuals seeking behavioral health and transition services are doing so due to experiencing distress and that gender non-conformity by itself is not a mental health issue. This led to the adoption of gender dysphoria in 2013 when the APA released the DSM-V. In addition to using a new term, the APA also differentiated the diagnosis between children and adolescents and adults, listing different characteristics for the two age groups (APA, 2017).

According to the DSM-V, gender dysphoria is defined as "the distress that may accompany the incongruence between one's experienced or expressed gender and one's assigned gender." As for the criteria to receive the diagnosis, the APA issued stricter criteria for children than adolescents and adults. For the former, the APA states that a child must meet six out of eight behavioral characteristics such as having "a strong desire to be of the other gender or an insistence that one is the other gender" or "a strong preference for cross-gender roles in make-believe or fantasy play." The criteria for adults and adolescents are less stringent with individuals only having to meet two out of six characteristics that include "a strong desire to be the other gender" or "a strong desire to be rid of one's primary and/or secondary sexual characteristics." The APA further notes that these criteria can also apply to young adolescents (DSM-V, 2013).

In 2021, the Merck Manual released a slightly different definition for gender dysphoria, citing that the condition "is characterized by a strong, persistent cross-gender identification associated with anxiety, depression, irritability, and often a wish to live as a gender different from the one associated with the

[1] The concept of gender being part of identity and disconnected from biological sex originated during the mid-twentieth century and was publicized by psychologist John W. Money. His research asserted that gender was a complete social construct and separate from biology, meaning that parents and/or caregivers could imprint on a young child (under three years) the identity of a boy or girl. In 1967, Money's theories led to a failed experiment on twin boys where physicians surgically transitioned one to appear as a girl. The twin that underwent sex reassignment never fully identified as a female. However, Money never publicly acknowledged this and reported the experiment as a success. Furthermore, he promoted his conclusions across the scientific community, concealing what actually unfolded. As a result, Money's ideas on gender fluidity served as a basis for performing procedures on children with hermaphroditic features or genital abnormalities. The case reveals how the understanding of a concept (e.g., gender) at any given time can lead to incorrect medical decisions with irreversible consequences (Gaetano, 2015).

sex assigned at birth." Additionally, the Merck Manual further states that "gender dysphoria is a diagnosis requiring specific criteria but is sometimes used more loosely for people in whom symptoms do not reach a clinical threshold" (Merck Manual, 2021). This definition is largely consistent with the DSM-V but does not emphasize the distress component to the same extent.[2]

Like other behavioral health diagnoses classified in the DSM-V, gender dysphoria has the following subtypes:

- **Early-Onset Gender Dysphoria:** This subtype begins during childhood and persists through adolescence into adulthood. It can be interrupted by periods where the individual does not experience gender dysphoria signs and may classify as homosexual (DSM-V, 2013).
- **Late-Onset Gender Dysphoria:** Occurring after puberty or during adulthood, this subtype does not begin until late adolescence and can emerge following no previous signs of gender dysphoria. The APA attributes this partially to individuals who did not want to verbalize their desires to transition (DSM-V, 2013).

Further studies have identified additional subtypes of gender dysphoria. In 2018, Lisa Littman introduced the concept of a rapid-onset subtype. Classified as rapid-onset gender dysphoria (ROGD), it features characteristics such as sudden beginnings during or following puberty. However, it differs from the DSM-V definitions because ROGD is associated with other causes such as social influences (e.g., peer groups, authority figures, and media). In other words, adolescents who had no history of displaying typical gender dysphoria characteristics go through a sudden change in identity following intense exposure to peers and/or media that heavily promotes transgender lifestyles (Littman, 2018). While more long-term studies are needed to confirm whether ROGD is a temporary or long-term condition, Littman's study has initiated discussions regarding potential causes of gender dysphoria as well as introduced a potential subtype.

Additionally, the frequent use of gender dysphoria in clinical and lay discourse has led to a fracturing of the definition. Studies on the topic frequently do not apply the DSM-V's criteria for the diagnosis and overlook certain key features such as distress. In a 2018 review by Zowie Davy and Michael Toze, the authors evaluated 387 articles that examine gender dysphoria and noted stark departures from the APA's definition. They further asserted that the APA intended to "reduce pathologization" by establishing a new definition for gender dysphoria in the DSM-V. This in turn would reduce diagnoses, although as Davy and Toze note, the tendency for the literature to diverge from the APA's definition may result in increased numbers of individuals classified as having gender dysphoria when they do not meet the DSM-V's criteria (Davy and Toze, 2018). This further raises the question of whether individuals are receiving potentially irreversible treatments for the condition when they might not actually have it.

The current usage of gender dysphoria is the result of discussions spanning across decades as demonstrated in the past editions of the DSM. Until 2013, the APA considered having gender identity issues a mental disorder by itself regardless of the presence of psychological distress. That perspective has since shifted to only consider the adverse psychological effects of questioning one's gender as a disorder. In addition, the APA considers gender as part of one's identity, which is not subject to a diagnosis. Whether the APA has shifted its terminology and criteria for gender identity issues due to

[2] Following the release of the Florida Department of Health's guidelines for treating gender dysphoria, Merck removed its definition for "gender dysphoria" from the Merck Manual (Fox News, 2022).

emerging clinical data or cultural changes is another question. In 1994, the APA replaced transsexualism with gender identity disorder as part of the "effort to reduce stigma" (APA, 2017). This raises questions about what influences decisions to revise definitions and criteria; is it social trends or medical evidence?

Behavioral Health Issues Co-Occurring with Gender Dysphoria

Because gender dysphoria pertains directly to the distress experienced by an individual who desires to change gender identities, secondary behavioral health issues can co-occur such as depression and anxiety. If left untreated, these conditions can lead to the inability to function in daily activities, social isolation, and even suicidal ideation. Studies do confirm that adolescents and adults with gender dysphoria report higher levels of anxiety, depression, and poor peer relationships than the general population (Kuper et al, 2019). Other associated conditions include substance abuse, eating disorders, and compulsivity. A significant proportion of individuals with gender dysphoria also have autism spectrum disorder (ASD) (Saleem and Rizvi, 2017). Although the number reporting secondary issues is increased, individuals diagnosed with gender dysphoria do not necessarily constitute the entire population that is gender non-conforming (i.e., does not identify with natal sex), and no information is available breaking down the percentage of those who are non-conforming with gender dysphoria and those who are non-conforming with no distress. Additionally, available research raises questions as to whether the distress is secondary to pre-existing behavioral health disorders and not gender dysphoria. This is evident in the number of adolescents who reported anxiety and depression diagnoses prior to transitioning (Saleem and Rizvi, 2017).

Furthermore, conventional treatments for secondary behavioral health issues are available. These include cognitive behavioral therapy, medication, and inpatient services. The APA reports that treatments for these are highly effective with 80% to 90% of individuals diagnosed with depression responding positively (APA, 2020). In addition, a high percentage of adolescents diagnosed with gender dysphoria had received psychiatric treatment for a prior or co-occurring mental health issue. A 2015 study from Finland by Kaltiala-Heino et al noted that 75% of children seeking sex reassignment services had been treated by a behavioral health professional (Kaltiala-Heino et al, 2015).

Diagnosing Gender Dysphoria

Prior to the publication of the DSM-V, diagnosing individuals experiencing gender identity issues followed a different process. Behavioral health clinicians could assign the diagnosis based on gender non-conformance alone. That has changed since 2013. Today, non-conforming to one's gender is part of personal identity and not a disorder requiring treatment. This change has led professional associations to shift the diagnostic criteria for gender dysphoria to focus on the distress caused by shifting identities (DSM-V, 2013).

For adolescents, the APA identifies "a marked incongruence between one's experienced/expressed gender and natal sex, of at least 6 months' duration" as the core component of gender dysphoria (DSM-V, 2013). What the APA does not elucidate is the threshold for "marked." This raises questions as to whether practitioners exercise uniformity when applying the diagnostic criteria or if they do so subjectively. For example, the WPATH's *Standards of Care for the Health of Transsexual, Transgender, and Gender Non-Conforming People* provides guidance on the processes mental health practitioners should use when assessing for gender dysphoria but offers no benchmarks for meeting diagnostic criteria (WPATH, 2012).

Such processes include evaluating for gender non-conforming behaviors and other co-existing mental disorders like anxiety or depression. This involves not only interviewing the adolescent but also the family in addition to reviewing medical histories. WPATH also asserts that gender dysphoria assessments need to account for peer relationships, academic performance, and provide information of potential treatments. This last component is necessary because it might affect an individual's choices regarding transitioning, particularly if the information does not correspond to the desired outcome (WPATH, 2012).

The diagnosis of gender dysphoria is a relatively recent concept in mental health, being the product of decades of discussion and building upon previous definitions. Instead of treating gender non-conformity as a disorder, behavioral health professionals acknowledge it as part of one's identity and focus on addressing the associated distress. Considering the new criteria, this changes the dynamics of the population who would have qualified for a diagnosis before 2013 and those who would today. Given that desiring to transition into a gender different from natal sex no longer qualifies as a disorder, behavioral health professionals are treating distress and referring adolescents and adults to therapies that are used off-label and pose irreversible effects.

Current Available Treatments for Gender Dysphoria

At present, proposed treatment for gender dysphoria occurs in four stages, beginning with psychological services and ending with sex reassignment surgery. As an individual progresses through each stage, the treatments gradually become more irreversible with surgical changes being permanent. Because of the increasing effects, individuals must have attempted treatment at the previous stage before pursuing the next one (Note: late adolescents and adults have already completed puberty and do not require puberty blockers). Listed in order, the four stages are as follows:

- **Behavioral Health Services:** Psychologists and other mental health professionals are likely the first practitioners individuals with gender dysphoria will encounter. In accordance with clinical guidelines established by the World Professional Association for Transgender Health (WPATH)[3], behavioral health professionals are supposed to "find ways to maximize a person's overall psychological well-being, quality of life, and self-fulfillment." WPATH further discourages services for attempting to change someone's gender identity. Instead, it instructs practitioners to assess for the condition and readiness for puberty blockers or cross-sex hormones while offering guidance to function in a chosen gender. WPATH does assert that the clinicians do need to treat any other underlying mental health issues secondary or co-occurring with gender dysphoria (WPATH, 2012). However, the organization provides conflicting guidance because it also advises practitioners to prescribe cross-sex hormones on demand (Levine, 2018).
- **Puberty Suppression:** Used only on individuals in the earliest stages of puberty (Tanner stage 2), preventing pubertal onset provides additional time to explore gender identities before the physical characteristics of biological sex develop. This treatment is intended to reduce distress and anxiety related to the appearance of adult sexual physical features. To suppress puberty, pediatric endocrinologists inject gonadotropin releasing hormone (Gn-RH) at specific intervals (e.g., 4 weeks or 12 weeks). The Gn-RH suppresses gonadotropin receptors that allow for the

[3] The World Professional Association for Transgender Health asserts that it is a professional organization. However, it functions like an advocacy group by allowing open membership to non-clinicians (WPATH, 2022).

development of primary and secondary adult sexual characteristics. Prior to receiving puberty suppression therapy, individuals must have received a diagnosis of gender dysphoria and have undergone a mental health evaluation (Kyriakou et al, 2020).

- **Cross-Sex Hormones:** For adults and late adolescents (16 years or older), the next treatment phase recommended is taking cross-sex hormones (e.g., testosterone or estrogen) to create secondary sex characteristics. In men transitioning into women, these include breast development and widening around the pelvis. Women who transition into men experience deeper voices, redistribution of fat deposits, and growing facial hair. According to the Endocrine Society, late adolescents who qualify for cross-sex hormones must have a confirmed diagnosis of gender dysphoria from a mental health practitioner with experience treating that population. Some physical changes induced by these hormones are irreversible (Endocrine Society, 2017).
- **Sex Reassignment Surgery:** Sometimes referred to as "gender affirming" surgery, this treatment does not consist of just one procedure but several, depending on the desires of the transitioning individual. Primarily, sex reassignment procedures alter the primary and secondary sexual characteristics. Men transitioning into women (trans-females) undergo a penectomy (removal of the penis), orchiectomy (removal of the testes), and vulvoplasty (creation of female genitals). Other procedures trans-females may undergo include breast augmentation and facial feminization. For women that transition into men (trans-males), procedures include mastectomy (removal of the breasts), hysterectomy (removal of the uterus), oophorectomy (removal of the ovaries), and phalloplasty (creation of male genitals). Because of the complexities involved in phalloplasty, many trans-males do not opt for this procedure and limit themselves to mastectomies. Additionally, the effects of sex reassignment surgery, such as infertility, are permanent (WPATH, 2012).

While some clinical organizations assert that they are the standard of care for gender dysphoria, the U.S. Food and Drug Administration (FDA) currently has not approved any medication as clinically indicated for this condition (Unger, 2018). Although puberty blockers and cross-sex hormones are FDA approved, the FDA did not approve them for treating gender dysphoria, meaning that their use for anything other than the clinical indications listed is off-label (American Academy of Pediatrics, 2014). As for surgical procedures, the FDA does not evaluate or approve them, but it does review all surgical devices (FDA, 2021). In addition, the Endocrine Society concedes that its practice guidelines for sex reassignment treatment does *not* constitute a "standard of care" and that its grades for available services are low or very low (Endocrine Society, 2017).[4]

[4] Disagreement over how to treat gender dysphoria, gender identity disorder, and transsexualism has persisted since sex reassignment surgery first became available in the 1960s. In a 2006 counterargument, Paul McHugh highlights how individuals seeking surgery had other reasons that extended beyond gender identity, including sexual arousal and guilt over homosexuality. In addition, he asserts that undergoing sex reassignment procedures did not improve a patient's overall behavioral health and that providing a "surgical alteration to the body of these unfortunate people was to collaborate with a mental disorder rather than to treat it" (McHugh, 2006).

Literature Review: Introduction

Currently, an abundance of literature and studies on gender dysphoria is available through academic journals, clinical guidelines, and news articles. Similar to other mental health issues, the material addresses a broad range of topics consisting of available treatments, etiology (i.e., causes), risks, benefits, and side effects. Although most stories reported by the media indicate that treatments such as cross-sex hormones and sex reassignment surgery are the most effective, research reveals that numerous questions still exist. These include what are the long-term health effects of taking cross-sex hormones, what are the real causes of gender dysphoria, and how many individuals that transition will eventually want to revert to their natal sex. Additionally, much of the available research is inconclusive regarding the effectiveness of sex reassignment treatments with multiple studies lacking adequate sample sizes and relying on subjective questionnaires. While much of the scientific literature leans in favor of cross-sex hormones and surgery as options for improving the mental health of individuals with gender dysphoria, it does not conclusively demonstrate that the benefits outweigh the risks involved, either short or long-term. What studies do reveal with certainty is that sex reassignment surgery and cross-sex hormones pose permanent effects that can result in infertility, cardiovascular disease, and disfigurement. All of this indicates that further research is necessary to validate available treatments for gender dysphoria. Thus, physicians, who recommend sex reassignment treatment, are not adhering to an evidence-based medicine approach and are following an eminence-based model.

The following literature review addresses the multiple facets of this condition and presents areas of ongoing debate and persisting questions. Beginning with the condition's etiology and continuing with evaluations of puberty blockers, cross-sex hormones, and surgery, the review explains each area separately and in context of gender dysphoria at large. Additionally, the review provides an analysis on available research on mental health outcomes as well as the condition's persistence into adulthood. Taken as a whole, the available studies demonstrate that existing gender dysphoria research is inconclusive and that current treatments are used to achieve cosmetic benefits while posing risky side effects as well as irreversible changes.

Literature Review: Etiology of Gender Dysphoria

What causes gender dysphoria is an ongoing debate among experts in the scientific and behavioral health fields. Currently, the research indicates that diagnosed individuals have higher proportions of autism spectrum disorder (ASD), history of trauma or abuse, fetal hormone imbalances, and co-existing mental illnesses. Also, experts acknowledge that genetics may factor into gender dysphoria. Another potential cause is social factors such as peer and online media influence. At the moment, none of the studies provides a definite cause and offer only correlations and weakly supported hypotheses. In addition, evidence favoring a biological explanation is highly speculative. However, the research does raise questions about whether treatments with permanent effects are warranted in a population with disproportionately high percentages of ASD, behavioral health problems, and trauma.

In a 2017 literature review by Fatima Saleem and Syed Rizvi, the authors examine gender dysphoria's numerous potential causes and the remaining questions requiring further research. In conclusion, the pair indicate that associations exist between the condition and ASD, schizophrenia, childhood abuse, genetics, and endocrine disruption chemicals but that more research is needed to improve understanding of how these underlying issues factor into a diagnosis. Throughout the review, Saleem and Rizvi identify the following as potential contributing elements to the etiology of gender dysphoria:

- **Neuroanatomical Etiology:** During fetal development, the genitals and brain develop during different periods of a pregnancy, the first and second trimesters respectively. Because the processes are separate, misaligned development is possible where the brain may have features belonging to the opposite sex. The authors identify one study where trans-females presented with a "female-like putamen" (structure at the base of the brain) when undergoing magnetic resonance imaging (MRI) scans.[5]
- **Psychiatric Associations:** Saleem and Rizvi identify multiple studies reporting that individuals with gender dysphoria have high rates of anxiety and depressive disorders with results ranging as high as 70% having a mental health diagnosis. In addition, the pair note that schizophrenia may also influence desires to transition. However, the review does not assess whether the mental health conditions are secondary to gender dysphoria.
- **Autism Spectrum Disorder:** Evidence suggests a significant percentage of individuals diagnosed with gender dysphoria also have ASD. The authors note that the available studies only establish a correlation and do not identify mechanisms for causation.
- **Childhood Abuse:** Like the above causes, Saleem and Rizvi note that those with gender dysphoria tended to experience higher rates of child abuse across all categories, including neglect, emotional, physical, and sexual.
- **Endocrine Disruptors:** Although this cause still requires substantial research, it is a valid hypothesis regarding how phthalates found in plastics can create an imbalance of testosterone in fetuses during gestation, which can potentially lead to gender dysphoria. The authors point to one study that makes this suggestion.

[5] Research on neuroanatomical etiology for gender dysphoria remains highly speculative due to limitations of brain imaging (Mayer and McHugh, 2016). In addition, neuroscience demonstrates that exposures to certain environments and stimuli as well as behaviors can affect brain changes (Gu, 2014). Furthermore, available research indicates that male and female brains have different physical characteristics but cannot be placed in separate categories due to extensive overlap of white/grey matter and neural connections (Joel et al, 2015).

Saleem and Rizvi's review reveal that gender dysphoria's etiology can have multiple factors, most of which require treatments and therapies not consisting of cross-sex hormones or surgery. (Saleem and Rizvi, 2017).

Out of the research on the condition's etiology, a large portion focuses on the correlation with ASD. One of the more substantial studies by Van der Miesen et al published in 2018 evaluates 573 adolescents and 807 adults diagnosed with ASD and compares them to 1016 adolescents and 846 adults from the general population. The authors' findings note that adolescents and adults with ASD were approximately 2.5 times more likely to indicate a desire of becoming the opposite sex. Although the methodology used to reach this conclusion consisted of surveys where respondents had a choice of answering "never," "sometimes," or "often," the results correspond with those of similar studies. Van der Miesen et al also indicate that most responses favoring a change in gender responded with "sometimes." Additionally, the authors do not state how many in their sample group actually had a gender dysphoria diagnosis. (Van der Miesen et al, 2018).

Another study by Shumer et al from 2016 utilizes a smaller sample size (39 adolescents) referred to an American hospital's gender clinic. Unlike Van der Miesen et al's research, Shumer et al evaluate subjects with a diagnosis of gender dysphoria for possible signs of ASD or Asperger's syndrome. Their findings revealed that 23% of patients presenting at the clinic would likely have one of the two conditions. Possible explanations for the high percentage are the methods used to gather the data. Shumer et al requested a clinical psychologist to administer the Asperger Syndrome Diagnostic Scale to the parents of the sample patients, four of whom already had an ASD diagnosis. The authors conclude that the evidence to support high incidence of gender dysphoria in individuals with ASD is growing and that further research is needed to determine the specific cause (Shumer et al, 2016).

Research indicating a strong correlation between ASD and gender dysphoria is not the only area where new studies are emerging. Discussions about the effects of prenatal testosterone levels are also becoming more prevalent. One such example is Sadr et al's 2020 study that looks at the lengths of the index and ring fingers (2D:4D) of both left and right hands of 203 individuals diagnosed with gender dysphoria. The authors used this method because prenatal testosterone levels can affect the length ratios of 2D:4D. By comparing the ratios of a group with gender dysphoria to a cohort from the general population, Sadr et al could assess for any significant difference. Their results indicated a difference in trans-females who presented with more feminized hands. For trans-males, the difference was less pronounced. The results for both groups were slight, and the meta-analysis that accompanies the study notes no statistically significant differences in multiple groups from across cultures. However, Sadr et al further assert that the evidence strongly suggests elevated prenatal testosterone levels in girls and reduced amounts in boys may contribute to gender dysphoria, requiring additional research (Sadr et al, 2020).

In addition to biological factors and correlations with ASD, researchers are exploring psychological and social factors to assess their role in gender dysphoria etiology. This literature examines a range of potential causative agents, including child abuse, trauma, and peer group influences. One such study by Kozlowska et al from 2021 explores patterns in children with high-risk attachment issues who also had gender dysphoria. The authors wanted to assess whether past incidents of abuse, loss, or trauma are associated with higher rates of persons desiring to transition. As a basis, Kozlowska et al cite John Bowlby's research on childhood brain development, noting that the process is not linear and depends

heavily on lived experiences. The study further acknowledges that biological factors combined with life events serve as the foundation for the next developmental phase and that early poor-quality attachment issues increase the risk for psychological disorders in adolescence and adulthood. Such disorders include mood and affective disorders, suicidal ideations, and self-harm. Kozlowska et al also cite other studies that indicate a high correlation between gender dysphoria and "adverse childhood events" and further assert that the condition "needs to be conceptualized in the context of the child's lived experience, and the many different ways in which lived experience is biologically embedded to shape the developing brain and to steer each child along their developmental pathway" (Kozlowska et al, 2021).

For their study, Kozlowska et al recruited 70 children diagnosed with gender dysphoria and completed family assessments going back three generations. This in-depth level was necessary to ascertain any and all events that could affect a child's developmental phases. Additionally, the researchers individually assessed the diagnosed children. To establish comparisons, Kozlowska et al performed assessments on a non-clinical group and a mixed-psychiatric group. Their results demonstrate that children with gender dysphoria have significantly higher rates of attachment issues as well as increased reports of "adverse childhood events" such as trauma (e.g., domestic violence and physical abuse). Furthermore, the authors indicate that a high proportion of families reported "instability, conflict, parental psychiatric disorder, financial stress, maltreatment events, and relational ruptures." These results led Kozlowska et al to conclude that gender dysphoria can be "associated with developmental pathways – reflected in at-risk patterns of attachment and high rates of unresolved loss and trauma – that are shaped by disruptions to family stability and cohesion." The study also cites that treatment requires "a comprehensive biopsychosocial assessment with the child and family, followed by therapeutic interventions that address, insofar as possible, the breadth of factors that are interconnected with each particular child's presentation" (Kozlowska et al, 2021).

This recent study raises questions regarding the medical necessity of gender dysphoria treatments such as puberty blockers and cross-sex hormones for adolescents. If high percentages of children diagnosed with gender dysphoria also have histories of trauma and attachment issues, should conventional behavioral health services be utilized without proposing treatments that pose irreversible effects? Would that approach not provide additional time to address underlying issues before introducing therapies that pose permanent effects (i.e., the watchful waiting approach)?

Aside from the notion that childhood abuse and adversity can potentially cause gender dysphoria, other possible explanations such as social factors (e.g., peer influences and media) may be contributing factors. Research on rapid onset gender dysphoria (ROGD) links this phenomenon to peer and social elements. In an analysis utilizing parent surveys, Lisa Littman asserts that the rapid rise of ROGD is not associated with the traditional patterns of gender dysphoria onset (i.e., evidence of an individual's gravitation to the opposite sex documented over multiple years) but rather exposure to "social and peer contagion." Littman uses this term in the context of definitions cited in academic literature, stating that "social contagion is the spread of affect or behaviors through a population" and that "peer contagion is the process where an individual and peer mutually influence each other in a way that promotes emotions and behaviors that can potentially undermine their own development or harm others." Examples of the latter's negative effects include depression, eating disorders, and substance abuse. What prompted this study is a sudden increase of parents reporting their daughters declaring themselves to be transgender without any previous signs of gender dysphoria. Littman also indicates

that these parents cite that their daughters became immersed in peer groups and social media that emphasized transgender lifestyles (Littman, 2018).

In addition to identifying characteristics of ROGD, the study examines social media content that provides information to adolescents regarding how to obtain cross-sex hormones through deception of physicians, parents, and behavioral health professionals. Such guidance includes coaching on how to fit a description to correspond to the DSM-V and pressures to implement treatment during youth to avoid a potential lifetime of unhappiness in an undesirable body. Littman further states that "online content may encourage vulnerable individuals to believe that non-specific symptoms and vague feelings should be interpreted as gender dysphoria." The study also notes that none of the individuals assessed using the parental surveys qualified for a formal diagnosis using the DSM-V criteria (Littman, 2018).

The survey responses revealed similar data to Kozlowska et al's study with 62.5% of the adolescents having a mental health or neurodevelopmental disorder. Furthermore, the responses indicate a rapid desire to bypass behavioral health options and pursue cross-sex hormones. 28.1% of parents surveyed stated that their adolescents did not want psychiatric treatments. One parent even reported that their daughter stopped taking prescribed anti-depressants and sought advice only from a gender therapist. Littman's research further reveals that 21.2% of parents responded that their adolescent received a prescription for puberty blockers or cross-sex hormones at their first visit (Littman, 2018). These responses indicate that practitioners do not uniformly follow clinical guidelines when making diagnoses or prescribing treatment.

In the discussion, Littman proposes two hypotheses for the appearance of ROGD. The first states that social and peer contagion is one of the primary causes, and the second asserts that ROGD is a "maladaptive coping mechanism" for adolescents dealing with emotional and social issues. While the surveyed parents did not report early signs of gender dysphoria, a majority noted that their daughters had difficulty in handling negative emotions. Littman concludes that ROGD is distinct from gender dysphoria as described in the DSM-V and that further research is needed to assess whether the condition is short or long-term (Littman, 2018). What the study does not explore, but raises the question, is what proportion of those being treated for gender dysphoria are adolescents with ROGD.

Littman's study along with the others reveal that the causes of gender dysphoria are still a mystery and could have multiple biological and social elements. Because of this ongoing uncertainty, treatments that pose irreversible effects should not be utilized to address what is still categorized as a mental health issue. That allows adequate opportunity for individuals to receive treatment for co-existing mental disorders, establish their gender dysphoria diagnoses, and understand how cross-sex hormones and surgery will alter the appearance of their bodies as well as long-term health.

Literature Review: Desistance of Gender Dysphoria and Puberty Suppression

The World Professional Association for Transgender Health (WPATH) and the Endocrine Society both endorse the use of gonadotropin releasing hormones (Gn-RH) to suppress puberty in young adolescents who have gender dysphoria. Both organizations state that the treatment is safe and fully reversible. In addition, they state that delaying pubertal onset can provide extra time for adolescents to explore the gender in which they choose to live. The associations further state that puberty suppression is necessary to prevent the development of primary and secondary sexual characteristics that can inhibit successful transitions into adulthood (WPATH, 2012; Endocrine Society, 2017). Of the two groups, WPATH offers clinical criteria an individual should meet to qualify for puberty suppression such as addressing psychological co-morbidities and assessing whether gender dysphoria has intensified (WPATH, 2012).

Neither organization explains that the majority of young adolescents who exhibit signs of gender dysphoria eventually desist and conform to their natal sex and that the puberty suppression can have side effects. Both organizations neglect to mention that using Gn-RH for gender dysphoria by altering the appearance is not an FDA-approved clinical indication. Furthermore, the research used to justify puberty suppression is low or very-low quality and little information is available on long-term effects (Hruz, 2019). Additionally, in his assessment, Quentin Van Meter explained that physical differences between central precocious puberty and natural onset puberty demonstrate that Gn-RH does not have permanent adverse effects for those treated for the former but can for the latter such as insufficient bone-mineral density and neural development (Van Meter, 2022). Also, as recently as May 17, 2022, during a U.S. Senate Committee on Appropriations hearing, Lawrence Tabak, acting director of the National Institutes of Health, responded to Senator Marco Rubio, acknowledging that no long-term studies are available evaluating the effects of puberty blockers when used for gender dysphoria (U.S. Senate Committee on Appropriations, 2022).

Currently, some studies provide weak support for this treatment but leave too many questions as to its effectiveness and medical necessity, especially considering how many children decide against transitioning. In addition, puberty blockers halt development of primary and secondary sexual characteristics and deny opportunities for adolescents to adapt and become comfortable with their natal sex. Instead, puberty blockers can serve as a potential "gateway drug" for cross-sex hormones by denying them the experience of physically maturing (Laidlaw et al, 2018).

A 2013 study by Steensma et al offers data on the percentage of children who opt not to transition after experiencing gender dysphoria. The authors follow 127 adolescents (mean age of 15 during the evaluation period) for four years who had been referred to a Dutch gender dysphoria clinic. Out of this cohort, 47 (37%; 23 boys and 24 girls) continued experiencing the condition and applied for sex reassignment treatment. The other 80 adolescents never returned to the clinic. Because this clinic was the only one that treated gender dysphoria in the Netherlands, Steensma et al assumed that those who did not return no longer desired transitioning. The study indicates one of the key predictors for persisting gender dysphoria was the age of first presentation. Older adolescents that started going to the clinic were more likely to persist, while younger adolescents tended not to follow through. Steensma et al provide further insight into other predicting factors, particularly on how each individual views his or her gender identity. The authors note that adolescents who "wished they were the other sex" were more likely to become desisters and that those who "believed that they were the other sex" persisted

and later sought sex reassignment treatment (Steensma et al, 2013). While the study focuses on factors that contribute to the condition's persistence or desistance, it raises the question as to whether puberty suppression is necessary when age plays such an important role regarding the decision to transition.

WPATH and the Endocrine Society state that the primary reason for initiating pubertal suppression is not to treat a physical condition but to improve the mental health of adolescents with gender dysphoria. However, available research does not yield definitive results that this method is effective at addressing a mental health issue. The "gold standard" for medical studies is the randomized-controlled trial (RCT). Because RCTs utilize large sample sizes, have blind testing groups (i.e, placebos), and use objective controls, they can offer concrete conclusions and shape the array of established treatments. In addition, RCTs require comparisons between cohort outcomes and ensure that participants are randomly assigned to each group. These measures further reduce the potential for bias and subjectivity (Hariton and Locascio, 2018).

Presently, no RCTs that evaluate puberty suppression as a method to treat gender dysphoria are available. Instead, the limited number of published studies on the topic utilize small sample sizes and subjective methods (Hruz, 2019). A 2015 article by Costa et al is one such example. The study asserts that "psychological support and puberty suppression were both associated with an improved global psychological functioning in gender dysphoric adolescents." To reach this conclusion, the authors selected 201 children diagnosed with the condition and divided them into two groups, one to receive psychological support only and the other to get puberty blockers in addition to psychological support. Costa et al did not create a third group that lacked a gender dysphoria diagnosis to serve as a control. To assess whether puberty suppression is an effective treatment, the authors administered two self-assessments (Utrect Gender Dysphoria Scale and Children's Global Assessment Scale)[6] to the groups at 6-month intervals during a 12-month period. Because the study relies heavily on self-assessments, the conclusions are likely biased and invalid. Another problem that is also present and common throughout articles supporting puberty suppression is the short-term period of the study. Costa et al's conclusions may not be the same if additional follow-ups occurred three or five years later (Costa et al, 2015). This further raises the question whether low-quality studies like Costa et al's should serve as the basis for clinical guidelines advising clinicians to prescribe drugs for off-label purposes.

Aside from questionable research, information regarding the full physical effects of puberty suppression is incomplete. In a 2020 consensus parameter prepared by Chen et al, 44 experts in neurodevelopment, gender development, and puberty/adolescence reached a conclusion stating that "the effects of pubertal suppression warrant further study." The basis for this was that the "full consequences (both beneficial and adverse) of suppressing endogenous puberty are not yet understood." The participating experts emphasized that the treatment's impact on neurodevelopment in adolescents remains unknown. Chen et al explain that puberty-related hormones play a role in brain development as documented in animal studies and that stopping these hormones also prevents neurodevelopment in addition to sexual maturation. The authors further raise the question whether normal brain development resumes as if it had not been interrupted when puberty suppression ceases. Because this

[6] Behavioral health practitioners use the Children's Global Assessment Scale (CGAS) to measure child functioning during the evaluation process to determine diagnoses. Available evidence indicates that the CGAS is not effective for evaluating children who experienced trauma and presented with mental health symptoms (Blake et al, 2006).

question remains unanswered, it casts doubt on the veracity of organizations' assertions that puberty suppression is "fully reversible" (Chen et al, 2020).

In addition to the unanswered questions and low-quality research, puberty suppression causes side effects, some of which have the potential to be permanent. According to a 2019 literature review by De Sanctis et al, most side effects associated with Gn-RH are mild, consisting mostly of irritation around injection sites. However, clinicians have linked the drug to long-term conditions such as polycystic ovarian syndrome, obesity, hypertension, and reduced bone mineral density. While reports of these events are low and the authors indicate that Gn-RH is safe for treating central precocious puberty (Note: De Sanctis et al do not consider gender dysphoria in their analysis), the review raises questions about whether off-label use to treat a psychological condition is worth the risks (De Sanctis et al, 2019).

Furthermore, De Sanctis et al cite studies noting increased obesity rates in girls who take Gn-RH but that more research is needed to gauge the consistency. Additionally, the authors note that evidence is strong regarding reduced bone mineral density during puberty suppression but indicate that the literature suggests it is reversible following treatment (De Sanctis et al, 2019). While research leans toward the reversibility of effects on bone mineral density, the quantity of studies available on this subject are limited. Also, no long-term research has been completed on how puberty suppression affects bone growth. This is significant because puberty is when bone mass accumulates the most (Kyriakou et al, 2020). One example of a complication involving bone growth and Gn-RH is slipped capital femoral epiphysis. This condition occurs when the head of the femur (i.e., thighbone) can slip out of the pelvis, which can eventually lead to osteonecrosis (i.e., bone death) of the femoral head. Although the complication is rare, its link to puberty suppression indicates that the "lack of adequate sex hormone exposure" could be a cause (De Sanctis et al, 2019).

The current literature on puberty suppression indicates that using it to treat gender dysphoria is off-label, poses potentially permanent side effects, and has questionable mental health benefits. The limited research and lack of FDA approval for that clinical indication prompt questions about whether medications with physically altering effects should be used to treat a problem that most adolescents who experience it will later overcome by conforming to their natal sex. Additional evidence is required to establish puberty suppression as a standard treatment for gender dysphoria.

Literature Review: Cross-Sex Hormones as a Treatment for Gender Dysphoria

Currently, the debate surrounding the use of cross-sex hormones to treat gender dysphoria revolves around their ability to improve mental health without causing irreversible effects. It is not about whether taking cross-sex hormones can alter someone's appearance. The evidence demonstrating the effectiveness of cross-sex hormones in achieving the secondary sexual characteristics of the opposite sex is abundant. Also, the overall scientific consensus concludes that individuals who take cross-sex hormones will reduce the primary sexual function of his or her natal sex organs. What researchers continue evaluating are the short and long-term effects on mental health, impacts on overall physical health, and how the changes affect the ability to detransition. Of these, benefits to mental health overshadow the other discussions. Prescribers of cross-sex hormones focus so heavily on behavioral health outcomes that they de-emphasize that these drugs cause permanent physical changes and side effects that can lead to premature death (Hruz, 2020). Some clinical guidelines such as WPATH's do not even indicate that some of the changes are irreversible.

Like puberty suppression, the Endocrine Society and WPATH provide guidance on administering cross-sex hormones to individuals with gender dysphoria. Both organizations state that this treatment should not be administered without a confirmed diagnosis of gender dysphoria and only after a full psychosocial assessment. In addition, behavioral health practitioners must ensure that any mental comorbidities are not affecting the individual's desire to transition. WPATH and the Endocrine Society further state that clinicians should administer hormone replacements such as testosterone and Estradiol (estrogen) in gradual phases, where the dose increases over several months. For trans-females, the organizations state that progesterone (anti-androgen) is also necessary to block the effects of naturally produced testosterone (WPATH, 2012; Endocrine Society, 2017). When taking cross-sex hormones, trans-males need increased doses for the first six months. After that, the testosterone's effects are the same on lower doses. Once started, individuals cannot stop taking hormones unless they desire to detransition (Unger, 2016).

Although the two groups provide similar guidance, they vary on statements that can have significant impact on long-term outcomes, particularly regarding age. According to WPATH's standards, 16 years is the general age for initiating cross-sex hormones, but the organization acknowledges that the treatment can occur for younger individuals depending on circumstances (WPATH, 2012). This differs from the Endocrine Society, which states no specific age for appropriateness and explains the disagreements in assigning a number. The group highlights that most adolescents have attained sufficient competence by age 16 but may not have developed adequate abilities to assess risk (Endocrine Society, 2017). This raises the question whether adolescents can make sound decisions regarding their long-term health. Additionally, the varying guidance raises an issue with WPATH not only using age 16 as a standard but also indicating that younger adolescents are capable of making that choice.

WPATH's guidance also does not stress the irreversible nature of cross-sex hormones, citing the treatment as "partially reversible" and not indicating which changes are permanent. Furthermore, parts of WPATH's information are misleading and directly conflict with guidance issued by clinics and other sources. One such example consists of WPATH stating that "hormone therapy *may* (emphasis added) lead to irreversible changes." This statement is misleading in light of existing research, which indicates that multiple physical changes are permanent. In addition, WPATH claims that certain effects of cross-

sex hormones such as clitoral enlargement can last one to two years when it is actually irreversible (UCSF, 2020). WPATH also does not explain the risks to male fertility, noting that lowered sperm count or sterility is "variable." The University of California at San Francisco (UCSF) provides starkly different information by stating that trans-females should expect to become sterile within a few months of starting cross-sex hormones. UCSF also advises trans-females to consult a sperm bank if they may want to father children after transitioning (WPATH, 2012; UCSF, 2020). Below is a chart that outlines the effects of cross-sex hormones and identifies which ones are reversible or permanent.

Physical Changes Effectuated by Cross-Sex Hormones	
Physical Changes in Trans-Males (Female-to-Male Transitions)	
Physical Change	**Reversible or Irreversible**
Oily Skin or Acne	Reversible
Facial and Body Hair Growth	Irreversible
Male-Pattern Baldness	Irreversible
Increased Muscle Mass	Reversible
Body Fat Redistribution	Reversible
Ceasing of Menstruation	Reversible
Enlarged Clitoris	Irreversible
Vaginal Atrophy	Reversible
Deepening of Voice	Irreversible
Physical Changes in Trans-Females (Male-to-Female Transitions)	
Body Fat Redistribution	Reversible
Decreased Muscle Mass	Reversible
Skin Softening or Decrease in Oiliness	Reversible
Lower Libido	Reversible
Fewer Spontaneous Erections	Reversible
Male Sexual Dysfunction	Possibly Irreversible
Breast Growth	Irreversible
Decrease in Testicular Size	Reversible
Decrease in Sperm Production or Infertility	Likely Irreversible
Slower Facial and Body Hair Growth	Reversible

Sources: UCSF, 2020; WPATH, 2012; Endocrine Society, 2017[7]

The above chart demonstrates that trans-males and trans-females experience different effects from cross-sex hormones that can cause myriad issues in later life. For example, trans-males who opt to detransition may face challenges related to permanent disfigurement (e.g., facial hair and deepened voices). Trans-females, on the other hand, may not endure the same issues pertaining to visible physical changes but might become despondent over being unable to reproduce. This can occur regardless of whether the transitioning individual is satisfied with sex reassignment. Given that the clinical guidelines do not provide uniform information on the permanent effects of cross-sex hormones, clinicians are unable to make sound recommendations to patients. This treatment can supposedly alleviate symptoms

[7] This chart consists of conclusions regarding physical changes made by three different clinical organizations. If one organization determined that a physical change was irreversible, that was sufficient to meet the criteria to be listed as "irreversible" in the chart.

of distress. However, cross-sex hormones' permanent effects also have the potential to cause psychological issues.

Arguments favoring cross-sex hormones assert that the desired physical changes can alleviate mental health issues in individuals with gender dysphoria but do not consider that hormones used in this manner, like puberty blockers, are off-label. While the FDA has approved estrogen and testosterone for specific clinical indications (e.g., hypogonadism), it has not cleared these drugs for treating gender dysphoria. Additionally, these arguments do not acknowledge that the U.S. Drug Enforcement Administration (DEA) lists testosterone as a Schedule III controlled substance, meaning that it has a high probability of abuse (DEA, 2022). Furthermore, evidence of psychological benefit from cross-sex hormones is low-quality and relies heavily on self-assessments taken from small sample groups (Hruz, 2020).

A 2019 study by Kuper et al seeks to demonstrate that adolescents desiring cross-sex hormones have elevated rates of depression, anxiety, and challenges with peer relationships. To make their findings, the authors provided questionnaires to 149 adolescents who presented at a gender clinic in Dallas, Texas and concluded that half of the sample group experienced increased psychological issues. One problem with the study is that it relies on parent or self-assessments such as the Youth-Self Report, Body-Image Scale, and the Child Behavior Checklist. While these assessments have strong reliability, the sample is cross-sectional, consisting of gender dysphoric individuals who presented for an initial visit at the clinic. Also, Kuper et al do not directly link these psychological symptoms to gender dysphoria but rather insinuate a strong connection. Without an analysis of the longitudinal histories of the participants, the study cannot demonstrate whether gender dysphoria was a direct cause of the psychological issues, which could possibly result from trauma, abuse, or family dysfunction. Kuper et al's study only presents weak correlation between adolescents who report symptoms of distress and gender dysphoria. While the authors do not claim that the participants' psychological problems caused the condition, they fail to explicitly state that no demonstrable relationship exists and explain that their findings are "broadly consistent with the previous literature" (Kuper et al, 2019).

Additionally, a more comprehensive literature review from 2019 by Nguyen et al evaluates the effect of cross-sex hormones on mental health outcomes. Although the authors argue that the evidence supports the treatment, they do note that available studies use "uncontrolled observational methods" and "rely on self-report." The review also asserts that "future research should focus on applying more robust study designs with large sample sizes, such as controlled prospective cohort studies using clinician-administered ratings and longitudinal designs with appropriately matched control groups." All of these are characteristics of RCTs. While Nguyen et al highlight flaws in the studies in their conclusion, they do not emphasize them in their analysis, opting to focus primarily on results. Another problem with the studies selected for the review is the short-term periods for evaluation. Out of 11 studies Nguyen et al discuss, only one tracks its participants for 24 months. The others only follow their cohorts for 6 or 12 months (Nguyen et al, 2019). Without long-term data to support assertions that cross-sex hormones substantially improve the mental health of individuals with gender dysphoria, the review cannot make definitive conclusions on the treatment's benefits.

Basing their stances on this low-quality evidence, clinical associations such as the American Academy of Pediatrics (AAP) and the American Psychology Association endorse the use of cross-sex hormones as treatments for gender dysphoria. In particular, the AAP discourages use of the term "transition" and

asserts that medical treatments used to obtain secondary characteristics of the opposite sex are "gender affirming." This decision mirrors the DSM-V's interpretation of gender being part of identity. The AAP further states that taking cross-sex hormones is an "affirmation and acceptance of who they (i.e., patient) have always been" (AAP, 2018). The American Psychological Association also takes a similar stance in its *Resolution on Gender Identity Change Efforts* by asserting that medical treatments such as puberty suppression, cross-sex hormones, and surgery improve mental health and quality of life and reinforce the notion that transitioning and seeking sex reassignment therapies do not constitute a psychological disorder (American Psychological Association, 2021). Stances like these can substantially influence practitioners and their treatment recommendations. Given that low-quality evidence serves as the basis for supportive positions, this raises questions about whether clinicians can make informed decisions for their patients that will promote the best outcomes.

James Cantor published a critique in 2020 of the AAP's endorsement of "gender affirming" treatments, arguing that the organization did not base its recommendations on established medical evidence. He asserts that the AAP's position is based on research that does not support intervention but rather supports "watchful waiting" because most transgender youths desist and identify as their natal sex during puberty. Cantor further argues that the AAP not only disregards evidence but also cites "gender affirming" interventions as the only effective method. To conclude, he states the organization is "advocating for something far in excess of mainstream practice and medical consensus" (Cantor, 2020).

Given those evidentiary problems, those who rely on the AAP's endorsement as a basis for "gender affirming" treatments are practicing eminence-based medicine as opposed to evidence-based medicine. Eminence-based medicine refers to clinical decisions made by relying on the opinions of prominent health organizations rather than relying on critical appraisals of scientific evidence (Nhi Le, 2016). While it is true that the AAP has more knowledge than a lay person and a degree of credibility in the medical community, the opinions of such organizations are not valid unless they are based on quality evidence.

Research on sex reassignment also does not adequately address the reasons for and prevalence of detransitioning. Although no definite numbers are available regarding the percentage of transgender people who decide to detransition, research indicates that roughly 8% decide to return to their natal sex. The reasons range from treatment side effects to more self-exploration that provided insight on individuals' gender dysphoria. In a 2020 study by Lisa Littman, 101 people who had detransitioned provided their basis for doing so. Out of the sample group, 96% had taken cross-sex hormones and 33% had sex reassignment surgery. The average age for transitioning was 22 years, and the mean duration for the transition was 4 years. This indicates that even allowing additional time beyond the recommended age of 16 years can still lead to regrets. The study also raises the question as to whether individuals who transitioned at 16 or younger wanted to detransition in greater numbers. The author further offers reasons why these individuals sought cross-sex hormones and surgery, which include having endured trauma (mental or sexual), homophobia (challenged to accept oneself as a homosexual), peer and media influences, and misogyny (applicable only to trans-males). To obtain the results, the participants responded to a survey that asked about their backgrounds (e.g., reasons for transitioning, mental health comorbidities), and motivations for detransitioning. Littman noted that half of the women (former trans-males) had a mental health disorder and/or had experienced trauma within a year of deciding to transition. Men (former trans-females) reported much lower numbers of behavioral health issues and trauma after de-transitioning. Additionally, 77% of men surveyed identified as the opposite gender prior to transition, whereas just 58% of women had (Littman, 2020).

Of the reasons cited for detransitioning, the majority (60%) noted that they became more comfortable with their natal sex. Other reasons included concerns over complications from the treatments, primarily cross-sex hormones, and lack of improved mental health. Other less-cited explanations include concerns about workplace discrimination and worsening physical health. The study also notes that approximately 36% of participants experienced worse mental health symptoms. Based on the findings, Littman concludes that more research is needed in tracking the transgender population to obtain accurate percentages of those who decide to detransition and that men and women reported varying reasons for deciding to transition and later return to their natal sex. The author notes that higher rates of trauma and peer group influences might have contributed to women's decisions, which Littman attributes partially to rapid onset gender dysphoria (Littman, 2020). What the study also indicates is that cross-sex hormones are not a validated treatment for gender dysphoria. Nearly all of the participants had taken them and decided against maintaining the physical changes. Given that the majority of surveyed detransitioners cited that they were comfortable with their biological sex, the study indicates that gender dysphoria is not necessarily a lifelong issue. This necessarily raises doubts about whether cross-hormones, which cause permanent physical damage, is justified.

In addition to the psychological factors, cross-sex hormones pose significant long-term health risks to transitioning individuals. Currently, little information is available given that researchers have not had adequate time to study the effects in this population. However, use of hormones for other conditions has yielded data on how these drugs can affect the body and the cardiovascular system in particular. Because of the high dosages required to achieve physical change and the need to continuously take the drugs, cross-sex hormones can potentially harm quality of life and reduce life expectancy for transitioning individuals. According to Dutra et al, trans-females are three times more likely to die from a cardiovascular event than the general population. In their 2019 literature review, Dutra et al examined the results of over 50 studies evaluating the effects of cross-sex hormones on not only transgender individuals but those with menopause and other endocrine disorders, all of which indicate that use of estrogen or testosterone can increase risks for cardiovascular disease. Throughout their review, Dutra et al cite examples of trans-females having higher triglyceride levels after 24 months of cross-sex hormones and how researchers halted a study on estrogen due to an increase in heart attacks among participants. Another article the authors reference indicates a higher risk for thromboembolisms (i.e., blood clots) in trans-females. For trans-males, Dutra et al explain that research shows significant increased risk for hypertension, high cholesterol, obesity, and heart attacks. One study noted that trans-males have a four times greater risk of heart attack compared to women identifying as their natal sex. Dutra et al conclude that most transgender individuals are younger than 50 and that more studies are needed as this population ages. They do note that available studies indicate that cross-sex hormones pose dangers to long-term cardiovascular health (Dutra et al, 2019).

In sum, the literature reveals that the evidence for cross-sex hormones as a treatment for gender dysphoria is weak and insufficient. Between the permanent effects, off-label use, and consequences to long-term health, cross-sex hormones are a risky option that does not promise a cure but does guarantee irreversible changes to both male and female bodies. Additionally, the inadequate studies serving as the basis for recommendations by clinical associations can lead to providers making poorly informed decisions for their patients. Research asserting that taking cross-sex hormones improves mental health is subjective and short-term. More studies that utilize large sample sizes and appropriate

methods is required before the medical profession should consider cross-sex hormones as one of gender dysphoria's standard treatments.

Literature Review: Sex Reassignment Surgery

The final phase of treatment for gender dysphoria is sex reassignment surgery. This method consists of multiple procedures to alter the appearance of the body to resemble an individual's desired gender. Some procedures apply to the genitals (genital procedures) while others affect facial features and vocal cords (non-genital procedures). While the surgery creates aesthetical aspects, it does not fully transform someone into the opposite biological sex. Transgender persons who undergo the procedures must continue taking cross-sex hormones to maintain secondary sexual characteristics. Additionally, all physical changes are irreversible, and the success rate of a surgery varies depending on the procedure and the population. For example, surgeries for trans-females have much better results than those for trans-males. Complications such as post-operative infections can also arise with the urinary tract system. However, sex reassignment surgery supposedly can provide drastic, if not complete, relief from gender dysphoria (Endocrine Society, 2017). The following is a list of procedures (both genital and non-genital) for trans-females and trans-males that create physical features of the desired sex.

Procedures for Trans-Females

- **Genital Surgeries:** These consist of penectomy (removal of the penis), orchiectomy (removal of the testicles), vaginoplasty (construction of a neo-vagina), clitoroplasty (construction of a clitoris), and vulvoplasty (construction of a vulva and labia). To perform, a surgeon begins by deconstructing the penis and removing the testicles. The penile shaft and glans are repurposed to serve as a neo-vagina and artificial clitoris (Note: These are not actual female genitalia but tissue constructed to resemble female anatomy). If the shaft tissue is insufficient, the surgeon may opt to use a portion of intestine to build a neo-vagina. The scrotum serves as material for fashioning a vulva and labia. In addition to constructing female genitalia, the surgeon reroutes the urethra to align with the neo-vagina. Genital surgeries for trans-females result in permanent sterility (Bizic et al, 2014).
- **Chest Surgery:** To attain full breasts, trans-females can undergo enlargement. The procedure is similar to breast augmentation for women where a surgeon places implants underneath breast tissue. Prior to surgery, trans-females need to take cross-sex hormones for roughly 24 months to increase breast size to get maximum benefit from the procedure (Endocrine Society, 2017).
- **Cosmetic and Voice Surgeries:** Designed to create feminine facial features, fat deposits, and vocal sounds, these procedures are secondary to genital procedures and intended to alter trans-females' appearances to better integrate into society as a member of the desired gender (WPATH, 2012).

Procedures for Trans-Males

- **Mastectomy:** This is the most performed sex reassignment surgery on trans-males because cross-sex hormones and chest-binding garments are often insufficient at diminishing breasts. To remove this secondary sexual characteristic, trans-males can undergo a mastectomy where a surgeon removes breast tissue subcutaneously (i.e., under the skin) and reconstructs the nipples to appear masculine. The procedure can result in significant scarring (Monstrey et al, 2011).
- **Genital Surgeries:** Unlike the procedures for trans-females, genital surgeries for trans-males are more complex and have lower success rates. Consisting of hysterectomy, oophorectomy

(removal of the ovaries), vaginectomy (removal of the vagina), phalloplasty (construction of a penis), and scrotoplasty (construction of prosthetic testicles), a team of surgeons must manufacture a penis using skin from the patient (taken from an appendage) while removing the vagina and creating an extended urethra. The functionality of the artificial penis can vary based on how extensive the construction was. Attaining erections requires additional surgery to implant a prosthesis, and the ability to urinate while standing is often not achieved. Genital procedures for trans-males result in irreversible sterility (Monstrey et al, 2011).

- **Cosmetic Surgeries:** Similar to trans-females, these procedures create masculine facial features, fat deposits, and artificial pectoral muscles. They aid trans-males with socially integrating as their desired gender. Surgery to deepen voices is also available but rarely performed (WPATH, 2012).

Because sex reassignment surgery is irreversible, the criteria for receiving these procedures is the strictest of all gender dysphoria treatments. WPATH and the Endocrine Society suggest rigorous reviews of patient history and prior use of other therapies before approving. Furthermore, the two organizations recommend that only adults (18 years old) undergo sex reassignment surgery.[8] WPATH and the Endocrine Society also recommend ensuring a strongly documented diagnosis of gender dysphoria, addressing all medical and mental health issues, and at least 12 months of cross-sex hormones for genital surgeries. Although the organizations agree on most criteria, they differ on whether hormones should be taken prior to mastectomies. WPATH asserts that hormones should not be a requirement, whereas the Endocrine Society advises up to 2 years of cross-sex hormones before undergoing the procedure (WPATH, 2012; Endocrine Society, 2017). What this indicates is that trans-males might undergo breast removal without having first pursued all options if their clinician adheres to WPATH's guidelines, which can lead to possible regret over irreversible effects.

As with cross-sex hormones, sex reassignment surgery's irreversible physical changes can potentially show marked mental health improvements and prevent suicidality in people diagnosed with gender dysphoria. In April 2022, the chair of the University of Florida's pediatric endocrinology department, Dr. Michael Haller, advocated for the benefits of "gender affirming" treatments (WUSF, 2020). However, the available evidence calls such statements into question. Recent research assessing both cross-sex hormones and sex reassignment surgery indicate that the effects on "long-term mental health are largely unknown." In studies regarding the benefits of surgery, the results have the same weaknesses as the research for the effectiveness of cross-sex hormones. These include small sample sizes, self-report surveys, and short evaluation periods, all of which are insufficient to justify recommendations for irreversible treatments (Bränström et al, 2020).

Two studies conducted in Sweden provide insight on the effectiveness of sex reassignment surgery in improving the behavioral health of transgender persons. Because Sweden has a nationalized health system that collects data on all residents, this country can serve as a resource to assess service utilization and inpatient admissions. Both studies, one by Dhejne et al from 2011 and another by Bränström et al published in 2020, assessed individuals who had received sex reassignment surgery and examined outcomes over several decades. Dhejne et al's findings indicate that sex reassignment

[8] Although practice guidelines indicate the minimum age to undergo sex reassignment surgery is 18, available evidence demonstrates that mastectomies have been performed on adolescent girls as young as 13 who experience "chest dysphoria" (Olson-Kennedy et al, 2018).

procedures do not reduce suicidality. The authors explained that individuals who underwent sex reassignment surgery were still more likely to attempt or commit suicide than those in the general population. This study is unique because it monitored the subjects over a long period of time. Dhejne et al note that the transgender persons tracked for the study did not show an elevated suicide risk until ten years after surgery (Dhejne et al, 2011). Given that a high proportion of research follows sex reassignment patients for much shorter timeframes, this evidence indicates that surgery might have little to no effect in preventing suicides in gender dysphoric individuals over the long run.

In addition to having an increased suicide risk, Dhejne et al discuss how individuals who underwent sex reassignment procedures also had higher mortality due to cardiovascular disease. The authors do not list the specific causes but establish the correlation. Given that cross-sex hormones can damage the heart, the increased risk could be related to the drugs and not the surgery. Furthermore, the study explains that the tracked population had higher rates of psychiatric inpatient admissions following sex reassignment. Dhejne et al established this by examining the rates of psychiatric hospitalizations in these individuals prior to surgery and noted higher utilization in the years following the procedures. These results are in comparison to the Swedish population at large. While the study contradicts other research emphasizing improvements in mental health issues, it has its limitations. For example, the sample size is small. Dhejne et al identified only 324 individuals who had undergone sex reassignment surgery between 1973 and 2003. In addition, the authors noted that while the tracked population had increased suicide risks when compared to individuals identifying as their natal sex, the rates could have been much higher if the procedures were not available (Dhejne et al 2011). What this study postulates is that sex reassignment surgery does not necessarily serve as a "cure" to the distress resulting from gender dysphoria and that ongoing behavioral health care may still be required even after a complete transition.

Bränström et al's study evaluating the Swedish population used a larger sample (1,018 individuals who had received sex reassignment surgery) but tracked them for just a ten-year period (2005 to 2015).[9] Unlike Dhejne et al, the authors did not track suicides and focused primarily on mood or anxiety disorder treatment utilization. Their results indicate that transgender persons who had undergone surgery utilized psychiatric outpatient services at lower rates and were prescribed medications for behavioral health issues at an annual decrease rate of 8%. Bränström et al also did not limit comparisons to Sweden's overall population and factored in transgender persons who take cross-sex hormones but have not elected to have surgery. Those results still presented a decrease in outpatient mental health services. However, Bränström et al note that individuals only on cross-sex hormones showed no significant reduction in that category, which calls into question claims regarding effectiveness of cross-sex hormones in ameliorating behavioral issues.

The Bränström et al study prompted numerous responses questioning its methodology. The study lacked a prospective cohort or RCT design, and it did not track all participants for a full ten-year period (Van Mol et al, 2020). These criticisms resulted in a retraction, asserting that Bränström et al's conclusions were "too strong" and that further analysis by the authors revealed that the new "results demonstrated no advantage of surgery in relation to subsequent mood or anxiety disorder-related

[9] Although Bränström et al claim to follow individuals for a ten-year period, peer reviews of the research revealed that this was not the case, noting the authors had varying periods of tracking, ranging from one to ten years (Van Mol et al, 2020).

health care visits or prescriptions or hospitalizations following suicide attempts in that comparison" (Kalin, 2020).

There are multiple explanations for why the Bränström et al study reached different results than the Dhejne et al study. For starters, Bränström et al tracked a larger sample group over a later period (2005 to 2015 as opposed to 1973 to 2003) during which gender dysphoria underwent a dramatic shift in definition. Also, Dhejne et al did not see elevated suicides until after ten years, raising the question as to whether sex reassignment surgery has temporary benefits on mental health rather than long-term or permanent benefits. Like the other Swedish study, Bränström et al's findings are a correlation and do not specifically state that the procedures cause reduced psychiatric service utilization (Bränström et al, 2020).

A 2014 study by Hess et al in Germany evaluated satisfaction with sex reassignment procedures by attempting to survey 254 trans-females on their quality of life, appearance, and functionality as women. Out of the participants selected, only 119 (47%) returned completed questionnaires, which Hess et al indicate is problematic because dissatisfied trans-females might not have wanted to provide input. The results from the collected responses noted that 65.7% of participants reported satisfaction with their lives following surgery and that 90.2% indicated that the procedures fulfilled their expectations for life as women. While these results led Hess et al to conclude that sex reassignment surgery generally benefits individuals with gender dysphoria, the information is limited and raises questions (Hess et al, 2014). Such questions include whether the participants had mental health issues before or after surgery and did their satisfaction wane over time. Hess et al only sent out one questionnaire and not several to ascertain consistency over multiple years. Questions like these raise doubts about the validity of the study. Although Hess et al's research is just one study, numerous others utilize the same subjective methods to reach their conclusions (Hruz, 2018).

In his assessment, Patrick Lappert contributes additional insight on the appropriate clinical indications for mastectomies, noting that removal of breast tissue is necessary following the diagnosis of breast cancer or as a prophylactic against that disease. He cites that this basis is verifiable through definitive laboratory testing and imaging, making it an objective diagnosis, whereas gender dysphoria has no such empirical methods to assess and depends heavily on the patient's perspective. Also, Lappert notes that trans-males who make such decisions are doing so on the idea that the procedure will reduce their dysphoria and suicide risk. However, they are making an irreversible choice based on anticipated outcomes supported only by weak evidence, and thus cannot provide informed consent (Lappert, 2022).

The literature is inconclusive on whether sex reassignment surgery can improve mental health for gender dysphoric individuals. Higher quality research is needed to validate this method as an effective treatment. This includes studies that obtain detailed participant histories (e.g., behavioral diagnoses) and track participants for longer periods of time. These are necessary to evaluate the full effects of treatments that cause irreversible physical changes. In addition, sex reassignment procedures can result in severe complications such as infections in trans-females and urethral blockage in trans-males. Health issues related to natal sex can also persist. For example, trans-males who undergo mastectomy can still develop breast cancer and should receive the same recommended screenings (Trum et al, 2015). Until more definitive evidence becomes available, sex reassignment surgery should not qualify as a standard treatment for gender dysphoria.

Literature Review: Quality of Available Evidence and Bioethical Questions

Quality of Available Evidence

Clinical organizations that have endorsed puberty suppression, cross-sex hormones, and sex reassignment surgery frequently state that these treatments have the potential to save lives by preventing suicide and suicidal ideation. The evidence, however, does not support these conclusions. James Cantor notes that actual suicides (defined as killing oneself) are low, occur at higher rates for men, and that interpretations of available research indicate a blurring of numbers between those with gender dysphoria and homosexuals (Cantor, 2022). Although information exists that contradicts certain arguments, media outlets continue to report stories emphasizing the "lifesaving" potential of sex reassignment treatment. A May 2022 story by NBC announced survey results under the headline "Almost half of LGBTQ youths 'seriously considered suicide in the past year'" (NBC, 2022). This is a significant claim that can have a sensational effect on patients and providers alike, but how strong is the evidence supporting it? Almost all of the data backing this assertion are based on surveys and cross-studies, which tend to yield low-quality results (Hruz, 2018). In addition, how many gender dysphoric individuals are seeing stories in the media and not questioning the narrative? Because research on the effectiveness of treatments is ongoing, a debate persists regarding their use in the adolescent and young-adult populations, and much of it is due to the low-quality studies serving as evidence.

In their assessment, Romina Brignardello-Petersen and Wojtek Wiercioch examined the quality of 61 articles published between 2020 and 2022 (Note: See Attachment A for the full study). They identified research on the effectiveness of puberty blockers, cross-sex hormones, and sex reassignment surgery and assigned a grade (high, moderate, low, or very low) in accordance with the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach. Out of the articles reviewed, all with a few exceptions received grades of low or very low quality when demonstrating outcomes regarding improvements in mental health and overall satisfaction with transitioning. For puberty blockers, Brignardello-Petersen and Wiercioch identified low quality evidence for alleviating gender dysphoria and very low quality for reducing suicidal ideation. The authors also had nearly identical findings for cross-sex hormones. However, they noted moderate quality evidence for the likelihood of cardiovascular side effects. Regarding surgery, Brignardello-Petersen and Wiercioch graded articles that examined overall satisfaction and complication rates. None of the studies received grades higher than low quality. These findings led the authors to conclude that "there is great uncertainty about the effects" of sex reassignment treatments and that the "evidence alone is not sufficient to support" using such treatments. Among the studies graded was one the U.S. Department of Health and Human Services cited in its information on "gender affirming" treatments. The authors noted this research had a "critical risk of bias" and was of low quality (Brignardello-Petersen and Wiercioch, 2022).

For his part, James Cantor provided a review of available literature, which addresses studies on etiology, desistance, effectiveness of puberty blockers and cross-sex hormones, suicidal behaviors, and clinical association and international guidelines. Throughout his analysis, Cantor cites weak evidence, poor methodologies (e.g., retrospective versus prospective studies), and lack of professional endorsements in research that indicates the benefits of sex reassignment treatment. Additionally, he notes that improvements in the behavioral health of adolescents who take cross-sex hormones can be attributed to the counseling they receive concurrently and that suicidality is not likely to result from gender

dysphoria but from co-occurring mental disorders. The reasoning behind the third point is based on the blending of suicide and suicidality, which are two distinct concepts. The former refers specifically to killing oneself, and the second regards ideation and threats in attempts to receive help. Cantor specifically notes that actual suicides are highly unlikely among gender dysphoric individuals, particularly trans-males. His other conclusions indicate that young children who experience gender identity issues will most likely desist by puberty, that multiple phenomena can cause the condition, and that Western European health services are not recommending medical intervention for minors. The basis for these statements is the paucity of high to moderate quality evidence on the effectiveness of sex reassignment treatments and numerous studies demonstrating desistance (Cantor, 2022).

Despite the need for stronger studies that provide definitive conclusions, many practitioners stand by the recommendations of the AAP, Endocrine Society, and WPATH. This is evident in a letter submitted to the *Tampa Bay Times*, which was a rebuttal to the Florida Department of Health's (DOH) guidance on treatment for gender dysphoria (Note: The guidance recommends against using puberty blockers, cross-sex hormones, or surgery for minors) (DOH, 2022). The authors, led by six professors at the University of Florida's College of Medicine, state that recommendations by clinical organizations are based on "careful deliberation and examination of the evidence by experts." However, evaluations of these studies show otherwise. Not only does the available research use cross-sectional methods such as surveys, but it provides insufficient evidence based on momentary snapshots regarding mental health benefits. These weak studies are the foundation for the clinical organizations' guidelines that the University of Florida professors tout as a gold standard. In addition, the letter's authors state that DOH's guidance is based on a "non-representative sample of small studies and reviews, editorials, opinion pieces, and commentary" (Tampa Bay Times, 2022). That statement misses the point when it comes to evidence demonstrating whether treatments with irreversible effects are beneficial because the burden of proof is on those advocating for this treatment, not on those acknowledging the need for further research. This raises the question concerning how much academic rigor these professors are applying to practice guidelines released by clinical organizations and whether they also apply the same level of rigor to novel treatments for other conditions (e.g., drugs, medical devices).

Another example of a lack of rigor is a 2019 article by Herman et al from the University of California at Los Angeles (UCLA) that evaluated responses to a 2015 national survey on transgender individuals and suicide. Unlike other studies, this one utilized a large cohort with 28,000 participants from across the U.S. responding. However, the researchers used no screening criteria and did not randomly select individuals. In addition, responses consisted entirely of self-reports with no supporting evidence to even prove a diagnosis of gender dysphoria. Although Herman et al conclude that the U.S. transgender population is at higher risk for suicidal behaviors, the authors' supporting evidence is subjective and serves as a weak basis. Additionally, the survey results do not establish gender dysphoria as a direct cause of suicide or suicidal ideation. The questions required participants to respond about their overall physical and mental health. Out of those that indicated "poor" health, 77.7% reported suicidal thoughts or attempts during the previous year, whereas just 29.1% of participants in "excellent" health had. These percentages indicate that causes beyond gender dysphoria could be affecting suicidal behaviors. Other reasons cited include rejection by family or religious organizations and discrimination. The authors also acknowledge that their findings are broad, not nationally representative, and should serve as a basis for pursuing future research (Herman et al, 2019).

Yet another example is a study published in 2022 by Olson et al tracks 300 young children that identify as transgender over a 5-year period, and asserts low probabilities for detransitioning, while supporting interventions such as puberty blockers. The authors found that children (median age of 8 years) who identified as a gender that differed from their natal sex were unlikely to desist at a rate of 94% and conclude that "transgender youth who socially transitioned at early ages" will continue "to identify that way." While this appears to contradict earlier studies that demonstrate most young adolescents who change gender identities return to their "assigned gender at birth," the authors note differences and limitations with the results. For example, Olson et al notes that they did not verify whether the participants met the DSM-V's diagnostic criteria for gender dysphoria and that the children's families supported the decisions to transition. Instead, the authors relied on a child's chosen pronouns to classify as transgender. Also, Olson et al acknowledged that roughly 66% of the sample was biologically male. This is particularly significant considering that the majority of transitioning adolescents in recent years were natal females. Another issue with the study includes the median age at the end of follow-up (13 years), which is when boys begin puberty. Furthermore, the authors cite that the participants received strong parental support regarding the transitions, which constitutes positive reinforcement (Olson et al, 2022). Other research demonstrates that such feedback on social transitioning from parents and peers can prevent desistance following pubertal onset (Zucker, 2019). Despite these limitations, the New York Times announced the study's publication under the headline "Few Transgender Children Change Their Minds After 5 Years" (New York Times, 2022). Such a title can add to the public's perception that gender dysphoria requires early medical intervention to address.

Bioethical Questions

The irreversible physical changes and potential side effects of sex reassignment treatment raise significant ethical questions. These questions concern multiple bioethical principles including patient autonomy, informed consent, and beneficence. In a 2019 article, Michael Laidlaw, Michelle Cretella, and Kevin Donovan argue that prescribing puberty blockers or cross-sex hormones on the basis that they will alleviate psychological symptoms should not be the standard of care for children with gender dysphoria. Additionally, the three authors assert that such treatments "constitute an unmonitored, experimental intervention in children without sufficient evidence of efficacy or safety." The primary ethical question Laidlaw, Cretella, and Donovan pose is whether pushing physical transitioning, particularly without parental consent, violates fully informed consent (Laidlaw et al, 2019).

In accordance with principles of bioethics, several factors must be present to obtain informed consent from a patient. These consist of being able to understand and comprehend the service and potential risks, receiving complete disclosure from the physician, and voluntarily providing consent. Bioethicists generally do not afford the ability of giving informed consent to children who lack the competence to make decisions that pose permanent consequences (Varkey, 2021). Laidlaw, Cretella, and Donovan reinforce this point regarding sex reassignment treatment when they state that "children and adolescents have neither the cognitive nor the emotional maturity to comprehend the consequences of receiving a treatment for which the end result is sterility and organs devoid of sexual function" (Laidlaw et al, 2019). This further raises the question whether clinicians who make such treatment recommendations are providing full disclosure about the irreversible effects and truly obtaining informed consent.

Another issue is the conflict between consumerism and the practitioner's ability to provide appropriate care. Consumerism refers to patients learning about treatments through media/marketing and requesting their health care provider to prescribe it, regardless of medical necessity. Considering that social media is rife with individuals promoting "gender affirmative" drugs and surgeries, children are making self-assessments based on feelings they may not understand and that can lead to deep regret in the future (Littman, 2018). This can contribute to patients applying pressure on their doctors to prescribe medications not proven safe or effective for the condition. Consumerism can also affect bioethical compliance because it constrains clinicians from using their full "knowledge and skills to benefit the patient," which is "tantamount to a form of patient abandonment and therefore is ethically indefensible" (Varkey, 2021).

In his assessment, G. Kevin Donovan explains the bioethical challenges related to sex reassignment treatment, emphasizing the lack of informed consent when administering these services. He asserts that gender dysphoria is largely a self-diagnosis practitioners cannot verify with empirical tests (e.g., labs and imaging) and that providing such treatments is experimental. Because of the lack of consent and off-label use of puberty blockers and cross-sex hormones, Donovan raises the question as to how "experienced and ethical physicians so mislead others or be so misled themselves?" He further attributes this phenomenon to societal and peer pressures that influence self-diagnosis and confirm decisions to transition. As a result, these pressures lead to individuals wanting puberty blockers, cross-sex hormones, and surgery. Donovan goes on to identify several news stories where embracing sex reassignment treatment is a "cult-like" behavior. To conclude, he links these factors back to the failure to obtain informed consent from transgender patients and how that violates basic bioethical principles (Donovan, 2022).

Coverage Policies of the U.S. and Western Europe

U.S. Federal Level Coverage Policies

Medicare: In 2016, the Centers for Medicare and Medicaid Services (CMS) published a decision memo announcing that Medicare Administrative Contractors (MACs) can evaluate sex reassignment surgery coverage on a "case-by-case" basis.[10] CMS specifically noted that the decision memo is not a National Coverage Determination and that "no national policy will be put in place for the Medicare program" (CMS, 2016). This memo was the result of CMS reviewing over 500 studies, reports, and articles to the validity of the procedures. Following its evaluation, CMS determined that "the quality and strength of evidence were low due to mostly observational study designs with no comparison groups, subjective endpoints, potential confounding . . . small sample sizes, lack of validated assessment tools, and considerable (number of participants in the studies) lost to follow up." In 2017, CMS reinforced this position with a policy transmittal that repeated the 2016 memo's criteria (CMS, 2017).

The basis for Medicare's decision is that the "clinical evidence is inconclusive" and that "robust" studies are "needed to ensure that patients achieve improved health outcomes." In its review of available literature, CMS sought to answer whether there is "sufficient evidence to conclude that gender reassignment surgery improves health outcomes for Medicare beneficiaries with gender dysphoria." After evaluating 33 studies that met inclusion criteria, CMS's review concludes that "not enough high-quality evidence" is available "to determine whether gender reassignment surgery improves health outcomes for Medicare beneficiaries with gender dysphoria and whether patients most likely to benefit from these types of surgical intervention can be identified prospectively." Additionally, out of the 33 studies, just 6 provided "useful information" on the procedures' effectiveness, revealing that their authors "assessed quality of life before and after surgery using validated (albeit non-specific) psychometric studies" that "did not demonstrate clinically significant changes or differences in psychometric test results" following sex reassignment surgery (CMS, 2016).

U.S. Department of Defense – Tricare: Tricare does not cover sex reassignment surgery, but it will cover psychological services such as counseling for individuals diagnosed with gender dysphoria and cross-sex hormones when medically necessary (Tricare, 2022).[11]

U.S. Department of Veterans Affairs: The U.S. Department of Veterans Affairs (VA) does not cover sex reassignment surgery, although it will reimburse for cross-sex hormones and pre- and post-operative care related to transitioning. Because the VA only provides services to veterans of the U.S. armed forces, it cannot offer sex reassignment treatment to children (VA, 2020).[12]

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[10] The Centers for Medicare and Medicaid Services is part of the U.S. Department of Health and Human Services. Its primary functions are to administer the entire Medicare system and oversee federal compliance of state Medicaid programs. In addition, CMS sets reimbursement rates and coverage criteria for the Medicare program.

[11] Tricare is the insurance program that covers members of the U.S. armed forces and their families. This includes children of all ages.

[12] The U.S. Department of Veterans Affairs oversees the Veterans Health Administration (VHA), which consists of over 1,000 hospitals, clinics, and long-term care facilities. As the largest health care network in the U.S., the VHA provides services to veterans of the U.S. armed forces.

State-Level Coverage Policies

Florida: In April 2022, DOH issued guidance for the treatment of gender dysphoria, recommending that minors not receive puberty blockers, cross-sex hormones, or sex reassignment surgery. [13] The justification offered for recommending against these treatments is that available evidence is low-quality and that European countries also have similar guidelines. Accordingly, DOH provided the following guidelines:

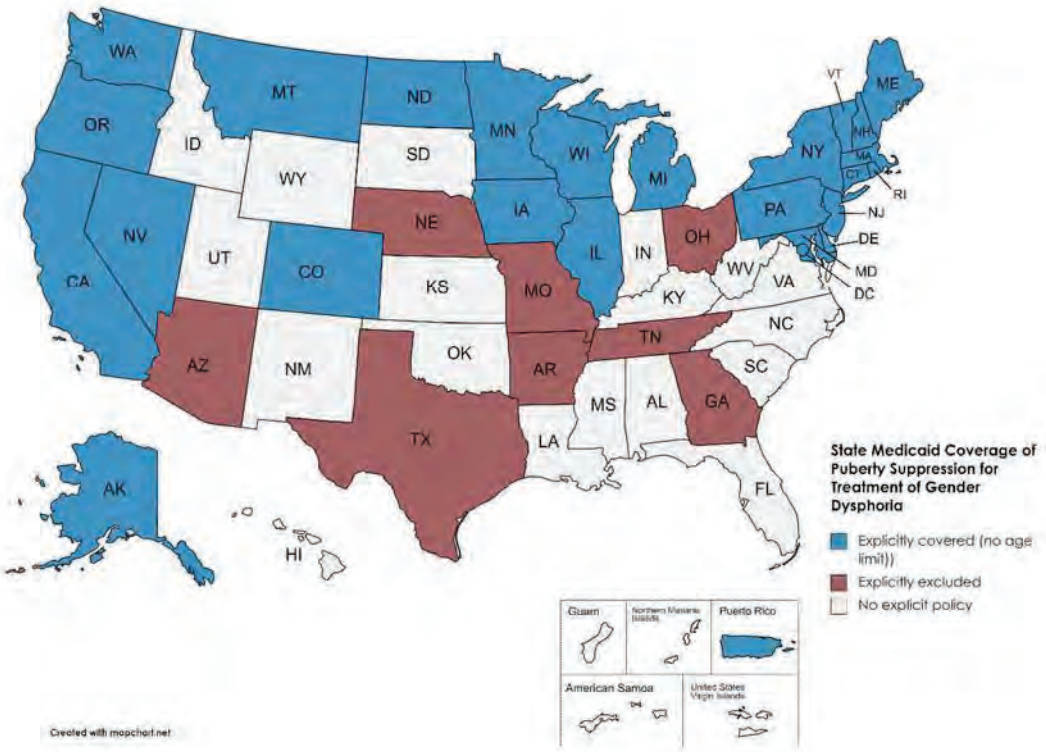
- "Social gender transition should not be a treatment option for children or adolescents."
- "Anyone under 18 should not be prescribed puberty blockers or hormone therapy."
- "Gender reassignment surgery should not be a treatment option for children or adolescents."
- "Children and adolescents should be provided social support by peers and family and seek counseling from a licensed provider."

In a separate fact sheet released simultaneously with the guidance, DOH further asserts that the evidence cited by the federal government cannot establish sex reassignment treatment's ability to improve mental health (DOH, 2022).

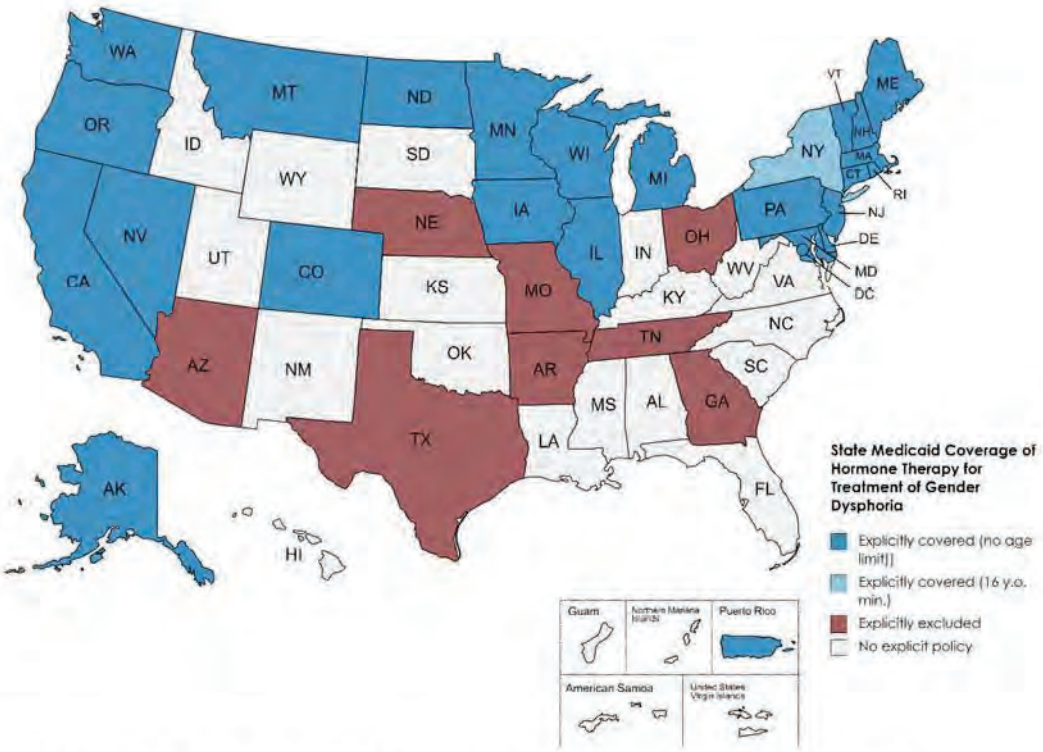
State Medicaid Programs: Because individual states differ in health services offered, Medicaid programs vary in their coverage of sex reassignment treatments. The following maps identify states that cover sex reassignment treatments, states that have no policy, and states that do not cover such treatments.

[13] Unlike the federal government, the State of Florida delegates responsibilities for Medicaid and health care services to five separate agencies (Agency for Health Care Administration, Department of Health, Department of Children and Families, Department of Elder Affairs, and Agency for Persons with Disabilities). Each agency has its own separate head (secretary or surgeon general), which reports directly to the Executive Office of the Governor. As Florida's public health agency, DOH oversees all county health departments, medical professional boards, and numerous health and welfare programs (e.g., Early Steps and Women, Infants, and Children). Because it oversees the boards, DOH has authority to release practice guidelines.

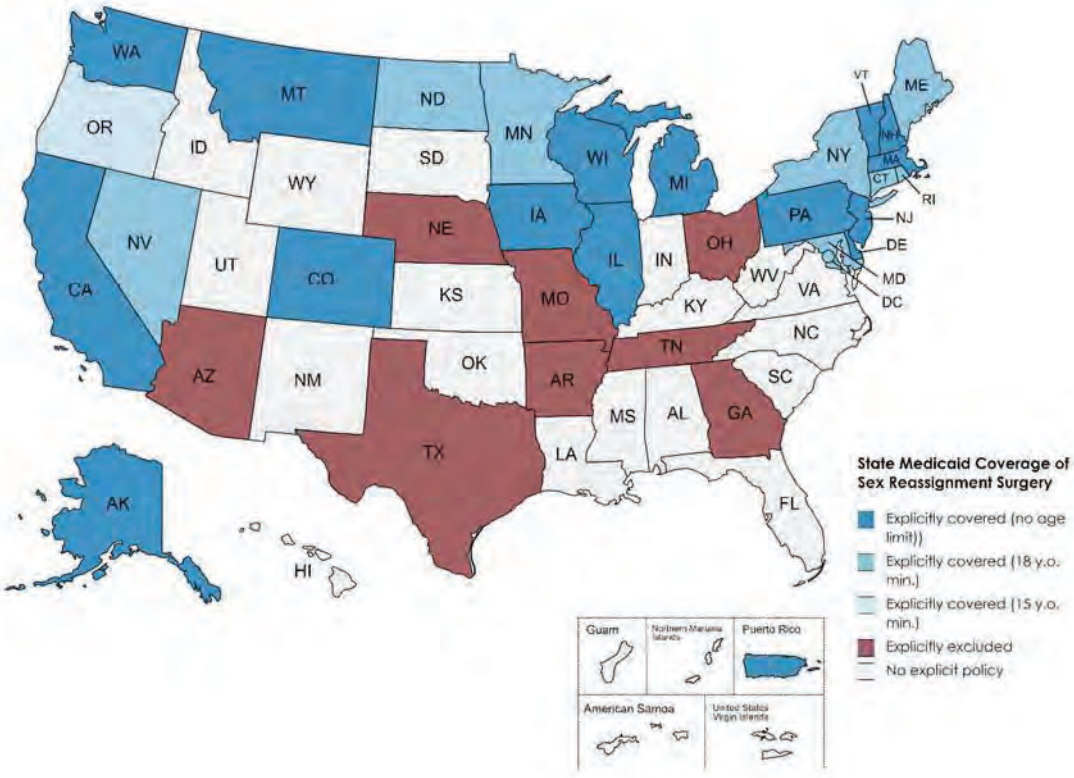
State Medicaid programs with coverage decisions regarding puberty blockers:



State Medicaid programs with coverage decisions regarding cross-sex hormones:



State Medicaid programs with coverage decisions regarding sex reassignment surgery:



Western Europe

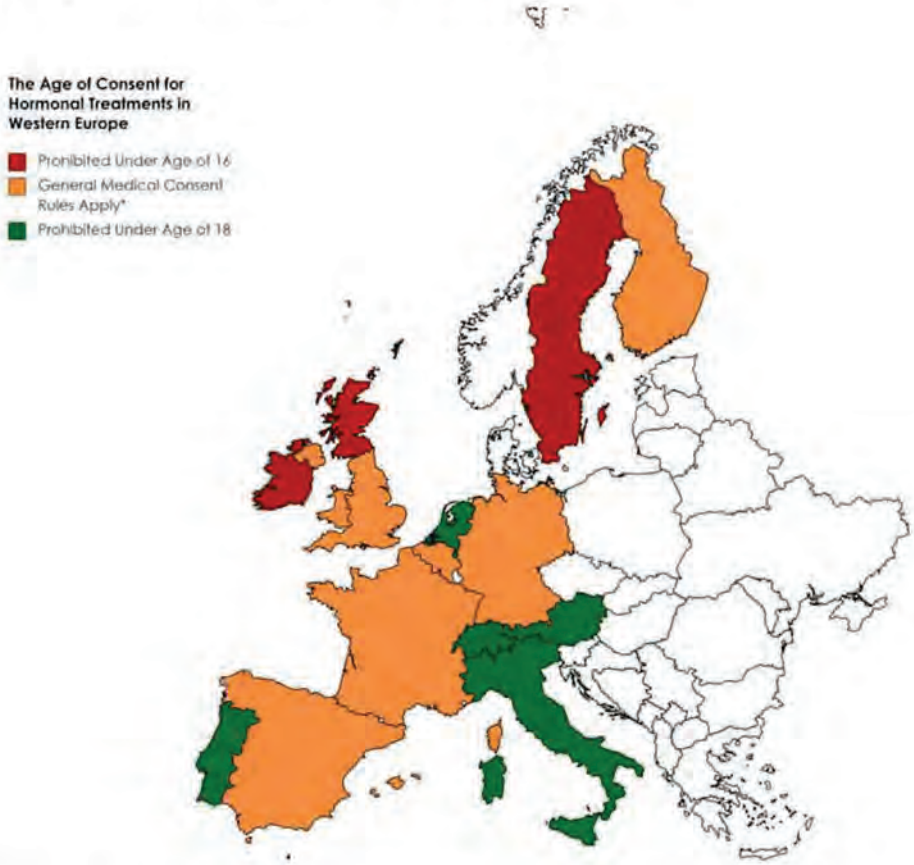
Scandinavian countries such as Sweden and Finland have released new guidelines on sex reassignment treatment for children. In 2022, the Swedish National Board of Health stated that "the risks of hormonal interventions for gender dysphoric youth outweigh the potential benefits." With the exception of youths who exhibited "classic" signs of gender identity issues, adolescents who present with the condition will receive behavioral health services and gender-exploratory therapy (Society for Evidence Based Gender Medicine, 2022).

In Finland, the Palveluvalikoima issued guidelines in 2020 stating that sex reassignment in minors "is an experimental practice" and that "no irreversible treatment should be initiated." The guidelines further assert that youths diagnosed with gender dysphoria often have co-occurring psychiatric disorders that must be stabilized prior to prescribing any cross-sex hormones or undergoing sex reassignment surgery (Palveluvalikoima, 2020).

The United Kingdom (U.K.) is also reassessing the use of irreversible treatments for gender dysphoria due the long-term effects on mental and physical health. In 2022, an independent interim report commissioned by the U.K.'s National Health Service (NHS) indicates that additional research and systematic changes are necessary to ensure the safe treatment of gender dysphoric youths. These include reinforcing the diagnosis process to assess all areas of physical and behavioral health, additional training for pediatric endocrinologists, and informing parents about the uncertainties regarding puberty blockers. The interim report is serving as a benchmark until the research is completed for final guidelines (The Cass Report, 2022).

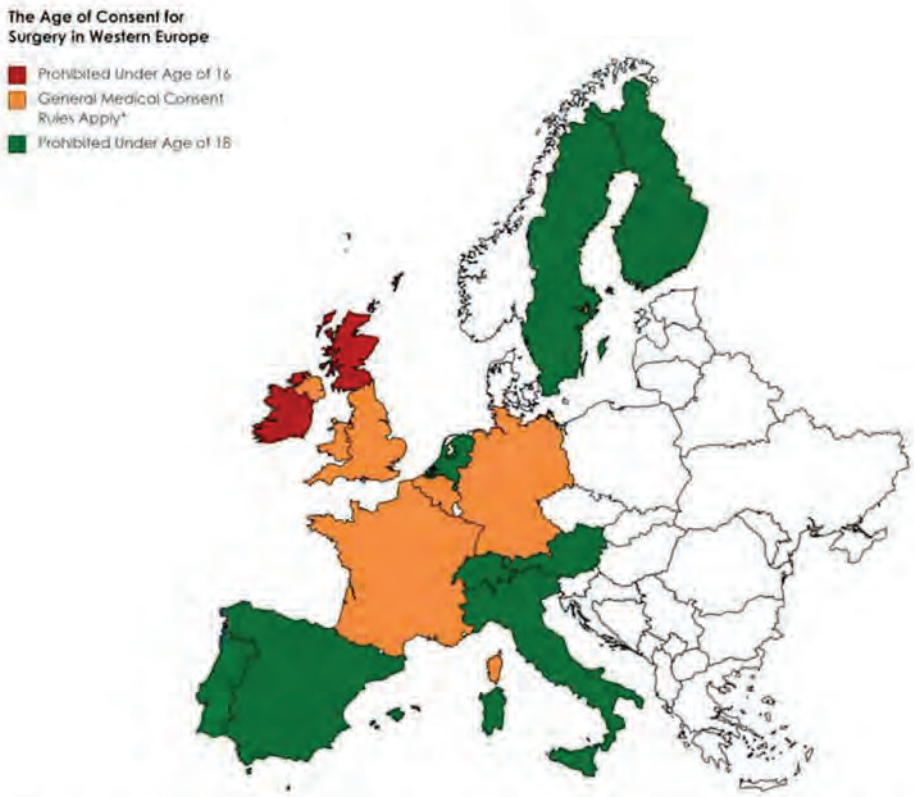
Like state Medicaid programs, health systems across Western Europe also vary in their coverage of sex reassignment treatment.

Western European nations' requirements for cross-sex hormones:



In this context, the age requirement for access to any medical treatment without consent of parents or of a public authority. This age may range from 16 to 18 years depending on each country's laws.

Western European nations' requirements for sex reassignment surgery:



In this context, the age requirement for access to any medical treatment without consent of parents or of a public authority. This age may range from 16 to 18 years depending on each country's laws.

Generally Accepted Professional Medical Standards Recommendation

This report does not recommend sex reassignment treatment as a health service that is consistent with generally accepted professional medical standards. Available evidence indicates that the services are not proven safe or effective treatments for gender dysphoria.

Rationale

The available medical literature provides insufficient evidence that sex reassignment through medical intervention is a safe and effective treatment for gender dysphoria. As this report demonstrates, the evidence favoring "gender affirming" treatments, including evidence regarding suicidality, is either low or very low quality:

- **Puberty Blockers:** Evidence does not prove that puberty blockers are safe for treatment of gender dysphoria. Evidence that they improve mental health and reduce suicidality is low or very low quality.
- **Cross-Sex Hormones:** Evidence suggesting that cross-sex hormones provide benefits to mental health and prevents suicidality is low or very low quality. Rather, evidence shows that cross-sex hormones cause multiple irreversible physical consequences as well as infertility.
- **Sex Reassignment Surgery:** Evidence of improvement in mental health and reduction in suicidality is low or very low quality. Sex reassignment surgery results in irreversible physical changes, including sterility.

While clinical organizations like the AAP endorse the above treatments, none of those organizations relies on high quality evidence. Their eminence in the medical community alone does not validate their views in the absence of quality, supporting evidence. To the contrary, the evidence shows that the above treatments pose irreversible consequences, exacerbate or fail to alleviate existing mental health conditions, and cause infertility or sterility. Given the current state of the evidence, the above treatments do not conform to GAPMS and are experimental and investigational.

✓ **Concur** ____ **Do not Concur**

Comments:

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_____

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Tom Wilson
Deputy Secretary for Medicaid (or designee)

6/2/22
Date

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Attachments

Attachment A: Secretary for the Florida Agency for Health Care Administration's Letter to Deputy Secretary Thomas Wallace. 20 April 2022.

Attachment B: Complete text of Rule 59G-1.035, F.A.C.

Attachment C: Romina Brignardello-Petersen, DDS, MSc, PhD and Wojtek Wiercioch, MSc, PhD: *Effects of Gender Affirming Therapies in People with Gender Dysphoria: Evaluation of the Best Available Evidence*. 16 May 2022.

Attachment D: James Cantor, PhD: *Science of Gender Dysphoria and Transsexualism*. 17 May 2022.

Attachment E: Quentin Van Meter, MD: *Concerns about Affirmation of an Incongruent Gender in a Child or Adolescent*. 17 May 2022.

Attachment F: Patrick Lappert, MD: *Surgical Procedures and Gender Dysphoria*. 17 May 2022.

Attachment G: G. Kevin Donovan, MD: *Medical Experimentation without Informed Consent: An Ethicist's View of Transgender Treatment for Children*. 16 May 2022.

Appendix Attachment

1a

ATTACHMENT A

RON DESANTIS
GOVERNOR

SIMONE MARSTILLER
SECRETARY

April 20, 2022

Tom Wallace
Deputy Secretary for Medicaid
Agency for Health Care Administration
2727 Mahan Drive
Tallahassee, FL 32308

Dear Deputy Secretary Wallace:

On April 20, 2022, the Florida Department of Health released guidance on the treatment of gender dysphoria for children and adolescents.[1] The Florida Medicaid program does not have a policy on whether to cover such treatments for Medicaid recipients diagnosed with gender dysphoria. Please determine, under the process described in Florida Administrative Code Rule 59G-1035, whether such treatments are consistent with generally accepted professional medical standards and not experimental or investigational. Pursuant to Rule 59G-1035(5), I look forward to receiving your final determination.

Sincerely,

Simone Marstiller
Secretary

[1] *See* https://www.floridahealth.gov/newsroom/2022/04/20220420-gender-dysphoria-press-release.pr.html (last visited Apr. 20, 2022).

Appendix Attachment

1b

ATTACHMENT B

59G-1.035 Determining Generally Accepted Professional Medical Standards.

(1) Definitions.

(a) Generally accepted professional medical standards – Standards based on reliable scientific evidence published in peer-reviewed scientific literature generally recognized by the relevant medical community or practitioner specialty associations' recommendations.

(b) Health service(s) – Diagnostic tests, therapeutic procedures, or medical devices or technologies.

(c) Relevant – Having a significant and demonstrable bearing on the matter at hand.

(2) Pursuant to the criteria set forth in subparagraph 59G-1.010(166)(a)3., Florida Administrative Code (F.A.C.), the Agency for Health Care Administration (hereafter referred to as Agency) will determine when health services are consistent with generally accepted professional medical standards and are not experimental or investigational.

(3) Health services that are covered under the Florida Medicaid program are described in the respective coverage and limitations handbooks, policies, and fee schedules, which are incorporated by reference in the F.A.C. The public may request a health service be considered for coverage under the Florida Medicaid program by submitting a written request via e-mail to HealthServiceResearch@ahca.myflorida.com. The request must include the name, a brief description, and any additional information that supports coverage of the health service, including sources of reliable evidence as defined in paragraph 59G-1.010(84)(b), F.A.C.

(4) To determine whether the health service is consistent with generally accepted medical standards, the Agency shall consider the following factors:

(a) Evidence-based clinical practice guidelines.

(b) Published reports and articles in the authoritative medical and scientific literature related to the health service (published in peer-reviewed scientific literature generally recognized by the relevant medical community or practitioner specialty associations).

(c) Effectiveness of the health service in improving the individual's prognosis or health outcomes.

(d) Utilization trends.

(e) Coverage policies by other creditable insurance payor sources.

(f) Recommendations or assessments by clinical or technical experts on the subject or field.

(5) Based upon the information collected, a report with recommendations will be submitted to the Deputy Secretary for Medicaid (or designee) for review. The Deputy Secretary for Medicaid (or designee) will make a final determination as to whether the health service is consistent with generally accepted professional medical standards and not experimental or investigational.

(6) In order for the health service to be covered under the Florida Medicaid program, it must also meet all other medical necessity criteria as defined in subsection 59G-1.010(166), F.A.C., and funded through the General Appropriations Act or Chapter 216, F.S.

Rulemaking Authority 409.919 FS. Law Implemented 409.902, 409.906, 409.912, 409.913 FS. History–New 2-26-14, Amended 9-28-15.

Appendix Attachment

1c

ATTACHMENT C

Effects of gender affirming therapies in people with gender dysphoria: evaluation of the best available evidence

Romina Brignardello-Petersen, DDS, MSc, PhD
Wojtek Wiercioch, MSc, PhD

1.Ā Introduction

We prepared this report to fulfill a request from the Florida Agency for Health Care Administration. This report contains three documents: 1. Main document (this document) summarizing the methodology used and the findings, 2. Methods document, which provides a detailed description of the systematic methodology used to find, prioritize, appraise, and synthesize the evidence, and 3. Results document, which describes the evidence available, the estimates of the effects of gender affirming therapies, and the certainty (also known as quality) of the evidence.

This document is organized in four parts. First, we describe the credentials and expertise of the health research methodologists conducting this evidence evaluation. Second, we summarize the methodology used. Third, we summarize the main findings. Finally, we briefly discuss strengths and limitations of our process and of the evidence.

2.Ā Credentials and expertise

Two experts in health research methodology, who specialize in evidence synthesis to support decision making, prepared this report. Their relevant credentials and expertise are described below.

Dr. Romina Brignardello-Petersen: Assistant Professor at the Department of Health Research Methods, Evidence, and Impact, at McMaster University. Dr. Brignardello-Petersen obtained a DDS degree (University of Chile) in 2007, an MSc degree in Clinical Epidemiology and Health Care Research (University of Toronto) in 2012, and MSc in Biostatistics (University of Chile) in 2015, and a PhD in Clinical Epidemiology and Health Care Research (University of Toronto) in 2016. Dr. Brignardello-Petersen has worked in evidence synthesis projects since 2010, and her research has focused on the methodology for the development of Systematic Reviews and Clinical Practice Guidelines since 2012. Through January 2022, she has published 122 peer reviewed scientific articles (24 as a first author and 9 as a senior author). Dr. Brignardello-Petersen has acted as a research methodologist for several groups and organizations, including the World Health Organization, the Pan-American Health Organization, the American Society of Hematologists, the American College of Rheumatology, and the Society for Evidence Based Gender Medicine, among others. Her research program has been awarded over $2M CAD from the Canadian Institutes for Health Research. Dr. Brignardello-Petersen has no lived experience as a person or family member of a person with gender dysphoria, and her research interests are not in this area.

Dr. Wojtek Wiercioch: Postdoctoral Research Fellow at the Department of Health Research Methods, Evidence, and Impact, at McMaster University. Dr. Wiercioch obtained an MSc degree (2014, McMaster University) and a PhD degree (2020, McMaster University) in Health Research Methodology. Dr. Wiercioch has worked in evidence syntheses projects since 2011, and his research focuses on evidence synthesis, guideline development methodology, and the guideline development process. Through April

2022, he has published 86 peer-reviewed scientific articles. Dr. Wiercioch has acted as a guideline methodologist for several groups and organizations, including the World Health Organization, the American Society of Hematologists, the Endocrine Society (of America), and the American Association for Thoracic Surgeons, among others. Dr. Wiercioch has no lived experience as a person or family member of a person with gender dysphoria, and his research interests are not in this area.

3.Ā Methods

We conducted an overview of systematic reviews. We used a reproducible approach to search, select, prioritize, appraise, and synthesize the available evidence, following high methodological standards. We describe full details of the methodology in an accompanying document.

In brief, we searched for systematic reviews published in English language in Epistemonikos, OVID Medline, and grey literature sources, through April 30, 2022. We selected systematic reviews which included studies on young individuals with a diagnosis of gender dysphoria, who received puberty blockers, cross-sex hormones, or surgeries; and in which authors reported data regarding outcomes important to patients: gender dysphoria, depression, anxiety, quality of life, suicidal ideation, suicide, adverse effects, and complications. Systematic reviews could have included any type of primary study design.

The two reviewers screened all titles and abstracts, followed by full text of potentially relevant systematic reviews. We then prioritized the most useful systematic review providing evidence for each of the outcomes, using pre-established criteria that considered date of publication, applicability, availability of outcome data, methodological quality of the systematic review, and usefulness of the data synthesis conducted in the systematic review (see methods document for details).

After abstracting data from the systematic reviews, we synthesized the best available evidence for each of the outcomes, and assessed the certainty (also known as quality) of the evidence using the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach. We conducted GRADE assessments using the information provided by the systematic review authors (risk of bias of primary studies, characteristics of included studies, results reported by the studies). We present the all the information about outcomes in GRADE summary of findings tables.

In addition, to evaluate the robustness of our conclusions, we systematically searched for and evaluated primary studies answering the questions of interest published after the authors of the included systematic reviews conducted their searches.

4.Ā Results

We included 61 systematic reviews, from which 3 addressed the effects of puberty blockers, 22 addressed the effects of cross-sex hormones, 30 addressed the effects of surgeries, and 6 addressed the effects of more than one of these interventions. After our prioritization exercise, we included information from 2 systematic reviews on puberty blockers, 4 on cross-sex hormones, and 8 on surgeries.

4.1 Puberty blockers

For most outcomes (except suicidality), there is no evidence about the effect of puberty blockers compared to not using puberty blockers. In other words, no studies compared the outcomes between a group of people with gender dysphoria using puberty blockers and another group of people with gender dysphoria not using them. Therefore, it is unknown whether people with gender dysphoria who use puberty blockers experience more improvement in gender dysphoria, depression, anxiety, and quality of life than those with gender dysphoria who do not use them. There is very low certainty about the effects of puberty blockers on suicidal ideation.

The studies included in the systematic review reported outcomes among a group of people with gender dysphoria after receiving puberty blockers. Low certainty evidence suggests that after treatment with puberty blockers, people with gender dysphoria experience a slight increase in gender dysphoria, and an improvement in depression, and anxiety. Low certainty evidence also suggests that a moderate percentage of patients experience adverse effects. The findings must be interpreted considering that these studies did not have a comparison group, and that it is unknown if people with gender dysphoria that do not use puberty blockers experience similar or different outcomes.

4.2 Cross sex hormones

For almost all outcomes (except breast cancer) there is no evidence about the effect of cross sex hormones compared to not using cross sex hormones. In other words, no studies compared the outcomes between a group of people with gender dysphoria using cross sex hormones and another group of people with gender dysphoria not using them. Therefore, it is unknown whether people with gender dysphoria who use cross-sex hormones experience more improvement in gender dysphoria, depression, anxiety, quality of life, and suicidality than those with gender dysphoria who do not use cross-sex hormones. There is low certainty evidence suggesting that cross-sex hormones may not increase the risk of breast cancer.

The studies included in the systematic reviews reported changes in the outcomes among a group of patients with gender dysphoria after the use of cross-sex hormones. Low certainty evidence suggests that after treatment with cross-sex hormones, people with gender dysphoria experience an improvement in gender dysphoria, depression, anxiety, and suicidality. There is very low certainty evidence about the changes in quality of life. There is moderate certainty evidence suggesting a low prevalence of venous thromboembolism after treatment with cross-sex hormones. The findings must be interpreted considering that these studies did not have a comparison group, and that it is unknown if people with gender dysphoria that do not use cross-sex hormones experience similar or different outcomes.

4.3 Surgeries

There were no systematic reviews and studies reporting on gender dysphoria, depression, anxiety, and suicidality. Therefore, the effects of surgeries on these outcomes (when compared to a group of patients with gender dysphoria who do not undergo surgery), or the changes in these outcomes (improvements or deterioration) among patients who undergo any gender-affirming surgery is unknown. Because of the lack of comparative studies, it is also unknown whether people with gender dysphoria who undergo surgeries experience more improvement in quality of life or less regret than those with gender dysphoria who do not undergo any surgeries. There is low certainty evidence suggesting that a low percentage of participants experience regret, and very low certainty evidence about changes in quality of life after surgery.

In assigned females at birth, low certainty evidence suggests that a high percentage of people are satisfied after chest surgery. There is very low certainty evidence, however, about satisfaction after bottom surgery, and about complications after both chest and bottom surgery. In assigned males at birth, low certainty evidence suggests a high percentage of people satisfied and a low percentage of people experiencing regret after vaginoplasty. There is very low certainty, however, about satisfaction with chest surgery and complications and reoperations after bottom surgery.

4.4 Evidence published after the systematic reviews selected

We found 10 relevant studies that were published after the systematic reviews were conducted. This evidence was not sufficient to importantly change the conclusions previously made.

5.Ā Discussion

5.1 Summary of the evidence

In this report, we systematically summarized the best available evidence regarding the effects of puberty blockers, cross-sex hormones, and surgeries in young people with gender dysphoria. We did not find evidence about the effect of these interventions on outcomes important to patients when compared to not receiving the intervention. We found low and very low certainty evidence suggesting improvements in gender dysphoria, depression, anxiety, and quality of life, as well as low rates of adverse events, after treatment with puberty blockers and cross-sex hormones.

5.2 Completeness and applicability

There are several gaps in the evidence regarding the effects of puberty blockers, cross-sex hormones, and surgeries in patients with gender dysphoria. Although we found some evidence for all the outcomes of interest, the evidence is suboptimal: several limitations included the lack of studies with a comparison group, and the risk of bias and imprecision, resulting in low or very low certainty evidence for all outcomes.

The applicability of the evidence may also be limited. Although we only rated down for indirectness when it was considered a serious problem (i.e., in evidence about the effects of surgeries, which was collected from people who were importantly older than the target population in this report), there are also potential applicability issues to consider in the evidence regarding the effects of puberty blockers and cross-sex hormones. It is not clear to what extent the people included in the studies were similar enough to the people seeking these treatment options today. For example, some of the included studies were conducted in people who had a diagnosis of gender dysphoria confirmed with strict criteria, as well as a supportive environment. It is important to take into account to what extent this may compromise the applicability of the results to people who are not in the same situation.

5.3 Strengths and limitations of the process for developing this report

We followed a reproducible process for developing this report. We used the highest methodological standards and the approach to evidence synthesis we generally use when supporting organizations in the development of their guidelines. This approach is based on prioritizing the sources of evidence most likely to be informative (i.e., to identify and use the evidence with the highest certainty level).

To follow the principles for evidence-based decision making, which require using the best available evidence to inform decisions, we summarized the best available evidence. Because knowing the best

available evidence necessitates being aware of all the available evidence, we based this report on systematic reviews of the literature. We chose the most trustworthy and relevant systematic reviews among many published reviews.

One potential limitation of the process is that, due to feasibility concerns, we relied on the information reported by the systematic reviewers. Most of the systematic reviews we used, unfortunately, were judged at moderate or low methodological quality, which may raise concerns about the trustworthiness of the evidence presented in this report. We believe, however, that the results and conclusions of this report would not be importantly different had the systematic reviews been conducted following higher methodological standards. Because there are no randomized controlled trials, well-conducted comparative observational studies, or very large case series (which include a large sample of consecutive patients who are representative of the whole population) addressing the effects of puberty blockers, cross-sex hormones, and surgeries; the certainty of the evidence about the effects of these interventions is likely to continue being low or very low, even if a few more studies are included (as observed after searching for primary studies published after the reviews were conducted) or some data points were reported inaccurately in the systematic reviews.

Also due to feasibility concerns, the scope of this report was limited to outcomes that are important to patients. Although some may question the decision of not including surrogate outcomes for which there is evidence available (e.g. bone density, blood pressure), decision makers should rarely consider these outcomes and should instead focus on outcomes that do matter to people and stakeholders (e.g., fractures, cardiovascular events).

5.4 Implications

The evidence evaluating the effects of puberty blockers, cross-sex hormones, and surgeries in people with gender dysphoria has important limitations. Therefore, decisions regarding their use should carefully consider other relevant factors. At a patient level, these factors include patients' values and preferences (how patients trade off the potential benefit and harms - what outcomes are more important to them), and resources needed to provide the interventions (and the availability of such resources). At a population level, in addition to these factors, it would be important to consider resources needed to implement the interventions, feasibility, acceptability by relevant stakeholders, and equity.

It is important to note that when there is low or very low certainty evidence, it is rarely appropriate to make decisions that will be applied to the majority of the patients (equivalent to strong recommendations). This implies, at the patient level, that shared decision making is a key part of the decision-making process. At a policy level, extensive debate may be needed.

6.Ā Conclusions

Due to the important limitations in the body of evidence, there is great uncertainty about the effects of puberty blockers, cross-sex hormones, and surgeries in young people with gender dysphoria. This evidence alone is not sufficient to support whether using or not using these treatments. We encourage decision makers to be explicit and transparent about which factors play an important role in their decision, and how they are weighed and traded off.

Methods

To ensure completeness and feasibility of the evidence review, we used an approach in which we prioritized the types of studies according to the design that was more likely to provide the best available evidence. First, we searched for systematic reviews of the literature. Second, we appraised all existing systematic reviews to select the most trustworthy (highest methodological quality, most up-to-date, most applicable) from which to draw conclusions. Third, we used the information presented in the systematic reviews to abstract information regarding the effects of the interventions of interest. Fourth, we assessed the certainty of the evidence (also known as quality of the evidence) abstracted from the selected systematic reviews. We planned to search for primary studies if systematic reviews were not found.

Information sources: We searched for existing systematic reviews in:

1. Epistemonikos (https://www.epistemonikos.org), an electronic database that focuses on systematic reviews. We used a comprehensive search strategy based on the population, using the terms "gender dysphoria", "gender identity disorder" and "transgender". We conducted this search on April 23, 2022.
2. OVID Medline. We used a search strategy based on the population and the interventions of interest, as well as an adaptation of a filter for systematic reviews from the Health Information Research Unit at McMaster University. We conducted this search on April 23, 2022.
3. Grey literature: we conducted a manual search in the websites of specific health agencies: National Institutes for Health and Care Excellence (NICE), Agency for Healthcare Research and Quality (AHRQ), Canada's Drug and Health Technology Agency (CADTH), and the website from the Society for Evidence-Based Gender Medicine (SEGM). We conducted these searches between April 27-30, 2022.

We used no date limits for the searches, but we did limit to systematic reviews published in English. Search strategies are available in Appendix 1.

Eligibility criteria: We included systematic reviews, which we defined as:

1. Reviews in which the authors searched for studies to include in at least one electronic database, and in which there were eligibility criteria for including studies and a methodology for assessing and synthesizing the evidence, or
2. Reviews in which the authors searched for studies to include in at least one electronic database, and although there was no description of eligibility criteria or methodology, the presentation of the results strongly suggested that the authors used systematic methods (e.g. flow chart depicting study selection, tables with the same information from all included studies, synthesis of data at the outcome level).

We screened systematic reviews using the following criteria for inclusion:

- ***Type of participants:*** Young individuals (< 25 years old) with a diagnosis of gender dysphoria/gender identity disorder. We included reviews in which authors used any label and diagnostic criteria for this condition. We included reviews in which the participants in the reported studies were older if it was the only evidence available for a specific question. We excluded reviews with mixed populations (i.e. with and without gender dysphoria) in which people without gender dysphoria constituted more than 20% of the total sample.

- ***Type of Interventions*:** Puberty blockers, cross-sex hormones, gender affirming surgeries. We included any type of puberty blockers and cross-sex hormones, provided with any regimen. We included the following surgeries: phalloplasty, vaginoplasty, and chest surgery (mastectomy or breast implants/augmentation). We only included these when they were performed for the first time (i.e., not revision surgeries).

- ***Type of comparison:*** When the systematic reviews included comparative studies, the comparator of interest was no intervention. Participants could have received psychotherapy or counselling as a cointervention (in both groups).

- ***Type of outcomes:*** Gender dysphoria, mental health outcomes (depression and anxiety), quality of life, suicidal ideation, suicide, adverse effects (for puberty blockers and cross-sex hormones only), and satisfaction, complications, reoperation, and regret (for surgeries only). We included any length of follow-up. We excluded surrogate outcomes such as blood pressure, bone mineral density, kidney or liver function test values, etc.

- ***Type of studies included in the systematic reviews:*** Any clinical study (studies in which the researchers recruited and measured outcomes in humans) regardless of study design. This included randomized clinical trials, comparative observational studies, and case series. Because we could not quantify effect measures, incidence, or prevalence, we excluded case reports.

We excluded systematic reviews published only in abstract format, and those that we could not retrieve in full text (no access through the McMaster University library, or open access online).

Selection process: The two reviewers screened all titles and abstracts independently and in duplicate, followed by screening of full texts of potentially eligible systematic reviews independently and in duplicate, using the systematic review online application Covidence (https://www.covidence.org). We solved disagreements by consensus.

To select the most useful systematic reviews among all of those that met the eligibility criteria, we used the following prioritization criteria:

1. Date of publication: we prioritized systematic reviews published within the last 3 years (2020-2022)

2. Match between eligibility criteria of the review and the question of interest: we prioritized reviews in which the authors specifically included the population, intervention, comparison, and outcomes of interest for this evidence review
3. Outcome data available: we prioritized systematic reviews in which the authors report outcome data
4. Methodological quality: we used a modified version of the items in AMSTAR 2.[1] We modified the items to ensure assessment of methodological rather than reporting quality (Table 1). We rated each systematic review as having high, moderate, low, or critically low methodological quality, according to the guidance from the developers of the tool.[1] We reached consensus on critical items that determined this rating (Table 1). We prioritized selection of systematic reviews with highest methodological quality.

For surgical interventions, in addition, we prioritized systematic reviews that covered all gender affirming surgeries (instead of focusing on a specific type of surgery).

We selected a systematic review specifically for each of the outcomes of interest. In other words, we chose the best systematic review to inform each outcome. Each systematic review, however, could inform more than one outcome.

Table 1: Items used to rate the methodological quality of the eligible systematic reviews

AMSTAR Item	Modification to measure methodological quality
1. Did the research questions and inclusion criteria for the review include the components of PICO?	Does the review have a clear question and are the eligibility criteria for studies consistent with the question?
2. Did the report of the review contain an explicit statement that the review methods were established prior to the conduct of the review and did the report justify any significant deviations from the protocol?	No modification needed
3. Did the review authors explain their selection of the study designs for inclusion in the review?	No modification needed
4. Did the review authors use a comprehensive literature search strategy?	Did the authors search in at least 2 electronic databases, using a reproducible search strategy?
5. Did the review authors perform study selection in duplicate?	No modification needed
6. Did the review authors perform data extraction in duplicate?	No modification needed
7. Did the review authors provide a list of excluded studies and justify the exclusions?	No modification needed
8. Did the review authors describe the included studies in adequate detail?	No modification needed
9. Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) in individual studies that were included in the review?	No modification needed

10. Did the review authors report on the sources of funding for the studies included in the review?	Did the review authors consider conflicts of interest and how they may have affected the results of the primary studies?
11. If meta-analysis was performed, did the review authors use appropriate methods for statistical combination of results?	Was the synthesis of evidence done appropriately? (outcome level, appropriate meta analysis or narrative synthesis)
12. If meta-analysis was performed, did the review authors assess the potential impact of RoB in individual studies on the results of the meta-analysis or other evidence synthesis?	Did authors use subgroup or sensitivity analysis to assess the effect of risk of bias in meta-analytic results? Likely not applicable to most cases
13. Did the review authors account for RoB in primary studies when interpreting/discussing the results of the review?	Did the review authors incorporate an assessment of risk of bias at the outcome level when drawing conclusions?
14. Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?	Did the review authors incorporate an assessment of heterogeneity at the outcome level when drawing conclusions?
15. If they performed quantitative synthesis did the review authors carry out an adequate investigation of publication bias (small study bias) and discuss its likely impact on the results of the review?	Did the authors address publication bias? (regardless of whether synthesis was using a meta-analysis or narrative)
16. Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?	Did the authors report conflicts of interest and did they manage any existing conflict of interest appropriately?

Shaded items were items considered critical.

Data abstraction: We abstracted outcome data from each of the systematic reviews. To ensure feasibility, we used the data as reported by the authors of the review and did not re-abstract data from the primary studies. One reviewer abstracted the data and a second reviewer checked the data for accuracy.

Data synthesis: Using the systematic reviews prioritized, we synthesized the evidence at the outcome level. Because of the higher likelihood of it resulting in higher certainty of evidence (details below) for each outcome, when there was comparative data (i.e. comparison of outcomes between an untreated and a treated group) and non-comparative data (i.e. changes from before to after treatment in one group, or only outcomes after treatment), we prioritized comparative data.

We prioritized numerical results (i.e. magnitudes of effect) and reported estimates and their 95% confidence intervals (CIs). When results were not reported in that way, we calculated the estimates and CIs when systematic review authors provided sufficient information. When necessary, we assumed moderate correlation coefficients for the changes between baseline and follow up (coefficient= 0.4). When this information was not available we reported narratively the effect estimates and ranges.

When a specific study reported the same outcome measured by more than one scale, we chose the scale presented first. We highlighted situations when the results obtained with other scales were importantly different.

When the same outcome was reported by more than one study but we could not pool the results, we created narrative syntheses.

Certainty of evidence: For each outcome, we assessed the certainty of the evidence (also known as quality of the evidence) using the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach.[2] The certainty of evidence can be rated as high, moderate, low, or very low (Table 2). For effects of interventions, the certainty of the evidence started as high and could be rated down due to serious concerns about risk of bias, inconsistency, indirectness, imprecision, and publication bias. For inferences about the effect of using a treatment versus no treatment, when there was no comparison group, we assessed risk of bias as very serious and rated down the certainty of the evidence 2 levels by default. We used the same principles when assessing the certainty of the evidence in estimates of prevalence or rates, but did not judge risk of bias as resulting in very serious concerns due to lack of a comparison group. For all assessments, we used the information presented by the authors of the systematic review (e.g. assessments of risk of bias of the included studies, effect estimates from studies).

Table 2: GRADE levels of certainty of the evidence

Certainty level	Definition
High ⊕⊕⊕⊕	We are very confident that the true result (effect estimate/ prevalence/ mean, etc.) lies close to that of the estimate of the result
Moderate ⊕⊕⊕◯	We are moderately confident in the result: the true result is likely to be close to the estimate of the result, bur there is a possibility that it is substantially different
Low ⊕⊕◯◯	Our confidence in the result is limited: the true result may be substantially different from the estimate of the result
Very low ⊕◯◯◯	We have very little confidence in the result: the true result is likely to be substantially different from the estimate of the result

Presentation of results: We created GRADE Summary of Findings tables in which we describe the evidence available for each of the outcomes, and the certainty of the evidence. These tables contain the following information:

- Outcomes: measurement method (including scales, if applicable) and follow-up
- Estimates of effect: absolute and relative estimates of effect, and their corresponding 95% CIs.
- Number of studies and participants providing evidence for the outcome
- GRADE certainty of the evidence, with a link to detailed explanations (provided at the bottom of the table) of why the certainty of the evidence was rated at a specific level
- A narrative statement about what happens with the outcome, based on the estimate of effect and certainty of evidence.

Searching for new evidence not included in the systematic reviews: To assess if newer evidence not included in the included systematic reviews would change the conclusions importantly, we searched for and assessed primary studies answering the questions of interest that were published after the authors of such systematic reviews conducted their searches. We defined an important change in conclusions as a change in the certainty of the evidence (from low/ very low/ not available to high/ moderate).

We searched OVID Medline from January 1, 2019 through May 12, 2022, for studies published in English. We included studies if they enrolled young individuals (< 25 years old, with at least 20% of the people being this age) with a diagnosis of gender dysphoria/gender identity disorder, who received puberty blockers, cross-sex hormones, or surgeries; and measured any of the outcomes of interest.

For outcomes that should be evaluated in a comparative manner (e.g., depression, anxiety, etc.), because they are the only type of study design that would change the conclusions importantly, we selected comparative clinical studies (studies in which the researchers recruited and measured outcomes in humans, and compared a group of people who received the intervention with another one who did not receive the intervention). This included randomized clinical trials, and comparative observational studies. For outcomes that can only occur when the treatment is administered, we included non-comparative observational studies (case series). For these to change conclusions, they should have a sufficiently large sample size, and therefore we excluded case series in which the researchers reported information from <100 people.

Two reviewers screened the potentially relevant articles at title and abstract and full text screening stage. We abstracted relevant study characteristics and outcome data, and assessed risk of bias of comparative studies using the most relevant domains of the Risk of Bias for non-Randomized studies of Interventions (ROBINS-I) tool[3] (table 3). For non-comparative studies, we used a list of custom items that captured the most important potential risk of bias concerns of case series (table 4). We judged the risk of bias of each study as the highest risk of bias of any of the domains assessed (e.g., one domain judged at critical risk of bias resulted in the study judged at critical risk of bias). We summarized this information at the study and judged whether it would have changed the conclusions importantly if added to the body of evidence from the systematic reviews.

Table 3: Domains used to assess risk of bias of comparative studies

Domain	Low	Critical
Confounding	Adjusted for all relevant confounding factors	No adjustment
Classification of intervention	Intervention recorded prospectively or from medical records	Asked patients to recall whether they received the intervention
Deviation from intended interventions	No cointerventions or cointerventions balanced between the groups	Cointerventions unbalanced between the groups

Missing data	More than 90% of patients who started the study provided outcome data	Less thank 50% of patients who started the study provided outcome data
Measurement of outcome	All outcomes measured in the same way in both groups	Outcomes measured differently in both groups

Each domain could be judged at low, moderate, serious, or critical risk of bias. In addition, information could be insufficient to make a judgment. The table describes the criteria used to judge a domain in the extreme categories.

Table 4: Domains used to assess risk of bias of non- comparative studies

Domain	Low	High
Representativeness of the sample	Included all consecutive patients	Highly selected sample based on specific characteristics related with the prognosis after treatment
Classification of the intervention	Intervention recorded prospectively or from medical records	Asked patients to recall whether they received the intervention
Deviation from intended interventions	No cointerventions outside what would be observed in practice (or in a small proportion of patients)	Most patients received co interventions that could influence the outcomes
Missing data	More than 90% of patients who started the study provided outcome data	Less thank 50% of patients who started the study provided outcome data
Measurement of outcome	Outcomes measured prospectively or from medical records	Outcomes reported by the patients and/ or needed to recall what happened a long time ago

Each domain could be judged at low, moderate, or high risk of bias. In addition, information could be insufficient to make a judgment. The table describes the criteria used to judge a domain in the extreme categories.

References

1. Shea BJ, Reeves BC, Wells G, et al. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. *Bmj* 2017;358:j4008. doi: 10.1136/bmj.j4008 [published Online First: 2017/09/25]
2. Blashem H, Helfand M, Schunemann HJ, et al. GRADE guidelines: 3. Rating the quality of the evidence. *Journal of clinical epidemiology* 2011;64:401-06.
3. Sterne JA, Hernan MA, Reeves BC, et al. ROBINS-I: a tool for assessing risk of bias in non-randomised studies of interventions. *BMJ (Clinical research ed)* 2016;355:i4919. doi: 10.1136/bmj.i4919 [published Online First: 2016/10/14]

Search Strategies

Questions Covered:

PICO questions:

1. For children, adolescents, and young adults (<21) with gender dysphoria, what are the effects of treatment with **puberty blockers (gonadotrophin releasing hormone (GnRH) analogues)** compared to no puberty blockers?

2. For children, adolescents, and young adults (<21) with gender dysphoria, what are the effects of treatment with **cross-sex hormones** compared to no cross-sex hormones?

3. For children, adolescents, and young adults (<21) with gender dysphoria, what are the effects of **gender-affirming surgeries** compared to no surgery?

Search Strategies:

Note: Population, puberty blocker, cross-sex hormones search blocks adapted from NICE (2020) evidence reviews. Gender-affirming search block adapted from Wernick *et al.* 2019. Systematic reviews filter adapted from McMaster University Health Information Research Unit (HIRU).

Databases: Medline, Epistemonikos
Grey Literature: CADTH, AHRQ, SEGM, NICE

Medline

OVERVIEW	
Interface:	Ovid
Databases:	OVID Medline Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present
Study Types:	Systematic Reviews
Search Run:	April 23, 2022

Search Strategy: search terms [number of results]		
Population		
1	exp "Sexual and Gender Minorities"/	12385
2	Gender Dysphoria/	774
3	Gender Identity/	20481
4	Gender Role/	197
5	"Sexual and Gender Disorders"/	81
6	Transsexualism/	4236
7	Transgender Persons/	5303
8	Health Services for Transgender Persons/	186

9 exp Sex Reassignment Procedures/ 1208
10 gender identity disorder.mp. 492
11 non-binary.mp. 566
12 transgender.mp. 9989
13 (gender* adj3 (dysphori* or disorder* or distress or nonconform* or non-conform* or atypical or incongru* or identi* or disorder* or confus* or minorit* or queer* or variant or diverse or creative or explor* or question* or expan* or fluid)).tw. 16428
14 ((sex or gender*) adj3 (reassign* or chang* or transform* or transition* or expression*)).tw. 13749
15 (transgend* or transex* or transsex* or transfem* or transwom* or transma* or transmen* or transperson* or transpeopl*).tw. 19665
16 (genderfluid or genderqueer or agender).mp. 130
17 ((correct or chosen) adj3 name).mp. 591
18 (trans or crossgender* or cross-gender* or crossex* or cross-sex* or genderqueer*).tw. 135313
19 ((sex or gender*) adj3 (reassign* or chang* or transform* or transition* or expression*)).tw. 13749
20 (male-to-female or m2f or female-to-male or f2m).tw. 148579
21 or/1-20 342948

Cross-Sex Hormones

22 Hormones/ad, tu, th 4676
23 exp Progesterone/ad, tu, th 11265
24 exp Estrogens/ad, tu, th 29635
25 exp Gonadal Steroid Hormones/ad, tu, th 35375
26 (progesteron* or oestrogen* or estrogen*).tw. 223307
27 ((cross-sex or crosssex or gender-affirm*) and (hormon* or steroid* or therap* or treatment* or prescri* or pharm* or medici* or drug* or intervention* or care)).tw. 1488
28 exp Estradiol/ad, tu, th 11197
29 exp Testosterone/ad, tu, th 8710
30 (testosteron* or sustanon* or tostran or testogel or testim or restandol or andriol or testocaps* or nebido or testavan).tw. 86509
31 (oestrad* or estrad* or evorel or ethinyloestrad* or ethinylestrad* or elleste or progynova or zumenon or bedol or femseven or nuvelle).tw. 100252
32 or/22-31 345895

Puberty Blockers

33 Gonadotropin-Releasing Hormone/ 28809
34 (pubert* adj3 block*).ti,ab. 141
35 ((gonadotrophin or gonadotropin) and releasing).ti,ab. 20121
36 (GnRH adj2 analog*).ti,ab. 2878
37 GnRH*.ti,ab. 24390
38 "GnRH agonist*".ti,ab. 4749
39 Triptorelin Pamoate/ 1981
40 triptorelin.ti,ab. 821
41 arvekap.ti,ab. 1

42	("AY 25650" or AY25650).ti,ab.	1
43	("BIM 21003" or BIM21003).ti,ab.	0
44	("BN 52014" or BN52014).ti,ab.	0
45	("CL 118532" or CL118532).ti,ab.	0
46	Debio.ti,ab.	119
47	diphereline.ti,ab.	28
48	moapar.ti,ab.	0
49	pamorelin.ti,ab.	1
50	trelstar.ti,ab.	3
51	triptodur.ti,ab.	1
52	("WY 42422" or WY42422).ti,ab.	0
53	("WY 42462" or WY42462).ti,ab.	0
54	gonapeptyl.ti,ab.	0
55	decapeptyl.ti,ab.	225
56	salvacyl.ti,ab.	0
57	Buserelin/	2137
58	buserelin.ti,ab.	1395
59	onist.ti,ab.	0
60	("hoe 766" or hoe-766 or hoe766).ti,ab.	72
61	profact.ti,ab.	2
62	receptal.ti,ab.	31
63	suprecur.ti,ab.	5
64	suprefact.ti,ab.	25
65	tiloryth.ti,ab.	0
66	histrelin.ti,ab.	78
67	"LHRH-hydrogel implant".ti,ab.	1
68	("RL 0903" or RL0903).ti,ab.	1
69	("SPD 424" or SPD424).ti,ab.	1
70	goserelin.ti,ab.	1016
71	Goserelin/	1643
72	("ici 118630" or ici118630).ti,ab.	51
73	("ZD-9393" or ZD9393).ti,ab.	0
74	zoladex.ti,ab.	388
75	leuprorelin.ti,ab.	525
76	carcinil.ti,ab.	0
77	enanton*.ti,ab.	26
78	ginecrin.ti,ab.	0
79	leuplin.ti,ab.	15
80	Leuprolide/	3018
81	leuprolide.ti,ab.	2004
82	lucrin.ti,ab.	16
83	lupron.ti,ab.	183
84	provren.ti,ab.	0
85	procrin.ti,ab.	3
86	("tap 144" or tap144).ti,ab.	41
87	(a-43818 or a43818).ti,ab.	3
88	Trenantone.ti,ab.	2
89	staladex.ti,ab.	0

90 prostap.ti,ab. 6
91 Nafarelin/ 327
92 nafarelin.ti,ab. 263
93 ("76932-56-4" or "76932564").ti,ab. 0
94 ("76932-60-0" or "76932600").ti,ab. 0
95 ("86220-42-0" or "86220420").ti,ab. 0
96 ("rs 94991 298" or rs94991298).ti,ab. 0
97 synarel.ti,ab. 13
98 deslorelin.ti,ab. 306
99 gonadorelin.ti,ab. 237
100 ("33515-09-2" or "33515092").ti,ab. 0
101 ("51952-41-1" or "51952411").ti,ab. 0
102 ("52699-48-6" or "52699486").ti,ab. 0
103 cetrorelix.ti,ab. 520
104 cetrotide.ti,ab. 52
105 ("NS 75A" or NS75A).ti,ab. 0
106 ("NS 75B" or NS75B).ti,ab. 0
107 ("SB 075" or SB075).ti,ab. 1
108 ("SB 75" or SB75).ti,ab. 67
109 gonadoliberin.ti,ab. 151
110 kryptocur.ti,ab. 7
111 cetrorelix.ti,ab. 520
112 cetrotide.ti,ab. 52
113 antagon.ti,ab. 18
114 ganirelix.ti,ab. 160
115 ("ORG 37462" or ORG37462).ti,ab. 3
116 orgalutran.ti,ab. 26
117 ("RS 26306" or RS26306).ti,ab. 5
118 ("AY 24031" or AY24031).ti,ab. 0
119 factrel.ti,ab. 13
120 fertagyl.ti,ab. 12
121 lutrelef.ti,ab. 5
122 lutrepulse.ti,ab. 3
123 relefact.ti,ab. 10
124 fertiral.ti,ab. 0
125 (hoe471 or "hoe 471").ti,ab. 6
126 relisorm.ti,ab. 4
127 cystorelin.ti,ab. 19
128 dirigestran.ti,ab. 5
129 or/33-128 47108

Gender-affirming Surgeries

130 virilization/ 2309
131 (virilism or virili?ation or masculini?ation).mp. 5657
132 feminization/ 797
133 femini?ation.mp. 3420
134 (vaginoplasty or vaginoplasties).mp. 1022

135 exp Vagina/ or *Reconstructive Surgical Procedures/ 78841
136 (vaginoplasty or vaginoplasties).mp. 1022
137 (phalloplasty or phalloplasties).mp. 561
138 exp Penile Prosthesis/ 1636
139 "penile reconstruction".mp. 292
140 (vagina reconstruction or vaginal reconstruction).mp. 549
141 (genitoplasty or genitoplasties).mp. 263
142 transsexualism/su [Surgery] 1007
143 sex reassignment.mp. 1668
144 sex transformation.mp. 42
145 or/130-144 91560

Systematic Review Filter

147 meta-analysis/ 158633
148 (meta anal* or meta-anal* or metaanal*).ti,ab. 231876
149 ((systematic or evidence) adj2 (review* or overview*)).ti,ab. 279806
150 ((pool* or combined) adj2 (data or trials or studies or results)).ab. 65411
151 (search strategy or search criteria or systematic search or study selection or data extraction).ab. 70886
152 (search* adj4 literature).ab. 84593
153 or/146-152 521554

Combine Interventions and Population

154 32 or 129 or 145 459771
155 21 and 154 17838

Limit to Systematic Reviews in English Language

156 153 and 155 295
157 limit 156 to english language 288

Epistemonikos

OVERVIEW	
Interface:	https://www.epistemonikos.org/
Database:	Epistemonikos
Study Types:	Systematic Reviews
Search Run:	April 23, 2022

Search Strategy: search terms [number of results]

Population

(title:((title:(gender dysphoria) OR abstract:(gender dysphoria)) OR (title:(gender identity disorder) OR abstract:(gender identity disorder)) OR (title:(transgender) OR abstract:(transgender))) OR abstract:((title:(gender dysphoria) OR abstract:(gender dysphoria)) OR (title:(gender identity disorder) OR abstract:(gender identity disorder)) OR (title:(transgender) OR abstract:(transgender))))

Limit to Systematic Reviews

*Limited by publication type "systematic review" [425]

Canadian Agency for Drugs and Technologies in Health (CADTH)

OVERVIEW	
Interface:	https://www.cadth.ca/
Database:	CADTH
Study Types:	Systematic Reviews, Health Technology Reviews
Search Run:	April 27, 2022

Search Strategy: search terms [number of results]

"gender dysphoria" [10]
Limit to Health Technology Review [2]

"transgender" [9]
Limit to Health Technology Review [5]

"gender identity disorder" [1]

Agency for Healthcare Research and Quality (AHRQ)

OVERVIEW	
Interface:	https://search.ahrq.gov/
Database:	AHRQ
Study Types:	Evidence Based Practice (EPC) Centre Reports, Full Research Reports, Health Technology Assessments
Search Run:	April 29, 2022
Search Strategy: search terms [number of results]	
Search titles only: "gender identity disorder" "gender dysphoria" "transgender" [7]	

Society for Evidence-based Gender Medicine (SEGM)

OVERVIEW	
Interface:	https://segm.org/news
Database:	SEGM News
Study Types:	Systematic Reviews
Search Run:	April 30, 2022
Search Strategy: search terms [number of results]	
Find in page: "systematic" [5]	

National Institute for Health and Care Excellence (NICE)

OVERVIEW	
Interface:	https://www.nice.org.uk/
Database:	NICE
Study Types:	Systematic Reviews, Guidelines with Systematic Reviews
Search Run:	April 30, 2022
Search Strategy: search terms [number of results]	
gender dysphoria [1] *Limit to Guidance* [1] transgender [10] *Limit to Guidance* [7]	

gender identity disorder [9] *Limit to Guidance* [8]

Search Strategies – Individual Studies

Questions Covered:

PICO questions:

1. For children, adolescents, and young adults (<21) with gender dysphoria, what are the effects of treatment with **puberty blockers (gonadotrophin releasing hormone (GnRH) analogues)** compared to no puberty blockers?

2. For children, adolescents, and young adults (<21) with gender dysphoria, what are the effects of treatment with **cross-sex hormones** compared to no cross-sex hormones?

3. For children, adolescents, and young adults (<21) with gender dysphoria, what are the effects of **gender-affirming surgeries** compared to no surgery?

Search Strategies:

Note: Population, puberty blocker, cross-sex hormones search blocks adapted from NICE (2020) evidence reviews. Gender-affirming search block adapted from Wernick *et al.* 2019.

Databases: Medline

Medline

OVERVIEW	
Interface:	Ovid
Databases:	OVID Medline Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present
Study Types:	Any
Search Run:	May 12, 2022

Search Strategy: search terms [number of results]

Population

1	exp "Sexual and Gender Minorities"/	12631
2	Gender Dysphoria/	781
3	Gender Identity/	20586
4	Gender Role/	204
5	"Sexual and Gender Disorders"/	81
6	Transsexualism/	4259
7	Transgender Persons/	5371
8	Health Services for Transgender Persons/	187
9	exp Sex Reassignment Procedures/	1211
10	gender identity disorder.mp.	492

11 non-binary.mp. 574
12 transgender.mp. 10079
13 (gender* adj3 (dysphori* or disorder* or distress or nonconform* or non-conform* or atypical or incongru* or identi* or disorder* or confus* or minorit* or queer* or variant or diverse or creative or explor* or question* or expan* or fluid)).ti,ab. 16546
14 ((sex or gender*) adj3 (reassign* or chang* or transform* or transition*)).ti,ab. 9375
15 (transgend* or transex* or transsex* or transfem* or transwom* or transma* or transmen* or transperson* or transpeopl*).ti,ab. 19788
16 (genderfluid or genderqueer or agender).mp. 132
17 ((correct or chosen) adj3 name).mp. 591
18 (trans or crossgender* or cross-gender* or crossex* or cross-sex* or genderqueer*).ti,ab. 135744
19 (male-to-female or m2f or female-to-male or f2m).ti,ab. 149067
20 or/1-19 341083

Cross-sex Hormones

21 Hormones/ad, tu, th 4690
22 exp Progesterone/ad, tu, th 11270
23 exp Estrogens/ad, tu, th 29646
24 exp Gonadal Steroid Hormones/ad, tu, th 35401
25 (progesteron* or oestrogen* or estrogen*).ti,ab. 223689
26 ((cross-sex or crosssex or gender-affirm*) and (hormon* or steroid* or therap* or treatment* or prescri* or pharm* or medici* or drug* or intervention* or care)).ti,ab. 1507
27 exp Estradiol/ad, tu, th 11200
28 exp Testosterone/ad, tu, th 8722
29 (testosteron* or sustanon* or tostran or testogel or testim or restandol or andriol or testocaps* or nebido or testavan).ti,ab. 86670
30 (oestrad* or estrad* or evorel or ethinyloestrad* or ethinylestrad* or elleste or progynova or zumenon or bedol or femseven or nuvelle).ti,ab. 100411
31 or/21-30 346508

Puberty Blockers

32 Gonadotropin-Releasing Hormone/ 28845
33 (pubert* adj3 block*).ti,ab. 142
34 ((gonadotrophin or gonadotropin) and releasing).ti,ab. 20158
35 (GnRH adj2 analog*).ti,ab. 2879
36 GnRH*.ti,ab. 24437
37 "GnRH agonist*".ti,ab. 4763
38 Triptorelin Pamoate/ 1983
39 triptorelin.ti,ab. 822
40 arvekap.ti,ab. 1
41 ("AY 25650" or AY25650).ti,ab. 1
42 ("BIM 21003" or BIM21003).ti,ab. 0
43 ("BN 52014" or BN52014).ti,ab. 0
44 ("CL 118532" or CL118532).ti,ab. 0

45	Debio.ti,ab.	119
46	diphereline.ti,ab.	28
47	moapar.ti,ab.	0
48	pamorelin.ti,ab.	1
49	trelstar.ti,ab.	3
50	triptodur.ti,ab.	1
51	("WY 42422" or WY42422).ti,ab.	0
52	("WY 42462" or WY42462).ti,ab.	0
53	gonapeptyl.ti,ab.	0
54	decapeptyl.ti,ab.	225
55	salvacyl.ti,ab.	0
56	Buserelin/	2137
57	buserelin.ti,ab.	1396
58	onist.ti,ab.	0
59	("hoe 766" or hoe-766 or hoe766).ti,ab.	72
60	profact.ti,ab.	2
61	receptal.ti,ab.	31
62	suprecur.ti,ab.	5
63	suprefact.ti,ab.	25
64	tiloryth.ti,ab.	0
65	histrelin.ti,ab.	78
66	"LHRH-hydrogel implant".ti,ab.	1
67	("RL 0903" or RL0903).ti,ab.	1
68	("SPD 424" or SPD424).ti,ab.	1
69	goserelin.ti,ab.	1017
70	Goserelin/	1644
71	("ici 118630" or ici118630).ti,ab.	51
72	("ZD-9393" or ZD9393).ti,ab.	0
73	zoladex.ti,ab.	388
74	leuprorelin.ti,ab.	529
75	carcinil.ti,ab.	0
76	enanton*.ti,ab.	26
77	ginecrin.ti,ab.	0
78	leuplin.ti,ab.	15
79	Leuprolide/	3018
80	leuprolide.ti,ab.	2003
81	lucrin.ti,ab.	16
82	lupron.ti,ab.	183
83	provren.ti,ab.	0
84	procrin.ti,ab.	3
85	("tap 144" or tap144).ti,ab.	41
86	(a-43818 or a43818).ti,ab.	3
87	Trenantone.ti,ab.	2
88	staladex.ti,ab.	0
89	prostap.ti,ab.	6
90	Nafarelin/	327
91	nafarelin.ti,ab.	263
92	("76932-56-4" or "76932564").ti,ab.	0

93	("76932-60-0" or "76932600").ti,ab.	0
94	("86220-42-0" or "86220420").ti,ab.	0
95	("rs 94991 298" or rs94991298).ti,ab.	0
96	synarel.ti,ab.	13
97	deslorelin.ti,ab.	310
98	gonadorelin.ti,ab.	238
99	("33515-09-2" or "33515092").ti,ab.	0
100	("51952-41-1" or "51952411").ti,ab.	0
101	("52699-48-6" or "52699486").ti,ab.	0
102	cetrorelix.ti,ab.	520
103	cetrotide.ti,ab.	52
104	("NS 75A" or NS75A).ti,ab.	0
105	("NS 75B" or NS75B).ti,ab.	0
106	("SB 075" or SB075).ti,ab.	1
107	("SB 75" or SB75).ti,ab.	67
108	gonadoliberin.ti,ab.	152
109	kryptocur.ti,ab.	7
110	cetrorelix.ti,ab.	520
111	cetrotide.ti,ab.	52
112	antagon.ti,ab.	18
113	ganirelix.ti,ab.	161
114	("ORG 37462" or ORG37462).ti,ab.	3
115	orgalutran.ti,ab.	26
116	("RS 26306" or RS26306).ti,ab.	5
117	("AY 24031" or AY24031).ti,ab.	0
118	factrel.ti,ab.	13
119	fertagyl.ti,ab.	12
120	lutrelef.ti,ab.	5
121	lutrepulse.ti,ab.	3
122	relefact.ti,ab.	10
123	fertiral.ti,ab.	0
124	(hoe471 or "hoe 471").ti,ab.	6
125	relisorm.ti,ab.	4
126	cystorelin.ti,ab.	19
127	dirigestran.ti,ab.	5
128	or/32-127	47179

Surgery

129	virilization/	2309
130	(virilism or virili?ation or masculini?ation).mp.	5664
131	feminization/	798
132	femini?ation.mp.	3425
133	(vaginoplasty or vaginoplasties).mp.	1032
134	(vaginoplasty or vaginoplasties).mp.	1032
135	(phalloplasty or phalloplasties).mp.	561
136	exp Penile Prosthesis/	1642
137	"penile reconstruction".mp.	292

138	(vagina reconstruction or vaginal reconstruction).mp.	550
139	(genitoplasty or genitoplasties).mp.	263
140	transsexualism/su [Surgery]	1007
141	sex reassignment.mp.	1674
142	sex transformation.mp.	42
143	or/129-142	14290
	Any intervention AND population	
144	31 or 128 or 143	386835
145	20 and 144	16516
	Limit to Humans	
146	animals/ not humans/	4972586
147	145 not 146	9281
148	limit 147 to humans	7901
	Limit to Publication Year 2019 to Current	
149	limit 148 to yr="2019 -Current"	1859

Results

Search results and eligible reviews: After screening 647 records found through our searches, we found 61 eligible systematic reviews. From these, 27 were published between 2020 and 2022 (Figure 1). Overall, 4% (1/27) of the reviews were judged to be of high methodological quality, 15% (4/27) were moderate methodological quality, 37% (10/27) were low methodological quality, and 44% (12/27) were critically low methodological quality.

We provide reasons for excluding systematic reviews in appendix 1.

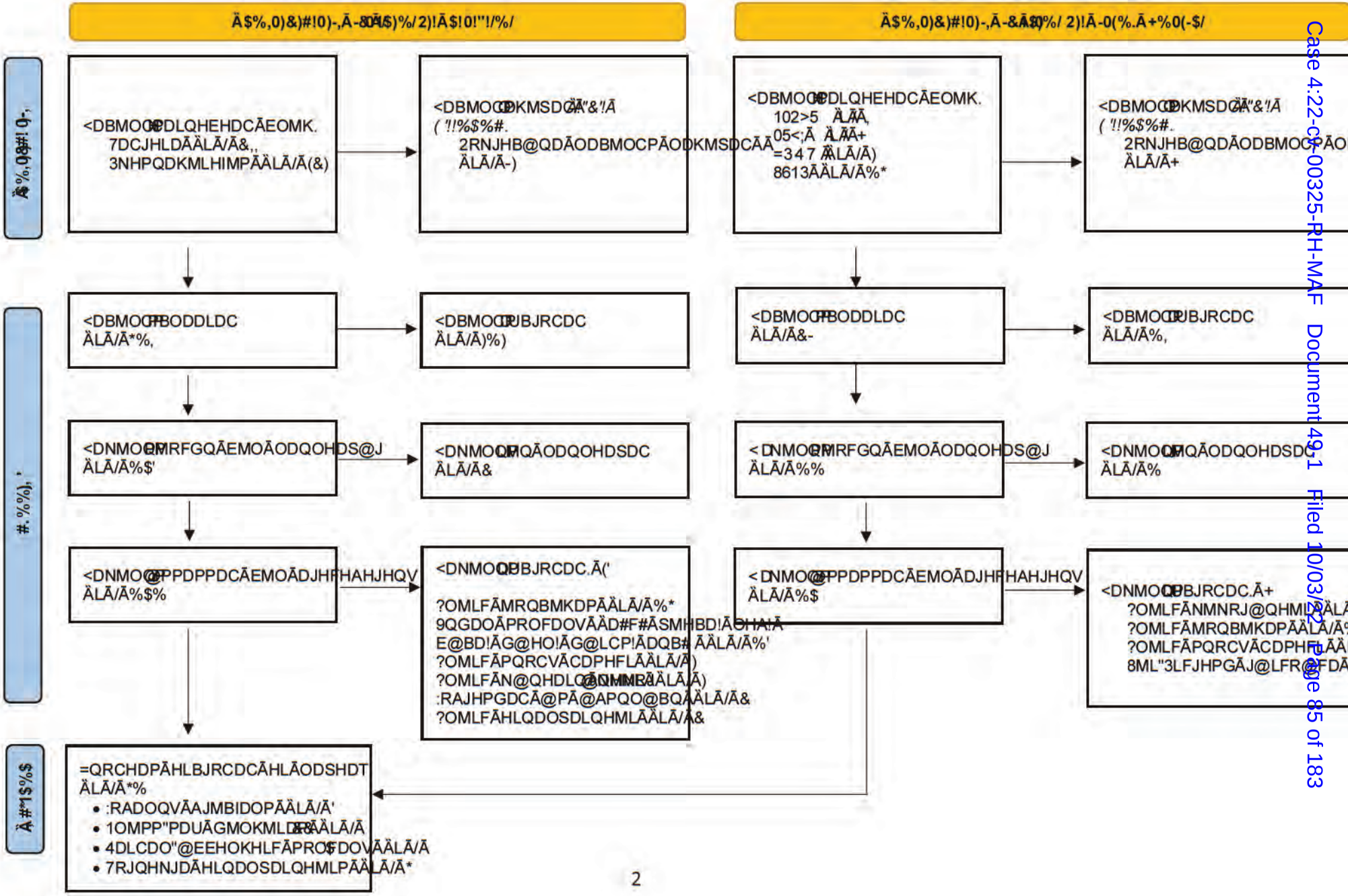

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Figure 1: PRISMA flow diagram for the selection of systematic reviews. *From:* Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

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Outcomes:

1. **Puberty blockers:** We found 4 systematic reviews assessing the effects of puberty blockers published between 2020 and 2022.[1-4] From these, we judged 2 as having moderate methodological quality, and 2 as having critically low methodological quality. Details of the assessment are provided in Figure 2.

   Table 1 summarizes the evidence about the effects of puberty blockers on the outcomes of interest. We used information from 2 systematic reviews.[2 3] For most outcomes (except suicidality), there is no evidence about the effect of puberty blockers compared to not using puberty blockers. In other words, no studies compared the outcomes between a group of people with gender dysphoria using puberty blockers and another not using them. Therefore, it is unknown whether people with gender dysphoria who use puberty blockers experience more improvement in gender dysphoria, depression, anxiety, and quality of life than those with gender dysphoria who do not use them. There is very low certainty about the effects of puberty blockers on suicidal ideation (see details in Table 1).

   Studies, however, reported outcomes among a group of people with gender dysphoria after receiving puberty blockers. The findings are:

   - There is low certainty evidence suggesting that treatment with puberty hormones may slightly increase gender dysphoria severity (mean change score in the Utrecht Gender Dysphoria scale, 0.7 points [95% CI, -4.2 to 5.6], range 12-60, with higher scores reflecting more severe gender dysphoria)
   - There is low certainty evidence suggesting that treatment with puberty blockers may decrease depression (mean change score in the Beck Depression Inventory, -3.4 [95% CI, -5.7 to -1.0], range 0-63, with higher scores reflecting more severe depression)
   - There is low certainty evidence suggesting that treatment with puberty blockers may decrease anxiety (mean change score in the Trait Anxiety Scale, trait subscale, -1.5 [95% CI, -4.7 to -1.8], range 0-80, with higher scores reflecting more severe anxiety)
   - There is low certainty evidence suggesting a moderate percentage of patients reporting adverse events after treatment with puberty blockers (see Table 1 for details)
   - There is very low certainty evidence about how puberty blockers affect suicidality

Figure 2: AMSTAR assessment judgements for systematic reviews addressing puberty blockers

Review ID	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	Methodological quality
AHRQ 2021																	MODERATE
NICE 2020a																	MODERATE
Ramos 2020																	CRITICALLY LOW
Rew 2020																	CRITICALLY LOW

Figure legend:

Yes

Probably yes

Probably no

No

Not applicable

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Table 1: Puberty blockers (gonadotrophin releasing hormone analogues) compared to no puberty blockers in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: puberty blockers (gonadotrophin releasing hormone analogues)
Comparison: no puberty blockers

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no puberty blockers	Risk / mean with puberty blockers				
Gender dysphoria assessed with: difference (effect) in gender dysphoria proportion or severity	Not reported					The effects of puberty blockers on gender dysphoria are unknown
Gender dysphoria assessed with: mean change score in the Utrecht Gender Dysphoria Scale (12-60, higher scores reflect more gender dysphoria, 40 points or more indicate a diagnosis of gender dysphoria) (NICE, 2020a) Follow up: mean 1.9 years (range 0.4 to 5.1 years)	NA	0.7 (-4.2 to 5.6)	NA	41 (1 study)	⨁⨁◯◯ LOW[1]	The mean gender dysphoria score may increase by 0.7 points after puberty blockers
Depression assessed with: difference (effect) in depression proportion or severity	Not reported					The effects of puberty blockers on depression are unknown

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Table 1: Puberty blockers (gonadotrophin releasing hormone analogues) compared to no puberty blockers in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: puberty blockers (gonadotrophin releasing hormone analogues)
Comparison: no puberty blockers

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no puberty blockers	Risk / mean with puberty blockers				
Depression assessed with: mean change score in Beck Depression Inventory-II scale (0-63, higher scores represent more severe depression) (NICE, 2020a) Follow up: mean 1.9 years (range 0.4 to 5.1 years)	NA	-3.4 (-5.7 to -1.0)	NA	41 (1 study)	⨁⨁◯◯ LOW[1]	The mean depression score may decrease by 3.4 points after puberty blockers
Anxiety assessed with: difference (effect) in anxiety proportion or severity	Not reported					The effects of puberty blockers on anxiety are unknown
Anxiety assessed with: mean change score in STAI-Trait scale (0-80, higher scores represent more severe anxiety) (NICE, 2020a) Follow up: mean 1.9 years (range 0.4 to 5.1 years)	NA	-1.5 (-4.7 to 1.8)	NA	41 (1 study)	⨁⨁◯◯ LOW[1]	The mean anxiety score may decrease by 1.5 points after puberty blockers

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Table 1: Puberty blockers (gonadotrophin releasing hormone analogues) compared to no puberty blockers in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: puberty blockers (gonadotrophin releasing hormone analogues)
Comparison: no puberty blockers

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no puberty blockers	Risk / mean with puberty blockers				
Quality of life assessed with: any measure	Not reported					The effects of puberty blockers on quality of life are unknown
Suicidal ideation difference (effect) in suicidal ideation (Rew, 2020) Follow-up: cross-sectional survey	The authors report that "compared to youth who did not receive pubertal suppression, those who did showed lower lifetime rates of suicidal ideation".			89 (1 study)	⊕◯◯◯ VERY LOW[2]	We are very uncertain about the effect of puberty blockers on suicidal ideation
Adverse effects assessed with: proportion of patients reporting adverse effects (NICE, 2020a) Follow up: mean 2.3 years (range 0.0 to 11.3 years)	NA	11%[3] (2% to 29%)	NA	27 (1 study)	⊕⊕◯◯ LOW[4]	The proportion of patients reporting adverse effects after treatment with puberty blockers may be 11%

STAI-Trait: Trait Anxiety Scale. Range: 0-80
CI: Confidence interval
NA: Not applicable

App. 091

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Table 1: Puberty blockers (gonadotrophin releasing hormone analogues) compared to no puberty blockers in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: puberty blockers (gonadotrophin releasing hormone analogues)
Comparison: no puberty blockers

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no puberty blockers	Risk / mean with puberty blockers				

GRADE Working Group grades of evidence
High certainty: We are very confident that the true effect lies close to that of the estimate of the effect
Moderate certainty: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low certainty: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect
Very low certainty: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

Explanations

1. Ā Mean change rated down due to risk of bias and imprecision. According to the systematic review authors, the study had poor methodological quality. In addition, there are too few participants included, which is not sufficient to make trustworthy inferences (does not meet the optimal information size).
2. Ā The authors of Rew 2020 narratively summarized the outcome of Turban *et al.* 2020; a cross-sectional online survey study. According to the systematic review authors, Turban et al. did not describe the study participants and the setting in detail and it was unclear whether outcomes were measured in a valid and reliable way. We therefore, downgraded the certainty of evidence by one level from low to very low due to high risk of bias.
3. Ā The authors reported 3/27 (11%) participants treated with GnRHa developed side effects: 1 participant developed sterile abscesses; they were switched from leuprolide acetate to triptorelin, 1 participant developed leg pains and headaches, which eventually resolved without treatment, 1 participant gained 19 kg within 9 months of initiating GnRH analogues.
4. Ā Proportion of adverse effects rated down due to risk of bias and imprecision. According to the systematic review authors, the cohort study Khatchadourian *et al.* 2014 was assessed at high risk of bias due to incomplete reporting of its cohort. In addition, there are too few participants included, which is not sufficient to make trustworthy inferences (does not meet the optimal information size).

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2. **Cross-sex hormones:** We found 9 systematic reviews assessing the effects of cross-sex hormones published between 2020 and 2022.[4-12] One of these, however, included both puberty blockers and cross-sex hormones combined in their evidence synthesis as was not prioritized.[5] From the 8 remaining reviews, we judged 1 as having high methodological quality, 2 as having moderate methodological quality, 2 as having low methodological quality, and 3 as having critically low methodological quality. Details of the assessment are provided in Figure 3. Because of its eligibility criteria related to study design, the systematic review judged at high methodological quality[7] did not include any studies and therefore we could not use it to inform any outcome.

Table 2 summarizes the evidence about the effects of cross-sex hormones on the outcomes of interest. We used information from 4 systematic reviews.[6 9 11 12] For most outcomes (all except risk of breast cancer), there is no evidence about the effect of cross-sex hormones compared to not using cross-sex hormones. In other words, no studies compared the outcomes between a group of people with gender dysphoria using cross-sex hormones and another not using it. Therefore, it is unknown whether people with gender dysphoria who use cross-sex hormones experience more improvement in gender dysphoria, depression, anxiety, quality of life, and suicidality than those with gender dysphoria who do not use them. There is low certainty evidence suggesting that cross-sex hormones may not increase or decrease the risk of breast cancer (see details in Table 2).

Studies, however, reported outcomes among a group of people with gender dysphoria after receiving cross-sex hormones. The findings are:

- There is low certainty evidence suggesting that treatment with cross-sex hormones may decrease gender dysphoria severity (mean change score in the Utrecht Gender Dysphoria scale, -42.4 points [95% CI, -44.1 to -40.1], range 12-60, with higher scores reflecting more severe gender dysphoria)
- There is low certainty evidence suggesting that treatment with cross-sex hormones may decrease depression (measured with different scales, see Table 4 for details) and the need for treatment for depression (change in percentage, -39%)
- There is low certainty evidence suggesting that treatment with cross-sex hormones may decrease anxiety (measured with different scales, see Table 4 for details) and the need for treatment for anxiety (change in percentage, -32%)
- There is very low certainty about the change in quality of life after treatment with cross-sex hormones.
- There is low certainty evidence suggesting that treatment with cross-sex hormones may decrease suicidality degree (mean change score in the Ask Suicide-Screening questions scale, -0.84 points [95% CI, -1.30 to -0.44], range 0-4, with higher scores reflecting more severe suicidality) and the percentage of patients with need for treatment due to suicidality/self-harm (change in percentage, -31%). There is very low certainty evidence about the percentage of people with suicidal ideation and suicide attempts after treatment with cross-sex hormones.

- There is low certainty evidence suggesting a low prevalence of venous thromboembolism after treatment with cross-sex hormones (see Table 2 for details)

Figure 3: AMSTAR assessment judgements for systematic reviews addressing cross-sex hormones

Review ID	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	Methodological quality
AHRQ 2021																	MODERATE
Baker 2021																	MODERATE
Fledderus 2020																	CRITICALLY LOW
Haupt 2020																	HIGH
Karalexi 2020																	LOW
Kotamarti 2021																	CRITICALLY LOW
Mattawanon 2021																	CRITICALLY LOW
NICE 2021b																	MODERATE
Totaro 2021																	LOW

Figure legend:

Yes

Probably yes

Probably no

No

Not applicable

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Table 2: Cross-sex hormones compared to no cross-sex hormones in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: cross-sex hormones
Comparison: no cross-sex hormones

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no cross-sex hormones	Risk/ mean with cross-sex hormones				
Gender dysphoria assessed with: difference (effect) in gender dysphoria percentage or severity	Not reported					The effects of cross-sex hormones on gender dysphoria are unknown
Gender dysphoria assessed with: mean change score in the Utrecht Gender Dysphoria Scale (12-60, higher scores reflect more gender dysphoria, 40 points or more indicate a diagnosis of gender dysphoria) (NICE, 2020b) Follow up: 1 year	NA	-42.4 (-44.1 to -40.1)	NA	23 (1 study)	⨁⨁◯◯ LOW[1]	The mean gender dysphoria score may decrease by 42 points after cross-sex hormones
Depression assessed with: difference (effect) in depression percentage or severity	Not reported					The effects of cross-sex hormones on depression are unknown

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Table 2: Cross-sex hormones compared to no cross-sex hormones in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: cross-sex hormones
Comparison: no cross-sex hormones

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no cross-sex hormones	Risk/ mean with cross-sex hormones				
Depression assessed with: mean change score in depression scales (higher scores represent more severe depression) (NICE, 2020b) Follow up: 1 year	NA	The mean depression score reduction was 9.6 points when using the BDI-II scale (n=23) and 7.5 when using the CESD-R scale (n=50). The authors report that both reductions were statistically significant[2]	NA	73 (2 studies)	⊕⊕◯◯ LOW[1]	The mean depression score may decrease after cross-sex hormones
Depression assessed with: change in percentage of patients with need for treatment (NICE, 2020b) Follow-up: 1 year	NA	The percentage of participants requiring treatment was reduced by 39% (from 54% at baseline), which was statistically significant	NA	52 (1 study)	⊕⊕◯◯ LOW[1]	The percentage of participants requiring treatment may be reduced by 39% after cross-sex hormones
Anxiety assessed with: difference (effect) in anxiety percentage or severity	Not reported					The effects of cross-sex hormones on anxiety are unknown

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Table 2: Cross-sex hormones compared to no cross-sex hormones in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: cross-sex hormones
Comparison: no cross-sex hormones

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no cross-sex hormones	Risk/ mean with cross-sex hormones				
Anxiety assessed with: mean change score in anxiety scales (higher scores represent more severe anxiety) (NICE, 2020b) Follow up: 1 year	NA	The mean anxiety score reduction was 16.5 points when using the STAI-State scale and 14.5 when using the STAI-Trait scale. The authors report that both reductions were statistically significant	NA	23 (1 study)	⊕⊕◯◯ LOW[1]	The mean anxiety score may decrease after cross-sex hormones
Anxiety assessed with: change in percentage of patients with need for treatment (NICE, 2020b) Follow-up: 1 year	NA	The percentage of participants requiring treatment was reduced by 32% (from 48% at baseline), which was statistically significant	NA	52 (1 study)	⊕⊕◯◯ LOW[1]	The percentage of participants requiring treatment may be reduced by 32% after cross-sex hormones
Quality of life assessed with: difference (effect) in quality of life improvement	Not reported					The effects of cross-sex hormones on quality of life are unknown

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Table 2: Cross-sex hormones compared to no cross-sex hormones in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: cross-sex hormones
Comparison: no cross-sex hormones

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no cross-sex hormones	Risk/ mean with cross-sex hormones				
Quality of life assessed with: mean change score in QLES-Q-SF score (higher scores represent better quality of life) (NICE, 2020b) Follow up: 1 year	NA	The mean quality of life score improved, but the differences were not statistically significant. The magnitudes were not reported	NA	50 (1 study)	⨁◯◯◯ VERY LOW[3]	We are very uncertain about the quality of life change after cross-sex hormones
Suicide/ suicidal ideation assessed with: difference (effect) in suicide or suicidal ideation	Not reported					The effects of cross-sex hormones on suicide/ suicidal ideation are unknown
Suicidality assessed with: change in score from ASQ instrument (higher scores represent greater degree of suicidality) (NICE, 2020b) Mean follow up: 1 year	NA	-0.84 (-1.30 to -0.44)	NA	39 (1 study)	⨁⨁◯◯ LOW[1]	Suicidality scores may decrease by 0.84 points after cross-sex hormones

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Table 2: Cross-sex hormones compared to no cross-sex hormones in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: cross-sex hormones
Comparison: no cross-sex hormones

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no cross-sex hormones	Risk/ mean with cross-sex hormones				
Suicidal ideation assessed with: percentage of participants with suicidal ideation measured with PHQ-9 (NICE, 2020b) Follow-up: 1 year	NA	The percentage of participants with suicidal ideation decreased by 6% (from 10% at baseline). The authors did not conduct a statistical analysis	NA	50 (1 study)	⨁◯◯◯ VERY LOW[3]	We are very uncertain about the change in percentage of patients in suicidal ideation after cross-sex hormones
Suicide attempts assessed with: not reported (NICE, 2020b) Follow up: not reported	NA	The percentage of people with lifetime suicide attempts was 15%, those with attempts 3 months before treatment was 2%, and those with attempts at follow up was 5%	NA	130 (1 study)	⨁◯◯◯ VERY LOW[3]	We are very uncertain about the percentage of people with suicide attempts after cross-sex hormones
Suicidality/ self-harm assessed with: change in percentage of patients with need for treatment (NICE, 2020b) Follow-up: 1 year	NA	The percentage of participants requiring treatment was reduced by 31% (from 35% at baseline), which was statistically significant	NA	52 (1 study)	⨁⨁◯◯ LOW[1]	The percentage of participants requiring treatment may be reduced by 31% after cross-sex hormones
Venous thromboembolism assessed with: Risk of VTE	Not reported					The effects of cross-sex hormones on the risk of VTE are unknown

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Table 2: Cross-sex hormones compared to no cross-sex hormones in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: cross-sex hormones
Comparison: no cross-sex hormones

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no cross-sex hormones	Risk/ mean with cross-sex hormones				
Venous thromboembolism assessed with: Prevalence among assigned males at birth (Totaro, 2021) Mean follow up: 4.1 years	NA	**20 per 1,000** (10 to 30)	NA	11,542 (18 studies)	⊕⊕⊕◯ MODERATE[4]	The prevalence of VTE among assigned males at birth is probably 2% after cross-sex hormones
Venous thromboembolism assessed with: Prevalence among assigned females at birth (Kotamarti, 2021) Mean follow up: 5.7 years	NA	**6 per 1,000** (CI not reported)[5]	NA	4,218 (8 studies)	⊕⊕⊕◯ MODERATE[6]	The prevalence of VTE among assigned females at birth is probably 0.6% after cross-sex hormones
Breast cancer assessed with: Risk of breast cancer (Fledderus, 2020) Follow up: not reported	Two studies compare the risk of beast cancer between assigned females at birth using versus not using testosterone, and found no differences (0 vs 1 case [total n= 130], and 1 vs 6 [total n=1579]). A third study compared assigned females at birth with non transgender women and found a lower risk in the former (magnitude not reported)		NA	2,938 (3 studies)	⊕⊕◯◯ LOW[7]	The risk of breast cancer may not increase or decrease due to the use of cross-sex hormones

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Table 2: Cross-sex hormones compared to no cross-sex hormones in youth (<21 years old) with gender dysphoria

Patient or population: youth (<21 years old) with gender dysphoria
Intervention: cross-sex hormones
Comparison: no cross-sex hormones

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no cross-sex hormones	Risk/ mean with cross-sex hormones				

ASQ: Ask Suicide-Screening Questions. Range 0-4
BDI-II: Beck Depression Inventory. Range: 0-63
CESD-R: Center for Epidemiological Studies Depression Scale. Range: 0-60
CI: Confidence interval
NA: Not applicable
PHQ-9: Patient Health Questionnaire (PHQ) Modified for Teens. For suicidal ideation, it is a single question (yes/no)
QLES-Q-SF: Quality of Life Enjoyment and Satisfaction Questionnaire. Range: 15-75
STAI: State-Trait Anxiety Inventory. Range: 0-80

GRADE Working Group grades of evidence
High certainty: We are very confident that the true effect lies close to that of the estimate of the effect
Moderate certainty: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low certainty: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect
Very low certainty: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

Explanations

1. Ā Mean change rated down due to risk of bias and imprecision. According to the systematic review authors, the studies had poor methodological quality. In addition, there are too few participants included, which is not sufficient to make trustworthy inferences (does not meet the optimal information size)
2. Ā Similar results when this outcome was measured using the Patient Health Questionnaire (PHQ) Modified for Teens in one of the same studies
3. Ā Rated down due to risk of bias, imprecision, and indirectness. According to the systematic review authors, the studies had poor methodological quality. In addition, there are too few participants included, which is not sufficient to make trustworthy inferences (does not meet the optimal information size). Finally, 30% of the participants did not have a diagnosis of gender dysphoria.
4. Ā Prevalence rated down due to risk of bias. According to the systematic review authors, only 6 out of the 18 studies (representing 16.5% of the weight of the studies) were at low risk of bias.

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5.Ā A meta-analysis of independent studies reported in this systematic review suggested that the prevalence of VTE in non-transgender females at birth was 1.7% (based on 7 studies and 18,748 persons)
6.Ā Prevalence rated down doe to risk of bias. According to the systematic review authors, all studies had at least one domain judged as problematic.
7.Ā Risk rated down 2 levels because of risk of bias. The researchers did not account for confounding in any of the studies.

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3.ĀSurgeries: We found 15 systematic reviews assessing the effects of gender-affirming surgeries published between 2020 and 2022. We judged 8 as having low methodological quality and 7 as having critically low methodological quality. Details of the assessment are provided in Figure 4. We present the results regarding the effects of surgeries in three parts. First, we describe the effects of all surgeries on mental health outcomes in all patients. Second, we describe the effects of all surgeries on surgical outcomes in assigned females at birth (transgender males). Finally, we describe the effects of all surgeries on surgical outcomes in assigned males at birth (transgender females).

3.1ĀEffects of surgeries on mental health outcomes: Table 3 summarizes the evidence about the effects of all surgeries on mental health outcomes in all patients. We used information from 2 systematic reviews.[13 14] There were no systematic reviews and studies reporting on gender dysphoria, depression, anxiety, and suicidality. Therefore, the effects of surgeries on these outcomes (when compared to a group of patients with gender dysphoria who do not undergo surgery), or the changes in these outcomes (improvements or deterioration) among patients who undergo surgeries is unknown.

The systematic reviews addressed quality of life and depression, but none of the included studies included a comparison group. Thus, it is unknown whether people with gender dysphoria who undergo surgeries experience more improvement in quality of life or less regret than those with gender dysphoria who do not undergo surgeries.

Studies, however, reported the following outcomes among a group of people with gender dysphoria after undergoing surgeries. The findings are:

-Ā There is low certainty evidence suggesting that the percentage of people who experience regret after surgery is low (1%)
-Ā There is very low certainty evidence about how surgeries affect quality of life (see Table 3 for details)

Figure 4: AMSTAR assessment judgements for systematic reviews addressing gender-affirming surgery

Review ID	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	Methodological quality
Bustos SS 2021																	LOW
Bustos VP 2021																	LOW
Bustos VP 2021b																	LOW
Dunford 2021																	LOW
Eftekhar, 2020																	LOW
Falcone 2021																	CRITICALLY LOW
Hu, 2022																	CRITICALLY LOW
Huayllani 2021																	CRITICALLY LOW
Jolly 2021																	LOW
Nassiri 2020																	CRITICALLY LOW
Oles 2022																	LOW
Oles 2022b																	LOW
Salibian 2021																	CRITICALLY LOW
Sijben 2021																	CRITICALLY LOW
Tay 2021																	CRITICALLY LOW

Figure legend:

Yes

Probably yes

Probably no

No

Not applicable

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Table 3: All surgeries compared to no surgeries in young people (<21 years old) with gender dysphoria

Patient or population: young people (<21 years old) with gender dysphoria
Intervention: surgeries
Comparison: no surgeries
Outcomes: Mental health and regret

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no surgery	Risk/ mean with surgery				
Gender dysphoria assessed with: any measure	Not reported					The effects of surgery on gender dysphoria, the changes in gender dysphoria severity after surgery, and the prevalence of gender dysphoria after surgery are unknown
Depression assessed with: any measure	Not reported					The effects of surgery on depression, the changes in depression severity after surgery, and the prevalence of depression after surgery are unknown
Anxiety assessed with: any measure	Not reported					The effects of surgery on anxiety, the changes in anxiety severity after surgery, and the prevalence of anxiety after surgery are unknown
Suicidality assessed with: any measure	Not reported					The effects of surgery on suicidality, the changes in anxiety severity after surgery, and the prevalence of anxiety after surgery are unknown
Quality of life assessed with: difference (effect) in quality of life	Not reported					The effects of surgery on quality of life are unknown
Quality of life assessed with: change in quality of life	Not reported					The change in quality of life after surgery is unknown

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Quality of life assessed with: mean score in the Short Form-36 Scale (0-100, higher scores reflect better quality of life) (Eftekhar Ardebili, 2020) Follow up: cross-sectional	NA	59.17 (48.59 to 69.74)[1]	NA	633 (5 studies)	⊕◯◯◯ VERY LOW[2]	We are very uncertain about the quality of life after surgeries
Regret assessed with: difference (effect) in percentage of people with regret	Not reported					The effects of surgery on regret are unknown
Regret assessed with: percentage of people with regret (Bustos, 2021) Mean follow up: 4 years	NA	1% (0 to 2%)[3]	NA	7928 (27 studies)	⊕⊕◯◯ LOW[4]	The percentage of people who experience regret is low

CI: Confidence interval
NA: Not applicable

GRADE Working Group grades of evidence
High certainty: We are very confident that the true effect lies close to that of the estimate of the effect
Moderate certainty: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low certainty: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect
Very low certainty: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

Explanations

1. Ā Similar scores for assigned males at birth and assigned females at birth.
2. Ā Mean score rated down for risk of bias and inconsistency. According to the systematic review authors, all studies had concerns related to risk of bias. In addition, the smaller studies showed better quality of life than the larger study.
3. Ā Similar percentage for assigned males at birth and assigned females at birth, and for different types of surgeries (all pooled percentages below 2%).
4. Ā Percentage rated down due to risk of bias and indirectness. According to the authors, many of the studies had moderate or high risk of bias. The mean age of the participants at the time of surgery was higher than the target population. Because it was considered to not have an important effect on the pooled estimate, we did not rate down for statistical heterogeneity

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3.2 **Effects of surgeries on assigned females at birth:** Table 4 summarizes the evidence about the effects of all surgeries on surgical outcomes among assigned at birth females. We used information from 3 systematic reviews.[13-17] Due to the nature of the outcomes (i.e. they can only be experienced by people who undergo surgeries), there cannot be studies comparing the outcomes between a group of people with gender dysphoria who undergo surgeries and another who does not.

Studies, therefore, assessed the outcomes among a group of people with gender dysphoria after surgery. The findings are:

-Ā There is low certainty evidence suggesting that the percentage of people who are satisfied after chest surgery is high (92%)
-Ā There is very low certainty evidence about the rate of surgical complications after chest surgery
-Ā There is very low certainty evidence about the percentage of people who are satisfied, and the rate of surgical complications after bottom surgeries (see Table 4 for details)

Table 4: All surgeries compared to no surgeries in assigned females at birth (<21 years old) with gender dysphoria

Patient or population: assigned females at birth (<21 years old) with gender dysphoria
Intervention: surgeries
Comparison: no surgeries

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no surgery	Risk/ mean with surgery				
Chest surgery						
Satisfaction assessed with: percentage of people who reported being satisfied (Bustos VP, 2020b) Range of follow up: 6 weeks to 46 months[1]	NA	92% (88% to 96%)[2]	NA	733 (14 studies)	⨁⨁◯◯ LOW[3]	The percentage of people who reports being satisfied may be 92%
Surgical complications assessed with: rate of complications across patients (Oles, 2022) Range of follow up: 8 weeks to 1 year	NA	16.8% Range (5.5% to 80.0%)	NA	1255 (7 studies)	⨁◯◯◯ VERY LOW[4]	We are very uncertain about the rate of surgical complications
Reoperation assessed with: rate of reoperation across patients (Oles, 2022) Range of follow up: 8 weeks to 1 year	NA	6.2% Range (0.7% to 11.2%)	NA	1214 (6 studies)	⨁◯◯◯ VERY LOW[4]	We are very uncertain about the rate of reoperation
Bottom surgery						

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Table 4: All surgeries compared to no surgeries in assigned females at birth (<21 years old) with gender dysphoria

Patient or population: assigned females at birth (<21 years old) with gender dysphoria
Intervention: surgeries
Comparison: no surgeries

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no surgery	Risk/ mean with surgery				
Satisfaction assessed with: percentage of people who reported being satisfied (Oles, 2022b) Range of follow up: 6 weeks to 46 months	NA	89.6% (45% to 100%)[5]	NA	1458 (27 studies)	⊕◯◯◯ VERY LOW[4]	We are very uncertain about the percentage of people who reports being satisfied
Surgical complications-Major assessed with: percentage of people experiencing major complications (Oles, 2022b) follow up: not reported	NA	The percentage was - 2.3% (range 0 to 20%) experiencing total flap loss - 19.5% (range 0 to 72%) experiencing prosthesis issues - 24.5% (range 0 to 86%) experiencing urethral issues	NA	3177 (42 studies)[6]	⊕◯◯◯ VERY LOW[4]	We are very uncertain about the percentage of people who experience major surgical complications
Surgical complications-Minor assessed with: percentage of people experiencing major complications (Oles, 2022b) follow up: not reported	NA	The percentage varied from 9.3% (range 0% to 45.5%) experiencing donor site issues, to 24% (range 10 to 93%) experiencing urethral issues[7]	NA	4466 (52 studies)[8]	⊕◯◯◯ VERY LOW[4]	We are very uncertain about the percentage of people who experience minor surgical complications

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Table 4: All surgeries compared to no surgeries in assigned females at birth (<21 years old) with gender dysphoria

Patient or population: assigned females at birth (<21 years old) with gender dysphoria
Intervention: surgeries
Comparison: no surgeries

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no surgery	Risk/ mean with surgery				
Reoperation assessed with: rate of reoperation across patients (Oles, 2022b) follow up: not reported	NA	27.6% Range (2.5% to 40%)	NA	1624 (15 studies)	⨁◯◯◯ VERY LOW[4]	We are very uncertain about the percentage of people who undergo reoperations

CI: Confidence interval
NA: Not applicable

GRADE Working Group grades of evidence
High certainty: We are very confident that the true effect lies close to that of the estimate of the effect
Moderate certainty: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low certainty: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect
Very low certainty: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

Explanations

1. Ā Studies used different scales to assess satisfaction
2. Ā The percentage was similar when the analysis was done by type of surgery and by follow up time (< 1 year vs 1 year or more). Another systematic review (Oles, 2022) also investigated this outcome, and reported a very similar percentage of satisfaction (91.8%, range 73% to 100%)
3. Ā Percentage of patients satisfied rated down due to risk of bias and indirectness. According to the systematic review authors, several studies were judged at moderate and high risk of bias. In addition, the median of the mean age of patients included in the studies was 28 years
4. Ā Rated down due to risk of bias, inconsistency/ imprecision, and indirectness. Even though the review authors did not assess risk of bias, these studies were included in other systematic reviews in which the authors judged several of them at high risk of bias. The studies report inconsistent results (some high and other low rates). The patients are older than the target population.
5. Ā Results for phalloplasty. Similar results for metoidioplasty (91.3%).

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6.Ā People and studies for urethral complications. 2671 people (37 studies) for prosthesis issues, and 1548 people (22 studies) for total flap loss.
7.Ā Percentage of wound dehiscence 9.8% (range, 2.9% to 75%), percentage of infection/ partial necrosis 10.3% (range, 0 to 45.8%), percentage of prosthesis issues 14.2% (range, 1.6 to 41.9%), percentage of incontinence 15.3% (range, 5.4% to 59.1%)
8.Ā People and studies for infection/ partial necrosis. 2389 people (31 studies) for urethral issues, 1736 people (17 studies) for wound dehiscence, 1080 (10 studies) for prosthesis issues, 1053 people (8 studies) for donor site issues, 131 people (3 studies) for incontinence

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3.3 **Effects of surgeries on assigned males at birth**: Table 5 summarizes the evidence about the effects of all surgeries on surgical outcomes among assigned at birth males. We used information from 3 systematic reviews.[16 18 19] Due to the nature of the outcomes (i.e. they can only be experienced by people who undergo surgeries), there cannot be studies comparing the outcomes between a group of people with gender dysphoria who undergo surgeries and another who does not.

Studies, therefore, assessed the outcomes among a group of people with gender dysphoria after surgery. The findings are:

-Ā There is low certainty evidence suggesting that the percentage of people who are satisfied after vaginoplasty is high (91%)
-Ā There is very low certainty evidence about the percentage of people who are satisfied, the rate of complications, and the rate of reoperations after chest surgery (see Table 5 for details)
-Ā There is low certainty evidence suggesting that the percentage of people who have regret after vaginoplasty is low (2%)
-Ā There is very low certainty evidence about the rate of complications and the rate of reoperations after vaginoplasty (see Table 5 for details)

Table 5: All surgeries compared to no surgeries in assigned males at birth (<21 years old) with gender dysphoria

Patient or population: assigned males at birth (<21 years old) with gender dysphoria
Intervention: surgeries
Comparison: no surgeries

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no surgery	Risk/ mean with surgery				
Chest surgery						
Satisfaction assessed with: percentage of people who reported being satisfied (Oles 2022) Range of follow up: 12 months to 17 years	NA	Range 75% (80/107) to 95% (33/35)[1]	NA	142 (2 studies)	⨁◯◯◯ VERY LOW[2]	We are very uncertain about the percentage of people who report being satisfied
Surgical complications assessed with: rate of complications across patients (Oles 2022) Range of follow up: 2 weeks to 16 years	NA	The complication rates were: - 3.8% (range 0% to 5.5%) of capsular contracture - 2.2% of major hematoma - 2.2% of implant extrusion[3]	NA	432 (5 studies)	⨁◯◯◯ VERY LOW[2]	We are very uncertain about the rate of surgical complications
Reoperation assessed with: rate of reoperation across patients (Oles 2022) Range of follow up: Not reported	NA	8.6% Range (4.4% to 10.4%)	NA	291 (2 studies)	⨁◯◯◯ VERY LOW[2]	We are very uncertain about the rate of reoperation
Bottom surgery						

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Table 5: All surgeries compared to no surgeries in assigned males at birth (<21 years old) with gender dysphoria

Patient or population: assigned males at birth (<21 years old) with gender dysphoria
Intervention: surgeries
Comparison: no surgeries

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no surgery	Risk/ mean with surgery				
Satisfaction assessed with: percentage of people who reported being satisfied for overall outcomes (Bustos SS, 2021) Range of follow up: 1 week to 11.3 years	NA	91% (81% to 98%)[4]	NA	1230 (12 studies)	⨁⨁◯◯ LOW[5]	The percentage of people who report being satisfied with overall outcomes may be 91%
Regret assessed with: percentage of people who reported regret (Bustos SS, 2021) Range of follow up: 2 months to 24.1 years	NA	2% (1% to 3%)	NA	1137 (15 studies)	⨁⨁◯◯ LOW[6]	The percentage of people who report regret may be 2%
Surgical complications assessed with: rate of complications across patients (Bustos SS, 2021) Range of follow up: 3 weeks to 24.1 years	NA	The complication rates were: - 1% (95% CI, <0.1% to 2%) of fistula - 11% (95% CI, 8% to 14%) of stenosis and/or strictures - 4% (95% CI, 1% to 9%) of tissue necrosis - 3% (95% CI, 1% to 4%) of prolapse[7]	NA	4196 (42 studies)[3]	⨁◯◯◯ VERY LOW[8]	We are very uncertain about the rate of surgical complications

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Table 5: All surgeries compared to no surgeries in assigned males at birth (<21 years old) with gender dysphoria

Patient or population: assigned males at birth (<21 years old) with gender dysphoria
Intervention: surgeries
Comparison: no surgeries

Outcomes	Anticipated absolute effects* (95% CI)		Relative effect (95% CI)	№ of participants (studies)	Certainty of the evidence (GRADE)	What happens
	Risk / mean with no surgery	Risk/ mean with surgery				
Reoperation assessed with: rate of reoperation across patients (Tay, 2021) Range of follow up: 6 weeks to 14.8 months	NA	One study reported a surgical revision rate of 9% (1/11 patients), and a second study reported that 13% (19/145) patients required repeat surgery due to complications.	NA	156 (2 studies)	⨁◯◯◯ VERY LOW[9]	We are very uncertain about the percentage of people who undergo reoperations

CI: Confidence interval
NA: Not applicable

GRADE Working Group grades of evidence
High certainty: We are very confident that the true effect lies close to that of the estimate of the effect
Moderate certainty: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low certainty: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect
Very low certainty: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

Explanations

1.Ã Another systematic review, Sijben 2021, reported satisfaction from 3 additional studies: 82% (113/138) were satisfied or very satisfied, 93% (32/34) were happier and more satisfied with their chest, and 79% (28/36) were very satisfied with the overall cosmetic result (very low certainty of evidence due to risk of bias, imprecision, and indirectness).
2.Ã Rated down due to risk of bias, indirectness (the included studies were not restricted to youth or young adults), and imprecision (too few participants included, not meeting optimal information size).

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3.Ā Another systematic review, Sijben 2021, reported similar ranges for rates of complication requiring reoperation from 7 studies (835 patients): capsular contraction (range 0.0-5.6%), asymmetry (3.6%), hematoma (range 0.0-2.9%), infection (range 0.0-0.9%), striae distensae (0.7%), implant rupture (0.7%), abscess (0.4%), scarring (0.0%), hypersensitivity (0.0%), and numbness (0.0%) (very low certainty of evidence due to risk of bias, imprecision, and indirectness)

4.Ā Bustos SS *et al.* 2021 additionally reported on satisfaction for functional (87%, 95% CI 77% to 94%) and aesthetic (90%, 95% CI 84% to 94%) outcomes. Another systematic review and meta-analysis, Oles 2022b, similarly reported that 92.3% (range 23.1% to 100%) of patients (2410/2601) were satisfied after vaginoplasty (very low certainty of evidence due to risk of bias, imprecision, and indirectness).

5.Ā Rated down due to risk of bias (the systematic review authors reported the quality of the included studies to be low to moderate using the New Castle Ottawa scale), and indirectness as the included studies were not restricted to youth or young adults. We did not rate down for imprecision or inconsistency despite high I^2 values as a satisfaction rate of 80% or above was deemed as a minimum threshold for clinical importance.

6.Ā Rated down due to risk of bias (the systematic review authors reported the quality of the included studies to be low to moderate using the New Castle Ottawa scale), and indirectness as the included studies were not restricted to youth or young adults.

7.Ā Another systematic review, Oles 2022b, similarly reported the percentage of patients experiencing complications from 51 studies, ranging from 2.4% to 12.0% (range 0% to 88%) for minor complications (intraoperative injury, wound dehiscence, superficial necrosis, infection, urinary issues, vaginal prolapse, stenosis, and bleeding) and 1.6% to 2.1% (range 0% to 31%) for major complications (flap/graft necrosis and infection) after genitoplasty (very low certainty of evidence due to risk of bias, imprecision, and indirectness).

8.Ā Rated down due to risk of bias (the systematic review authors reported the quality of the included studies to be low to moderate using the New Castle Ottawa scale), imprecision and inconsistency, with wide confidence intervals and I^2 values ranging from 65.8% to 94.3%, and indirectness as the included studies were not restricted to youth or young adults.

9.Ā Rated down due to risk of bias, indirectness (the age range of patients in the included studies was 24 to 39 years; the studies included were restricted to those that investigated the use of peritoneum in neovagina construction), and imprecision (too few participants included, not meeting optimal information size).

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Effects of gender affirming therapies in people with gender dysphoria: evaluation of the best available evidence. Dr. Romina Brignardello-Petersen and Dr. Wojtek Wiercioch; Results; May 16, 2022

Results from search for studies not included in the systematic reviews: After screening 1854 records found through our searches, we found 10 eligible studies (figure 5). From these, 8 were comparative observational studies[20-27] and 2 were non- comparative[28 29]. We provide reasons for excluding studies in appendix 2.

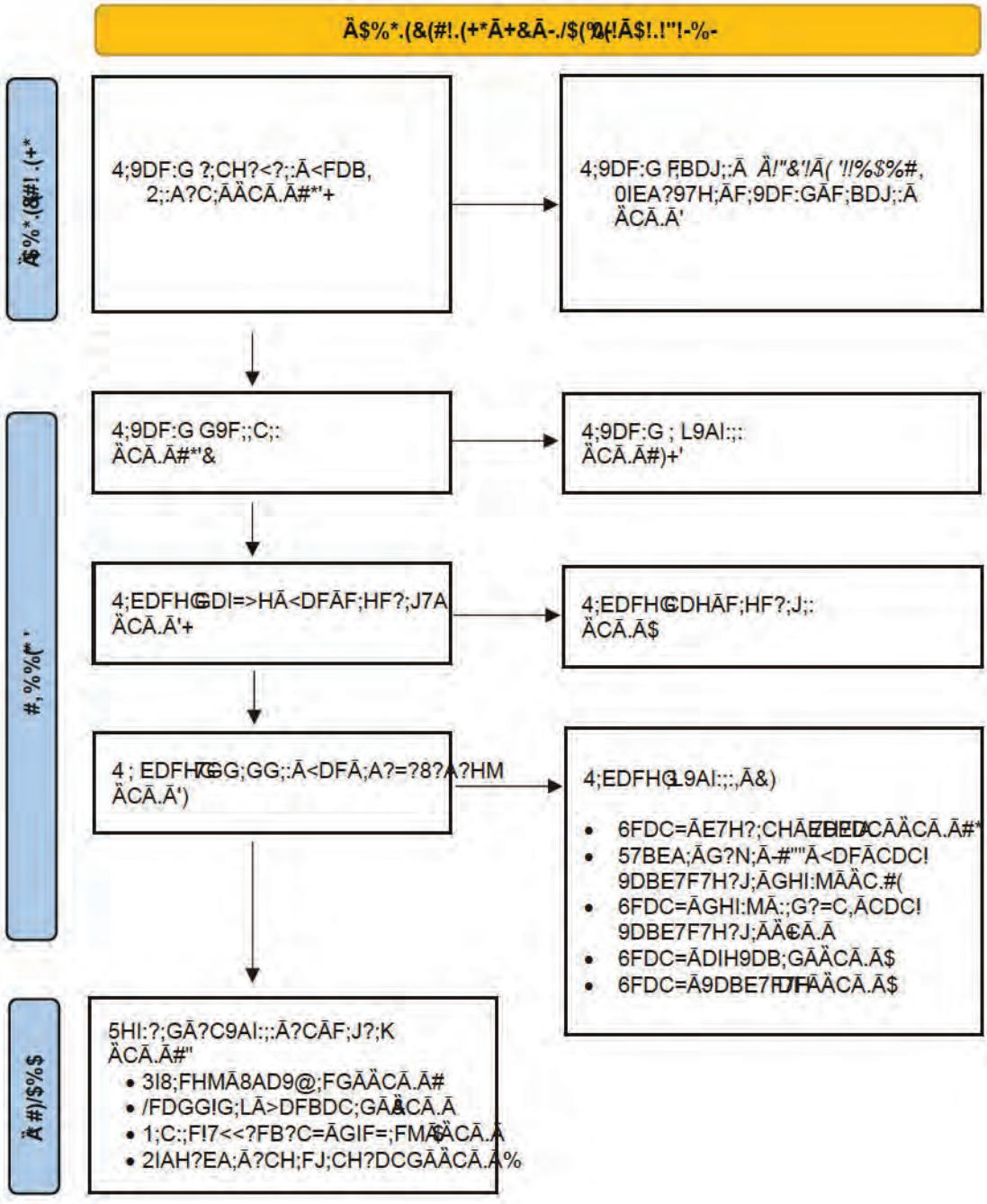

Figure 5: PRISMA flow diagram for the selection of primary studies. *From:* Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

None of the studies were judged as likely to importantly change the conclusions obtained from the systematic reviews (Tables 6 and 7). The main limitations of the comparative studies were risk of bias concerns (Figures 6 and 7) due to confounding, classification of intervention, and missing data; as well as small sample sizes. Although non-comparative studies were at lower risk of bias, because their results were consistent with those of the included evidence, they were also judged as unlikely to change the conclusions importantly.

Table 6: Characteristics of eligible comparative observational studies

Study ID	Sample size*	Study design	Intervention	Comparator	Outcomes measured	Likely to change conclusions	Reasons
VanDerMiesen, 2020	450	Retrospective cohort study	Puberty blockers	Waiting for puberty blockers	Self-harm/ suicidality, internalizing behaviors	No	Reports a small benefit on suicidality and moderate on internalizing behaviours, but high risk of bias
Becker-Hebly, 2021	75	Prospective cohort study	1. Puberty blockers 2. Cross-sex hormones 3. Surgery	No medical intervention yet; psychosocial intervention only	Health-related quality of life	No	Critical risk of bias (missing data due to low response rate, and confounding). Reports small benefit in mean change score for mental and physical dimension QoL as compared to no medical treatment. Imprecision; the 95% CIs for mean change scores are wide.
Green, 2021	3235	Cross-sectional study	Cross-sex hormones	Would like to take cross-sex hormones	Depression, suicidality	No	Critical risk of bias, no follow up of patients (measurement of current outcomes and not adjusting for baseline)
Tordoff, 2022	84	Prospective cohort study	1. Puberty blockers 2. Cross-sex hormones	No intervention	Depression, anxiety, suicidal thoughts	No	Moderate risk of bias, small sample size
Turban, 2022	9341	Cross-sectional study	Cross-sex hormones	Desired but never accessed gender affirming hormones	Suicidal ideation, suicidal attempt	No	Critical risk of bias, no follow up of patients (measurement of current outcomes and not adjusting for baseline)
Grannis, 2021	47	Cross-sectional study	Cross-sex hormones	No intervention yet	Anxiety, depression	No	Critical risk of bias, no follow up of patients, small sample size
Fontanari, 2020	350	Cross-sectional study	1. Cross-sex hormones 2. Cross-sex hormones or surgery	1. Waiting for cross-sex hormones 2. No intervention	Anxiety, depression, gender distress	No	Critical risk of bias (confounding, self-reported classification of interventions). Online cross-sectional survery reported small benefit in anxiety and depression mean scores, and little to no effect on gender distress with cross-sex hormones and/or surgery. Non-randomized comparative study provides very low certainty evidence due to

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							very serious risk of bias and serious imprecision (95% CIs include little to no effect)
Castelo-Branco, 2021	205	Cross-sectional study	Cross-sex hormones	No intervention	Anxiety, depression	No	Critical risk of bias due to confounding (non-adjusted analysis). Reported no difference observed in anxiety and depression mean scores (Symptom Checklist-90-Revised scale) between groups. Non-randomized comparative study provides low certainty evidence.

*Considered the number of participants relevant to the questions of this report, not all people included in the studies

Table 7: Characteristics of eligible non- comparative observational studies

Study ID	Sample size	Intervention	Outcomes measured	Likely to change conclusions	Reasons
Bordas, 2021	813	FtM bottom surgery	Surgical complications, satisfaction	No	Reports rate of complications (10.5%) and satisfaction (79% totally satisfied, 20% mainly satisfied) within range of effects reported by studies already included in systematic reviews. Unlikely to reduce imprecision and inconsistency within body of evidence (3177 and 1458 people, respectively) of non-comparative studies (42 and 27, respectively) to increase certainty of evidence
Elias, 2022	110	FtM top surgery	Complications	No	Reports rate of complications (16%) and revision surgery (5%), which is consistent with the rates reported in the studies included. Unlikely to increase the certainty of evidence

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Figure 6: Risk of bias judgements for comparative studies

Study ID	Intervention	Confounding	Classification of the intervention	Deviations from intended interventions	Missing data	Measurement of outcome	Overall
Becker-Hebly, 2021	Puberty blockers, cross-sex hormones, or surgery						CRITICAL
Castelo-Branco, 2021	Cross-sex hormones						CRITICAL
Fontanari, 2020	Cross-sex hormones, cross-sex hormones or surgery						CRITICAL
Grannis, 2021	Cross-sex hormones						CRITICAL
Green, 2021	Cross-sex hormones						CRITICAL
Tordoff, 2022	Puberty blockers, cross-sex hormones						MODERATE
Turban, 2022	Cross-sex hormones						CRITICAL
Van Der Miesen, 2020	Puberty blockers						SERIOUS

Figure legend:

Low
Moderate
Serious
Critical
Unclear

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Figure 7: Risk of bias judgements for non-comparative studies

Study ID	Intervention	Representativeness of sample	Classification of intervention	Deviation from intended interventions	Missing data	Measurement of outcome	Overall
Bordas, 2021	FtM bottom surgery						LOW
Elias, 2022	FtM top surgery						MODERATE

Figure legend:

Low

Moderate

High

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ID	Study	Reason
#534	Abu-Ghname 2020	Wrong population: non transgender men
#434	Aires 2022	Wrong interventions: Other type of surgery: glottoplasty
#514	Angus 2021	Wrong outcomes: It does not include any outcome of interest. Includes: serum total testosterone concentration, body fat redistribution, breast development, and facial/body hair reduction
#318	Baddredine 2022	Wrong intervention. Continuing vs stopping estrogen during perioperative period of vaginoplasty
#40	Baram 2019	Wrong outcomes: only clinical outcomes are sperm count, testicular histology, hormone levels, etc.
#145	Barcelos 2022	Wrong outcomes: sexual satisfaction, desire, and function outcomes only
#60	Boczar 2021	No outcome data
#386	Bouman 2014	Wrong population: unclear that more than 80% are transgender
#208	Bustos 2021	Wrong intervention: niple areola reconstruction
#54	Connelly 2021	Wrong outcomes: Blood pressure
#43	Coon 2022	Wrong intervention: facial gender surgery
#34	D'Angelo 2018	Wrong design: narrative review
#165	Delgado-Ruiz 2019	Wrong outcomes: bone density
#355	Escandon 2022	Other type of surgery: facial surgery
#129	Fighera 2019	Wrong outcomes: bone mass
#597	Hembree 2017	Practice guideline, does not report the methods/ results of the systematic review in details
#120	Kakadekar 2021	Wrong outcomes: histological findings
#451	Kennedy 2021	Wrong intervention: self administered hormones
#375	Kloer 2021	Wrong outcomes: sexual health and satisfaction outcomes only
#439	Kovar 2019	More than 20% participants did not have gender dysphoria
#297	Kristensen 2021	Wrong outcomes: agression and hostility
#637	Leclere 2015	Wrong design: commentary of a systematic review
#293	Miranda 2021	Published in abstract format only
#624	Morrison 2016	Wrong intervention: facial feminization surgery
#270	Narayan 2021	Wrong design: narrative review
#119	Nolan 2019	Wrong intervention: phonosurgery
#167	Patel 2021	Wrong intervention: facial hair transplantation
#287	Ray 2020	Wrong population: cisgender is the population of interest, transgender included as indirect evidence and not in a systematic manner
#518	Rozga 2020	Published in abstract format only
#265	Sariyaka 2017	Wrong population: More than 20% participants did not have gender dysphoria
#35	Sayegh 2019	Wrong intervention: facial masculinization surgery
#124	Schwarz 2017	Wrong intervention: laryngeal surgery

#97	Siringo 2021	Wrong intervention: facial feminization surgery
#253	Song 2016	Wrong intervention: phonosurgery
#250	Song 2017	Wrong intervention: phonosurgery
#104	Spanos 2020	Wrong outcomes: lean mass, fat mass or insulin resistance
#257	Therattil 2017	Wrong intervention: thyroid chartilage reduction surgery
#328	Tirrell 2022	Wrong intervention: facial feminization surgery
#676	Traish 2010	Wrong design: narrative review
#279	VanDamme 2017	Wrong intervention: voice pitch raising surgery
#171	Vellho 2017	Wrong outcomes: BMI, blood pressure, hematocrit, hemoglobin, lipid profile, and liver enzymes
#112	Wilson 2020	Wrong outcomes: prolactine related outcomes (levels, hyperprolactinemia, prolactinoma)
#245	Worth 2018	Unable to access full text
#122	Ziegler 2018	Wrong outcomes: voice parameters and satisfaction with voice
#499	Zucker 2021	Unable to access full text

ID	Study	Reason
#1458	Al-Tamimi 2019	Wrong patient population
#287	Al-Tamimi 2020	Wrong study design: non comparative
#403	Alcon 2021	Wrong study design: non comparative
#214	Aldridge 2021	Wrong study design: non comparative
#54	Almazan 2021	Wrong patient population
#1387	Boas 2019	Wrong patient population
#1323	Branstrom 2020	Wrong patient population
#1447	Breidenstein 2019	Wrong study design: non comparative
#114	Briles 2022	Insufficient Sample Size <100
#1804	Butler 2019	Wrong patient population
#716	Carmichael 2021	Wrong study design: non comparative
#622	Cocchetti 2021	Wrong outcomes
#1067	Coon 2020	Wrong patient population
#1835	Cristofari 2019	Wrong patient population
#1486	Cuccolo 2019	Wrong patient population
#1276	deBlok 2020	Wrong patient population
#577	deRooij 2021	Wrong patient population
#1625	DeWolf 2019	Wrong patient population
#1759	Djordjevic 2019	Wrong patient population
#244	Falcone 2020	Insufficient Sample Size <100
#258	FosterSkewis 2021	Wrong comparator
#1583	Gallagher 2019	Wrong patient population
#139	Gumussoy 2022	Wrong study design: non comparative
#515	Hisle-Gorman 2021	Wrong study design: non comparative
#350	Hougen 2021	Insufficient Sample Size <100
#1007	Meyer 2020	Wrong study design: non comparative
#499	Miller 2021	Wrong patient population
#621	Mullins 2021	Wrong study design: non comparative
#1653	Naeimi 2019	Insufficient Sample Size <100
#1691	Namba 2019	Insufficient Sample Size <100
#1770	Neuville 2019	Insufficient Sample Size <100
#623	Neuville 2021	Insufficient Sample Size <100
#644	Nieder 2021	Insufficient Sample Size <100
#1624	Nikkels 2019	Wrong patient population
#353	Opsomer 2021	Wrong patient population
#1306	Papadopulos 2020	Wrong comparator
#640	Papadopulos 2021	Insufficient Sample Size <100
#1472	Pigot 2019	Wrong patient population
#899	Pigot 2020	Insufficient Sample Size <100
#1212	Segev-Becker 2020	Insufficient Sample Size <100
#1351	Staples 2020	Wrong outcomes
#645	Staud 2021	Insufficient Sample Size <100
#864	Terrier 2020	Insufficient Sample Size <100
#1083	vanderSluis 2020	Insufficient Sample Size <100

#1204	Veerman 2020	Insufficient Sample Size <100
#1409	Watanabe 2019	Wrong patient population
#512	Waterschoot 2021	Insufficient Sample Size <100

Appendix Attachment

1d

ATTACHMENT D

THE SCIENCE OF GENDER DYSPHORIA AND TRANSSEXUALISM

REPORT SUBMITTED TO THE FLORIDA AGENCY FOR HEALTHCARE ADMINISTRATION

JAMES M. CANTOR, PHD

17 MAY 2022

Ā

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I.Ā Background & Credentials

1.Ā I am a research scientist and clinical psychologist and am currently the Director of the Toronto Sexuality Centre in Canada. For my education and training, I received my Bachelor of Science degree from Rensselaer Polytechnic Institute, where I studied mathematics, physics, and computer science. I received my Master of Arts degree in psychology from Boston University, where I studied neuropsychology. I earned my Doctoral degree in psychology from McGill University, which included successfully defending my doctoral dissertation studying the effects of psychiatric medication and neurochemical changes on sexual behavior, and included a clinical internship assessing and treating people with a wide range of sexual and gender identity issues.

2.Ā Over my academic career, my posts have included Senior Scientist and Psychologist at the Centre for Addiction and Mental Health (CAMH), Head of Research for CAMH's Sexual Behaviour Clinic, Associate Professor of Psychiatry on the University of Toronto Faculty of Medicine, and Editor-in-Chief of the peer reviewed journal, *Sexual Abuse*. That journal is one of the top-impact, peer-reviewed journals in sexual behavior science and is the official journal of the Association for the Treatment of Sexual Abusers. In that appointment, I was charged to be the final arbiter for impartially deciding which contributions from other scientists in my field merited publication. I believe that appointment indicates not only my extensive experience evaluating scientific claims and methods, but also the faith put in me by the other scientists in my field. I have also served on the Editorial Boards of the *Journal of Sex Research*, the *Archives of Sexual Behavior*, and *Journal of Sexual Aggression*. Thus, although I cannot speak for other scientists, I regularly interact with and am routinely exposed to the views and opinions of most of the scientists active in our field today, within the United States and throughout the world.

3.Ā My scientific expertise spans the biological and non-biological development

of human sexuality, the classification of sexual interest patterns, the assessment and treatment of atypical sexualities, and the application of statistics and research methodology in sex research. I am the author of over 50 peer-reviewed articles in my field, spanning the development of sexual orientation, gender identity, hypersexuality, and atypical sexualities collectively referred to as *paraphilias*. I am the author of the past three editions of the gender identity and atypical sexualities chapter of the *Oxford Textbook of Psychopathology*. These works are now routinely cited in the field and are included in numerous other textbooks of sex research.

4.Ā I began providing clinical services to people with gender dysphoria in 1998. I trained under Dr. Ray Blanchard of CAMH and have participated in the assessment and treatment of over one hundred individuals at various stages of considering and enacting both transition and detransition, including its legal, social, and medical (both cross-hormonal and surgical) aspects. My clinical experience includes the assessment and treatment of several thousand individuals experiencing other atypical sexuality issues. I am regularly called upon to provide objective assessment of the science of human sexuality by the courts (prosecution and defense), professional media, and mental health care providers.

5.Ā A substantial proportion of the existing research on gender dysphoria comes from two clinics, one in Canada and one in the Netherlands. The CAMH gender clinic (previously, Clarke Institute of Psychiatry) was in operation for several decades, and its research was directed by Dr. Kenneth Zucker. I was employed by CAMH between 1998 and 2018. Although I was a member of the hospital's adult forensic program, I remained in regular contact with members of the CAMH child psychiatry program (of which Dr. Zucker was a member), and we collaborated on multiple research projects.

II.Ā Summary of Conclusions

- The scientific research consistently demonstrates that there is more than one distinct phenomenon that can lead to gender dysphoria. These types are distinguished by differing epidemiological and demographic patterns, unique psychological and behavioral profiles, and differing responses to the treatment options.
- Studies show that otherwise mentally healthy adults—undergoing thorough assessment (1–2 year Real Life Experience) and supervised by clinics engaged in gate-keeping roles—adjust well to life as the opposite sex.
- Regarding pre-pubescent children with gender dysphoria, there have been 11 outcomes studies. All 11 reported the majority of children to cease to feel dysphoric by puberty. They typically report being gay or lesbian instead.
- Regarding pubescent and adolescent age minors, there have been (also) 11 follow-up studies of puberty blockers and cross-sex hormones. In four, mental health failed to improve at all. In five, mental health improved, but because psychotherapy and medical interventions were both provided, which one caused the improvement could not be identified. The two remaining studies employed methods that did permit psychotherapy effects to be distinguished from medical effects, and neither found medical intervention to be superior to psychotherapy-only.
- The research importantly distinguishes completed suicides—which occur primarily in biological males and involve the intent to die—from suicidal ideation, gestures, and attempts—which occur primarily in biological females and represent psychological distress and cries for help. The evidence is minimally consistent with transphobia being the predominant cause of suicidality. The evidence is very strongly consistent with the hypothesis that other mental health issues, such as Borderline Personality Disorder (BPD), cause suicidality and unstable identities, including gender identity confusion.
- The international consensus of public health care services is that there remains no evidence to support medicalized transition for youth. The responses in the U.S. stand in stark contrast with Sweden, Finland, France, and the United Kingdom, which are issuing increasingly restrictive statements and policies, including bans on all medical transition of minors.

III. Science of Gender Dysphoria and Transsexualism

6. One of the most widespread public misunderstandings about transsexualism and people with gender dysphoria is that all cases of gender dysphoria represent the same phenomenon; however, the clinical science has long and consistently demonstrated that gender dysphoric children (cases of *early-onset* gender dysphoria) do not represent the same phenomenon as adult gender dysphoria

(cases of *late-onset* gender dysphoria),[1] merely attending clinics at younger ages. That is, gender dysphoric children are not simply younger versions of gender dysphoric adults. They differ in every known regard, from sexual interest patterns, to responses to treatments. A third presentation has recently become increasingly observed among people presenting to gender clinics: These cases appear to have an onset in adolescence in the absence of any childhood history of gender dysphoria. Such cases have been called adolescent-onset or "rapid-onset" gender dysphoria (ROGD). Very many public misunderstandings and expert misstatements come from misattributing evidence or personal experience from one of these types to another.

A. Adult-Onset Gender Dysphoria

7.Ā People with adult-onset gender dysphoria typically attend clinics requesting transition services in mid-adulthood, usually in their 30s or 40s. Such individuals are nearly exclusively biological males.[2] They typically report being sexually attracted to women and sometimes to both men and women. Some cases profess asexuality, but very few indicate any sexual interest in or behavior involving men.[3] Cases of adult-onset gender dysphoria are typically associated with a sexual interest pattern (medically, a *paraphilia*) involving themselves in female form.[4]

1.ĀOutcome Studies of Transition in Adult-Onset Gender Dysphoria

8.Ā Clinical research facilities studying gender dysphoria have repeatedly reported low rates of regret (less than 3%) among adult-onset patients who underwent complete transition (*i.e.*, social, plus hormonal, plus surgical transition). This has been widely reported by clinics in Canada,[5] Sweden,[6] and the Netherlands.[7]

9.Ā Importantly, each of the Canadian, Swedish, and Dutch clinics for adults

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1 Blanchard, 1985.
2 Blanchard, 1990, 1991.
3 Blanchard, 1988.
4 Blanchard 1989a, 1989b, 1991.
5 Blanchard, *et al.*, 1989.
6 Dhejneberg, *et al.*, 2014.
7 Wiepjes, *et al.*, 2018.

with gender dysphoria all performed "gate-keeping" procedures, disqualifying from medical services people with mental health or other contraindications. One would not expect the same results to emerge in the absence of such gate-keeping or when gate-keepers apply only minimal standards or cursory assessment.

10.Ā An important caution applies to interpreting these results: The side-effect of removing these people from the samples of transitioners is that if a researcher compared the average mental health of individuals coming into the clinic with the average mental health of individuals going through medical transition, then the post-transition group would appear to show a substantial improvement, even though transition had *no effect at all*: The removal of people with poorer mental health created the statistical illusion of improvement among the remaining people.

2.ĀMental Health Issues in Adult-Onset Gender Dysphoria

11.Ā The research evidence on mental health issues in gender dysphoria indicates it to be different between adult-onset versus adolescent-onset versus prepubescent-onset types. The co-occurrence of mental illness with gender dysphoria in adults is widely recognized and widely documented.[8] A research team in 2016 published a comprehensive and systematic review of all studies examining rates of mental health issues in transgender adults.[9] There were 38 studies in total. The review indicated that many studies were methodologically weak, but nonetheless demonstrated (1) that rates of mental health issues among people are highly elevated both before *and after* transition, (2) but that rates were less elevated among those who completed transition. Analyses were not conducted in a way so as to compare the elevation in mental health issues observed among people newly attending clinics to improvement after transition. Also, several studies showed more than 40% of patients to become "lost to follow-up." With attrition rates that high, it is unclear to what

[8] *See, e.g.*, Hepp, *et al.*, 2005.
[9] Dhejne, *et al.*, 2016.

extent the information from the remaining participants would accurately reflect the whole population. The very high rate of "lost to follow-up" leaves open the possibility of considerably more negative results overall.

12.Ā The long-standing and consistent finding that gender dysphoric adults continue to show high rates of mental health issues after transition indicates a critical point: To the extent that gender dysphoric children resemble adults, we should not expect mental health to improve as a result of transition—that is, transition does not appear to be what causes mental health improvement. Rather, mental health issues should be resolved before any transition, as has been noted in multiple standards of care documents, as detailed in their own section of this report.

B. Childhood Onset (Pre-Puberty) Gender Dysphoria

1.ĀFollow-up Studies Show Most Children Desist by Puberty

13.Ā Prepubescent children (and their parents) have been approaching mental health professionals for help with their unhappiness with their sex and belief they would be happier living as the other for many decades. The large majority of childhood onset cases of gender dysphoria occur in biological males, with clinics reporting 2–6 biological male children to each female.[10]

14.Ā In total, there have been 11 outcomes studies of these children, listed in Appendix 1. In sum, despite coming from a variety of countries, conducted by a variety of labs, using a variety of methods, all spanning four decades, every study without exception has come to the identical conclusion: Among prepubescent children who feel gender dysphoric, the majority cease to want to be the other gender over the course of puberty—ranging from 61–88% desistance across the large, prospective studies. Such cases are often referred to as "desisters," whereas children who continue to feel gender dysphoric are often called "persisters."

15.Ā Notably, in most cases, these children were receiving professional

[10] Cohen-Kettenis, *et al.*, 2003; Steensma, *et al.*, 2018; Wood, *et al.*, 2013.

psychosocial support across the study period aimed, not at affirming cross-gender identification, but at resolving stressors and issues potentially interfering with desistance. While beneficial to these children and their families, the inclusion of therapy in the study protocol represents a complication for the interpretation of the results: It is not possible to know to what extent the outcomes were influenced by the psychosocial support or would have emerged regardless. In science, this is referred to as a confound.

16.Ā While the absolute number of those who present as prepubescent children with gender dysphoria and "persist" through adolescence is very small in relation to the total population, persistence in some subjects was observed in each of these studies. Thus, a clinician cannot take either outcome for granted.

17.Ā It is because of this long-established and unanimous research finding of desistance being probable but not inevitable, that the "watchful waiting" method became the standard approach for assisting gender dysphoric children. The balance of potential risks to potential benefits is very different for groups likely to desist versus groups unlikely to desist: If a child is very likely to persist, then taking on the risks of medical transition might be more worthwhile than if that child is very likely to desist in transgender feelings.

18.Ā The consistent observation of high rates of desistance among pre-pubertal children who present with gender dysphoria demonstrates a pivotally important—yet often overlooked—feature: because gender dysphoria so often desists on its own, clinical researchers cannot assume that therapeutic intervention cannot facilitate or speed desistance for at least some patients. That is, gender identity is not the same as sexual orientation, and it cannot be assumed that gender identity is as unchangeable as is sexual orientation. Such is an empirical question, and there has not yet been any such study.

19.Ā It is also important to note that research has not yet identified any reliable

procedure for discerning which children who present with gender dysphoria will persist, as against the majority who will desist, absent transition and "affirmation." Such a method would be valuable, as the more accurately that potential persisters can be distinguished from desisters, the better the risks and benefits of options can be weighted. Such "risk prediction" and "test construction" are standard components of applied statistics in the behavioral sciences. Multiple research teams have reported that, on average, groups of persisters are somewhat more gender non-conforming than desisters, but not so different as to usefully predict the course of a particular child.[11]

20.Ā In contrast, one research team (the aforementioned Olson group) claimed the opposite, asserting that they developed a method of distinguishing persisters from desisters, using a single composite score representing a combination of children's "peer preference, toy preference, clothing preference, gender similarity, and gender identity."[12] They reported a statistical association (mathematically equivalent to a correlation) between that composite score and the probability of persistence. As they indicated, "Our model predicted that a child with a gender-nonconformity score of .50 would have roughly a .30 probability . . . of socially transitioning. By contrast, a child with gender-nonconformity score of .75 would have roughly a .48 probability."[13] Although the Olson team declared that "social transitions may be predictable from gender identification and preferences,"[14] their actual results suggest the opposite: The gender-nonconforming group who went on to transition (socially) had a mean composite score of .73 (which is less than .75), and the gender-nonconforming group who did not transition had a mean composite score of .61, also less than .75.[15] Both of those are lower than the value of .75, so both of those would be more likely than not

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11 Singh, *et al.* (2021); Steensma *et al.*, 2013.
12 Rae, *et al.*, 2019, at 671.
13 Rae, *et al.*, 2019, at 673.
14 Rae, *et al.*, 2019, at 669.
15 Rae, *et al.*, 2019, Supplemental Material at 6, Table S1, bottom line.

to desist, rather than to proceed to transition. That is, Olson's model does not distinguish likely from unlikely to transition; rather, it distinguishes unlikely from even less likely to transition.

21.Ā Although it remains possible for some future discovery to yield a method to identify with sufficient accuracy which gender dysphoric children will persist, there does not exist such a method at the present time. Moreover, in the absence of long-term follow-up, it cannot be known what proportions come to regret having transitioned and then *de*transition. Because only a minority of gender dysphoric children persist in feeling gender dysphoric in the first place, "transition-on-demand" increases the probability of unnecessary transition and unnecessary medical risks.

2.Ā"Watchful Waiting" and "The Dutch Protocol"

22.Ā It was this state of the science—that the majority of prepubescent children will desist in their feelings of gender dysphoria and that we lack an accurate method of identifying which children will persist—that led to the development of a clinical approach, The Dutch Protocol,[16] including its "Watchful Waiting" period. Internationally, the Dutch Protocol remains the most empirically supported protocol for the treatment of children with gender dysphoria.

23.Ā The purpose of the protocol was to compromise the conflicting needs among: clients' initial wishes upon assessment, the long-established and repeated observation that those wishes will change in the majority of (but not in all) childhood cases, and that cosmetic aspects of medical transition are perceived to be better when they occur earlier rather than later.

24.Ā The Dutch Protocol was developed over many years by the Netherlands' child gender identity clinic, incorporating the accumulating findings from their own research as well as those reported by other clinics working with gender dysphoric

[16] Delemarre-van de Waal & Cohen-Kettenis (2006).

children. They summarized and explicated the approach in their peer-reviewed report, *Clinical management of gender dysphoria in children and adolescents: The Dutch Approach*.[17] The components of the Dutch Approach are:

- no social transition at all considered before age 12 (watchful waiting period),
- no puberty blockers considered before age 12,
- cross-sex hormones considered only after age 16, and
- resolution of mental health issues before any transition.

25. For youth under age 12, "the general recommendation is watchful waiting and carefully observing how gender dysphoria develops in the first stages of puberty."[18]

26. The age cut-offs of the Dutch Approach were not based on any research demonstrating their superiority over other potential age cut-off's. Rather, they were chosen to correspond to the ages of consent to medical procedures under Dutch law. Nevertheless, whatever the original rationale, the data from this clinic simply contain no information about the safety or efficacy of employing these measures at younger ages.

27. The authors of the Dutch Approach repeatedly and consistently emphasize the need for extensive mental health assessment, including clinical interviews, formal psychological testing with validated psychometric instruments, and multiple sessions with the child and the child's parents.

28. Within the Dutch approach, there is no social transition before age twelve. That is, social affirmation of the new gender may not begin until age 12—as desistance is less likely to occur past that age. "Watchful Waiting" refers to a child's developmental period up to that age. Watchful waiting does not mean do nothing but passively observe the child. Rather, such children and families typically present with substantial distress involving both gender and non-gender issues, and it is during the watchful waiting period that a child (and other family members as appropriate) would

[17] de Vries & Cohen-Kettenis, 2012
[18] de Vries & Cohen-Kettenis, 2012, at 301.

undergo therapy, resolving other issues which may be exacerbating psychological stress or dysphoria. As noted by the Dutch clinic, "[T]he adolescents in this study received extensive family or other social support . . . [and they] were all regularly seen by one of the clinic's psychologists or psychiatrists."[19] One is actively treating the person, while carefully "watching" the dysphoria.

3.ĀFollow-Up Studies of Puberty Blockers and Cross-Sex Hormones

29.Ā Very many strong claims have appeared in the media and on social media asserting that transition results in improved mental health or, contradictorily, in decreased mental health. In the highly politicized context of gender and transgender research, many outlets have cited only the findings which appear to support one side, cherry-picking from the complete set of research reports. It total, there have been 11 prospective outcomes studies following up gender dysphoric children undergoing medically induced suppression of puberty or cross-sex hormone treatment. Four studies failed to find evidence of improvement in mental health functioning at all, and some groups deteriorated on some variables.[20] Five studies successfully identified evidence of improvement, but because patients received psychotherapy along with medical services, which of those treatments caused the improvement is unknowable.[21] In the remaining two studies, both psychotherapy and medical interventions were provided, but the studies were designed in such a way as to allow the effects of psychotherapy to be separated from the effects of the puberty-blocking medications.[22] As detailed in the following, neither identified benefits of medication over psychotherapy alone.

a.ĀFour studies found no mental health improvement

30.Ā Carmichael, *et al.* (2021) recently released its findings from the Tavistock

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19 de Vries, *et al.*, 2011, at 2280-2281.
20 Carmichael, *et al.*, 2021; Hisle-Gorman, *et al.*, 2021; Kaltiala, *et al.*, 2020; Kuper, *et al.*, 2020.
21 de Vries, *et al.*, 2011; Tordoff, *et al.*, 2022; van der Miesen, *et al.*, 2020.
22 Achille, *et al.*, 2020; Costa, *et al.*, 2015.

and Portman clinic in the U.K.[23] Study participants were ages 12–15 (Tanner stage 3 for natal males, Tanner stage 2 for natal females) and were repeatedly tested before beginning puberty-blocking medications and then every six months thereafter. Cases exhibiting serious mental illnesses (*e.g.*, psychosis, bipolar disorder, anorexia nervosa, severe body-dysmorphic disorder unrelated to gender dysphoria) were excluded. Relative to the time point before beginning puberty suppression, there were *no* significant changes in any psychological measure, from either the patients' or their parents' perspective.

31.Ā In Kuper, *et al.* (2020), a multidisciplinary team from Dallas published a prospective follow-up study which included 25 youths as they began puberty suppression.[24] (The other 123 study participants were undergoing cross-sex hormone treatment.) Interventions were administered according to practice guidelines from the Endocrine Society.[25] Their analyses found *no statistically significant changes* in the group undergoing puberty suppression on any of the nine measures of wellbeing measured, spanning tests of body satisfaction, depressive symptoms, or anxiety symptoms.[26] Notably, whereas the Dutch Protocol includes age 12 as a minimum for puberty suppression treatment, this team provided such treatment beginning at age 9.8 years (full range: 9.8–14.9 years).[27]

32.Ā Hisle-Gorman, *et al.* (2021) analyzed military families' healthcare data to compare 963 transgender and gender-diverse youth before versus after hormonal treatment, with their non-gender dysphoric siblings as controls. The study participants included youth undergoing puberty-blocking as well as those undergoing cross-sex hormone treatment, but these subgroups did not differ from each other. Study participants had a mean age of 18 years when beginning the study, but their

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23 Carmichael, *et al.*, 2021.
24 Kuper, *et al.*, 2020, at 5.
25 Kuper, *et al.*, 2020, at 3, referring to Hembree, *et al.*, 2017.
26 Kuper, *et al.*, 2020, at Table 2.
27 Kuper, *et al.*, 2020, at 4.

initial clinical contacts and diagnoses occurred at a mean age of 10 years. According to the study, "mental health care visits overall did not significantly change following gender-affirming pharmaceutical care,"[28] yet, "psychotropic medication use *increased,*"[29] indicating *deteriorating* mental health.

33.Ā Kaltiala et al. (2020) similarly reported that after cross-sex hormone treatment, "Those who had psychiatric treatment needs or problems in school, peer relationships and managing everyday matters outside of home continued to have problems during real-life."[30] They concluded, "Medical gender reassignment is not enough to improve functioning and relieve psychiatric comorbidities among adolescents with gender dysphoria. Appropriate interventions are warranted for psychiatric comorbidities and problems in adolescent development."[31]

b.ĀFive studies confounded psychotherapy and medical treatment

34.Ā The initial enthusiasm for medical blocking of puberty followed largely from early reports from the Dutch clinical research team suggesting at least some mental health improvement.[32] It was when subsequent research studies failed to replicate those successes that it became apparent that the successes were due, not to the medical interventions, but to the psychotherapy that accompanied such interventions in most clinics, including the Dutch clinic.

35.Ā The Dutch clinical research team followed up a cohort of youth at their clinic undergoing puberty suppression[33] and later cross-hormone treatment and surgical sex reassignment.[34] The youth improved on several variables upon follow-up as compared to pre-suppression measurement, including depressive symptoms and

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28 Hisle-Gorman, et al., 2021, at 1448.
29 Hisle-Gorman, et al., 2021, at 1448, emphasis added.
30 Kaltiala et al., 2020, at 213.
31 Kaltiala et al., 2020, at 213.
32 de Vries, *et al.*, 2011; de Vries, *et al.*, 2014
33 de Vries, *et al.*, 2011.
34 de Vries, *et al.*, 2014.

general functioning. No changes were detected in feelings of anxiety or anger or in gender dysphoria as a result of puberty suppression; however, natal females using puberty suppression suffered *increased* body dissatisfaction both with their secondary sex characteristics and with nonsexual characteristics.[35]

36.Ā As the report authors noted, while it is possible that the improvement on some variables was due to the puberty-blockers, it is also possible that the improvement was due to the mental health support, and it is possible that the improvement occurred only on its own with natural maturation. So any conclusion that puberty blockers improved the mental health of the treated children is not justified by the data. Because this study did not include a control group (another group of adolescents matching the first group, but *not* receiving medical or social support), these possibilities cannot be distinguished from each other. The authors of the study were explicit in noting this themselves: "All these factors may have contributed to the psychological well-being of these gender dysphoric adolescents."[36]

37.Ā In a 2020 update, the Dutch clinic reported continuing to find improvement in transgender adolescents' psychological functioning, reaching age-typical levels, "after the start of specialized transgender care involving puberty suppression."[37] Unfortunately, because the transgender care method of that clinic involves both psychosocial support and puberty suppression, it again cannot be known which of those (or their combination) is driving the improvement. Also, the authors indicate that the changing demographic and other features among gender dysphoric youth might have caused the treated group to differ from the control group in unknown ways. As the study authors noted again, "The present study can, therefore, not provide evidence about the direct benefits of puberty suppression over time and long-

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35 Biggs, 2020.
36 de Vries, *et al.* 2011, at 2281.
37 van der Miesen, *et al.*, 2020, at 699.

term mental health outcomes."[38]

38.Ā Allen, *et al.* (2019) reported on a sample of 47 youth, ages 13–20, undergoing cross-sex hormone treatment. They reported observing increases in measures of well-being and decreases in measures of suicidality; however, as the authors also noted, "whether a patient is actively receiving psychotherapy" may have been a confounding variable.[39]

39.Ā Tordoff, *et al.* (2022) reported on a sample of youth, ages 13–20 years, treated with either puberty blockers or cross-sex hormones. There were improvements in mental health functioning; however, 62.5% of the sample was again receiving mental health therapy.[40]

c.ĀTwo studies showed no superiority of medical intervention above psychotherapy

40.Ā Costa, *et al.* (2015) reported on preliminary outcomes from the Tavistock and Portman NHS Foundation Trust clinic in the UK. They compared the psychological functioning of one group of youth receiving psychological support with a second group receiving both psychological support as well as puberty blocking medication. Both groups improved in psychological functioning over the course of the study, but no statistically significant differences between the groups was detected at any point.[41] As those authors concluded, "Psychological support and puberty suppression were both associated with an improved global psychosocial functioning in GD adolescence. Both these interventions may be considered effective in the clinical management of psychosocial functioning difficulties in GD adolescence."[42] Because psychological support does not pose the physical health risks that hormonal interventions or surgery does (such as loss of reproductive function) however, one

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38 van der Miesen, *et al.*, 2020, at 703.
39 Allen, *et al.*, 2019.
40 Tordoff, et al., 2022, Table 1.
41 Costa, *et al.*, at 2212 Table 2.
42 Costa, *et al.*, at 2206.

cannot justify taking on the greater risks of social transition, puberty blockers or surgery without evidence of such treatment producing superior results. Such evidence does not exist. Moreover, this clinical team subsequently released the final version of this preliminary report, finding that neither group actually experienced significant improvement,[43] making moot any discussion of the source any improvement.

41.Ā Achille, *et al.* (2020) at Stony Brook Children's Hospital in New York treated a sample of 95 youth with gender dysphoria, providing follow-up data on 50 of them. (The report did not indicate how these 50 were selected from the 95.) As well as receiving puberty blocking medications, "Most subjects were followed by mental health professionals. Those that were not were encouraged to see a mental health professional."[44] The puberty blockers themselves "were introduced in accordance with the Endocrine Society and the WPATH guidelines."[45] Upon follow-up, some incremental improvements were noted; however, after statistically adjusting for psychiatric medication and engagement in counselling, "*most predictors did not reach statistical significance.*"[46] That is, puberty blockers did not improve mental health any more than did mental health care on its own.

d.ĀConclusions

42.Ā The authors of the original Dutch studies were careful not to overstate the implications of their results, "We *cautiously* conclude that puberty suppression *may be* a valuable *element* in clinical management of adolescent gender dysphoria."[47] Nonetheless, many other clinics and clinicians intrepidly proceeded on the basis of only the perceived positives, broadened the range of people beyond those represented in the research findings, and removed the protections applied in the procedures that

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43 Carmichael, et al., 2021.
44 Achille, *et al.*, 2020, at 2.
45 Achille, *et al.*, 2020, at 2.
46 Achille, *et al.*, 2020, at 3 (italics added).
47 de Vries, *et al.* 2011, at 2282, italics added.

led to those outcomes. Many clinics and individual clinicians have reduced the minimum age for transition to 10 instead of 12. While the Dutch Protocol involves interdisciplinary teams of clinicians, many clinics now rely on a single assessor, in some cases one without adequate professional training in childhood and adolescent mental health. Comprehensive, longitudinal assessments (*e.g.*, 1 to 2 *years*[48]) became approvals after one or two assessment sessions. Validated, objective measures of youths' psychological functioning were replaced with clinicians' subjective (and first) opinions, often reflecting only the clients' own self-report. Systematic recordings of outcomes, so as to allow for detection and correction of clinical deficiencies, were eliminated.

43.Ā Notably, Dr. Thomas Steensma, central researcher of the Dutch clinic, has decried other clinics for "blindly adopting our research" despite the indications that those results may not actually apply: "We don't know whether studies we have done in the past are still applicable to today. Many more children are registering, and also a different type."[49] Steensma opined that "every doctor or psychologist who is involved in transgender care should feel the obligation to do a good pre- and post-test." But few if any are doing so.

4.ĀMental Health Issues in Childhood-Onset Gender Dysphoria

44.Ā As shown by the outcomes studies, there is little evidence that transition improves the mental well-being of children. As shown repeatedly by clinical guidelines from multiple professional associations, mental health issues are expected or required to be resolved *before* undergoing transition. The reasoning behind these conclusions is that children may be expressing gender dysphoria, not because they are experiencing what gender dysphoric adults report, but because they mistake what their experiences indicate or to what they might lead. For example, a child

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[48] de Vries, *et al.*, 2011.
[49] Tetelepta, 2021.

experiencing depression from social isolation might develop the hope—and the unrealistic expectation—that transition will help them fit in, this time as and with the other sex.

45.Ā If a child undergoes transition, discovering only then that their mental health or social situations will not in fact change, the medical risks and side-effects (such as sterilization) will have been borne for no reason. If, however, a child resolves the mental health issues first, with the gender dysphoria resolving with it (which the research literature shows to be the case in the large majority), then the child need not undergo transition at all, but retains the opportunity to do so later.

46.Ā Elevated rates of multiple mental health issues among gender dysphoric children are reported throughout the research literature. A formal analysis of children (ages 4–11) undergoing assessment at the Dutch child gender clinic showed 52% fulfilled criteria for a DSM axis-I disorder.[50] A comparison of the children attending the Canadian versus Dutch child gender dysphoria clinic showed only few differences between them, but a large proportion in both groups were diagnosable with clinically significant mental health issues. Results of standard assessment instruments (Child Behavior Check List, or CBCL) demonstrated that the average score was in the clinical rather than healthy range, among children in both clinics.[51] When expressed as percentages, among 6–11-year-olds, 61.7% of the Canadian and 62.1% of the Dutch sample were in the clinical range.

47.Ā A systematic, comprehensive review of all studies of Autism Spectrum Disorders (ASDs) and Attention-Deficit Hyperactivity Disorder (ADHD) among children diagnosed with gender dysphoria was recently conducted. It was able to identify a total of 22 studies examining the prevalence of ASD or ADHD I youth with gender dysphoria. Studies reviewing medical records of children and adolescents

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[50] Wallien, *et al.*, 2007.
[51] Cohen-Kettenis, *et al.*, 2003, at 46.

referred to gender clinics showed 5–26% to have been diagnosed with ASD.[52] Moreover, those authors gave specific caution on the "considerable overlap between symptoms of ASD and symptoms of gender variance, exemplified by the subthreshold group which may display symptoms which could be interpreted as either ASD or gender variance. Overlap between symptoms of ASD and symptoms of GD may well confound results."[53] As noted elsewhere herein, when two or more issues are present at the same time, researchers cannot distinguish when a result is associated with or caused by the issue of interest or one of the side issues.[54] The rate of ADHD among children with GD was 8.3–11%. Conversely, in data from children (ages 6–18) with Autism Spectrum Disorders (ASDs) show they are more than seven times more likely to have parent-reported "gender variance."[55]

C. Adolescent-Onset Gender Dysphoria

1.ĀFeatures of Adolescent-Onset Gender Dysphoria

48.Ā In the social media age, a third profile has recently begun to present clinically or socially, characteristically distinct from the two previously identified profiles.[56] Unlike adult-onset or childhood-onset gender dysphoria, this group is predominately biologically female. This group typically presents in adolescence, but lacks the history of cross-gender behavior in childhood like the childhood-onset cases have. It is that feature which led to the term Rapid Onset Gender Dysphoria (ROGD).[57] The majority of cases appear to occur within clusters of peers and in association with increased social media use[58] and especially among people with autism or other neurodevelopmental or mental health issues.[59]

49.Ā It cannot be easily determined whether the self-reported gender dysphoria

52 Thrower, *et al.*, 2020.
53 Thrower, *et al.*, 2020, at 703.
54 Cohen-Kettenis *et al.*, 2003, at 51; Skelly *et al.*, 2012.
55 Janssen, *et al.*, 2016.
56 Kaltiala-Heino, *et al.*, 2015; Littman, 2018.
57 Littman, 2018.
58 Littman, 2018.
59 Kaltiala-Heino, *et al.*, 2015; Littman, 2018; Warrier, *et al.*, 2020.

is a result of other underlying issues or if those mental health issues are the result of the stresses of being a sexual minority, as some writers are quick to assume.[60] (The science of the *Minority Stress Hypothesis* appears in its own section.) Importantly, and unlike other presentations of gender dysphoria, people with rapid-onset gender dysphoria often (47.2%) experienced *declines* rather than improvements in mental health when they publicly acknowledged their gender status.[61] Although long-term outcomes have not yet been reported, these distinctions demonstrate that one cannot apply findings from the other types of gender dysphoria to this type. That is, in the absence of evidence, researchers cannot assume that the pattern found in childhood-onset or adult-onset gender dysphoria also applies to adolescent-onset gender dysphoria. The multiple differences already observed between these groups argue against predicting that features present in one type would generalize to be present in all types of gender dysphoria.

2.ĀSocial Transition and Puberty Blockers with Adolescent Onset

50.Ā There do not yet exist prospective outcomes studies either for social transition or for medical interventions for people whose gender dysphoria began in adolescence. That is, instead of taking a sample of individuals and following them forward over time (thus permitting researchers to account for people dropping out of the study, people misremembering the order of events, etc.), all studies have thus far been *retrospective*. It is not possible for such studies to identify what factors caused what outcomes. No study has yet been organized in such a way as to allow for an analysis of the adolescent-onset group, as distinct from childhood-onset or adult-onset cases. Many of the newer clinics (not the original clinics which systematically tracked and reported on their cases' results) fail to distinguish between people who had childhood-onset gender dysphoria and have aged into adolescence versus people

[60] Boivin, *et al.*, 2020.
[61] Biggs, 2020; Littman, 2018.

whose onset was not until adolescence. (Analogously, there are reports failing to distinguish people who had adolescent-onset gender dysphoria and aged into adulthood from adult-onset gender dysphoria.) Studies selecting groups according to their current age instead of their ages of onset produces confounded results, representing unclear mixes according to how many of each type of case wound up in the final sample.

3.ĀMental Illness in Adolescent-Onset Gender Dysphoria

51.Ā In 2019, a Special Section appeared in the *Archives of Sexual Behavior* titled, "Clinical Approaches to Adolescents with Gender Dysphoria." It included this brief yet thorough summary of rates of mental health issues among adolescents expressing gender dysphoria, by Dr. Aron Janssen of the Department of Child and Adolescent Psychiatry of New York University:[62] The literature varies in the range of percentages of adolescents with co-occurring disorders. The range for depressive symptoms ranges was 6–42%,[63] with suicide attempts ranging 10 to 45%.[64] Self-injurious thoughts and behaviors range 14–39%.[65] Anxiety disorders and disruptive behavior difficulties including Attention Deficit/Hyperactivity Disorder are also prevalent.[66] Gender dysphoria also overlaps with Autism Spectrum Disorder.[67]

52.Ā Of particular concern in the context of adolescent onset gender dysphoria is Borderline Personality Disorder (BPD; diagnostic criteria to follow). It is increasingly hypothesized that very many cases appearing to be adolescent-onset gender dysphoria actually represent cases of BPD.[68] That is, some people may be misinterpreting their experiencing of the broader "identity disturbance" of symptom Criterion 3 to represent a gender identity issue specifically. Like adolescent-onset

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62 Janssen, *et al.*, 2019.
63 Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013; Wallien, *et al.*, 2007.
64 Reisner, *et al.*, 2015.
65 Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013.
66 de Vries, *et al.*, 2011; Mustanski, *et al.*, 2010; Wallien, *et al.*, 2007.
67 de Vries, *et al.*, 2010; Jacobs, *et al.*, 2014; Janssen, *et al.*, 2016; May, *et al.*, 2016; Strang, *et al.*, 2014, 2016.
68 *E.g.*, Anzani, *et al.*, 2020; Zucker, 2019.

gender dysphoria, BPD begins to manifest in adolescence, is three times more common in biological females than males, and occurs in 2–3% of the population, rather than 1-in-5,000 people. (Thus, if even only a portion of people with BPD experienced an identity disturbance that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.)

53. DSM-5-TR Diagnostic Criteria for Borderline Personality Disorder:

> A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:
>
> 1. Frantic efforts to avoid real or imagined abandonment. (Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5.)
> 2. A pattern of unstable and intense interpersonal relationship characterized by alternating between extremes of idealization and devaluation.
> 3. *Identity disturbance: markedly and persistently unstable self-image or sense of self.*
> 4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (Note: Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
> 5. *Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behavior.*
> 6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
> 7. Chronic feelings of emptiness.
> 8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
> 9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

(Italics added.)

54. Mistaking cases of BPD for cases of Gender Dysphoria may prevent such youth from receiving the correct mental health services for their condition, and a primary cause for concern is symptom Criterion 5: Recurrent suicidality. (The research on suicide and suicidality are detailed in their own section herein.)

Regarding the provision of mental health care, the distinction between these conditions is crucial: A person with BPD going undiagnosed will not receive the appropriate treatments (the currently most effective of which is Dialectical Behavior Therapy). A person with a cross-gender identity would be expected to feel relief from medical transition, but someone with BPD would not: The problem was not about *gender* identity, but about having an *unstable* identity. Moreover, after a failure of medical transition to provide relief, one would predict for these people increased levels of hopelessness and increased risk of suicidality.

55.Ā Regarding research, there have now been several attempts to document rates of suicidality among gender dysphoric adolescents. The scientific concern presented by BPD is that it poses a potential confound: Samples of gender dysphoric adolescents could appear to have elevated rates of suicidality, not because of the gender dysphoria (or transphobia in society), but because of the number of people with BPD in the sample.

IV.Ā Other Scientific Claims Assessed

A. Suicide and Suicidality

56.Ā Social media increasingly circulate demands for transition accompanied by hyperbolic warnings of suicide should there be delay or obstacle. Claims accompany admissions that "I'd rather have a trans daughter than a dead son," and such threats are treated as the justification for referring to affirming gender transitions as 'life-saving' or 'medically necessary'. Such claims convey only grossly misleading misrepresentations of the research literature, however, deploying terms for their shock value rather than accuracy, and exploiting common public misperceptions about suicide. Indeed, suicide prevention research and public health campaigns repeatedly warn against circulating such exaggerations, due to the risk of copy-cat

behavior they encourage.[69]

57.Ā Despite that the media treat them as near synonyms, suicide and suicidality are distinct phenomena. They represent different behaviors with different motivations, with different mental health issues, and with different clinical needs. *Suicide* refers to completed suicides and the sincere intent to die. It is substantially associated with impulsivity, using more lethal means, and being a biological male.[70] *Suicidality* refers to parasuicidal behaviors, including suicidal ideation, threats, and gestures. These typically represent cries for help rather than an intent to die and are more common among biological females. Suicidal threats can indicate any of many problems or represent emotional blackmail, as typified by "If you leave me, I will kill myself." Professing suicidality is also used for attention-seeking or for the support or sympathy it evokes from others, denoting distress much more frequently than an intent to die.

58.Ā Notwithstanding public misconceptions about the frequency of suicide and related behaviors, the highest rates of suicide are among middle-aged and elderly men in high income countries.[71] Biological males are at three times greater risk of death by suicide than are biological females, whereas suicidal ideation, plans, and attempts are three times more common among biological females.[72] In contrast with completed suicides, the frequency of suicidal ideation, plans, and attempts is highest during adolescence and young adulthood, with reported ideation rates spanning 12.1–33%.[73] Relative to other countries, Americans report elevated rates of each of suicidal ideation (15.6%), plans (5.4%), and attempts (5.0%).[74] Suicide attempts occur up to 30

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69 Gould & Lake, 2013.
70 Freeman, *et al.*, 2017.
71 Turecki & Brent, 2016
72 Klonsky et al., 2016; Turecki & Brent, 2016
73 Borges et a., 2010; Nock et al., 2008
74 Klonsky, et al., 2016.

times more frequently than completed suicides.[75] The rate of completed suicides in the U.S. population is 14.5 per 100,000 people.[76] The widely discrepant numbers representing completed suicides versus transient suicidal ideation has left those statistics open to substantial abuse in the media and social media. Despite public media guidelines urging "Avoid dramatic headlines and strong terms such as 'suicide epidemic'",[77] that is exactly what mainstream outlets have done.[78]

59.Ā There is substantial research associating sexual orientation with suicidality, but much less so with completed suicide.[79] More specifically, there is some evidence suggesting gay adult men are more likely to die by suicide than are heterosexual men, but there is less evidence of an analogous pattern among lesbian women. Regarding suicidality, surveys of self-identified LGB Americans repeatedly report rates of suicidal ideation and suicide attempts 2–7 times higher than their heterosexual counterparts. Because of this association of suicidality with sexual orientation, one must apply caution in interpreting findings allegedly about gender identity: Because of the overlap between people who self-identify as non-heterosexual and as non-cis-gendered, correlations detected between suicidality and gender dysphoria may instead reflect (be confounded by) homosexuality. Indeed, other authors have made explicit their surprise that so many studies, purportedly of gender identity, entirely omitted measurement or consideration of sexual orientation, creating the situation where features that seem to be associated with gender identity instead reflect the sexual orientation of the members of the sample.[80]

60.Ā Among post-transition transsexuals, completed suicide rates are elevated,

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75 Bachman, 2018.
76 World Health Organization, 2022.
77 Samaritans, 2020.
78 E.g., MSNBC, 2015, *Trans youth and suicide: An epidemic.*
79 Haas, *et al.*, 2011.
80 McNeil, *et al.* (2017)

but are nonetheless rare.[81] Regarding suicidality, there have been three recent, systematic reviews of the research literature.[82] All three included specific methods to minimize any potential effects of cherry-picking findings from within the research literature. Compiling the results of 108 articles reported from 64 research projects, Adams and Vincent (2019) found an overall average rate of 46.55% for suicidal ideation (ranging 18.18%–95.5%) and an overall average rate of 27.19% for suicidal attempts (ranging 8.57%–52.4%). These findings confirmed those reported by McNeil, *et al.* (2017), whose review of 30 articles revealed a range of 37%–83% for suicidal ideation and 9.8%–43% for suicidal attempts. Thus, on the one hand, these ranges are greater than those reported for the mainstream population—They instead approximate the rates reported among sexual orientation minorities. On the other hand, with measures so lacking in reliability that they produce every result from 'rare' to 'almost everyone', it is unclear which, if any of them, represents a valid conclusion.

61.Ā McNeil *et al.* (2017) observed also the research to reveal rates of suicidal ideation and suicidal attempts to be related—not to transition status—but to the social support received: The studies reviewed showed support to decrease suicidality, but transition not to. Indeed, in some situations, social support was associated with *increased* suicide attempts, suggesting the reported suicidality may represent attempts to evoke more support.[83]

62.Ā Marshall et al. (2016) identified and examined 31 studies, again finding rates of suicidal ideation and suicide attempts to be elevated, particularly among biological females, indicating that suicidality patterns correspond to biological sex rather than self-identified gender.[84]

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81 Wiepjes, *et al.*, 2020.
82 Adams & Vincent, 2019; Marshall, *et al.*, 2016; McNeil, *et al.* (2017).
83 Bauer, *et al.*, 2015; Canetto, et al., 2021.
84 Marshall, et al., 2016.

63.Ā Despite that mental health issues, including suicidality, are repeatedly required by clinical standards of care to be resolved before transition, threats of suicide are instead oftentimes used as the very justification for labelling transition a 'medical necessity'. However plausible it might seem that failing to affirm transition causes suicidality, the epidemiological evidence indicates that hypothesis to be incorrect: Suicide rates remains elevated even after complete transition, as shown by a comprehensive review of 17 studies of suicidality in gender dysphoria.[85]

64.Ā The scientific study of suicide is inextricably linked to that of mental illness, and Borderline Personality Disorder is repeatedly documented to be greatly elevated among sexual minorities[86].

B. Conversion Therapy

65.Ā Activists and social media increasingly, but erroneously, apply the term "conversion therapy" moving farther and farther from what the research has reported. "Conversion therapy" (or "reparative therapy" and other names) was the attempt to change a person's sexual orientation; however, with the public more frequently accustomed to "LGB" being expanded to "LGBTQ+", the claims relevant only to sexual orientation are being misapplied to gender identity. The research has repeatedly demonstrated that once one explicitly acknowledges being gay or lesbian, this is only very rarely are mistaken. That is entirely unlike gender identity, wherein the great majority of children who declare cross-gender identity cease to do so by puberty, as already shown unanimously by all follow-up studies. As the field grows increasingly polarized, any therapy failing to provide affirmation-on-demand is mislabeled "conversion therapy."[87] Indeed, even actions of non-therapists, unrelated

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85 McNeil, *et al.*, 2017.
86 Reuter, *et al.*, 2016; Rodriguez-Seiljas, *et al.*, 2021; Zanarni, *et al.*, 2021.
87 D'Angelo, *et al.*, 2021.

to any therapy, have been labelled conversion therapy, including the prohibition of biological males competing on female teams.[88]

C. Assessing Demands for Social Transition and Affirmation-Only or Affirmation-on-Demand Treatment in Pre-Pubertal Children.

66.Ā Colloquially, affirmation refers broadly to any actions that treat the person as belonging to a new gender. In different contexts, that could apply to social actions (use of a new name and pronouns), legal actions (changes to birth certificates), or medical actions (hormonal and surgical interventions). That is, social transition, legal transition, and medical transition (and subparts thereof) need not, and rarely do, occur at the same time. In practice, there are cases in which a child has socially only partially transitioned, such as presenting as one gender at home and another at school or presenting as one gender with one custodial parent and another gender with the other parent.

67.Ā Referring to "affirmation" as a treatment approach is ambiguous: Although often used in public discourse to take advantage of the positive connotations of the term, it obfuscates what exactly is being affirmed. This often leads to confusion, such as quoting a study of the benefits and risks of social affirmation in a discussion of medical affirmation, where the appearance of the isolated word "affirmation" refers to entirely different actions.

68.Ā It is also an error to divide treatment approaches into affirmative versus non-affirmative. As noted already, the widely adopted Dutch Approach (and the guidelines of the multiple professional associations based on it) cannot be said to be either: It is a staged set of interventions, wherein social transition (and puberty blocking) may not begin until age 12 and cross-sex hormonal and other medical interventions, later.

69.Ā Formal clinical approaches to helping children expressing gender dysphoria

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[88] Turban, 2021, March 16.

employ a gate-keeper model, with decision trees to help clinicians decide when and if the potential benefits of affirmation of the new gender would outweigh the potential risks of doing so. Because the gate-keepers and decision-trees generally include the possibility of affirmation in at least some cases, it is misleading to refer to any one approach as "the affirmation approach." The most extreme decision-tree would be accurately called affirmation-*on-demand,* involving little or no opportunity for children to explore at all whether the distress they feel is due to some other, less obvious, factor, whereas more moderate gate-keeping would endorse transition only in select situations, when the likelihood of regretting transition is minimized.

70.Ā Many outcomes studies have been published examining the results of gate-keeper models, but no such studies have been published regarding affirmation-on-demand with children. Although there have been claims that affirmation-on-demand causes mental health or other improvement, these have been the result only of "retrospective" rather than "prospective" studies. That is, such studies did not take a sample of children and follow them up over time, to see how many dropped out altogether, how many transitioned successfully, and how many transitioned and regretted it or detransitioned. Rather, such studies took a sample of successfully transitioned adults and asked them retrospective questions about their past. In such studies, it is not possible to know how many other people dropped out or regretted transition, and it is not possible to infer causality from any of the correlations detected, despite authors implying and inferring causality.

D. Assessing the "Minority Stress Hypothesis"

71.Ā The elevated levels of mental health problems among lesbian, gay, and bisexual populations is a well-documented phenomenon, and the idea that it is caused by living within a socially hostile environment is called the *Minority Stress Hypothesis*.[89] The association is not entirely straight-forward, however. For example,

[89] Meyer, 2003.

although lesbian, gay, and bisexual populations are more vulnerable to suicide ideation overall, the evidence specifically on adult lesbian and bisexual women is unclear. Meyer did not include transgender populations in originating the hypothesis, and it remains a legitimate question to what extent and in what ways it might apply to gender identity.

72.Ā Minority stress is associated, in large part, with being a visible minority. There is little evidence that transgender populations show the patterns suggested by the hypothesis. For example, the minority stress hypothesis would predict differences according to how visibly a person is discernable as a member of the minority, which often changes greatly upon transition. Biological males who are very effeminate stand out throughout childhood, but in some cases can successfully blend in as adult females; whereas the adult-onset transitioners blend in very much as heterosexual cis-gendered males during their youth and begin visibly to stand out in adulthood, only for the first time.

73.Ā Also suggesting minority stress cannot be the full story is that the mental health symptoms associated with minority stress do not entirely correspond with those associated with gender dysphoria. The primary symptoms associated with minority stress are depressive symptoms, substance use, and suicidal ideation.[90] The symptoms associated with gender dysphoria indeed include depressive symptoms and suicidal ideation, but also include anxiety symptoms, Autism Spectrum Disorders, and personality disorders.

74.Ā A primary criterion for readiness for transition used by the clinics demonstrating successful transition is the absence or resolution of other mental health concerns, such as suicidality. In the popular media, however, indications of mental health concerns are instead often dismissed as an expectable result caused by Sexual Minority Stress (SMS). It is generally implied that such symptoms will resolve

[90] Meyer, 2003.

upon transition and integration into an affirming environment.

V.Ā Assessing Statements from Professional Associations

A. Understanding the Value of Statements from Professional Associations

75.Ā The value of position statements from professional associations should be neither over- nor under-estimated. In the ideal, an organization of licensed health care professionals would convene a panel of experts who would systematically collect all the available evidence about an issue, synthesizing it into recommendations or enforceable standards for clinical care, according to the quality of the evidence for each alternative. For politically neutral issues, with relevant expertise contained among association members, this ideal can be readily achievable. For controversial issues with no clear consensus, the optimal statement would summarize each perspective and explicate the strengths and weaknesses of each, providing relatively reserved recommendations and suggestions for future research that might resolve the continuing questions. Several obstacles can hinder that goal, however. Committees within professional organizations are typically volunteer activities, subject to the same internal politics of all human social structures. That is, committee members are not necessarily committees of experts on a topic—they are often committees of generalists handling a wide variety of issues or members of an interest group who feel strongly about political implications of an issue, instead of scientists engaged in the objective study of the topic.

76.Ā Thus, documents from professional associations may represent required standards, the violation of which may merit sanctions, or may represent only recommendations or guidelines. A document may represent the views of an association's full membership or only of the committee's members (or majorities thereof). Documents may be based on systematic, comprehensive reviews of the available research or selected portions of the research. In sum, the weight best placed

on any association's statement is the amount by which that association employed evidence versus other considerations in its process.

B. Misrepresentations of statements of professional associations.

77.Ā In the presently highly politicized context, official statements of professional associations have been widely misrepresented. In preparing the present report, I searched the professional research literature for documentation of statements from these bodies and from my own files, for which I have been collecting such information for many years. I was able to identify statements from six such organizations. Although not strictly a medical association, the World Professional Association for Transgender Health (WPATH) also distributed a set of guidelines in wide use and on which other organizations' guidelines are based.

78.Ā Notably, despite that all these medical associations reiterate the need for mental health issues to be resolved before engaging in medical transition, only the AACAP members have medical training in mental health. The other medical specialties include clinical participation with this population, but their assistance in transition generally assumes the mental health aspects have already been assessed and treated beforehand.

79.Ā With the broad exception of the AAP, their statements repeatedly noted instead that:

- Ā Desistance of gender dysphoria occurs in the majority of prepubescent children.
- Ā Mental health issues need to be assessed as potentially contributing factors and need to be addressed before transition.
- Ā Puberty-blocking medication is an experimental, not a routine, treatment.
- Ā Social transition is not generally recommended until after puberty.

Although some other associations have published broad statements of moral support for sexual minorities and against discrimination, they did not include any specific standards or guidelines regarding medical- or transition-related care.

1.ĀWorld Professional Association for Transgender Health (WPATH)

80.Ā The WPATH standards as they relate to prepubescent children begin with the acknowledgement of the known rates of desistance among gender dysphoric children:

> [I]n follow-up studies of prepubertal children (mainly boys) who were referred to clinics for assessment of gender dysphoria, the dysphoria persisted into adulthood for only 6–23% of children (Cohen-Kettenis, 2001; Zucker & Bradley, 1995). Boys in these studies were more likely to identify as gay in adulthood than as transgender (Green, 1987; Money & Russo, 1979; Zucker & Bradley, 1995; Zuger, 1984). Newer studies, also including girls, showed a 12–27% persistence rate of gender dysphoria into adulthood (Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008).[91]

81.Ā That is, "In most children, gender dysphoria will disappear before, or early in, puberty."[92]

82.Ā Although WPATH does not refer to puberty blocking medications as "experimental," the document indicates the non-routine, or at least inconsistent availability of the treatment:

> Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. If such treatment is offered, the pubertal stage at which adolescents are allowed to start varies from Tanner stage 2 to stage 4 (Delemarre-van de Waal & Cohen-Kettenis, 2006; Zucker et al., [2012]).[93]

83.Ā WPATH neither endorses nor proscribes social transitions before puberty, instead recognizing the diversity among families' decisions:

> Social transitions in early childhood do occur within some families with early success. This is a controversial issue, and divergent views are held by health professionals. The current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood.[94]

84.Ā It does caution, however, "Relevant in this respect are the previously described relatively low persistence rates of childhood gender dysphoria."[95]

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91 Coleman, *et al.*, 2012, at 172.
92 Coleman, *et al.*, 2012, at 173.
93 Coleman, *et al.*, 2012, at 173.
94 Coleman, *et al.*, 2012, at 176.
95 Coleman, *et al.*, 2012, at 176 (quoting Drummond, *et al.*, 2008; Wallien & Cohen-Kettenis, 2008).

85.Ā The WPATH standards have been subjected to standardized evaluation, the Appraisal of Guidelines for Research and Evaluation ("AGREE II") method, as part of an appraisal of all published Clinical Practice Guidelines (CPGs) regarding sex and gender minority healthcare.[96] Utilizing community stakeholders to set domain priorities for the evaluation, the assessment concluded that the guidelines regarding HIV and its prevention were of high quality, but that "[t]ransition-related CPGs tended to lack methodological rigour and rely on patchier, lower-quality primary research."[97] The WPATH guidelines were recommended for use. Indeed, the WPATH guidelines received unanimous ratings of "Do not recommend."[98]

86.Ā Finally, it should be noted that WPATH is in stark opposition to international standards: Public healthcare systems throughout the world have instead been ending the practice of medical transition of minors, responding to the increasingly recognized risks associated with hormonal interventions and the now clear lack of evidence that medical transition was benefitting most children, as opposed to the mental health counseling accompanying transition.

2.ĀEndocrine Society (ES)

87.Ā The 150,000-member Endocrine Society appointed a nine-member task force, plus a methodologist and a medical writer, who commissioned two systematic reviews of the research literature and, in 2017, published an update of their 2009 recommendations, based on the best available evidence identified. The guideline was co-sponsored by the American Association of Clinical Endocrinologists, American Society of Andrology, European Society for Paediatric Endocrinology, European Society of Endocrinology, Pediatric Endocrine Society (PES), and the World Professional Association for Transgender Health (WPATH).

88.Ā The document acknowledged the frequency of desistance among gender

96 Dahlen, *et al.*, 2021.
97 Dahlen, *et al.*, 2021, at 6.
98 Dahlen, *et al.*, 2021, at 7.

dysphoric children:

> Prospective follow-up studies show that childhood GD/gender incongruence does not invariably persist into adolescence and adulthood (so-called "desisters"). Combining all outcome studies to date, the GD/gender incongruence of a minority of prepubertal children appears to persist in adolescence. . . . In adolescence, a significant number of these desisters identify as homosexual or bisexual.[99]

89.Ā The statement similarly acknowledges inability to predict desistance or persistence, "With current knowledge, we cannot predict the psychosexual outcome for any specific child."[100]

90.Ā Although outside their area of professional expertise, mental health issues were also addressed by the Endocrine Society, repeating the need to handle such issues before engaging in transition, "In cases in which severe psychopathology, circumstances, or both seriously interfere with the diagnostic work or make satisfactory treatment unlikely, clinicians should assist the adolescent in managing these other issues."[101] This ordering—to address mental health issues before embarking on transition—avoids relying on the unproven belief that transition will solve such issues.

91.Ā The Endocrine Society did not endorse any affirmation-only approach. The guidelines were neutral with regard to social transitions before puberty, instead advising that such decisions be made only under clinical supervision: "We advise that decisions regarding the social transition of prepubertal youth are made with the assistance of a mental health professional or similarly experienced professional."[102]

92.Ā The Endocrine Society guidelines make explicit that, after gathering information from adolescent clients seeking medical interventions and their parents, the clinician "provides correct information to prevent unrealistically high expectations [and] assesses whether medical interventions may result in unfavorable

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99 Hembree, *et al.*, 2017, at 3876.
100 Hembree, *et al.*, 2017, at 3876.
101 Hembree, *et al.*, 2017, at 3877.
102 Hembree, *et al.*, 2017, at 3872.

psychological and social outcomes."[103]

3.ĀPediatric Endocrine Society and Endocrine Society (ES/PES)

93.Ā In 2020, the 1500-member Pediatric Endocrine Society partnered with the Endocrine Society to create and endorse a brief, two-page position statement.[104] Although strongly worded, the document provided no specific guidelines, instead deferring to the Endocrine Society guidelines.[105]

94.Ā It is not clear to what extent this endorsement is meaningful, however. According to the PES, the Endocrine Society "recommendations include evidence that treatment of gender dysphoria/gender incongruence is medically necessary and should be covered by insurance."[106] However, the Endocrine Society makes neither statement. Although the two-page PES document mentioned insurance coverage four times, the only mention of health insurance by the Endocrine Society was: "If GnRH analog treatment is not available (insurance denial, prohibitive cost, or other reasons), postpubertal, transgender female adolescents may be treated with an antiandrogen that directly suppresses androgen synthesis or action."[107] Despite the PES asserting it as "medically necessary," the Endocrine Society stopped short of that. Its only use of that phrase was instead limiting: "We recommend that a patient pursue genital gender-affirming surgery only after the MHP and the clinician responsible for endocrine transition therapy both agree that surgery is medically necessary and would benefit the patient's overall health and/or well-being."[108]

4.ĀAmerican Academy of Child & Adolescent Psychiatry (AACAP)

95.Ā The 2012 statement of the American Academy of Child & Adolescent Psychiatry (AACAP) is not an affirmation-only policy. It notes:

Just as family rejection is associated with problems such as depression,

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103 Hembree, *et al.*, 2017, at 3877.
104 PES, online; Pediatric Endocrine Society & Endocrine Society, Dec. 2020.
105 Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1; Hembree, *et al.*, 2017.
106 Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1.
107 Hembree, *et al.* 2017, at 3883.
108 Hembree, *et al.*, 2017 at 3872, 3894.

> suicidality, and substance abuse in gay youth, the proposed benefits of treatment to eliminate gender discordance in youth must be carefully weighed against such possible deleterious effects. . . . In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood, or at least until the wish to change sex is unequivocal, consistent, and made with appropriate consent.[109]

96.Ā The AACAP's language repeats the description of the use of puberty blockers only as an exception: "For situations in which deferral of sex reassignment decisions until adulthood is *not clinically feasible,* one approach that has been described in case series is sex hormone suppression under endocrinological management with psychiatric consultation using gonadotropin-releasing hormone analogues."[110]

97.Ā The AACAP statement acknowledges the long-term outcomes literature for gender dysphoric children: "In follow-up studies of prepubertal boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood,"[111] adding that "[c]linicians should be aware of current evidence on the natural course of gender discordance and associated psychopathology in children and adolescents in choosing the treatment goals and modality."[112]

98.Ā The policy similarly includes a provision for resolving mental health issues: "Gender reassignment services are available in conjunction with mental health services focusing on exploration of gender identity, cross-sex treatment wishes, counseling during such treatment if any, and *treatment of associated mental health problems*."[113] The document also includes minority stress issues and the need to deal with mental health aspects of minority status (*e.g.*, bullying).[114]

99.Ā Rather than endorse social transition for prepubertal children, the AACAP

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109 Adelson & AACAP, 2012, at 969.
110 Adelson & AACAP, 2012, at 969 (italics added).
111 Adelson & AACAP, 2012, at 963.
112 Adelson & AACAP, 2012, at 968.
113 Adelson & AACAP, 2012, at 970 (italics added).
114 Adelson & AACAP, 2012, at 969.

indicates: "There is similarly no data at present from controlled studies to guide clinical decisions regarding the risks and benefits of sending gender discordant children to school in their desired gender. Such decisions must be made based on clinical judgment, bearing in mind the potential risks and benefits of doing so."[115]

5.ĀAmerican College of Obstetricians & Gynecologists (ACOG)

100.Ā The American College of Obstetricians & Gynecologists (ACOG) published a "Committee Opinion" expressing recommendations in 2017. The statement indicates it was developed by the ACOG's Committee on Adolescent Health Care, but does not indicate participation based on professional expertise or a systematic method of objectively assessing the existing research. It includes the disclaimer: "This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed."[116]

101.Ā Prepubertal children do not typically have clinical contact with gynecologists, and the ACOG recommendations include that the client additionally have a primary health care provider.[117]

102.Ā The ACOG statement cites the statements made by other medical associations—European Society for Pediatric Endocrinology (ESPE),, PES, and the Endocrine Society—and by WPATH.[118] It does not cite any professional association of *mental* health care providers, however. The ACOG recommendations repeat the previously mentioned eligibility/readiness criteria of having no mental illness that would hamper diagnosis and no medical contraindications to treatment. It notes: "*Before* any treatment is undertaken, the patient must display eligibility and readiness (Table 1), meaning that the adolescent has been evaluated by a mental

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115 Adelson & AACAP, 2012, at 969.
116 ACOG, 2017, at 1.
117 ACOG, 2017, at 1.
118 ACOG, 2017, at 1, 3.

health professional, has no contraindications to therapy, and displays an understanding of the risks involved."[119]

103.Ā The "Eligibility and Readiness Criteria" also include, "Diagnosis established for gender dysphoria, transgender, transsexualism."[120] This standard, requiring a formal diagnosis, forestalls affirmation-on-demand because self-declared self-identification is not sufficient for DSM diagnosis.

104.Ā ACOG's remaining recommendations pertain only to post-transition, medically oriented concerns. Pre-pubertal social transition is not mentioned in the document, and the outcomes studies of gender dysphoric (prepubescent) children are not cited.

6.ĀAmerican College of Physicians (ACP)

105.Ā The American College of Physicians published a position paper broadly expressing support for the treatment of LGBT patients and their families, including nondiscrimination, antiharassment, and defining "family" by emotional rather than biological or legal relationships in visitation policies, and the inclusion of transgender health care services in public and private health benefit plans.[121]

106.Ā ACP did not provide guidelines or standards for child or adult gender transitions. The policy paper opposed attempting "reparative therapy;" however, the paper confabulated sexual orientation with gender identity in doing so. That is, on the one hand, ACP explicitly recognized that "[s]exual orientation and gender identity are inherently different."[122] It based this statement on the fact that "the American Psychological Association conducted a literature review of 83 studies on the efficacy of efforts to change *sexual orientation*."[123] The APA's document, entitled "Report of the American Psychological Task Force on appropriate therapeutic responses to

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119 ACOG, 2017, at 1, 3 (citing the Endocrine Society guidelines) (italics added).
120 ACOG, 2017, at 3 Table 1.
121 Daniel & Butkus, 2015a, 2015b.
122 Daniel & Butkus, 2015b, at 2.
123 Daniel & Butkus, 2015b, at 8 (italics added).

sexual orientation" does not include or reference research on gender identity.[124] Despite citing no research about transgenderism, the ACP nonetheless included in its statement: "Available research does not support the use of reparative therapy as an effective method in the treatment of LGB*T* persons."[125] That is, the inclusion of "T" with "LGB" is based on something other than the existing evidence.

107. There is another statement,[126] which was funded by ACP and published in the Annals of Internal Medicine under its "*In the Clinic*" feature, noting that "'In the Clinic' does not necessarily represent official ACP clinical policy."[127] The document discusses medical transition procedures for adults rather than for children, except to note that "[n]o medical intervention is indicated for prepubescent youth,"[128] that a "mental health provider can assist the child and family with identifying an appropriate time for a social transition,"[129] and that the "child should be assessed and managed for coexisting mood disorders during this period because risk for suicide is higher than in their cisgender peers."[130]

7. American Academy of Pediatrics (AAP)

108. The policy of the American Academy of Pediatrics (AAP) is unique among the major medical associations in being the only one to endorse an affirmation-on-demand policy, including social transition before puberty without any watchful waiting period. Although changes in recommendations can obviously be appropriate in response to new research evidence, the AAP provided none. Rather, the research studies AAP cited in support of its policy simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing watchful waiting.[131] Moreover, of all

[124] APA, 2009 (italics added).
[125] Daniel & Butkus, 2015b, at 8 (italics added).
[126] Safer & Tangpricha, 2019.
[127] Safer & Tangpricha, 2019, at ITC1.
[128] Safer & Tangpricha, 2019, at ITC9.
[129] Safer & Tangpricha, 2019, at ITC9.
[130] Safer & Tangpricha, 2019, at ITC9.
[131] Cantor, 2020.

the outcomes research published, the AAP policy cited *one*, and that without mentioning the outcome data it contained.[132].

109.Ā Immediately following the publication of the AAP policy, I conducted a point-by-point fact-check of the claims it asserted and the references it cited in support. I submitted that to the *Journal of Sex & Marital Therapy*, a well-known research journal of my field, where it underwent blind peer review and was published. I append that article as part of this report. *See* Appendix 2. A great deal of published attention ensued; however, the AAP has yet to respond to the errors I demonstrated its policy contained. Writing for *The Economist* about the use of puberty blockers, Helen Joyce asked AAP directly, "Has the AAP responded to Dr Cantor? If not, have you any response now?" The AAP Media Relations Manager, Lisa Black, responded: "We do not have anyone available for comment."

8.ĀThe ESPE-LWPES GnRH Analogs Consensus Conference Group

110.Ā Included in the interest of completeness, there was also a collaborative report in 2009, between the European Society for Pediatric Endocrinology (ESPE) and the Lawson Wilkins Pediatric Endocrine Society (LWPES).[133] Thirty experts were convened, evenly divided between North American and European labs and evenly divided male/female, who comprehensively rated the research literature on gonadotropin-release hormone analogs in children.

111.Ā The effort concluded that "[u]se of gonadotropin-releasing hormone analogs for conditions other than central precocious puberty requires additional investigation and cannot be suggested routinely."[134] However, gender dysphoria was not explicitly mentioned as one of those other conditions.

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132 Cantor, 2020, at 1.
133 Carel et al., 2009.
134 Carel et al. 2009, at 752.

VI.Ā International Health Care Consensus

1. United Kingdom

112.Ā The National Health Service (NHS) of the United Kingdom centralizes gender counselling and transitioning services in a single clinic, the Gender Identity Development Service (GIDS) of the Tavistock and Portman NHS Foundation Trust. Between 2008 and 2018, the number of referrals to the clinic had increased by a factor of 40, leading to a government inquiry into the causes[135]. The GIDS was repeatedly accused of over-diagnosing and permitting transition in cases despite indicators against patient transition, including by 35 members of the GIDS staff, who resigned by 2019[136].

113.Ā The NHS appointed Dr. Hilary Cass, former President of the Royal College of Paediatrics and Child Health, to conduct an independent review[137]. That review included a systematic consolidation of all the research evidence, following established procedures for preventing the "cherry-picking" or selective citation favouring or down-playing any one conclusion[138]. The review's results were unambiguous: "The critical outcomes for decision making are the impact on gender dysphoria, mental health and quality of life. The quality of evidence for these outcomes was assessed as very low"[139], again using established procedures for assessing clinical research evidence (called GRADE). The review also assessed as "very low" the quality of evidence regarding "body image, psychosocial impact, engagement with health care services, impact on extent of an satisfaction with surgery and stopping treatment"[140]. The report concluded that of the existing research, "The studies included in this evidence review are all small, uncontrolled observational studies, which are subject to bias and confounding….They suggest little change with GnRH analogues [puberty

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135 Marsh, 2020; Rayner, 2018.
136 BBC, 2021; Donnelly, 2019.
137 National Health Service, 2020, Sept. 22.
138 National Institute for Health and Care Excellence, 2020.
139 National Institute for Health and Care Excellence, 2020, p. 4.
140 National Institute for Health and Care Excellence, 2020, p. 5.

blockers] from baseline to follow-up"[141].

2. Finland

114.Ā In Finland, the assessments of mental health and preparedness of minors for transition services are centralized by law into two research clinics, Helsinki University Central Hospital and Tampere University Hospital. The eligibility of minors began in 2011. In 2019, Finnish researchers published an analysis of the outcomes of adolescents diagnosed with transsexualism and receiving cross-sex hormone treatment[142]. That study showed that despite the purpose of medical transition to improve mental health: "Medical gender reassignment is not enough to improve functioning and relieve psychiatric comorbidities among adolescents with gender dysphoria. Appropriate interventions are warranted for psychiatric comorbidities and problems in adolescent development"[143]. The patients who were functioning well after transition were those who were already functioning well before transition, and those who were functioning poorly, continued to function poorly after transition.

115.Ā Consistent with the evidence, Finland's health care service (Council for Choices in Health Care in Finland—COHERE) thus ended the surgical transition of minors, ruling in 2020 that "Surgical treatments are not part of the treatment methods for dysphoria caused by gender-related conflicts in minors" (COHERE, 2020). The review of the research concluded that "[N]o conclusions can be drawn on the stability of gender identity during the period of disorder caused by a psychiatric illness with symptoms that hamper development." COHERE also greatly restricted access to puberty-blocking and other hormonal treatments, indicating they "may be considered if the need for it continues *after* the other psychiatric symptoms have

141 National Institute for Health and Care Excellence, 2020, p. 13.
142 Kaltiala et al., 2020.
143 Kaltiala et al., 2020, p. 213.

ceased and adolescent development is progressing normally"[144]. The council was explicit in noting the lack of research needed for decision-making, "There is also a need for more information on the *disadvantages* of procedures and on people who regret them"[145].

3. Sweden

116.Ā Sweden's national health care policy regarding trans issues has developed quite similarly to that of the UK. Already in place 20 years ago, Swedish health care policy permitted otherwise eligible minors to receive puberty-blockers beginning at age 14 and cross-sex hormones at age 16.) At that time, only small numbers of minors sought medical transition services. An explosion of referrals ensued in 2013–2014. Sweden's Board of Health and Welfare reported that, in 2018, the number of diagnoses of gender dysphoria was 15 times higher than 2008 among girls ages 13–17.

117.Ā Sweden has long been very accepting with regard to sexual and gender diversity. In 2018, a law was proposed to lower the age of eligibility for surgical care from age 18 to 15, remove the requirement for parental consent, and lower legal change of gender to age 12. A series of cases of regret and suicide were reported in the Swedish media, leading to questions of mental health professionals failing to consider. In 2019, the Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) therefore conducted its own comprehensive review of the research[146]. Like the UK, the Swedish investigation employed methods to ensure the encapsulation of the all the relevant evidence[147].

118.Ā The SBU report came to the same conclusions as the UK commission. From 2022 forward, the Swedish National Board or Health and Welfare therefore

144 Council for Choices in Health Care in Finland, 2020; italics added.
145 Council for Choices in Health Care in Finland, 2020; italics added.
146 Orange, 2020, Feb 22.
147 Swedish Agency for Health Technology Assessment and Assessment of Social Services, 2019.

"recommends restraint when it comes to hormone treatment…Based on the results that have emerged, the National Board of Health and Welfare's overall conclusion is that the risks of anti-puberty and sex-confirming hormone treatment for those under 18 currently outweigh the possible benefits for the group as a whole"[148]. Neither puberty blockers nor cross-sex hormones would be provided under age 16, and patients ages 16–18 would receive such treatments only within research settings (clinical trials monitored by the appropriate Swedish research ethics board).

4.ĀFrance

119.Ā In 2022, the Académie Nationale de Médecine of France issued a strongly worded statement, citing the Swedish ban on hormone treatments. "[A] great medical caution must be taken in children and adolescents, given the vulnerability, particularly psychological, of this population and the many undesirable effects, and even serious complications, that some of the available therapies can cause…such as impact on growth, bone fragility, risk of sterility, emotional and intellectual consequences and, for girls, symptoms reminiscent of menopause"[149]. For hormones, the Académie concluded "the greatest reserve is required in their use," and for surgical treatments, "[T]heir irreversible nature must be emphasized." The Académie did not outright ban medical interventions, but warned "the risk of over-diagnosis is real, as shown by the increasing number of transgender young adults wishing to "detransition". Rather than medical interventions, it advised health care providers "to extend as much as possible the psychological support phase." The Académie reviewed and emphasized the evidence indicating the very large and very sudden increase in youth requesting medical transition. It attributed the change, not to society now being more accepting of sexual diversity, but to social media, "underlining the addictive character of excessive consultation of social networks which is both

148 Swedish National Board of Health and Welfare, 2022.
149 Académie Nationale de Médecine, 2022, Feb. 25.

harmful to the psychological development of young people and responsible, for a very important part, of the growing sense of gender incongruence."

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APPENDICES

Appendix 1

The Outcomes Studies of Childhood-Onset Gender Dysphoria

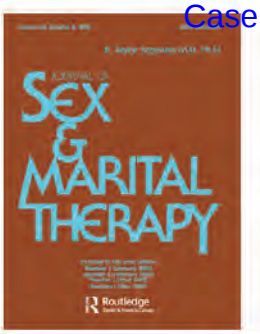
Appendix 2

Peer-reviewed article:

Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy, 46,* 307–313. doi: 10.1080/0092623X.2019.1698481

Prospective Outcomes Studies of Gender Dysphoric Children

2/16 4/16 10/16	gay trans-/crossdress straight/uncertain	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283–1289.
2/16 2/16 12/16	trans- uncertain gay	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. *Comprehensive Psychiatry, 19, 363–369.*
0/9 9/9	trans- gay	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. *Journal of Pediatric Psychology, 4,* 29–41.
2/45 10/45 33/45	trans-/crossdress uncertain gay	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90–97.
1/10 2/10 3/10 4/10	trans- gay uncertain straight	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. *Archives of Sexual Behavior, 15,*511–517.
1/44 43/44	trans- cis-	Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality*. New Haven, CT: Yale University Press.
0/8 8/8	trans- cis-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565–569.
21/54 33/54	trans- cis-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413–1423.
3/25 6/25 16/25	trans- lesbian/bi- straight	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology, 44*, 34–45.
47/127 80/127	trans- cis-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582–590.
17/139 122/139	trans- cis-	Singh, D., Bradley, S. J., and Zucker, K. J. (2021) A follow-up study of boys with gender identity disorder. Frontiers in Psychiatry, 12, 632784. doi: 10.3389/fpsyt.2021.632784



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Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy

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ABSTRACT

The American Academy of Pediatrics (AAP) recently published a policy statement: *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents.* Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping gender diverse (GD) children, the AAP statement instead rejected that consensus, endorsing *gender affirmation* as the only acceptable approach. Remarkably, not only did the AAP statement fail to include any of the actual outcomes literature on such cases, but it also misrepresented the contents of its citations, which repeatedly said the very opposite of what AAP attributed to them.

The American Academy of Pediatrics (AAP) recently published a policy statement entitled, *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents* (Rafferty, AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, 2018). These are children who manifest discontent with the sex they were born as and desire to live as the other sex (or as some alternative gender role). The policy was quite a remarkable document: Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping transgender and gender diverse (GD) children, the AAP statement rejected that consensus, endorsing only *gender affirmation.* That is, where the consensus is to delay any transitions after the onset of puberty, AAP instead rejected waiting before transition. With AAP taking such a dramatic departure from other professional associations, I was immediately curious about what evidence led them to that conclusion. As I read the works on which they based their policy, however, I was pretty surprised—rather alarmed, actually: These documents simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing *watchful waiting.*

The AAP statement was also remarkable in what it left out—namely, the actual outcomes research on GD children. In total, there have been 11 follow-up studies of GD children, of which AAP cited one (Wallien & Cohen-Kettenis, 2008), doing so without actually mentioning the outcome data it contained. The literature on outcomes was neither reviewed, summarized, nor subjected to meta-analysis to be considered in the aggregate—It was merely disappeared. (The list of all existing studies appears in the appendix.) As they make clear, *every* follow-up study of GD children, without exception, found the same thing: Over puberty, the majority of GD children cease to want to transition. AAP is, of course, free to establish whatever policy it likes on

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whatever basis it likes. But any assertion that their policy is based on evidence is demonstrably false, as detailed below.

AAP divided clinical approaches into three types—conversion therapy, watchful waiting, and gender affirmation. It rejected the first two and endorsed *gender affirmation* as the only acceptable alternative. Most readers will likely be familiar already with attempts to use conversion therapy to change sexual orientation. With regard to gender identity, AAP wrote:

> "[C]onversion" or "reparative" treatment models are used to prevent children and adolescents from identifying as transgender or to dissuade them from exhibiting gender-diverse expressions. ... Reparative approaches have been proven to be not only unsuccessful[38] but also deleterious and are considered outside the mainstream of traditional medical practice.[29,39–42]

The citations were:

38. Haldeman DC. The practice and ethics of sexual orientation conversion therapy. *J Consult Clin Psychol.* 1994;62(2):221–227.

29. Adelson SL; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *J Am Acad Child Adolesc Psychiatry.* 2012;51(9):957–974.

39. Byne W. Regulations restrict practice of conversion therapy. *LGBT Health.* 2016;3(2):97–99.

40. Cohen-Kettenis PT, Delemarrevan de Waal HA, Gooren LJ. The treatment of adolescent transsexuals: changing insights. *J Sex Med.* 2008;5(8):1892–1897.

41. Bryant K. Making gender identity disorder of childhood: historical lessons for contemporary debates. *Sex Res Soc Policy.* 2006;3(3):23–39.

42. World Professional Association for Transgender Health. *WPATH De-Psychopathologisation Statement.* Minneapolis, MN: World Professional Association for Transgender Health; 2010.

AAP's claims struck me as odd because *there are no studies of conversion therapy for gender identity.* Studies of conversion therapy have been limited to *sexual orientation,* and, moreover, to the sexual orientation *of adults,* not to gender identity and not of children in any case. The article AAP cited to support their claim (reference number 38) is indeed a classic and well-known review, but it is a review of sexual orientation research *only.* Neither gender identity, nor even children, received a single mention in it. Indeed, the narrower scope of that article should be clear to anyone reading even just its title: "The practice and ethics of *sexual orientation* conversion therapy" [italics added].

AAP continued, saying that conversion approaches for GD children have already been rejected by medical consensus, citing five sources. This claim struck me as just as odd, however—I recalled associations banning conversion therapy for sexual orientation, but not for gender identity, exactly because there is no evidence for generalizing from adult sexual orientation to childhood gender identity. So, I started checking AAP's citations for that, and these sources too pertained only to sexual orientation, not gender identity (specifics below). What AAP's sources *did* repeatedly emphasize was that:

A. Sexual orientation of adults is unaffected by conversion therapy and any other [known] intervention;
B. Gender dysphoria in childhood before puberty desists in the majority of cases, becoming (cis-gendered) homosexuality in adulthood, again regardless of any [known] intervention; and
C. Gender dysphoria in childhood persisting after puberty tends to persist entirely.

That is, in the context of GD children, it simply makes no sense to refer to externally induced "conversion": The majority of children "convert" to cisgender or "desist" from transgender

regardless of any attempt to change them. "Conversion" only makes sense with regard to adult sexual orientation because (unlike childhood gender identity), adult homosexuality never or nearly never spontaneously changes to heterosexuality. Although gender identity and sexual orientation may often be analogous and discussed together with regard to social or political values and to civil rights, they are nonetheless distinct—with distinct origins, needs, and responses to medical and mental health care choices. Although AAP emphasized to the reader that "gender identity is not synonymous with 'sexual orientation'" (Rafferty et al., 2018, p. 3), they went ahead to treat them as such nonetheless.

To return to checking AAP's fidelity to its sources: Reference 29 was a practice guideline from the Committee on Quality Issues of the American Academy of Child and Adolescent Psychiatry (AACAP). Despite AAP applying this source to *gender identity*, AACAP was quite unambiguous regarding their intent to speak to sexual orientation and *only* to sexual orientation: "Principle 6. Clinicians should be aware that there is no evidence that *sexual orientation* can be altered through therapy, and that attempts to do so may be harmful. There is no established evidence that change in a predominant, enduring *homosexual* pattern of development is possible. Although sexual fantasies can, to some degree, be suppressed or repressed by those who are ashamed of or in conflict about them, sexual desire is not a choice. However, behavior, social role, and—to a degree—identity and self-acceptance are. Although operant conditioning modifies sexual fetishes, it does not alter *homosexuality*. Psychiatric efforts to alter *sexual orientation* through 'reparative therapy' *in adults* have found little or no change in *sexual orientation*, while causing significant risk of harm to self-esteem" (AACAP, 2012, p. 967, italics added).

Whereas AAP cites AACAP to support gender affirmation as the only alternative for treating GD children, AACAP's actual view was decidedly neutral, noting the lack of evidence: "Given the lack of empirical evidence from randomized, controlled trials of the efficacy of treatment aimed at eliminating gender discordance, the potential risks of treatment, and longitudinal evidence that gender discordance persists in only a small minority of untreated cases arising in childhood, further research is needed on predictors of persistence and desistence of childhood gender discordance as well as the long-term risks and benefits of intervention before any treatment to eliminate gender discordance can be endorsed" (AACAP, 2012, p. 969). Moreover, whereas AAP rejected watchful waiting, what AACAP recommended was: "In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood" (AACAP, 2012, p. 969). So, not only did AAP attribute to AACAP something AACAP never said, but also AAP withheld from readers AACAP's actual view.

Next, in reference 39, Byne (2016) also addressed only sexual orientation, doing so very clearly: "Reparative therapy is a subset of conversion therapies based on the premise that *same-sex attraction* are reparations for childhood trauma. Thus, practitioners of reparative therapy believe that exploring, isolating, and repairing these childhood emotional wounds will often result in reducing *same-sex attractions*" (Byne, 2016, p. 97). Byne does not say this of gender identity, as the AAP statement misrepresents.

In AAP reference 40, Cohen-Kettenis et al. (2008) did finally pertain to gender identity; however, this article never mentions conversion therapy. (!) Rather, in this study, the authors presented that clinic's lowering of their minimum age for cross-sex hormone treatment from age 18 to 16, which they did on the basis of a series of studies showing the high rates of success with this age group. Although it did strike me as odd that AAP picked as support against conversion therapy an article that did not mention conversion therapy, I could imagine AAP cited the article as an example of what the "mainstream of traditional medical practice" consists of (the logic being that conversion therapy falls outside what an 'ideal' clinic like this one provides). However, what this clinic provides is the very *watchful waiting* approach that AAP rejected. The approach

espoused by Cohen-Kettenis (and the other clinics mentioned in the source—Gent, Boston, Oslo, and now formerly, Toronto) is to make puberty-halting interventions available at age 12 because: "[P]ubertal suppression may give adolescents, together with the attending health professional, more time to explore their gender identity, without the distress of the developing secondary sex characteristics. The precision of the diagnosis may thus be improved" (Cohen-Kettenis et al., 2008, p. 1894).

Reference 41 presented a very interesting history spanning the 1960s–1990s about how feminine boys and tomboyish girls came to be recognized as mostly pre-homosexual, and how that status came to be entered into the DSM at the same time as homosexuality was being *removed* from the DSM. Conversion therapy is never mentioned. Indeed, to the extent that Bryant mentions treatment at all, it is to say that treatment is entirely irrelevant to his analysis: "An important omission from the *DSM* is a discussion of the kinds of treatment that GIDC children should receive. (This omission is a general orientation of the DSM and not unique to GIDC)" (Bryant, 2006, p. 35). How this article supports AAP's claim is a mystery. Moreover, how AAP could cite a 2006 history discussing events of the 1990s and earlier to support a claim about the *current* consensus in this quickly evolving discussion remains all the more unfathomable.

Cited last in this section was a one-paragraph press release from the World Professional Association for Transgender Health. Written during the early stages of the American Psychiatric Association's (APA's) update of the DSM, the statement asserted simply that "The WPATH Board of Directors strongly urges the de-psychopathologisation of gender variance worldwide." Very reasonable debate can (and should) be had regarding whether gender dysphoria should be removed from the DSM as homosexuality was, and WPATH was well within its purview to assert that it should. Now that the DSM revision process is years completed however, history has seen that APA ultimately retained the diagnostic categories, rejecting WPATH's urging. This makes AAP's logic entirely backwards: That WPATH's request to depathologize gender dysphoria was *rejected* suggests that it is *WPATH's* view—and therefore the AAP policy—which fall "outside the mainstream of traditional medical practice." (!)

AAP based this entire line of reasoning on their belief that conversion therapy is being used "to prevent children and adolescents from identifying as transgender" (Rafferty et al., 2018, p. 4). That claim is left without citation or support. In contrast, what is said by AAP's sources is "delaying affirmation should *not* be construed as conversion therapy or an attempt to change gender identity" in the first place (Byne, 2016, p. 2). Nonetheless, AAP seems to be doing exactly that: simply relabeling any alternative approach as equivalent to conversion therapy.

Although AAP (and anyone else) may reject (what they label to be) conversion therapy purely on the basis of political or personal values, there is no evidence to back the AAP's stated claim about the existing science on gender identity at all, never mind gender identity of children.

AAP also dismissed the watchful waiting approach out of hand, not citing any evidence, but repeatedly calling it "outdated." The criticisms AAP provided, however, again defied the existing evidence, with even its own sources repeatedly calling watchful waiting the current standard. According to AAP:

> [G]ender affirmation is in contrast to the outdated approach in which a child's gender-diverse assertions are held as "possibly true" until an arbitrary age (often after pubertal onset) when they can be considered valid, an approach that authors of the literature have termed "watchful waiting." This outdated approach does not serve the child because critical support is withheld. Watchful waiting is based on binary notions of gender in which gender diversity and fluidity is pathologized; in watchful waiting, it is also assumed that notions of gender identity become fixed at a certain age. The approach is also influenced by a group of early studies with validity concerns, methodologic flaws, and limited follow-up on children who identified as TGD and, by adolescence, did not seek further treatment ("desisters").[45,47]

The citations from AAP's reference list are:

45. Ehrensaft D, Giammattei SV, Storck K, Tishelman AC, Keo-Meier C. Prepubertal social gender transitions: what we know; what we can learn—a view from a gender affirmative lens. *Int J Transgend.* 2018;19(2):251–268

47. Olson KR. Prepubescent transgender children: what we do and do not know. *J Am Acad Child Adolesc Psychiatry.* 2016;55(3):155–156.e3

I was surprised first by the AAP's claim that watchful waiting's delay to puberty was somehow "arbitrary." The literature, including AAP's sources, repeatedly indicated the pivotal importance of puberty, noting that outcomes strongly diverge at that point. According to AAP reference 29, in "*prepubertal* boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood, with only 2.2% to 11.9% continuing to experience gender discordance" (Adelson & AACAP, 2012, p. 963, italics added), whereas "when gender variance with the desire to be the other sex is present *in adolescence*, this desire usually does persist through adulthood" (Adelson & AACAP, 2012, p. 964, italics added). Similarly, according to AAP reference 40, "Symptoms of GID *at prepubertal ages* decrease or even disappear in a considerable percentage of children (estimates range from 80–95%). Therefore, any intervention in childhood would seem premature and inappropriate. However, GID persisting *into early puberty* appears to be highly persistent" (Cohen-Kettenis et al., 2008, p. 1895, italics added). That follow-up studies of prepubertal transition differ from postpubertal transition is the very meaning of non-arbitrary. AAP gave readers exactly the reverse of what was contained in its own sources. If AAP were correct in saying that puberty is an arbitrarily selected age, then AAP will be able to offer another point to wait for with as much empirical backing as puberty has.

Next, it was not clear on what basis AAP could say that watchful waiting withholds support—AAP cited no support for its claim. The people in such programs often receive substantial support during this period. Also unclear is on what basis AAP could already know exactly which treatments are "critical" and which are not—Answering that question is the very purpose of this entire endeavor. Indeed, the logic of AAP's claim appears entirely circular: It is only if one were already pre-convinced that gender affirmation is the only acceptable alternative that would make watchful waiting seem to withhold critical support—What it delays is gender affirmation, the method one has already decided to be critical.

Although AAP's next claim did not have a citation appearing at the end of its sentence, binary notions of gender were mentioned both in references 45 and 47. Specifically, both pointed out that existing outcome studies have been about people transitioning from one sex to the other, rather than from one sex to an in-between status or a combination of masculine/feminine features. Neither reference presented this as a reason to reject the results from the existing studies of complete transition however (which is how AAP cast it). Although it is indeed true that the outcome data have been about complete transition, some future study showing that partial transition shows a different outcome would not invalidate what is known about complete transition. Indeed, data showing that partial transition gives better outcomes than complete transition would, once again, support the watchful waiting approach which AAP rejected.

Next was a vague reference alleging concerns and criticisms about early studies. Had AAP indicated what those alleged concerns and flaws were (or which studies they were), then it would be possible to evaluate or address them. Nonetheless, the argument is a red herring: Because all of the later studies showed the same result as did the early studies, any such allegation is necessarily moot.

Reference 47 was a one-and-a-half page commentary in which the author off-handedly mentions criticisms previously made of three of the eleven outcome studies of GD children, but does not provide any analysis or discussion. The only specific claim was that studies (whether early or late) had limited follow-up periods—the logic being that had outcome researchers lengthened the follow-up period, then people who seemed to have desisted might have returned to the clinic as

cases of "persistence-after-interruption." Although one could debate the merits of that prediction, AAP instead simply withheld from the reader the result from the original researchers having tested that very prediction directly: Steensma and Cohen-Kettenis (2015) conducted another analysis of their cohort, by then ages 19–28 (mean age 25.9 years), and found that 3.3% (5 people of the sample of 150) later returned. That is, in long-term follow-up, the childhood sample showed 66.7% desistence instead of 70.0% desistance.

Reference 45 did not support the claim that watchful-waiting is "outdated" either. Indeed, that source said the very opposite, explicitly referring to watchful waiting as the *current* approach: "Put another way, if clinicians are straying from SOC 7 guidelines for social transitions, not abiding by the watchful waiting model *favored by the standards*, we will have adolescents who have been consistently living in their affirmed gender since age 3, 4, or 5" (Ehrensaft et al., 2018, p. 255). Moreover, Ehrensaft et al. said there are cases in which they too would still use watchful waiting: "When a child's gender identity is unclear, the watchful waiting approach can give the child and their family time to develop a clearer understanding and is not necessarily in contrast to the needs of the child" (p. 259). Ehrensaft et al. are indeed critical of the watchful waiting model (which they feel is applied too conservatively), but they do not come close to the position the AAP policy espouses. Where Ehrensaft summaries the potential benefits and potential risks both to transitioning and not transitioning, the AAP presents an ironically binary narrative.

In its policy statement, AAP told neither the truth nor the whole truth, committing sins both of commission and of omission, asserting claims easily falsified by anyone caring to do any fact-checking at all. AAP claimed, "This policy statement is focused specifically on children and youth that identify as TGD rather than the larger LGBTQ population"; however, much of that evidence was about sexual orientation, not gender identity. AAP claimed, "Current available research and expert opinion from clinical and research leaders … will serve as the basis for recommendations" (pp. 1–2); however, they provided recommendations entirely unsupported and even in direct opposition to that research and opinion.

AAP is advocating for something far in excess of mainstream practice and medical consensus. In the presence of compelling evidence, that is just what is called for. The problems with Rafferty, however, do not constitute merely a misquote, a misinterpretation of an ambiguous statement, or a missing reference or two. Rather, AAP's statement is a systematic exclusion and misrepresentation of entire literatures. Not only did AAP fail to provide compelling evidence, it failed to provide the evidence at all. Indeed, AAP's recommendations are *despite* the existing evidence.

Disclosure statement

No potential conflict of interest was reported by the author.

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Appendix

Count	Group	Study
2/16 4/16 10/16	gay* trans-/crossdress straight*/uncertain	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283–1289.
2/16 2/16 12/16	trans- uncertain gay	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. *Comprehensive Psychiatry, 19,* 363–369.
0/9 9/9	trans- gay	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. *Journal of Pediatric Psychology, 4,* 29–41.
2/45 10/45 33/45	trans-/crossdress uncertain gay	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90–97.
1/10 2/10 3/10 4/10	trans- gay uncertain straight	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. *Archives of Sexual Behavior, 15,* 511–517.
1/44 43/44	trans- cis-	Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality.* New Haven, CT: Yale University Press.
0/8 8/8	trans- cis-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565–569.
21/54 33/54	trans- cis-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413–1423.
3/25 6/25 16/25	trans- lesbian/bi- straight	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology, 44,* 34–45.
17/139 122/139	trans- cis-	Singh, D. (2012). *A follow-up study of boys with gender identity disorder.* Unpublished doctoral dissertation, University of Toronto.
47/127 80/127	trans- cis-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582–590.

*For brevity, the list uses "gay" for "gay and cis-", "straight" for "straight and cis-", etc.

Appendix Attachment

1e

ATTACHMENT E

Concerns about Affirmation of an Incongruent Gender in a Child or Adolescent

Quentin L. Van Meter, M.D.
May 17, 2022

Qualifications

I received my B.A. in Science at the College of William and Mary and my M.D. from the Medical College of Virginia, Virginia Commonwealth University. I am currently a pediatric endocrinologist in private practice in Atlanta, Georgia. I am the President of Van Meter Pediatric Endocrinology, P.C. I am on the clinical faculties of Emory University School of Medicine and Morehouse College of Medicine, in the role of adjunct Associate Professor of Pediatrics. I am board certified in Pediatrics and Pediatric Endocrinology. I have been licensed to practice medicine in Georgia since 1991. I have been previously licensed to practice medicine in California, Louisiana, and Maryland.

I did my Pediatric Endocrine fellowship at Johns Hopkins Hospital from 1978-1980. The faculty present at that time had carried on the tradition of excellence established by Lawson Wilkins, M.D. Because of the reputation of the endocrine program as a center for exceptional care for children with disorders of sexual differentiation, I had well-above average exposure to such patients. As a Pediatric Fellow, I was also exposed to adults with Gender Identity Disorder, then called Trans-Sexuality, and received training from John Money, Ph.D., in his Psycho-hormonal Division. Over the past 44 years, I have closely followed the topic of incongruent gender in children adolescents and adults, but I am focusing in this document on working with children and adolescents. To get a more solid understanding of how male and female human beings develop in utero, it is important to start at the point when a sperm meets an egg.

Differentiation in the Fetus

From the moment of conception, a fetus is determined to be either a male (XY), female (XX), or in rare cases, to have a combination of sex-determining chromosomes, many of which are not compatible with life, and some of which are the cause of identifiable clinical syndromes. The presence of a Y chromosome in the developing fetus directs the developing gonadal tissue to develop as a testicle. The absence of a functional Y chromosome allows the gonadal tissue to develop as an ovary. Under the influence of the mother's placental hormones, the testicle will produce testosterone which directs the genital tissue to form a penis and a scrotum. Simultaneously, the testicle produces anti-Müllerian Hormone (AMH) which regresses development of the tissue that would otherwise develop into the uterus, fallopian tubes, and upper third of the vagina. This combination of actions in early fetal development is responsible for what we subsequently see on fetal sonograms, and what we observe at birth as male or female genitalia. It is only when the genital structures are ambiguous in appearance that sex determination is withheld until a thorough expert team evaluation has occurred.

For reasons most often occurring as random events, there are malfunctions of the normal differentiation. These aberrations of normal development are responsible for what we classify as Disorders of Sexual Differentiation (DSD), and they represent a very small fraction of the human population. The incidence of such circumstances occurs in 1:4500 to 1:5500 births.[1] Sex is binary, male or female, and is determined by chromosomal complement and corresponding reproductive role. The exceedingly rare DSDs are all medically identifiable deviations from this sexual binary norm. The 2006 consensus statement of the Intersex Society of North America and the 2015 revision of the Statement do not endorse DSD as a third sex.[2] DSD outcomes range from appearance of female external genitalia in an XY male (complete androgen insensitivity syndrome) to appearance of male external genitalia in an XX female (severe congenital adrenal hyperplasia).

As one would expect, there are variations of the degree of hormonally driven changes that create ambiguous genital development that prevent assigning of a specific classification as either male or female at birth. DSD patients are not "transgender"; they have an objective, physical, medically verifiable, physiologic condition. Transgender people generally do not have intersex conditions or any other verifiable physical anomaly. People who identify as "feeling like the opposite sex" or "somewhere in between" do not comprise a third sex. They remain biological men or biological women.

In some DSDs there exist more than one set of chromosomes. When there is a divergence of the appearance of the external genitalia from the chromosomally determined sex due to the presence of both an ovarian and testicular cell lines in a patient simultaneously, the patient is classified as having ovo-testicular DSD (formerly termed a true hermaphrodite). When there is a disruption in the development of genital structures but there is solely testicular tissue present in the chromosomal male or solely ovarian tissue in the chromosomal female, the term 46 XY DSD or 46 XX DSD is used instead respectively (formerly termed male pseudohermaphrodite or female pseudohermaphrodite).

The decision to assign a sex of rearing is complex and is specific to the diagnosis. Patients with complete androgen insensitivity (CAIS) are XY DSD but are never reared as a male. Because testosterone never influences development, they become happy, functional female adults with infertility. Females with severe congenital adrenal hyperplasia (CAH) are XX DSD but are not reared as males despite the male appearance of the genitalia at birth. Although these girls may show a tendency for male play behaviors as children, they generally assume a female sexual identity. Therapeutic interventions in the DSD individuals from infancy onward are aimed at what function can be expected from their disordered sexual anatomy in terms of function and fertility. Most often, the chromosomal sex aligns with the sex of rearing.

Gender Identity

"Gender" is a term that refers to the psychological and cultural characteristics associated with biological sex. It is a psychological concept and sociological term, not a biological one. The term gender possessed solely a linguistic meaning prior to the 1950s. This changed when sexologists of the 1950s and 1960s co-opted the term to conceptualize cross-dressing and transsexualism in their psychological practice. "Gender identity" is a term coined by my former endocrine faculty member John Money in the 1970s and has come to refer to an individual's mental and emotional sense of being male or female. The norm is for individuals to have a gender identity that aligns with one's biological sex.

Gender discordance (formerly Gender Identity Disorder) is used to describe a psychological condition in which a person experiences marked incongruence between his experienced gender and the gender associated with his biological sex. He will often express the belief that he is the opposite sex. Up until 2010, gender discordance occurred in 0.001% of biological females and in 0.0033% of biological males.[3] Exact numbers are hard to document since reporting is often anecdotal. Gender discordance is not considered a normal developmental variation.

"Gender Dysphoria" is a diagnostic term to describe the emotional distress caused by gender incongruity.[4] John Money played a prominent role in the early development of gender theory and transgenderism. He understood gender to be "the social performance indicative of an internal sexed identity."[5] He joined the Johns Hopkins faculty in 1951 specifically to have access to children diagnosed with DSD, hoping to prove his theory that gender was arbitrary and fluid. Money experimented with DSD infants by assigning them to the opposite biological sex through surgical revision, counseling, and hormonal manipulation during puberty. His mode of operation was to have a theory and then experiment with patients to see how his theory worked.

Ethics in Clinical Research on Human Subjects

It is important to discuss the need for ethics to play a role in the design of clinical studies involving human patients. To have a hypothesis, as did John Money, is not at issue. However, to clearly elucidate the potential for harm and balance that knowledge with the potential benefits is key and essential. After the travesties of open-ended experimentation in the Nazi concentration camps, international guidelines were established to protect human subjects from just such experimentation.[6] John Money ignored these guidelines as he assigned genders to infants and toddlers with ambiguous genitalia. There was no informed consent of the patients, who were infants and toddlers, and their parents were just told to follow the advice of Dr. Money and to trust that he had the correct information. There was no standardized protocol to follow, and no known outcome that could be guaranteed. This kind of endeavor did not anticipate or prevent adverse outcomes and was the antithesis of ethical science. Money never submitted his research proposals for review by an independent external review board. This left the patients unprotected and vulnerable to harm, and, indeed, in the case of the Reimer twins, to death due to drug addiction/overdose in one brother to and suicide in the other.[7]

Near the end of my fellowship training at Johns Hopkins, a male infant was sent to our clinic to assess the cause of his very small penis and testicles. My attending physician and I laid out a diagnostic work-up based on the known science which would help us understand whether the problem was due to a pituitary deficiency or an inability of tissue response to hormones. We purposely left John Money off the care "team," having some serious concerns about his tendency to dismiss science and to experiment. We sent the family home with their son and were quite surprised when the mother returned six weeks later with a baby wearing a pink dress and an eyelet bonnet. Without our knowledge, Dr. Money had intervened and told the family that our protocol was nonsense and the baby needed to be reared as female. On physical exam, there was clear evidence that not only was the baby able to produce testosterone, but his penis responded well, as expected, to the hormone production by his own body. The family was relieved but had not been spared suffering under the experimentation by Dr. Money. They had suffered deeply when they divulged to their extended family that their baby boy was actually a baby girl, and then they suffered even more when they recanted and resumed calling him a boy.

Because of his experience with infants, Money initially garnered support from endocrine colleagues and surgical colleagues, and Johns Hopkins became a renowned center for care of patients with DSD in the 1970s, receiving referrals from around the world. Follow-up studies on these infants later showed, however, that altering their natal sexual identity via social intervention could lead to severe psychological harm. Clinical case reports of children with DSD have revealed that gender identity is indeed not immune to environmental input.[8]

Meanwhile, Money had expanded into the field of adult patients with persistent gender identity disorder. This very small group of patients chose voluntarily, as adults, to enter a very precise protocol which began with living socially as the opposite sex for a year, eventually receiving hormonal therapy to change their physical appearance to some extent. The final step was surgical revision of the body structures that would otherwise be at odds with their desired gender identity. This small group of patients was followed for a number of years past their final surgical procedures and required continuous counseling. These patients expressed some degree of subjective satisfaction but showed no objective improvement in overall wellbeing.[9] The legacy of John Money fell into disrepute and the transsexual treatment program at Johns Hopkin was closed in the 1980s based on the lack of evidence that this protocol produced an effective cure.

Etiology of Gender Disorders

Transgender affirming professionals claim transgender individuals have a "feminized brain" trapped in a male body at birth and vice versa based upon various brain studies. Diffusion-weighted MRI scans have demonstrated that the pubertal testosterone surge in boys increases white matter volume. A study by Rametti and colleagues found that the white matter microstructure of the brains of female-to-male (FtM) transsexual adults, who had not begun testosterone treatment, more closely resembled that of men than that of women.[10] Other

diffusion-weighted MRI studies have concluded that the white matter microstructure in both FtM and male-to-female (MtF) transsexuals falls halfway between that of genetic females and males.[11] These studies, however, are of limited clinical significance due to the small number of subjects and failure to account for neuroplasticity.

Neuroplasticity is the well-established phenomenon in which long-term behavior alters brain microstructure. For example, the MRI scans of experienced cab drivers in London are distinctly different from those of non-cab drivers, and the changes noted are dependent on the years of experience.[12] There is no evidence that people are born with brain microstructures that are forever unalterable, but there is significant evidence that experience changes brain microstructure.[13,14] Therefore, any transgender brain differences would more likely be the result of transgender behavior than its cause.

Furthermore, infants' brains are imprinted prenatally by their own endogenous sex hormones, which are secreted from their gonads beginning at approximately eight weeks' gestation.[15,16,17] There are no published studies documenting MRI-verified differences in the brains of gender-disordered children or adolescents. The DSD guidelines also specifically state that current MRI technology cannot be used to identify those patients who should be raised as males or raised as females.[18] Behavior geneticists have known for decades that while genes and hormones influence behavior, they do not hard-wire a person to think, feel, or behave in a particular way. The science of epigenetics has established that genes are not analogous to rigid "blueprints" for behavior. Rather, humans "develop traits through the dynamic process of gene-environment interaction. ... [genes alone] don't determine who we are." [19]

Regarding transgenderism, twin studies of adults prove definitively that prenatal genetic and hormone influence is minimal. The largest twin study of transgender adults found that only 20 percent of identical twins were both transgender-identified.[20] Since identical twins contain 100 percent of the same DNA from conception and develop in exactly the same prenatal environment exposed to the same prenatal hormones, if genes and/or prenatal hormones contributed to a significant degree to transgenderism, the concordance rates would be close to 100 percent. Instead, 80 percent of identical twin pairs were discordant. This difference would indicate that at least 80 percent of what contributes to transgenderism as an adult in one co-twin consists of one or more non-shared post-natal experiences including but not limited to non-shared family experiences. These findings also mean that persistent GD is due predominately to the impact of nonshared environmental influences. These studies provide compelling evidence that discordant gender is not hard-wired genetically.

Gender Dysphoria vs. Gender Identity Disorder

Up until the recent revision of the DSM-IV criteria, the American Psychological Association (APA) held that Gender Identity Disorder (GID) was the mental disorder described as a discordance between the natal sex and the gender identity of the patient. Dr. Kenneth Zucker, who is a highly respected clinician and researcher from Toronto, carried on evaluation and

treatment of GID patients for forty years. His works, widely published, found that the vast majority of boys and girls with GID identify with their biological sex by the time they emerge from puberty to adulthood, through either watchful waiting or family and individual counseling.[21] His results were mirrored in studies from Europe.[22,23]

When the DSM-V revision of the diagnosis of GID was proposed by the APA committee responsible for revision, Dr. Zucker strongly opposed the change to the term Gender Dysphoria, which purposefully removed gender discordance as a mental disorder apart from the presence of significant emotional distress. With this revision, Gender Dysphoria describes the mental anguish which is experienced by the gender discordant patient. The theory that societal rejection is the root cause of Gender Dysphoria was validly questioned by a study from Sweden which showed that the dysphoria was not eliminated by hormones and sex reassignment surgery even with widespread societal acceptance.[24]

Treatment of Gender Dysphoria

The treatment of children and adolescents with gender discordance and accompanying gender dysphoria should include an in-depth evaluation of the child and family dynamics. This evaluation provides a basis on which to proceed with psychologic therapy. The entire biologic and social family should be involved in psychological therapy designed to assist the patient, if at all possible, to align gender identity with natal sex. Psychological support by competent counselors with an intent of resolving the gender conflict should be provided as long as the patient continues to suffer emotionally. Given the high degree of eventual desistance of gender discordance/dysphoria by the end of puberty, it would be ethical and logical to counsel the patient and family to rear the child in conformity with natal sex.

There should be no interruption of natural puberty. Natural pubertal maturation in accordance with one's natal sex is not a disease. It is designed to carry malleable, immature children forward to be healthy adults capable of conceiving their own progeny by providing either a sperm or an egg. Puberty affects physical changes, some of them painful, unique to the natal sex to reflect the laws of nature. Interruption of puberty has been reserved for children who begin puberty at an age much younger than normal in an effort to preserve final height potential and avoid the social consequences of precocious maturation.[25]

There are a number of physical changes that are a consequence of normally timed puberty that could be classified as disadvantageous: changes in body proportions can alter success with dance and gymnastics; acne can be severe and disfiguring; a boy soprano can suddenly hardly carry a tune. It has not been the ethical standard of care to stop puberty so that these changes can be circumvented. Erikson described the stage of adolescence as "Identity versus Role Confusion" during which the teen works at developing a sense of self by testing roles then integrating them into a single identity.[26] This process is often unpleasant regardless of the presence or absence of gender identity conflicts. The major benefit of enduring puberty in a GD patient is that it provides a strong likelihood of alignment of his gender identity with his

natal sex. There is no doubt that these patients need compassionate care to get them through their innate pubertal changes.

The light at the end of the tunnel is the proven scientific evidence that 80%- 95% of pre-pubertal children with GD will come to identify with their biological sex by late adolescence. Some will require lifelong supportive counseling while others will not.[27] Intervention at a young age with gonadotropin releasing hormone analogs (often referred to as puberty blockers) to either stop puberty early on or prevent it from starting before it naturally occurs is suggested by guidelines developed by WPATH without scientific basis. These guidelines are essentially nothing more than an open-ended experiment in the manner of John Money. They represent the ideas of their authors with clear admission that there is no long-term evidence that harm will exceed benefits as these patients grow to old age. There is evidence that bone mineral density is irreversibly decreased if puberty blockers are used during the years of adolescence.[28] To treat puberty as a pathologic state of health that should be avoided by using puberty blockers (GnRH analogs) is to interrupt a major necessary physiologic transformation at a critical age when such changes can effectively happen. We have definite evidence of the need for estrogen in females to store calcium in their skeleton in their teen years. That physiologic event can't be put off successfully to a later date. It is very difficult to imagine ethical controlled clinical trials that could elucidate the effects of delaying puberty until the age of consent.

The use of cross-sex hormones during this same time frame has no basis of safety and efficacy. The use of such treatment in adults raises scientifically valid concerns that were amply expressed in the 2009 Endocrine Society Guidelines on Transgender treatment. The next step in WPATH-recommended intervention is to use cross-sex hormone therapy during the time when the patient would naturally be experiencing endogenous pubertal changes. This too is not based on scientifically proven theories. The use of cross-sex hormones can cause permanent infertility.[29]

The final recommended step is so-called "sex reassignment surgery," which can include surgical removal of the breasts in natal females, or removal of the penis and scrotum in natal males. Each of these steps has adverse outcomes, some reversible and others not. Mastectomies leave scars, and there is great difficulty in creating a functional vaginal-like orifice, and certainly no success in creating an innervated erectile penis where none existed previously. Sex reassignment surgery is, by nature, permanent.

Recurrent Themes that Are Repeatedly Published

Puberty blockers are stated to be completely reversible in their effects on the adolescent who has entered puberty based on clinical studies in young children with precocious puberty who have been treated with these drugs. This is comparing apples to oranges. Precocious puberty, by definition, is defined as puberty which starts before the 8th birthday for a female child or the before the 9th birthday in a male child. The end of treatment is carefully timed so that resumption of puberty occurs at the average age for females (10.5 years) and males (11.5

years). This allows the necessary functions of puberty to prepare the body for reproduction and affects the bones, gonads, and brain, among other body systems. On the other hand, blocking puberty at the age of normal puberty prevents the needed accretion of calcium into the skeleton and prevents the maturation of the gonads. There is no long-term data that compares bone, gonad, and brain health in pubertal-aged patients who have had puberty interrupted and those who have not, as was noted as a concern in the Endocrine Society Guidelines. There are no such ongoing studies completed that guarantee the full reversibility of blocking puberty in this age group, but there is evidence that normal bone density can't be fully reestablished. Without any verifiable safety data, using the puberty blockers for interrupting normal puberty is not a sanctionable off-label use of these drugs and is therefore to be considered uncontrolled, non-consentable experimentation on children.

Advocates for the social, medical and surgical affirmation of gender incongruent children insist that they are only following established standards of care. There are no standards of care for transgender health. Standards of care established by broad consensus are reached by inclusion of the whole spectrum of opinions, clinical experience and published science in the formation thereof. The guidelines published by WPATH[30], the Endocrine Society,[29,31] the American Academy of Pediatrics[32], and the Pediatric Endocrine Society[33] are solely the opinions of like-minded practitioners who excluded any contrary opinion. The Endocrine Society Guidelines, as mentioned before, clearly stated that they are not to be considered standards of care. Before true consensus-driven standards of care are established for the treatment of transgender patients of all ages, following the current guidelines is risky experimentation in a manner reminiscent of John Money's tactics.

What We Do Know and Do Not Know

We do know that social affirmation of an incongruent gender tears the fabric of the patient's life into pieces- pitting family members against each other, ruining child friendships and it introduces the child to a fantasy world, much of it on the internet. Kenneth Zucker aptly documented the detrimental effects of such affirmation and the immense amount of work it takes to undo these effects when the child does come to realize they can't change their sex and wants to go back to identifying with their sex[34]. We do not know that social affirmation does anything other than push the child away from the proven, 80-90% effective, so-called watch-and wait treatment option. Embarrassingly unscientific short term convenience sample studies purport to show that all gender incongruent children who are socially affirmed have improved mental health and are therefore better off than those children who are not allowed to socially transition.[35]

We do know that blocking puberty during the age when puberty naturally happens lessens accretion of calcium into the skeleton and that this can't be regained by allowing puberty to resume or by using cross sex hormones. We do know that the ovary and testicle cease to mature with treatment. What we do not know is whether allowing puberty to resume will allow the ovary and testicle to fully mature and have full function in terms of fertility. We do

not know if brain development that is halted with puberty blockers can return to full function once puberty is allowed to resume.

We do know that elevated levels of testosterone in females and of estrogen in males create significant medical morbidity. This knowledge comes from the evaluation and treatment of naturally occurring disease states in children and adults. Treatment of these conditions is aimed at returning hormone levels to normal, thereby avoiding cancers, heart disease, and stroke. We do not know that elevating testosterone in females and estrogen in males to levels ten-fold higher than these known disease states is safe, but common sense would say it can't possibly be safe.

The Myth of Increased Suicide

The affirmation advocates repeatedly refer to the established increased risk of suicide if any of the affirmation strategies are not followed to completion. They point to their own published studies touting dramatic improvement in mental health status of patients who are affirmed in all three ways, but they cite data from convenience sampling, which never should be sued to prove anything other than association, at best. Such studies can never prove causation. There are only two total population studies in the peer-reviewed medical literature.[24,36,37] They show that when every recorded case in the population of Sweden was analyzed, neither medical affirmation nor medical affirmation followed by surgical affirmation improved the mental health of the patients in the long run.

What of the Nearly Logarithmic Increase in Incidence of Gender Incongruence?

Data collection in this regard is subject to estimates based on surveys, which can easily alter the numbers upward or downward, depending on who designed the survey and to whom it was presented. Fear, self-loathing or suicide will necessarily lower the numbers of survey participants whose lives are made miserable by the choice to affirm an incongruent gender. Instant gratification, payback to strict parents, and current celebrity will draw survey participants to express euphoric satisfaction with their decision to affirm their incongruent gender, especially when the surveys are circulated by trans-activist organizations, such as the Trevor Project. What had been in 2010 a nearly invisible fraction of adults who admitted to living with an incongruent gender has exponentially increased in frequency to as many as one out of five students in a suburban Pittsburgh school district in 2021. After I completed my fellowship at Johns Hopkins in 1980, it was not until 1993 that a biologic male presented to my private practice office with a desire to be treated with estrogen to feminize his body so that he could appear to be a female and identify as such. There was nothing in published medical literature that I could find to guide my treatment options. I canvassed my broad contact pediatric endocrinology network across the United States, and nobody had heard of such a clinical case, and none had any suggestions about what I should do. In the ensuing 19 years, the number of transgender treatment centers have burgeoned from zero to several hundred between university-based centers and Planned parenthood. Minority stress theory is frequently used to cover this explosion in numbers, but that is utterly impossible. What does

explain this increase is online recruiting and grooming of vulnerable children and adolescents by a generously funded political movement aimed at dissolving the reality and birthright of biologic sex. This will not end well. By the time a plethora of legal action against those who promoted and engineered the social, medical, and surgical affirmation of incongruent gender knocks down this house of cards, millions of children and adolescents will have been medically, surgically, and mentally maimed as well sterilized.

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Appendix Attachment

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ATTACHMENT F

Florida Medicaid Project: Surgical Procedures and Gender Dysphoria

Patrick Lappert, M.D.

May 17, 2022

Florida Medicaid Project: Surgical Procedures and Gender Dysphoria

Patrick Lappert, M.D.

Overview

The "Gender Affirmation" care model for children who suffer from gender identity issues is experimental in nature because it is based in low to very low-quality scientific evidence. There is no body of quality scientific evidence to support the hypothesis that gender dysphoria with its associated problems of self-harm and suicide, is improved long-term by gender affirmation surgical procedures.

The best evidence available today demonstrates that transgender is not a single condition that can be explained by any single factor. There are vast differences in age of presentation, predominant sex, persistence into adulthood, and resolution during adolescent development. Moreover, there are numerous and common co-morbid conditions such as autism-spectrum disorder, major anxiety disorders, and clinical depression that severely affect any sense of certainty about the true cause of the child's dysphoria, as well as their capacity to understand and give assent to irreversible medical and surgical procedures that lead to permanent sterility, sexual impotence, and a lifetime of medical problems associated with affirmation care.

The process of obtaining medical informed consent as part of gender affirming surgery is morally indefensible, and likely legally indefensible as well. Parents of suffering children are led by medical professionals to believe that there is only one valid option of care (affirmation medicine and surgery), utterly concealing the historic reality that greater than 92% of children desist in their cross-sex self-identification when treated using the "watchful waiting" therapeutic strategy. Parents are told that if they do not consent to affirmation care, there is a high likelihood that their child will die from suicide. This is not informed consent, but rather consent under duress.

Gender identity is being presented as a fixed and unchanging, biologically determined, personal characteristic. It is not. The medical literature has consistently shown over many years that the vast majority of children with cross-sex gender identity resolve the issue during adolescence and adopt a gender identity that is congruent with their biological sex.

Because surgeons who perform gender affirmation surgeries have no diagnostic test to predict who among the self-identified transgender minors would have persisted in their cross-sex self-identification into adulthood, and who among those children would have desisted, they have no way to know, in any particular case if the irreversible surgery is being performed on a person who would have continued to self-identify in the cross-sex persona into adulthood. Given the historically well-known desistance rate, it is possible that as many as 90% of children are undergoing surgery based upon an incorrect diagnosis.

"Gender Affirming" breast surgery for self-identifying transgender minors is not medically and ethically equivalent to similar procedures performed for objectively identifiable medical conditions. Transgender breast surgery is always cosmetic (aesthetic) in nature because the indication is a hoped-for improvement in the interior emotional life of the patient. Transgender surgery is not based in any medical diagnosis and does not seek to restore any form or function that may have been lost due to trauma, disease, or developmental accident. It begins with normal structures and changes their appearance in order to achieve a subjective improvement and is therefore cosmetic surgery.

Because gender affirming surgery is cosmetic (aesthetic) in nature, such surgeries must never be offered if they are known to predictably produce an irreversible loss of function. To knowingly sacrifice a human capacity (breast feeding, capacity for sexual intimacy, fertility) in the pursuit of a cosmetic result in a minor who is incapable of giving informed consent, is morally indefensible. The hoped-for subjective improvement that is sought in transgender surgery is a short-lived improvement and is only supported by low to very low-quality scientific evidence. Long term longitudinal cohort studies that are based in level III evidence show that affirmation surgical care is of no benefit in reducing self-harm including suicide.

Problems with Informed Consent

The protection of children in situations requiring informed consent is a crucial problem that the state has a historic and abiding interest in. In the particular situation of self-identified transgender children, it becomes a most significant problem, given that they are being submitted for permanently life-altering interventions. In my opinion as a plastic and reconstructive surgeon, the life-altering nature of hormonal and surgical interventions needs to be addressed from the moment of the child's entry into the gender-transition system, given the fact that the overwhelming majority of children who first begin puberty blockade, go onto the physically altering and permanent changes produced by cross sex hormones, and many ultimately also pursue surgery, as is attested to by multiple papers, the content of which is examined below. Informed consent has several requirement that need to be met if such consent is to be deemed valid. These requirements include a thorough discussion of the details of the proposed procedure including risks, known complications, and some measure of the likelihood of a favorable outcome. The discussion must include alternative treatments, and their risks, known complications and their likelihood of a favorable outcome. In the case of the interventions associated with gender-transition medicine and surgery, the favorable outcomes should be evident over the lifetime of the patient, given that they are permanently sacrificing structures and capacities (breasts and breast-feeding, or genitals and fertility).

Because the commonly cited medical literature used in support of these surgeries is of low to very low quality, it must be recognized that such surgeries must be considered experimental in nature given the unknown long-term effects of treatment, and the vast uncertainty in the patient selection and diagnostic processes. Yet the experts who provide opinion in support of these surgeries speak with absolute certainty of their efficacy, and the absence of any alternative treatment. Considering these factors severally and together it becomes difficult to imagine a

more flawed consent process. It also becomes understandable how parents can be drawn into uninformed participation given the simultaneous presentation of dire consequences if gender dysphoria is left untreated, and the insistence that affirmation care including surgery is the only way to bring lasting happiness to the child.

Chest Masculinization" in Natal Females is Not Ethically Equivalent to Mastectomies for Breast Cancer

When mastectomy is performed for the management of breast cancer, or to mitigate the proven risk of developing breast cancer in women, it is done on the basis of objective diagnoses either by pathological examination of biopsy tissue, or as in the case of prophylactic mastectomy, on the basis of genetic analysis that shows known markers of increased risk of developing breast cancer. These tests (microscopic examination of tissue specimens, detection of cell surface markers with proven association with malignancy, and genetic screening of at-risk patients) have known positive predictive value for the diagnosis of breast cancer, and these tests have known error rates that can be used when obtaining informed consent for mastectomy. The validity of these tests has been proven using scientific methodologies that produce high quality evidence in longitudinal population studies with control populations, and very long follow up. As the result, when a woman gives consent for mastectomy to control or prevent the potentially lethal disease, it is with a clear and proven evaluation of the risks and benefits that consent is obtained. Mastectomy is being performed based upon an objective diagnosis of a potentially lethal condition, and the surgical procedure has proven benefit in management of that condition.

In stark contrast, this is not the case when mastectomy is performed to "masculinize" the chest of girls and women who self-identify as transgender or who self-report symptoms of dysphoria. In the self-identified transgender adolescent, breasts are being removed on the basis of a diagnosis that is made by the patient since there are no tests with known error rates that can be used to predict who will benefit from this disfiguring and irreversible surgery. The claim is made that chest masculinization has proven benefit in reducing dysphoria and the associated risk of suicide. But published studies that make this claim of benefit offer evidence that is low to very low quality, typically small case collections with self-selection bias, very short follow up, and no case controls.

The best data presently available on the long-term effects of medical and surgical transitioning are long-term, longitudinal, population-based studies. For example, Dehjne, et al., examined the putative long-term benefit of full transitioning (including hormonal and surgical treatments) found in the Swedish medical database. (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOSOne February 22, 2011 https://doi.org/10.1371/journal.pone.0016885). That database includes all persons in the Swedish medical system, from pre-natal to death. It reports all episodes of care and all demographic information in a uniform vocabulary. Furthermore, Sweden has been on the forefront of "gender affirmation" long before the American medical

system seriously considered its claims. Because of the nature of Sweden's database, it is possible to study a cohort of patients that very closely matches the inquiry group with regards to age, sex, economic status, etc. It is possible to ask with great precision such questions as, "What is the likelihood that a fully transitioned transgender male will be hospitalized for psychiatric illness when compared to the age/sex matched control group?" Even more, one could urgently ask, "What is the relative risk of suicide in transgender persons, when compared to age/sex matched controls?"

Why are such longitudinal, population-based studies superior to the case-collection/case series methodology? Because confounding variables such as age, sex, and self-selection biases are removed. In the flawed case-collection methodology, the reported cases are typically only those who return for follow up. You have no way of knowing if the patient had a good outcome or didn't return for follow up because they were in a psychiatric hospital, were incarcerated, or committed suicide. In the Swedish longitudinal study, the suicide is in the same database, as are the other issues of hospitalization, incarceration, and addiction treatment, among other rates of comorbidity. Thus the longitudinal population study can give us what is called a "hazard ratio" for a particular study population (patients who have completed transgender transition in this case).

What this Swedish study shows us that the risk of completed suicide in all transgender persons is 19.1 times higher than in the control cohort. If you look only at patients who have transitioned — patients after "treatment" — from female to "male presentation," the risk of completed suicide is 40 times higher than in the general population. (Note: this finding is consistent with the historic Branstrom 10-year follow up study, which found no benefits to "transitioning treatments" but did note an increased risk of serious suicide attempts and anxiety disorders AFTER "treatment.") (Correction to Bränström and Pachankis, Am J Psychiatry 177:8, August 2020; see detailed citations in the "Notes" section of this report below).

Another cautionary note was added to the literature by the reputed Cochrane Review, a UK based international association of researchers who examine the quality of scientific evidence used in medical decision making. The Cochrane Review recently published findings concerning the medical evidence used to support the decision to give young women cross sex hormones as part of the transition process. The authors summarize the world literature review thus: "We found insufficient evidence to determine the efficacy or safety of hormonal treatment approaches for transgender women in transition. This lack of studies shows a gap between current clinical practice and clinical research." (Does hormone therapy help transgender women undergoing gender reassignment to transition? See, Haupt C, Henke M, Kutschmar A, Hauser B, Baldinger S, Saenz SR, Schreiber G., Cochrane Review, 28 Nov 2020).

Similar issues of very poor, low quality scientific support for chest masculinization surgery can be seen in a recent article by Tolstrup et al. published in the journal Aesthetic Plastic Surgery (See Anders Tolstrup, Dennis Zetner, Jacob Rosenberg, Outcome Measures in Gender-Confirming Chest Surgery: A Systematic Scoping Review, Aesthetic Plast Surg 2020 Feb;44(1):219-228. doi: 10.1007/s00266-019-01523-1. Epub 2019 Oct 29). The article reports a

comprehensive review of the world literature concerning the efficacy of "gender confirming" chest surgery in transgender patients. The authors found 849 articles on the subject, published in peer reviewed medical journals. Of these 849 articles, only 47 could be included in the review. This means that only 5.5% of all the published, peer-reviewed transgender surgery articles demonstrated even rudimentary scientific rigor. Of those 47 articles, the authors report that only 29 of the articles addressed mental health outcomes (3.4% of all the articles). What is startling is that the mental health outcomes were judged only on the basis of uncorroborated, untested, and unassessed patient subjective reporting with descriptors that varied so widely from article to article that results could not even be compared. The authors summarize by saying, "Evaluation of outcomes in gender-confirming chest surgery showed large variations in reporting, and further streamlining of reporting is therefore required to be able to compare surgical outcomes between studies." None of these negligent articles even bothered to examine rates of psychiatric hospitalization, substance abuse, self-harm behaviors, and suicide. This tells us that the main reason for performing these surgeries (psychological distress and suicide risk) isn't even evaluated with regard to efficacy.

An example of an article with very low-quality data, reckless (now banned practices), and methodology, published in a "leading journal," and promoted as evidence for the efficacy of "chest masculinization" surgery makes this fact very clear. The lead author (Olson-Kennedy, a leading national advocate for the transgender treatment enterprise) is a board-certified pediatrician who leads the gender clinic for the Los Angeles Children's Hospital. The article appeared in 2018 (See J. Olson-Kennedy, J. Warus, MD1, et al., Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults; Comparisons of Nonsurgical and Postsurgical Cohorts., JAMA Pediatr. 2018;172(5):431-436. doi:10.1001/jamapediatrics. 2017.5440. In their summary of findings, the authors reported that "chest dysphoria" is common among "trans males" (natal females seeking to present as males) and claimed that dysphoria is "decreased by surgery." They claim that regret for surgery is "rare." The article reports breast removal surgery on at least one girl aged 13 years. (Note that this reckless, experimental practice has now apparently been abandoned as unethical/experimentation on children by England, Sweden, and Finland. The average age of patients in the study was 19. Children were entered into the study through recruitment from among patients visiting the clinic and by telephone over a six-month period. The authors found that, of the patients recruited from among visitors to the clinic (convenience sampling), there was an over-representation of non-operated patients, so the authors were forced to reach out to all the post-surgical patients by phone. Twenty-six percent of the clinic's post-surgical patients could not be reached for various reasons including no working phone, or failure to respond to multiple messages. The 26% drop-out rate is never even questioned by these authors. Were surgical patients lost to follow up because of dissatisfaction, psychiatric hospitalization, or suicide? This problem is called "self-selection bias," and it is evidence of careless study design. Of the remaining 74% of patients, only 72% completed the survey. This is a second example of self-selection bias. Why would some post-surgical patients who had been successfully contacted, not complete the survey? The authors — demonstrating multiple levels of confirmation bias — do not even ask such essential questions. (See detailed citations in the "Notes" section of this report below).

In the study, dysphoria was evaluated using what the author called "a novel measure," which amounted to a series of subjective questions about happiness that was in part designed by the adolescent test subjects themselves. Essentially, the methodology used an entirely unvalidated ("junk science") test instrument, with no known error rates and no proven predictive power. Furthermore, the post-surgical patients were administered the survey at widely varying time intervals post-surgery. The longest interval between surgery and the satisfaction survey was 5 years, but children less than a year post-surgery were included in this obviously flawed sample, and yet the authors claim evidence of "negligible regret." This is a remarkable, misleading, and deceptive claim given that long-term, longitudinal population studies show that there is a dramatic rise in post-surgical problems such as depression, hospitalization, substance abuse, and suicide beginning at around seven years post-surgery (Ibid). Surely the authors are familiar with the world literature on transgender outcomes?

Having deceptively or negligently promised in the introduction to their paper that "chest dysphoria" is reduced by surgery, at the conclusion the authors confessed to the fact that the study design and execution produced very low-quality data that is not useful for patient selection, or prediction of outcomes. They even confessed that the study does not address the efficacy of surgery in improving outcomes regarding the single most compelling reason for performing the operation: mitigation of depression and suicide. The authors write, "An additional limitation of the study was the small sample size. The nonsurgical cohort was a convenience sample, recruited from those with appointments during the data collection period. There could be unknown imbalances between the nonsurgical and postsurgical cohorts that could have confounded the study findings."

Finally, the authors did not even bother to validate their "Chest Dysphoria Scale." Such a "made-up" scale is unlikely to accurately represent distress or correlate with properly validated measures of quality of life, depression, anxiety, or functioning. Their own analysis at the conclusion or the paper directly contradicts the deceptive claim made in their introduction.

This is the kind of "junk science" that is used to support transgender medicine and surgery. The paper is only a few years old. It was written by board certified physicians who practice in one of the nation's largest pediatric gender clinics and was published in a peer-reviewed medical journal. It is essentially useless in making any clinical decisions regarding who should be offered surgery, what is the likelihood they will benefit from it, and what is the likelihood they will regret their decision. Most importantly, it does not even measure the effect of therapy on suicide risk. The very morbidity (the risk of suicide) that they claim is improved by surgery is not even measured in their low-quality study.

Because of the very low-quality scientific support for mastectomy in the management of gender dysphoria, valid consent would demand that these procedures be described as experimental, would need the approval of ethics panels to monitor human experimentation, and would require the use of valid controls found in long-term, longitudinal population-based study models. These are the kinds of patient protections now endorsed in England, Sweden and Finland but still

ignored in the US environment where proper scientific critiques of such studies can get faculty "cancelled."

Even though the transgender treatment industry has been performing these surgeries for over 50 years, gender treatment centers continue to publish the same low quality, methodologically defective studies based upon collected cases that are degraded in value by self-selection bias, confirmation bias, and short-term follow-up, while continuing to deceptively claim that such defective research provides a sufficient scientific basis for performing irreversible, disfiguring, and ultimately sterilizing hormonal treatments and surgeries on children.

"Chest Masculinization" in Natal Females is Not Ethically Equivalent to Gynecomastectomy

Gynecomastectomy is the surgical treatment of gynecomastia, a fairly common condition in which males develop female-type breast gland tissue. Proponents of "masculinization" mastectomy in natal females erroneously equate the ethics of removing healthy breast tissue from gender dysphoric children with the removal of abnormal breast tissue in men (gynecomastia). In the case of gynecomastectomy in male patients, the operation is performed to remove the objectively diagnosed presence of female type glandular breast tissue present in a male patient. Physical examination demonstrates the presence of a dense retro-areolar mass which is tender and sometimes disfiguring. Pathological examination of the removed tissue will demonstrate the presence of female-type fibroglandular tissue in a male patient. This is an objectively abnormal condition. It should further be noted that the absence of such abnormal, female-type fibroglandular tissue in the submitted surgical specimen places the chest recontouring in the category of cosmetic surgery and is therefore not typically paid for by third-party payors.

A comprehensive literature review on the subject of gynecomastectomy and suicidal behavior conducted by Sollie in 2018 (Management of gynecomastia—changes in psychological aspects after surgery—a systematic review: Gland Surg. 2018 Aug; 7(Suppl 1): S70–76.doi: 10.21037/gs.2018.03.09) did not produce a single paper claiming improvement in suicide rate in patients who underwent this surgery. There were many reports concerning improvement in the pain that men with this objective condition suffer with. The remainder of the reported data was in the category of subjective "satisfaction survey". This tells us that the author did not distinguish between medically indicated and aesthetic surgeries. Nonetheless, no claim is made of decreased suicide rates in a suicidal population of male patients. This is because any male patient seeking removal of abnormal, female-type, breast tissue who reported suicidal ideation would be considered incompetent to give consent and would require a psychiatric evaluation and treatment to manage suicidal thinking before being considered for surgery. This kind of decision in favor of psychiatric support does not appear to be at work in the transgender affirmation world. There, and there alone, is suicidal thinking considered a qualification for a surgery.

"Chest Masculinization" in Natal Females is Not Ethically Equivalent to Breast Reduction

It should be obvious that "Chest Masculinization" surgery in natal females is not ethically equivalent to breast reduction surgery in non-transgender females. In the case of breast reduction for females with excessively large breasts (macromastia, or gigantomastia), the operation is performed to relieve a debilitating orthopedic complaint of neck, back, and shoulder pain associated with the postural/mechanical effects of the weight of the breasts. These patients experience significant activity restriction and chronic pain that is not relieved by medical management or physical therapy. Furthermore, there is voluminous actuarial data, based upon many years of longitudinal population-based study by medical insurance agencies that is used to predict who will benefit from surgery, and who will not. These physical, objective tests, based upon the actual measurement of the breasts, and the patient's overall body habitus, have known error rates that can be used to predict the likelihood that a breast reduction will relieve the orthopedic complaints of neck, back, and shoulder pain. When the tissue specimens are submitted to pathology, they are weighed in order to ensure that enough tissue has been removed so that there will be a very high likelihood that the surgery will relieve the orthopedic condition of neck, back, and shoulder pain (Accuracy of Predicted Resection Weights in Breast Reduction Surgery, Theodore A. Kung, MD, Raouf Ahmed, MBBS1 Christine O. Kang, MPH,1 Paul S. Cederna, MD, and Jeffrey H. Kozlow, MD; Plast Reconstr Surg Glob Open. 2018 Jun; 6(6): e1830.

Based upon that, adequate pre-operative consent can be obtained. The supporting data is based in very high-quality methodology. There is no quality research data, no pre-operative test or study, and no known error rates that can be used to predict the likelihood that any child suffering from gender dysphoria will benefit from the experimental procedures of mastectomy and chest "masculinization." As noted above, because of the very low quality data, transgender chest masculinization is at best experimental and at worst, should be viewed as a form of medical child abuse — it is important to note that Finland, Sweden, and the UK apparently now all agree with this analysis, as they have all retreated from such reckless surgical procedures for (See detailed citations in the "Notes" section of this report below).

It is crucial to remember that "chest masculinization-affirmation surgery" of healthy breast tissue results in a complete loss of function, that this loss is two-fold (breast feeding and erotic sensibility), and the cause of the loss is two-fold (gland removal and severing of the intercostal nerve). (See Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; Aesthetic Surgery Journal, (Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; Aesthetic Surgery Journal, Volume 21, Issue 3, May 2001, Pages 261–271, https://doi.org/10.1067/maj.2001.116439).

If a patient who undergoes "chest masculinization" should regret the surgery, they do have the option of breast reconstruction. However, all that will be produced is a counterfeit of a breast. The patient will have lost the function of breast feeding. Additionally, the most commonly performed "masculinization" surgery involves the removal of the nipples, and subsequent re-

attachment in the form of a nipple graft. Those nipples will have lost their native nerve connections that provoke erotic sensibility. All that can be hoped for is the eventual random ingrowth of local skin sensation, but there will never be erotic sensation because the particular branch of the fourth intercostal nerve which communicates with particular centers in the brain responsible for oxytocin release and erotic provocation will have been permanently severed. This means that breast function has been completely and irreversibly sacrificed for the sake of producing a cosmetic result (a masculine appearing chest). This is the exact opposite of the goals of any reconstructive surgery. It must therefore be understood that "chest masculinization" is a cosmetic procedure that has violated the most essential principle of cosmetic surgery: never sacrifice function for the sake of a cosmetic result.

Erroneous use of the word "Reconstructive" to describe Gender Affirmation Surgeries

The transgender treatment enterprise uses the word "reconstructive" to characterize a group of surgical treatments that seek to alter the sexed appearance of the person. It is important to understand that these procedures, because of the indications for surgery, the motivations for surgery, and the outcomes of surgery, are not reconstructive, but are to be properly understood to be cosmetic in nature.

Reconstructive surgeries are procedures that seek to establish or restore structures and their functioning that have been lost due to trauma, disease, in-utero developmental abnormalities, or surgical treatment for disease. Such reconstructive surgeries must begin with the objective characterization of the defect, including abnormalities of form, and associated loss of function. This process of defining the defect begins with a thorough understanding of normal human form and function and seeks to select, develop, and execute procedures that will restore both. In some cases function may be emphasized more than form, as when the mangled hand of a man is reconstructed. In other cases, reconstruction of form is all that is possible because as yet there are no techniques to restore function. An example of this is seen in the reconstruction of a woman's breast following cancer care. All that can be offered is the appearance of a breast; she will never be able to feed an infant through the reconstructed part.

This is to be contrasted with cosmetic, or aesthetic surgery in which the appearance of a structure is modified in order to produce a subjective (aesthetic) result for the patient. No functional restoration is addressed because no functional or structural loss exists. The object of the surgery is aesthetic. There is no lost form or function that needs to be reconstructed. It is aesthetic surgery because the motivation is aesthetic (subjective feelings about appearance). Further evidence for this is the fact that nearly the entirety of the outcome studies cited in support of these surgeries use subjective questionnaires which the patient fills out. The questions used are typical of those used to evaluate any aesthetic surgery. They are called "satisfaction surveys". Such surveys are prone to suffer from self-selection bias, confirmation bias, and high drop-out rates.

One of the key problems that the transgender treatment enterprise faces on a daily basis is the issue of third-party payment for services. No health insurance provider, including federal and state agencies will pay for cosmetic surgery. For this reason, it is necessary, in order for the business model to succeed, that providers characterize their services as reconstructive. This is doubly difficult given the intense political pressure that has been exerted upon the medical community to "de-pathologize" the condition of transgender. This is seen in the abandoning of the diagnostic nomenclature of "body dysmorphic disorder", and "gender identity disorder" in favor of the more recent DSM manual using the term "gender dysphoria". This leads transgender treatment providers into the difficult situation of claiming that transgender is not a pathology, while at the same time insisting that the services are medically necessary and describing the procedures as reconstructive without characterizing any physical/ functional defect.

As we consider the specific "gender affirming" surgical procedures we will see that comparison to medically indicated surgeries on both men and women actually serves to reinforce the evidence that these surgeries are essentially and fundamentally cosmetic.

Masculinizing and Feminizing Chest Surgeries are Not "Medically Necessary"

Supporters of "transitioning" treatments justify surgical treatment based upon "medical necessity." They claim that gender dysphoria can lead to debilitating anxiety and depression, as well as serious incidents of self-harm, including self-mutilation, suicide attempts, and suicide. Yet with only a single exception, in the studies they cite no measures are made of the effects of surgery on what is claimed to constitute the "medical necessity" for these procedures. In contrast, the Branstrom study[1] documented no reliable benefits for transgender surgery/hormonal treatments and no reduction in suicide and even an increase in serious suicide attempts requiring hospitalization in patients receiving surgery. These recent, long-term, published, peer reviewed, credible research findings are quite contrary to the claims of supporters of "transitioning treatments" — as are the National Science Reviews in this area from England-NICE, Sweden, and Finland. (See detailed citations in the Notes section in this declaration).

Scientific rigor would demand an examination of objective outcomes such as: rates of substance abuse, psychiatric hospitalization, self-harm, or suicide, and how they were changed by surgery. One paper does ask these crucial questions concerning efficacy is a very comprehensive, long term, longitudinal population cohort study which actually shows the opposite of what experts claim for these patient outcomes. When followed beyond eight years post operatively, this paper shows that patients receiving these treatments have the same alarmingly high rates of hospitalization, substance abuse, self-harm, and completed suicide as persons who have had no medical or surgical intervention.

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[1] *Correction of a key study: No evidence of "gender-affirming" surgeries improving mental health.* Home. (2020, August 30). Retrieved May 17, 2022, from https://segm.org/ajp_correction_2020

In summary, on the issue of the efficacy of these surgeries, the scientific support is very weak, while the scientific evidence rejecting the hypothesis of efficacy is remarkably strong (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 https://doi.org/10.1371/journal.pone.0016885).

The surgical removal of the breasts, and the re-contouring of the chest through liposuction is a common procedure for women who seek to present as men. These operations are performed in both men and women, for a variety of reasons. They are generally very safe, and typically performed in the outpatient setting. It is important to understand that the only way of distinguishing cosmetic breast surgery from "medically necessary" surgery is based upon the diagnosis of underlying pathology. For example, breast reduction may be cosmetic, or it may be medically indicated. In both cases, the patient presents with a complaint that her breasts are too big. The distinction between cosmetic breast reduction and medically indicated breast reduction is based upon the presenting symptoms of orthopedic problems when working, such as chronic neck back and shoulder pain caused by the weight of the breasts. But even then, the weight of the removed tissue is factored into the objective verification that the surgery was "medically necessary." There is a vast body of medical and actuarial data that demonstrates the relationship between the weight of the breast tissue removed and the probability that back pain will be cured by performing a breast reduction.

The same issues are at stake in breast enhancement for men seeking to present as women. Cross-sex hormones will have caused varying degrees of gynecomastia (breast enlargement in men). Surgical enhancement procedures are exactly the same in both men and women.

Medically necessary surgery in women is based upon the diagnosis of an objective medical condition, such as Poland's syndrome (congenital absence of a breast), surgical absence of the breast following cancer care. In men, the objective diagnosis of gynecomastia might warrant surgery based upon medical necessity, but it would be the removal of tissue that has objective pathological features (breast gland proliferation in a man). A rare diagnosis of breast cancer in a man might warrant chest wall reconstruction after cancer care. On the other hand, cosmetic surgery of the breast is entirely about the subjective feelings of the patient, and that is all that we find in the case of the self-identified transgender patient.

In the case of transgender chest surgery, the diagnosis is based on the patient's subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and suicide. None among the many papers typically cited by supporters of "transitioning treatments" address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery. They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess every

other cosmetic surgery of the breast. Such papers often begin with standard language about the suffering of self-identified transgender adolescents, and their risk of self-harm. They will claim that the reported surgeries somehow reduce the risk of suicide, or the frequency or severity of self-harm, but they never report actual results of improvement in the risk of suicide, or substance abuse, or cutting, or sexual risk taking. The claim of benefit is unsupported in the scientific literature.

In summary, the medical necessity of transgender chest surgery is not supported by scientific evidence and appears to be firmly in the category of cosmetic surgery. What is more, the surgeries when performed on natal females causes a life-long loss of function, placing those surgeries in the category of malpractice. No other cosmetic procedure is expected to produce major functional loss. Such a result would only be the result of a complication, or other surgical misadventure. To actually have a 100% certainty of loss when surgical consent is being obtained constitutes a complete neglect of one of the foundational principles in plastic surgery: Never sacrifice function for the sake of a cosmetic result.

About the Author

Education and Training: I received my Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. There I was engaged in research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump. I received my M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md. I served my General Surgery Residency at the Naval Hospital Oakland/UC Davis East Bay Consortium, 1987-1991 and served as Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991. I also served a Plastic Surgery Residency at the University of Tennessee-Memphis, 1992-1994. My professional background, experience, and publications are described in more detail in my curriculum vitae, which is attached as Exhibit A to this declaration.

Board Certifications in Medicine: I have been Board Certified in Surgery (American Board of Surgery, 1992), in Plastic Surgery (American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008).

Medical Staff Appointments: I served as the Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992 and as Associate Professor of Surgery, UC Davis-East Bay, 1991-1992. I also served as a Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, Virginia, 1994-2002 and as Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, Virginia, 1996-2002. I later served as Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002 and as Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, Virginia, 1996-2002 also as the Founding Director, Wound Care Center, Naval Hospital Portsmouth, Virginia, 1995-2002. I have also served as a Staff Plastic Surgeon in Nebraska and Alabama.

U.S. Surgeon General Service: I served as a Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002.

Faculty Appointments: I served as Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery, 1995-2002. I also served on the teaching faculty of the Via College of Osteopathic Medicine, 2017-2020.

Military Service: I served as an Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978 and was Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983. I served as a Designated Naval Flight Surgeon, Naval Aerospace Medical Institute, 1985, and I was Assigned Marine Fighter/Attack Squadron-451, serving as Flight Surgeon, and serving as Radar Intercept Officer in the Marine F4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor. I was deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines. I served in the US Navy for 24 years, and I served in the USMC for 3 years. I retired with the rank of Captain, USN in 2002.

Publications - Peer Reviewed Medical Journals: Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. Surgery. 1987 Sep; 102(3):553-4; Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. J Plastic and Reconstructive Surgery. 1991; 87 (6): 1048-53; Lappert P. Patch Esophagoplasty. J Plastic and Reconstructive Surgery. 1993; 91 (5): 967-8; Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. J Craniofacial Surg. 1995;6(4):327–331; Lappert PW. Scarless Fetal Skin Repair: "Unborn Patients" and "Fetal Material". J Plastic and Reconstructive Surgery. 1996 Nov; 98(6): 1125; Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. Plastic and Reconstructive Surgery 1998; 102(5): 1642-5.

Publications - Medical Textbooks: Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. Plastic Surgery: Indications, Operations, and Outcomes, Vol. 1; 53-63. Mosby. St. Louis, MO 2000.

Operations and Clinical Experience: Consultations and Discussions: As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transitioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as "LGBTQ friendly" on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.

Appendix Attachment

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ATTACHMENT G

Florida Medicaid Project: Treatment for Transgender Children

Medical Experimentation without Informed Consent:

An Ethicist's View of Transgender Treatment for Children

G. Kevin Donovan, MD, MA
5-12-2022

Florida Medicaid Project: Treatment for Transgender Children

Medical Experimentation without Informed Consent: An Ethicist's View of Transgender Treatment for Children

I. The Issue

Growing controversy attends the diagnosis and treatment of individuals identifying as transgender, particularly those who are still children or adolescents. As was recently pointed out, leading medical, mental health, and public health organizations support understanding gender-diverse youth and providing gender-affirming medical (hormonal) and other(surgical) care as the standard of care, including the American Academy of Pediatrics, American Psychological Association, Centers for Disease Control and Prevention, Society for Adolescent Health and Medicine, and the American Medical Association. Major nursing organizations—the American Nurses Association and the American Academy of Nursing— have made statements that young people's access to inclusive, safe, and competent health care is a human rights issue. (Wolfe, I., & Goepferd, A. "Child Abuse in Texas." *The Hastings Center*. 14 Mar. 2022) However, this widespread support is not going unchallenged, even by those who have been providing medical interventions for these children and adolescents.

Recently, questions have arisen about the appropriateness of both the diagnosis, and the safety and efficacy of these interventions that have been strongly encouraged up until now. Currently, less than half of state Medicaid programs provide gender affirming care. (Mallory, C., & Tentindo,W. "Medicaid coverage of gender-affirming care." Williams Institute, UCLA School of Law. Oct 2019). The Florida Surgeon General has said that minors should not undergo gender transition procedures, puberty blockers and hormone treatments. "Florida Department of Health Releases Guidance on Treatment of Gender Dysphoria for Children and Adolescents." 20220420-Gender-Dysphoria-Press-Release | Florida Department of Health.) In Texas, the state attorney general issued a decision that gender-affirming medical treatments such as puberty-suppressing hormones fall under the definition of child abuse in Texas state law. In fact, 34 states have introduced legislation to limit hormonal and surgical interventions for such transgender patients. This aligns with similar reassessments and limitations in the United Kingdom, Sweden, Finland, and France. A new position statement from the Royal Australian and New Zealand College of Psychiatrists (RANZCP) stresses the importance of a mental health evaluation for people with gender dysphoria — in particular for children and adolescents — before any firm decisions are made on whether to prescribe hormonal treatments to transition or to perform surgeries, often referred to as "gender-affirming care." "There is a paucity of quality evidence on the outcomes of those presenting with gender dysphoria. In particular, there is a need for better evidence in relation to outcomes for children and young people," the guidance states.

Given the legitimate concerns about the diagnosis, treatment, and the paucity of supportive, scientific studies in regard to the interventions being offered to minors who identify as transgender, I will offer a view of these from the perspective of an ethicist and pediatrician. This will be done in the face of strong and sometimes heated opposition to any variance from the currently prevailing recommendations. Each category of currently recommended or potential treatments will be briefly considered within this framework. The evidence base for these will be reviewed, and an overall argument made that such interventions must be considered as medical experimentation, subject to the requirements of research in childhood with informed consent. Finally, I will conclude with an examination of the fundamental flaw of the transgender project in childhood, and how it is leading to inevitable and controversial challenges.

In order to do this, we must review the ethical requirements for medical research in childhood and the elements of **informed consent**. Because of numerous abuses in the past, a strong system of regulations and oversight has been developed for the protection of human subjects in the United States. This began with the Belmont Report: (https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html) The report not only described the ethical principles listed below, but led to guidelines for research protections that are now codified in Federal regulations (Code of Federal Regulations, or 'CFR') and monitored by the U.S. Department of Health and Human Services (DHHS). These led to the establishment of IRBs (Institutional Review Boards) which are responsible for the protection of human subjects in federally funded research—IRBs are the Federally mandated committees that review research activities for the protection of human subjects. The Office for Human Research Protections (OHRP) provides leadership in the protection of the rights, welfare, and wellbeing of subjects involved in research conducted or supported by the DHHS. The OHRP helps ensure this by providing clarification and guidance, developing educational programs and materials, maintaining regulatory oversight, and providing advice on ethical and regulatory issues in biomedical and social-behavioral research. These measures have laid the ground rules for human research, in adults and children including the need for informed consent.

Although adults may be included in research, this should only be done with *fully informed consent*, and the requirements will differ for children and other vulnerable subjects. The bedrock of these protections lies in obtaining the informed consent from the participant. Informed consent to medical treatment and research involvement is fundamental to both ethics and law. The process requires that a *fully autonomous patient* have the ability to *understand relevant medical information* about the proposed interventions, including the *risks, benefits if any, and alternatives* (including doing nothing/non-participation). and consent *voluntarily* without *coercion*. This is rooted in respect for the **ethical principles** of **autonomy**, **beneficence**, and **justice**.

Autonomy is derived from respect for persons, which requires that we not only respect those who are fully autonomous but protect those individuals that are not fully autonomous. Vulnerable subjects such as children cannot legally or ethically participate in the consent process due to their age and maturity level. The rules for their involvement are set out by the Code of Federal Regulations (46 CFR 401-409). While consent cannot be given for another person, parents or guardians can give "permission" and children can give assent to the extent that they are able. The process of obtaining assent should be appropriate to the age, maturity, and psychological development of the child. The consent process must contain three ethically required components: *information*, *comprehension*, and *voluntariness*. Deficiencies in any of these categories would invalidate the process. The main contention here is that deficiencies in *all* these categories can be found in the current approach to minors who identify as transgender, and current attempts at treatment should not proceed as they are now practiced.

Beneficence is reflected in the complementary expressions of (1) do no harm and (2) maximize possible benefits and minimize possible harms. An assessment of risks and benefits will depend heavily on the delivery of accurate and complete information as described above. An assessment of risk will include both the probability and the severity of envisioned harms, both physical and psychological.

Finally, ***justice*** requires fairness in distribution of risks and benefits. It suggests that not only should like cases be treated alike, but different approaches are appropriate for different circumstances. This is highly relevant in the selection process for those being subjected to the various interventions while still minors.

Thus the process of informed consent must proceed with a correct diagnosis, the nature and purpose of recommended interventions, the known burdens and benefits of all options, including doing nothing or forgoing the intervention. While not able to do an exhaustive review of these elements as they apply to the main treatment approaches recommended for transgender minors, we can briefly examine each category to assess for obvious deficiencies. The issue of deficient information will be significant in each category, and questions of comprehension and voluntariness will be addressed at the end.

II. The Interventions

Surgery

A variety of surgeries have been performed on transgender adults. These range from removal of both breasts (bilateral mastectomy) and associated chest reconstruction, nipple repositioning, dermal implant and tattooing, to gender surgery for trans men which includes construction of a penis (phalloplasty or metoidioplasty), construction of a scrotum (scrotoplasty) and testicular implants, or a penile implant. Removal of the womb (hysterectomy) and the ovaries and fallopian tubes (salpingo-oophorectomy) may also be considered. Surgery for trans women includes removal of the testes (orchidectomy), removal of the penis (penectomy), construction of a vagina (vaginoplasty), construction of a vulva (vulvoplasty), construction of a clitoris (clitoroplasty), as well as breast implants for trans women, facial feminisation surgery and hair transplants. Certainly there are multiple known risks to this long list of surgeries. These used to be described as "sex-change" operations: they are now termed "gender affirming surgeries." The semantic shift is important, as we will see.

Most, but not all, practitioners would delay undertaking these permanent alterations in minor children and adolescents. This may be as much for legal reasons as for medical considerations. However, the lack of sexual maturity in younger patients, especially if previously delayed by puberty blocking agents, makes the sparse tissue more difficult to work with and outcomes less favorable, with problems such as wound rupture more likely. These are not challenges that are routinely described to minors at the beginning of their treatment progression with puberty blocking agents or hormones. This deficit of information would be a major failing.

Hormonal Treatment

Treatment with cross-sex hormones is a mainstay of gender affirming care. These result in the changes in body habitus, facies, voice tone, and hair development that transgender patients seek. They are described as "gender affirming", "life-saving" and "a human right" by their proponents. They have been prescribed by Planned Parenthood clinics and others after a first visit for gender dysphoria (https://www.plannedparenthood.org/planned-parenthood-greater-texas/patient-resources/transgender-healthcare). Surely no one would argue that such a precipitous practice has been accompanied by a full psychological evaluation, or disclosure of medical risks. Chief among these is the fact that the resulting bodily changes will not disappear, even if the initial desire for them changes. And this change is no unlikely development – upwards of 80% of minors who identify as transgender will reverse this identity by the time they reach their mid-20's if left untreated, and revert to their previous identification, albeit possibly with a same-sex attraction. It is more than simply changes in one's body that are at risk; sex hormones have an important and lasting effect on brain development and adolescent psychology. To not fully appreciate this fact, or to not have it delineated in the first place, is an egregious failure of informed consent.

Puberty Blockers

Perhaps the greatest failure of informed consent, and non-disclosure of human experimentation outcomes, is found in the supposedly benign use of puberty blocking agents in minors. They are routinely and widely prescribed with the thought that this will "buy time" for those questioning their gender as minors. Children and their supportive parents are assured that they are a benign intervention whose effects are easily reversible, just in case the child decides not to transition. Some potential effect on the development of bone density may be mentioned. The extent of this danger is just now being appreciated, with severe and disabling osteoporosis described in at least one child in Sweden. This led to new guidelines for gender-affirming care issued in February by the National Board of Health and Welfare. It stated that, based on current knowledge: "the risks of puberty suppressing treatment with GnRH-analogues and gender-affirming hormonal treatment currently outweigh the possible benefits, and that the treatments should be offered only in exceptional cases." However, the effect of puberty blocking agents (started in early adolescent development) on long-term sexual function seems to be largely unstudied. Current guidelines recommend starting puberty blockers at the earliest stage of sexual maturation in children (Tanner two). These will not only prevent the enlargement of penile tissue, it will desensitize the orgasmic potential for tissues later exposed to cross-sex hormones. Simply put, transgender adults treated in early adolescence with puberty blockers may never experience orgasm. When children with gender dysphoria are given these powerful hormones (around age 11) they are too young to appreciate the implications of what will happen.

It is not simply a matter of chronology. As children mature into adolescents and adults, their brains are also being formed and reformed under the influence of sex hormones. There is evidence for structural changes, and these are likely to be demonstrated in cognitive and behavioral changes. In fact, the development of the adolescent brain and the maturation of its rational and executive functions does not typically complete until one's early 20s. Although the deleterious effects on sexual development and function in adulthood from puberty blockers may be predicted, no one is entirely certain of the effects on other critical areas such as brain development and bone density. Carefully constructed and monitored studies have not been done. *Until they are, these off-label treatments with puberty blockers and cross sex hormones can only be considered experimental.* Experimental interventions should be done as carefully as any other research, and fully informed consent is the only ethical way to enter into such studies. Clearly, this is not the current practice.

III. The Fundamental Flaw

There appears to have been a headlong rush in the past decade towards the process of gender affirming care described above. After close scrutiny, it can only be seen as off label experimentation, despite the fact that informed consent practices do not conform to this reality. Given this, we must ask ourselves: how can experienced and ethical physicians so mislead others or be so misled themselves? In 2013, the American Psychiatric Association published their update of the Diagnostic and Statistical Manual of Mental Disorders, the DSM-5. In it the diagnosis of "gender identity disorder" was replaced with "gender dysphoria." This was done to "avoid stigma and ensure clinical care for individuals who see and feel themselves to be a different gender" other than the one to which they were born. The APA stated that "it is important to note the gender nonconformity is not in itself a mental disorder. The critical element of gender dysphoria is the presence of clinically significant distress associated with the condition." Dysphoria is a state of uneasiness, unhappiness, or dissatisfaction. With this change in terminology there was also a shift from seeking or correcting the underlying cause of the dysphoria, and a focus on transitioning to the preferred gender.

This revision has probably done more harm than good by accepting a self-diagnosis characterized by the belief that the patient (or their essence) is "trapped in the wrong body." This concept relies on the Cartesian duality, a body-self dichotomy. It reverts to the fallacious "ghost in the machine" concept. In reality, we cannot be trapped in the wrong body; we **are** our bodies, which are an integral and inseparable part of ourselves. To assert that there is a female self inside a male body (or the reverse), is to fail to achieve a full understanding that we are embodied persons, unified body and mind, if you will. A generation ago, sex and gender were taken to be synonyms for the same phenomena. Even now, a transgender female, no matter how much or how long of a hormonal therapeutic regimen they undergo, is still genetically male. Ignoring this fact has led to a contradiction, where sympathetic practitioners recommend "holistic care" while insisting on a fragmented concept of the self. This approach has been warmly embraced, even insisted upon, by many practitioners while viewed as nonsensical and even ludicrous by many laypersons.

Inevitably this has led to added difficulties. Even young patients are encouraged to begin puberty blockers and then hormones based on a self-diagnosis. Self-diagnosing psychiatric conditions is always fraught with the possibility of error. In this case, there can be no confirmatory lab tests, radiologic exams, or genetic findings. Moreover, the dysphoria can only be diagnosed and opened to treatment if it is causing significant trauma to the individual. The clinically significant distress manifests itself in underlying psychiatric diagnoses such as depression and suicidality. It is argued that embarking on affirmative treatment as early as possible is urgently needed to prevent further psychiatric complications, a contested assertion. Studies have shown that adult transgender persons continue to have evidence of depression and suicidality following treatment. The rate of suicide among post-operative transgender adults in a study from Sweden found an incidence 20 times greater than that of the general population. Such treatment may not be urgently needed to protect adolescents; it may not even be effective protection for their adult counterparts.

The claim of urgency coupled with an impulse toward nonjudgmental empathy for the disturbed patients has led to a frantic insistence on a single approach that may seem almost cult like in its insularity and opposition to outside challenges. Both parents (Trinko, K.(Nov. 19, 2018 "What It's Like to Lose Your Children to the 'Transgender Cult,' From a Mom Who Knows." *The Daily Signal*, 30 Oct. 2019) and teachers (Manning, M. for The Mail on Sunday. "Whistleblower Teacher Makes Shocking Claim That 'Most Are Autistic'." *Daily Mail Online*, Associated Newspapers, 19 Nov. 2018, https://www.dailymail.co.uk/news/article-6401593/Whistleblower-teacher-makes-shocking-claim-autistic.html.) report that their children or students are being wrongly encouraged at school to think of themselves as transgender. Sometimes this is the result of overenthusiastic acceptance or "love bombing". Sometimes it appears to influence the susceptible, as in autistic children. Sometimes transgender counseling is taking place even without the parents' knowledge, and this troubling approach has been supported in the literature with statements that adolescents should be legally empowered to obtain puberty-blocking without parental consent (Priest, M. Transgender Children and the Right to Transition: Medical Ethics When Parents Mean Well but Cause Harm. Am J Bioeth. 2019 Feb;19(2):45-59).

Inevitably, this has resulted in complications and conflicts. The media have been replete with reports of such things as contested accessibility of transgender females to such things as domestic abuse shelters, female prisons, and female sports competitions. Similar issues regarding bathroom accessibility in schools recently came to a boil in Virginia, when it came to light that a sexual assault by a self-described trans- female (with a penis) was repeated in another school after the perpetrator was transferred. (Poff, J. "Loudoun superintendent failed to inform state of school sexual assault." Washington Examiner, 4 May 2022.) These issues are far from any resolution by debate, discussion, or legislation. In fact, both sides of the debate have doubled down with insistence that the opposing viewpoint must not only be rejected but considered unethical and made illegal.

Some disturbing trends have developed resulting not only from this dichotomy of opinion about the proper treatment approach, but ultimately based in the acceptance of the mind-body dichotomy. There has been a change in the diagnosed population. As Abigail Schrier pointed out:

> For the nearly 100-year diagnostic history of gender dysphoria, it overwhelmingly afflicted boys and men, and it began in early childhood (ages two to four). According to the DSM-V, the latest edition of the historical rate of incidence was 0.01 percent of males (roughly one in 10,000).
>
> For decades, psychologists treated it with "watchful waiting" — that is, a method of psychotherapy that seeks to understand the source of a child's gender dysphoria, lessen its intensity, and ultimately help a child grow more comfortable in her own body. Now such an approach is disdained by the term "conversion therapy", and labelled as unethical, and even made illegal.

She continues:

> Since nearly seven in 10 children initially diagnosed with gender dysphoria eventually outgrew it, the conventional wisdom held that, with a little patience, most kids would come to accept their bodies. The underlying assumption was children didn't always know best. But in the last decade, watchful waiting has been supplanted by "affirmative care," which assumes children do know what's best. Affirmative care proponents urge doctors to corroborate their patients' belief that they are trapped in the wrong body. The family is pressured to help the child transition to a new gender identity — sometimes having been told by doctors or activists that, if they don't, their child may eventually commit suicide. From there, pressures build on parents to begin concrete medical steps to help children on their path to transitioning to the "right" body. That includes puberty blockers as a preliminary step. Typically, cross-sex hormones follow and then, if desired, gender surgery. (Shrier, A. "Top Trans Doctors Blow the Whistle on 'Sloppy' Care." Emmaus Road Ministries, 5 Oct. 2021)

These pressures apply not only to parents, but to the children themselves because of the strong emphasis on affirmative support for anyone declaring themselves transgender. As one mother described: "A lot of these kids have concurrent mental health issues, and they find a place to fit in because as soon as you say that you're trans, you get love-bombed," she reflects. "You get love-bombed online, you get love-bombed on at school … As soon as you say you're trans, you turn into a star. And kids are thirsty for that kind of affirmation." (Trinko, 2019)

Two phenomena may be associated with this. Strong affirmation for the diagnosis and hormonal treatment may be altering the natural course of the phenomenon in childhood. It may not only be easier to identify as transgender in today's environment; it may be more difficult to turn ones back on the diagnosis. This may help explain a recent report that found that an average of 5 years after their initial social transition, 7.3% of youth had retransitioned (changed gender identity) at least once. At the end of this period, most youth identified as binary transgender youth (94%), including 1.3% who retransitioned to another identity before returning to their binary transgender identity. 2.5% of youth identified as cisgender and 3.5% as nonbinary. Later cisgender identities were more common amongst youth whose initial social transition occurred before age 6 years; the retransition often occurred before age 10. Unlike previous studies of transgender youth, males were not predominant, but were outnumbered by 2 to 1. Moreover, this is a direct contradiction of previous data showing a high rate of reversion towards a sex/gender coherence in children as they mature. (Olson, Kristina R., Durwood, Lily, Horton, Rachel, Gallagher, Natalie M., & Devor, Aaron; Gender Identity 5 Years

After Social Transition. Pediatrics 2022; 10.1542/peds.2021-056082) We must ask if this represents a shift towards being trapped in a wrong diagnosis, rather than a child being trapped in a wrong body.

In fact, there has been another shift. Unlike in the past, we now see increased numbers of females identifying as transgender, and later in their adolescence. Sometimes this occurs in large cohorts within a single school or peer group, a phenomenon labelled "rapid onset gender dysphoria." Both these phenomena call into question the underlying cause for the concept of gender dysphoria. Rather than approaching it as an accurate self-diagnosis that must be affirmed and treated to change the outward sexual appearance, isn't there a better model? We may be making a fundamental mistake in approaching transgender phenomena, not as a disease or disorder, but at most a dysphoria that is a cause for affirmation. This contrasts with our approach to similar conditions claiming a mind- body divergence, such as anorexia nervosa or body integrity identity disorder. The former is familiar to most Americans. The latter is a rare mental disorder characterized by a desire to have a physical disability, claiming discomfort with being able-bodied and often resulting in a request for amputation of the body part that makes them uncomfortable. People with this condition may refer to themselves as "trans abled."

In all three of these conditions there is a claim for a mismatch between one's mental bodily image and physical body. All tend to find an onset in prepubescence and are frequently associated with other mental disturbances. "Affirmative care" is the only recommended standard for transgender patients. It is horribly disturbing to contemplate amputation of a healthy limb because of a mental disorder (although this has been done). No one would seriously consider surgery to limit caloric intake or weight gain for a patient with anorexia nervosa, in order to support and affirm her distorted body image. Nevertheless, sex change operations have been recast as "gender affirming surgeries". The change in language reflects the change in attitude that distorts the approach to treatment for a psychiatric, not medical/surgical, disorder.

Finally, what are we to make of this situation, as a medical profession, and as a society? This question cannot be answered until both the affected people and profession can overcome our collective hubris. It is not enough to admit we don't know all the answers. We must see that we are not yet certain of all the questions that must be answered. In such a situation, competing interests must not pretend to take the moral high ground when no one can be certain where it will be located. First and foremost, we must back off from our current approaches until questions can be answered with proper studies, done with sufficient patients, and sufficient controls, over a sufficient period of time. Any insistence on a single course of therapy without this information could prove to be the same type of morally unacceptable interventions that caused formal research protections to be created in the first place.

In the meantime, we must adopt a more respectful tone with those whom we disagree. As John Milton said, "Where there is much desire to learn, there of necessity will be much arguing, much writing, many opinions; for opinion in good men is but knowledge in the making." Most important of all, in order to protect the current and future well-being of these affected children, we must rely on the ancient principal of medical ethics "In the first place, do no harm." Until we can demonstrate the efficacy and safety of any proposed treatment or intervention, its usage must properly be considered a medical experimentation and require fully informed consent. Anything less is a betrayal of both our principles and our progeny.

About the author: *Dr. Donovan's observations flow from his professional experience. He has been a Board-certified pediatrician for over 40 years, as an academic physician who rose to Vice-chair of the Department of Pediatrics and ultimately interim Chair at the University of Oklahoma in Tulsa. His professional role and interests expanded in the 1990's after he took a sabbatical in medical ethics at*

Georgetown University under the world-famous Dr. Edmund Pellegrino, a founding father of modern bioethics. He subsequently went on to earn a master's degree in Bioethics and founded the first bioethics center in his home university, where he was responsible for ethics training and education for students and physicians. He also served as clinical ethics consultant for three teaching hospitals. He was chair of the Section on Bioethics for the American Academy of Pediatrics (AAP) for three years and then their first liaison member of the AAP Committee on Bioethics. He has also served as the chair for a hospital Intuitional Review Board for 17 years. Finally, he was asked to become Director for the Center for Clinical Bioethics at Georgetown University School of Medicine, where he served from 2012-2020. His duties included teaching, consultation, publishing papers and speaking on bioethics extensively at the local, national, and international level on four continents. He has been interviewed and quoted on National Broadcasting Company (NBC), National Public Radio (NPR), Eternal Word Television Network (EWTN), and Al Jazeera, as well as the New York Times and the Washington Post, among others. He was awarded the Humanism in Medicine award from the Gold Foundation, which recognizes physicians to have successfully integrated humanism into the delivery of care to their patients and families. He has also offered formal testimony on bioethical issues before state legislatures and the U.S. Congress.

Appendix Attachment

2

DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS

FIFTH EDITION

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DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS,

FIFTH EDITION

DSM-5™

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Gender Dysphoria

In this chapter, there is one overarching diagnosis of gender dysphoria, with separate developmentally appropriate criteria sets for children and for adolescents and adults. The area of sex and gender is highly controversial and has led to a proliferation of terms whose meanings vary over time and within and between disciplines. An additional source of confusion is that in English "sex" connotes both male/female and sexuality. This chapter employs constructs and terms as they are widely used by clinicians from various disciplines with specialization in this area. In this chapter, *sex* and *sexual* refer to the biological indicators of male and female (understood in the context of reproductive capacity), such as in sex chromosomes, gonads, sex hormones, and nonambiguous internal and external genitalia. Disorders of sex development denote conditions of inborn somatic deviations of the reproductive tract from the norm and/or discrepancies among the biological indicators of male and female. *Cross-sex* hormone treatment denotes the use of feminizing hormones in an individual assigned male at birth based on traditional biological indicators or the use of masculinizing hormones in an individual assigned female at birth.

The need to introduce the term *gender* arose with the realization that for individuals with conflicting or ambiguous biological indicators of sex (i.e., "intersex"), the lived role in society and/or the identification as male or female could not be uniformly associated with or predicted from the biological indicators and, later, that some individuals develop an identity as female or male at variance with their uniform set of classical biological indicators. Thus, *gender* is used to denote the public (and usually legally recognized) lived role as boy or girl, man or woman, but, in contrast to certain social constructionist theories, biological factors are seen as contributing, in interaction with social and psychological factors, to gender development. *Gender assignment* refers to the initial assignment as male or female. This occurs usually at birth and, thereby, yields the "natal gender." *Gender-atypical* refers to somatic features or behaviors that are not typical (in a statistical sense) of individuals with the same assigned gender in a given society and historical era; for behavior, *gender-nonconforming* is an alternative descriptive term. *Gender reassignment* denotes an official (and usually legal) change of gender. *Gender identity* is a category of social identity and refers to an individual's identification as male, female, or, occasionally, some category other than male or female. *Gender dysphoria* as a general descriptive term refers to an individual's affective/cognitive discontent with the assigned gender but is more specifically defined when used as a diagnostic category. *Transgender* refers to the broad spectrum of individuals who transiently or persistently identify with a gender different from their natal gender. *Transsexual* denotes an individual who seeks, or has undergone, a social transition from male to female or female to male, which in many, but not all, cases also involves a somatic transition by cross-sex hormone treatment and genital surgery (*sex reassignment surgery*).

Gender dysphoria refers to the distress that may accompany the incongruence between one's experienced or expressed gender and one's assigned gender. Although not all individuals will experience distress as a result of such incongruence, many are distressed if the desired physical interventions by means of hormones and/or surgery are not available. The current term is more descriptive than the previous DSM-IV term *gender identity disorder* and focuses on dysphoria as the clinical problem, not identity per se.

Gender Dysphoria

Diagnostic Criteria

Gender Dysphoria in Children 302.6 (F64.2)

A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least six of the following (one of which must be Criterion A1):

1. A strong desire to be of the other gender or an insistence that one is the other gender (or some alternative gender different from one's assigned gender).
2. In boys (assigned gender), a strong preference for cross-dressing or simulating female attire; or in girls (assigned gender), a strong preference for wearing only typical masculine clothing and a strong resistance to the wearing of typical feminine clothing.
3. A strong preference for cross-gender roles in make-believe play or fantasy play.
4. A strong preference for the toys, games, or activities stereotypically used or engaged in by the other gender.
5. A strong preference for playmates of the other gender.
6. In boys (assigned gender), a strong rejection of typically masculine toys, games, and activities and a strong avoidance of rough-and-tumble play; or in girls (assigned gender), a strong rejection of typically feminine toys, games, and activities.
7. A strong dislike of one's sexual anatomy.
8. A strong desire for the primary and/or secondary sex characteristics that match one's experienced gender.

B. The condition is associated with clinically significant distress or impairment in social, school, or other important areas of functioning.

Specify if:

With a disorder of sex development (e.g., a congenital adrenogenital disorder such as 255.2 [E25.0] congenital adrenal hyperplasia or 259.50 [E34.50] androgen insensitivity syndrome).

Coding note: Code the disorder of sex development as well as gender dysphoria.

Gender Dysphoria in Adolescents and Adults 302.85 (F64.1)

A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least two of the following:

1. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or in young adolescents, the anticipated secondary sex characteristics).
2. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics).
3. A strong desire for the primary and/or secondary sex characteristics of the other gender.
4. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).
5. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).
6. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender).

B. The condition is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specify if:

With a disorder of sex development (e.g., a congenital adrenogenital disorder such as 255.2 [E25.0] congenital adrenal hyperplasia or 259.50 [E34.50] androgen insensitivity syndrome).

Coding note: Code the disorder of sex development as well as gender dysphoria.

Specify if:

Posttransition: The individual has transitioned to full-time living in the desired gender (with or without legalization of gender change) and has undergone (or is preparing to have) at least one cross-sex medical procedure or treatment regimen—namely, regular cross-sex hormone treatment or gender reassignment surgery confirming the desired gender (e.g., penectomy, vaginoplasty in a natal male; mastectomy or phalloplasty in a natal female).

Specifiers

The posttransition specifier may be used in the context of continuing treatment procedures that serve to support the new gender assignment.

Diagnostic Features

Individuals with gender dysphoria have a marked incongruence between the gender they have been assigned to (usually at birth, referred to as *natal gender*) and their experienced/expressed gender. This discrepancy is the core component of the diagnosis. There must also be evidence of distress about this incongruence. Experienced gender may include alternative gender identities beyond binary stereotypes. Consequently, the distress is not limited to a desire to simply be of the other gender, but may include a desire to be of an alternative gender, provided that it differs from the individual's assigned gender.

Gender dysphoria manifests itself differently in different age groups. Prepubertal natal girls with gender dysphoria may express the wish to be a boy, assert they are a boy, or assert they will grow up to be a man. They prefer boys' clothing and hairstyles, are often perceived by strangers as boys, and may ask to be called by a boy's name. Usually, they display intense negative reactions to parental attempts to have them wear dresses or other feminine attire. Some may refuse to attend school or social events where such clothes are required. These girls may demonstrate marked cross-gender identification in role-playing, dreams, and fantasies. Contact sports, rough-and-tumble play, traditional boyhood games, and boys as playmates are most often preferred. They show little interest in stereotypically feminine toys (e.g., dolls) or activities (e.g., feminine dress-up or role-play). Occasionally, they refuse to urinate in a sitting position. Some natal girls may express a desire to have a penis or claim to have a penis or that they will grow one when older. They may also state that they do not want to develop breasts or menstruate.

Prepubertal natal boys with gender dysphoria may express the wish to be a girl or assert they are a girl or that they will grow up to be a woman. They have a preference for dressing in girls' or women's clothes or may improvise clothing from available materials (e.g., using towels, aprons, and scarves for long hair or skirts). These children may role-play female figures (e.g., playing "mother") and often are intensely interested in female fantasy figures. Traditional feminine activities, stereotypical games, and pastimes (e.g., "playing house"; drawing feminine pictures; watching television or videos of favorite female characters) are most often preferred. Stereotypical female-type dolls (e.g., Barbie) are often favorite toys, and girls are their preferred playmates. They avoid rough-and-tumble play and competitive sports and have little interest in stereotypically masculine toys (e.g., cars, trucks). Some may pretend not to have a penis and insist on sitting to urinate. More

rarely, they may state that they find their penis or testes disgusting, that they wish them removed, or that they have, or wish to have, a vagina.

In young adolescents with gender dysphoria, clinical features may resemble those of children or adults with the condition, depending on developmental level. As secondary sex characteristics of young adolescents are not yet fully developed, these individuals may not state dislike of them, but they are concerned about imminent physical changes.

In adults with gender dysphoria, the discrepancy between experienced gender and physical sex characteristics is often, but not always, accompanied by a desire to be rid of primary and/or secondary sex characteristics and/or a strong desire to acquire some primary and/or secondary sex characteristics of the other gender. To varying degrees, adults with gender dysphoria may adopt the behavior, clothing, and mannerisms of the experienced gender. They feel uncomfortable being regarded by others, or functioning in society, as members of their assigned gender. Some adults may have a strong desire to be of a different gender and treated as such, and they may have an inner certainty to feel and respond as the experienced gender without seeking medical treatment to alter body characteristics. They may find other ways to resolve the incongruence between experienced/expressed and assigned gender by partially living in the desired role or by adopting a gender role neither conventionally male nor conventionally female.

Associated Features Supporting Diagnosis

When visible signs of puberty develop, natal boys may shave their legs at the first signs of hair growth. They sometimes bind their genitals to make erections less visible. Girls may bind their breasts, walk with a stoop, or use loose sweaters to make breasts less visible. Increasingly, adolescents request, or may obtain without medical prescription and supervision, hormonal suppressors ("blockers") of gonadal steroids (e.g., gonadotropin-releasing hormone [GnRH] analog, spironolactone). Clinically referred adolescents often want hormone treatment and many also wish for gender reassignment surgery. Adolescents living in an accepting environment may openly express the desire to be and be treated as the experienced gender and dress partly or completely as the experienced gender, have a hairstyle typical of the experienced gender, preferentially seek friendships with peers of the other gender, and/or adopt a new first name consistent with the experienced gender. Older adolescents, when sexually active, usually do not show or allow partners to touch their sexual organs. For adults with an aversion toward their genitals, sexual activity is constrained by the preference that their genitals not be seen or touched by their partners. Some adults may seek hormone treatment (sometimes without medical prescription and supervision) and gender reassignment surgery. Others are satisfied with either hormone treatment or surgery alone.

Adolescents and adults with gender dysphoria before gender reassignment are at increased risk for suicidal ideation, suicide attempts, and suicides. After gender reassignment, adjustment may vary, and suicide risk may persist.

Prevaience

For natal adult males, prevalence ranges from 0.005% to 0.014%, and for natal females, from 0.002% to 0.003%. Since not all adults seeking hormone treatment and surgical reassignment attend specialty clinics, these rates are likely modest underestimates. Sex differences in rate of referrals to specialty clinics vary by age group. In children, sex ratios of natal boys to girls range from 2:1 to 4.5:1. In adolescents, the sex ratio is close to parity; in adults, the sex ratio favors natal males, with ratios ranging from 1:1 to 6.1:1. In two countries, the sex ratio appears to favor natal females (Japan: 2.2:1; Poland: 3.4:1).

Development and Course

Because expression of gender dysphoria varies with age, there are separate criteria sets for children versus adolescents and adults. Criteria for children are defined in a more con-

crete, behavioral manner than those for adolescents and adults. Many of the core criteria draw on well-documented behavioral gender differences between typically developing boys and girls. Young children are less likely than older children, adolescents, and adults to express extreme and persistent anatomic dysphoria. In adolescents and adults, incongruence between experienced gender and somatic sex is a central feature of the diagnosis. Factors related to distress and impairment also vary with age. A very young child may show signs of distress (e.g., intense crying) only when parents tell the child that he or she is "really" not a member of the other gender but only "desires" to be. Distress may not be manifest in social environments supportive of the child's desire to live in the role of the other gender and may emerge only if the desire is interfered with. In adolescents and adults, distress may manifest because of strong incongruence between experienced gender and somatic sex. Such distress may, however, be mitigated by supportive environments and knowledge that biomedical treatments exist to reduce incongruence. Impairment (e.g., school refusal, development of depression, anxiety, and substance abuse) may be a consequence of gender dysphoria.

Gender dysphoria without a disorder of sex development. For clinic-referred children, onset of cross-gender behaviors is usually between ages 2 and 4 years. This corresponds to the developmental time period in which most typically developing children begin expressing gendered behaviors and interests. For some preschool-age children, both pervasive cross-gender behaviors and the expressed desire to be the other gender may be present, or, more rarely, labeling oneself as a member of the other gender may occur. In some cases, the expressed desire to be the other gender appears later, usually at entry into elementary school. A small minority of children express discomfort with their sexual anatomy or will state the desire to have a sexual anatomy corresponding to the experienced gender ("anatomic dysphoria"). Expressions of anatomic dysphoria become more common as children with gender dysphoria approach and anticipate puberty.

Rates of persistence of gender dysphoria from childhood into adolescence or adulthood vary. In natal males, persistence has ranged from 2.2% to 30%. In natal females, persistence has ranged from 12% to 50%. Persistence of gender dysphoria is modestly correlated with dimensional measures of severity ascertained at the time of a childhood baseline assessment. In one sample of natal males, lower socioeconomic background was also modestly correlated with persistence. It is unclear if particular therapeutic approaches to gender dysphoria in children are related to rates of long-term persistence. Extant follow-up samples consisted of children receiving no formal therapeutic intervention or receiving therapeutic interventions of various types, ranging from active efforts to reduce gender dysphoria to a more neutral, "watchful waiting" approach. It is unclear if children "encouraged" or supported to live socially in the desired gender will show higher rates of persistence, since such children have not yet been followed longitudinally in a systematic manner. For both natal male and female children showing persistence, almost all are sexually attracted to individuals of their natal sex. For natal male children whose gender dysphoria does not persist, the majority are *androphilic* (sexually attracted to males) and often self-identify as gay or homosexual (ranging from 63% to 100%). In natal female children whose gender dysphoria does not persist, the percentage who are *gynephilic* (sexually attracted to females) and self-identify as lesbian is lower (ranging from 32% to 50%).

In both adolescent and adult natal males, there are two broad trajectories for development of gender dysphoria: early onset and late onset. *Early-onset gender dysphoria* starts in childhood and continues into adolescence and adulthood; or, there is an intermittent period in which the gender dysphoria desists and these individuals self-identify as gay or homosexual, followed by recurrence of gender dysphoria. *Late-onset gender dysphoria* occurs around puberty or much later in life. Some of these individuals report having had a desire to be of the other gender in childhood that was not expressed verbally to others. Others do not recall any signs of childhood gender dysphoria. For adolescent males with late-onset gender dysphoria, parents often report surprise because they did not see signs of gender

dysphoria during childhood. Expressions of anatomic dysphoria are more common and salient in adolescents and adults once secondary sex characteristics have developed.

Adolescent and adult natal males with early-onset gender dysphoria are almost always sexually attracted to men (androphilic). Adolescents and adults with late-onset gender dysphoria frequently engage in transvestic behavior with sexual excitement. The majority of these individuals are gynephilic or sexually attracted to other posttransition natal males with late-onset gender dysphoria. A substantial percentage of adult males with late-onset gender dysphoria cohabit with or are married to natal females. After gender transition, many self-identify as lesbian. Among adult natal males with gender dysphoria, the early-onset group seeks out clinical care for hormone treatment and reassignment surgery at an earlier age than does the late-onset group. The late-onset group may have more fluctuations in the degree of gender dysphoria and be more ambivalent about and less likely satisfied after gender reassignment surgery.

In both adolescent and adult natal females, the most common course is the early-onset form of gender dysphoria. The late-onset form is much less common in natal females compared with natal males. As in natal males with gender dysphoria, there may have been a period in which the gender dysphoria desisted and these individuals self-identified as lesbian; however, with recurrence of gender dysphoria, clinical consultation is sought, often with the desire for hormone treatment and reassignment surgery. Parents of natal adolescent females with the late-onset form also report surprise, as no signs of childhood gender dysphoria were evident. Expressions of anatomic dysphoria are much more common and salient in adolescents and adults than in children.

Adolescent and adult natal females with early-onset gender dysphoria are almost always gynephilic. Adolescents and adults with the late-onset form of gender dysphoria are usually androphilic and after gender transition self-identify as gay men. Natal females with the late-onset form do not have co-occurring transvestic behavior with sexual excitement.

Gender dysphoria in association with a disorder of sex development. Most individuals with a disorder of sex development who develop gender dysphoria have already come to medical attention at an early age. For many, starting at birth, issues of gender assignment were raised by physicians and parents. Moreover, as infertility is quite common for this group, physicians are more willing to perform cross-sex hormone treatments and genital surgery before adulthood.

Disorders of sex development in general are frequently associated with gender-atypical behavior starting in early childhood. However, in the majority of cases, this does not lead to gender dysphoria. As individuals with a disorder of sex development become aware of their medical history and condition, many experience uncertainty about their gender, as opposed to developing a firm conviction that they are another gender. However, most do not progress to gender transition. Gender dysphoria and gender transition may vary considerably as a function of a disorder of sex development, its severity, and assigned gender.

Risk and Prognostic Factors

Temperamental. For individuals with gender dysphoria without a disorder of sex development, atypical gender behavior among individuals with early-onset gender dysphoria develops in early preschool age, and it is possible that a high degree of atypicality makes the development of gender dysphoria and its persistence into adolescence and adulthood more likely.

Environmental. Among individuals with gender dysphoria without a disorder of sex development, males with gender dysphoria (in both childhood and adolescence) more commonly have older brothers than do males without the condition. Additional predisposing

factors under consideration, especially in individuals with late-onset gender dysphoria (adolescence, adulthood), include habitual fetishistic transvestism developing into autogynephilia (i.e., sexual arousal associated with the thought or image of oneself as a woman) and other forms of more general social, psychological, or developmental problems.

Genetic and physiological. For individuals with gender dysphoria without a disorder of sex development, some genetic contribution is suggested by evidence for (weak) familiality of transsexualism among nontwin siblings, increased concordance for transsexualism in monozygotic compared with dizygotic same-sex twins, and some degree of heritability of gender dysphoria. As to endocrine findings, no endogenous systemic abnormalities in sex-hormone levels have been found in 46,XY individuals, whereas there appear to be increased androgen levels (in the range found in hirsute women but far below normal male levels) in 46,XX individuals. Overall, current evidence is insufficient to label gender dysphoria without a disorder of sex development as a form of intersexuality limited to the central nervous system.

In gender dysphoria associated with a disorder of sex development, the likelihood of later gender dysphoria is increased if prenatal production and utilization (via receptor sensitivity) of androgens are grossly atypical relative to what is usually seen in individuals with the same assigned gender. Examples include 46,XY individuals with a history of normal male prenatal hormone milieu but inborn nonhormonal genital defects (as in cloacal bladder exstrophy or penile agenesis) and who have been assigned to the female gender. The likelihood of gender dysphoria is further enhanced by additional, prolonged, highly gender-atypical postnatal androgen exposure with somatic virilization as may occur in female-raised and noncastrated 46,XY individuals with 5-alpha reductase-2 deficiency or 17-beta-hydroxysteroid dehydrogenase-3 deficiency or in female-raised 46,XX individuals with classical congenital adrenal hyperplasia with prolonged periods of non-adherence to glucocorticoid replacement therapy. However, the prenatal androgen milieu is more closely related to gendered behavior than to gender identity. Many individuals with disorders of sex development and markedly gender-atypical behavior do not develop gender dysphoria. Thus, gender-atypical behavior by itself should not be interpreted as an indicator of current or future gender dysphoria. There appears to be a higher rate of gender dysphoria and patient-initiated gender change from assigned female to male than from assigned male to female in 46,XY individuals with a disorder of sex development.

Culture-Related Diagnostic Issues

Individuals with gender dysphoria have been reported across many countries and cultures. The equivalent of gender dysphoria has also been reported in individuals living in cultures with institutionalized gender categories other than male or female. It is unclear whether with these individuals the diagnostic criteria for gender dysphoria would be met.

Diagnostic Markers

Individuals with a somatic disorder of sex development show some correlation of final gender identity outcome with the degree of prenatal androgen production and utilization. However, the correlation is not robust enough for the biological factor, where ascertainable, to replace a detailed and comprehensive diagnostic interview evaluation for gender dysphoria.

Functional Consequences of Gender Dysphoria

Preoccupation with cross-gender wishes may develop at all ages after the first 2–3 years of childhood and often interfere with daily activities. In older children, failure to develop age-typical same-sex peer relationships and skills may lead to isolation from peer groups and to distress. Some children may refuse to attend school because of teasing and harass-

ment or pressure to dress in attire associated with their assigned sex. Also in adolescents and adults, preoccupation with cross-gender wishes often interferes with daily activities. Relationship difficulties, including sexual relationship problems, are common, and functioning at school or at work may be impaired. Gender dysphoria, along with atypical gender expression, is associated with high levels of stigmatization, discrimination, and victimization, leading to negative self-concept, increased rates of mental disorder comorbidity, school dropout, and economic marginalization, including unemployment, with attendant social and mental health risks, especially in individuals from resource-poor family backgrounds. In addition, these individuals' access to health services and mental health services may be impeded by structural barriers, such as institutional discomfort or inexperience in working with this patient population.

Differential Diagnosis

Nonconformity to gender roles. Gender dysphoria should be distinguished from simple nonconformity to stereotypical gender role behavior by the strong desire to be of another gender than the assigned one and by the extent and pervasiveness of gender-variant activities and interests. The diagnosis is not meant to merely describe nonconformity to stereotypical gender role behavior (e.g., "tomboyism" in girls, "girly-boy" behavior in boys, occasional cross-dressing in adult men). Given the increased openness of atypical gender expressions by individuals across the entire range of the transgender spectrum, it is important that the clinical diagnosis be limited to those individuals whose distress and impairment meet the specified criteria.

Transvestic disorder. Transvestic disorder occurs in heterosexual (or bisexual) adolescent and adult males (rarely in females) for whom cross-dressing behavior generates sexual excitement and causes distress and/or impairment without drawing their primary gender into question. It is occasionally accompanied by gender dysphoria. An individual with transvestic disorder who also has clinically significant gender dysphoria can be given both diagnoses. In many cases of late-onset gender dysphoria in gynephilic natal males, transvestic behavior with sexual excitement is a precursor.

Body dysmorphic disorder. An individual with body dysmorphic disorder focuses on the alteration or removal of a specific body part because it is perceived as abnormally formed, not because it represents a repudiated assigned gender. When an individual's presentation meets criteria for both gender dysphoria and body dysmorphic disorder, both diagnoses can be given. Individuals wishing to have a healthy limb amputated (termed by some *body integrity identity disorder*) because it makes them feel more "complete" usually do not wish to change gender, but rather desire to live as an amputee or a disabled person.

Schizophrenia and other psychotic disorders. In schizophrenia, there may rarely be delusions of belonging to some other gender. In the absence of psychotic symptoms, insistence by an individual with gender dysphoria that he or she is of some other gender is not considered a delusion. Schizophrenia (or other psychotic disorders) and gender dysphoria may co-occur.

Other clinical presentations. Some individuals with an emasculinization desire who develop an alternative, nonmale/nonfemale gender identity do have a presentation that meets criteria for gender dysphoria. However, some males seek castration and/or penectomy for aesthetic reasons or to remove psychological effects of androgens without changing male identity; in these cases, the criteria for gender dysphoria are not met.

Comorbidity

Clinically referred children with gender dysphoria show elevated levels of emotional and behavioral problems—most commonly, anxiety, disruptive and impulse-control, and de-

pressive disorders. In prepubertal children, increasing age is associated with having more behavioral or emotional problems; this is related to the increasing non-acceptance of gender-variant behavior by others. In older children, gender-variant behavior often leads to peer ostracism, which may lead to more behavioral problems. The prevalence of mental health problems differs among cultures; these differences may also be related to differences in attitudes toward gender variance in children. However, also in some non-Western cultures, anxiety has been found to be relatively common in individuals with gender dysphoria, even in cultures with accepting attitudes toward gender-variant behavior. Autism spectrum disorder is more prevalent in clinically referred children with gender dysphoria than in the general population. Clinically referred adolescents with gender dysphoria appear to have comorbid mental disorders, with anxiety and depressive disorders being the most common. As in children, autism spectrum disorder is more prevalent in clinically referred adolescents with gender dysphoria than in the general population. Clinically referred adults with gender dysphoria may have coexisting mental health problems, most commonly anxiety and depressive disorders.

Other Specified Gender Dysphoria

302.6 (F64.8)

This category applies to presentations in which symptoms characteristic of gender dysphoria that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for gender dysphoria. The other specified gender dysphoria category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for gender dysphoria. This is done by recording "other specified gender dysphoria" followed by the specific reason (e.g., "brief gender dysphoria").

An example of a presentation that can be specified using the "other specified" designation is the following:

The current disturbance meets symptom criteria for gender dysphoria, but the duration is iess than 6 months.

Unspecified Gender Dysphoria

302.6 (F64.9)

This category applies to presentations in which symptoms characteristic of gender dysphoria that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for gender dysphoria. The unspecified gender dysphoria category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for gender dysphoria, and includes presentations in which there is insufficient information to make a more specific diagnosis.

Appendix Attachment

3

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

DECLARATION OF MATTHEW BRACKETT

I, Matthew Brackett, hereby declare and state as follows:

1. I am over the age of 18, of sound mind, and in all respects competent to testify. I have personal knowledge of the information contained in this declaration and would testify completely to those facts if called to do so.

2. I am a program consultant for the Agency for Health Care Administration. While working for the agency, I prepared approximately ten reports supporting determinations of generally accepted professional medical standards.

3. I was responsible for preparing the report, Florida Medicaid Generally Accepted Professional Medical Standards Determination on the Treatment of Gender Dysphoria ("the GAPMS Report"), which was published in June 2022.

4. The GAPMS Report was created after "the Florida Department of Health released guidance on the treatment of gender dysphoria for children and adolescents."

GAPMS Report Att. A. Because the "Florida Medicaid program" did "not have a policy on whether to cover such treatments for Medicaid recipients diagnosed with gender dysphoria," *id.*, Secretary Marstiller requested the Division of Florida Medicaid to review "sex reassignment treatments" of gender dysphoria for a coverage determination under Rule 59G-1.035, Florida Administrative Code. Secretary Marstiller's request to the Division of Florida Medicaid is Attachment A to the GAPMS Report.

5. "Sex reassignment treatments" refer to "medical services used to obtain primary and/or secondary physical sexual characteristics of a male or female." GAPMS Report at 2. The following sex reassignment treatments were discussed in the GAPMS Report: puberty blockers, cross-sex hormones, and sex reassignment surgery.

6. As a condition for coverage, under Rule 59G-1.035, Florida Administrative Code, the treatments must be consistent with generally accepted professional medical standards and must not be experimental or investigational. That rule is Attachment B to the GAPMS Report. The Deputy Secretary for Medicaid makes the final determination as to whether treatments are consistent with generally accepted professional medical standards.

7. The GAPMS Report included assessments from six subject-matter experts: Romina Brignardello-Petersen, Wojtek Wiercioch, James Cantor, Quentin Van Meter, Patrick Lappert, and G. Kevin Donovan. Those experts discussed the following subject matters concerning gender dysphoria: health care research, clinical psychology,

plastic surgery, pediatric endocrinology, and bioethics. Their reports are Attachments C through G to the GAPMS Report.

8. Specifically, for health care research, Dr. Brignardello-Petersen and Dr. Wiercioch "performed a systematic review that graded a multitude of studies. They conclude[d] that evidence supporting sex reassignment treatments is low or very low quality." GAPMS Report at 2-3.

9. For clinical psychology, Dr. Cantor "provided a review of literature on all aspects of the subject, covering therapies, lack of research on suicidality, practice guidelines, and Western European coverage requirements." *Id.* at 3.

10. For plastic surgery, Dr. Lappert "provided an evaluation explaining how surgical interventions are cosmetic with little to no supporting evidence to improve mental health, particularly those altering the chest." *Id.*

11. For pediatric endocrinology, Dr. Van Meter "explain[ed] how children and adolescent brains are in continuous phases of development and how puberty suppression and cross-sex hormones can potentially affect appropriate neural maturation." *Id.*

12. And for bioethics, Dr. Donovan "provide[d] additional insight on the bioethics of administering these treatments, asserting that children and adolescents cannot provide truly informed consent." *Id.*

13. The GAPMS Report concluded that "[a]vailable medical literature provides insufficient evidence that sex reassignment through medical intervention is

safe and effective treatment for gender dysphoria. Studies presenting the benefits to mental health, including those claiming that the services prevent suicide, are either low or very low quality and rely on unreliable methods such as surveys and retrospective analyses, both of which are cross-sectional and highly biased. Rather, the available evidence demonstrates that these treatments cause irreversible physical changes and side effects that can affect long-term health." *Id.* at 2.

14. Specifically, for puberty blockers, "[e]vidence does not prove that puberty blockers are safe for treatment of gender dysphoria. Evidence that they improve mental health and reduce suicidality is low or very low quality." *Id.* at 38.

15. For cross-sex hormones, "[e]vidence suggesting that cross-sex hormones provide benefits to mental health and prevents suicidality is low or very low quality. Rather, evidence shows that cross-sex hormones cause multiple irreversible physical consequences as well as infertility." *Id.*

16. And for sex reassignment surgery, "[e]vidence of improvement in mental health and reduction in suicidality is low or very low quality. Sex reassignment surgery results in irreversible physical changes, including sterility." *Id.*

17. The GAPMS Report also noted the emerging international consensus on treatments for gender dysphoria. Attachment D to the GAPMS Report provides more information on the consensus.

18. In Sweden, for example, "the Swedish National Board of Health stated that 'the risks of hormonal interventions for gender dysphoric youth outweigh the

potential benefits.' With the exception of youths who exhibited 'classic' signs of gender identity issues, adolescents who present with the condition will receive behavioral health services and gender-exploratory therapy." *Id.* at 35.

19. "In Finland, the Palveluvalikoima issued guidelines in 2020 stating that sex reassignment in minors 'is an experimental practice' and that 'no irreversible treatment should be initiated.' The guidelines further assert that youths diagnosed with gender dysphoria often have co-occurring psychiatric disorders that must be stabilized prior to prescribing any cross-sex hormones or undergoing sex reassignment surgery." *Id.*

20. And in the United Kingdom, the government "is also reassessing the use of irreversible treatments for gender dysphoria due the long-term effects on mental and physical health. In 2022, an independent interim report commissioned by the U.K.'s National Health Service (NHS) indicates that additional research and systematic changes are necessary to ensure the safe treatment of gender dysphoric youths. These include reinforcing the diagnosis process to assess all areas of physical and behavioral health, additional training for pediatric endocrinologists, and informing parents about the uncertainties regarding puberty blockers. The interim report is serving as a benchmark until the research is completed for final guidelines." *Id.*

21. As a result, the GAPMS Report did "not recommend sex reassignment treatment as a health service that is consistent with generally accepted professional medical standards. Available evidence indicates that the services are not proven safe or effective treatments for gender dysphoria." *Id.*

22. On July 8, 2022, the agency held an in-person hearing to receive public comments on the proposed changes to Rule 59G-1.050, Florida Administrative Code. I served as a panelist during the hearing. Attendees included physicians, attorneys, individuals who had detransitioned, and other interested parties. A true and correct copy of the transcript of the hearing is attached to this declaration.

23. Some attendees voiced opposition to the proposed rule change, but the overwhelming majority spoke in favor of the changes that will prohibit Medicaid coverage of puberty blockers, cross-sex hormones, and sex reassignment surgery when used to treat gender dysphoria.

24. Several attendees' comments were notable. The first attendee who spoke was Chloe Cole, a 17-year-old detransitioner, and said:

> I was medically transitioned from ages 13 to 16. My parents took me to a therapist to affirm my male identity. The therapist did not care about causality or encourage me to learn to be comfortable in my body because of—partially due to California's conversion therapy bans. He brushed off my parents' concerns about that because he had hormones, puberty blockers, and surgeries. My parents were given a suicide threat as a reason to move me forward in my transition. My endocrinologist, after two or three appointments, put me on puberty blockers and injectable testosterone. At age 15, I asked to remove my breasts. My therapist continued to affirm my transition. I went to a top surgery class that was filled with around 12 girls that thought they were men—I thought that they were men. Most were my age or younger. None of us were going to be men. We were just fleeing from the uncomfortable feeling of becoming women. I was unknowingly physically cutting off my true self from my body, irreversibly and painfully. Our transidentities were not questioned. I went through with the surgery. Despite having therapists and attending the top surgery class, I really didn't understand all of the ramifications of

> any of the medical decisions I was making. I wasn't capable of understanding it, and it was downplayed consistently. My parents, on the other hand, were pressured to continue my so-called gender journey with the suicide threat. I have been forced to realize that I will never be able to breastfeed a child, despite my increasing desire to as I mature. I have blood clots in my urine. I am unable to fully empty my bladder. I do not yet know if I am capable of carrying a child to full term. In fact, even the doctors who put me on puberty blockers and testosterone do not know. No child should have to experience what I have. My consent was not informed . . . .

Tr. 2:2 – 3:22.

25. Sophia Galvin, another detransitioner, also spoke and stated:

> I began detransitioning at 17 and a half socially. At 18 was when I began detrans—I mean transitioning medically. I had a history of mental illness. I had suicidal ideation and I would self-harm. And my wanting to transition was all in an effort to escape the fear of being a woman in this society and because of traumas that I had been through in my life. So I continued down the process, and then ended up removing my breasts at 19 years old because I was trapped, afraid to go back to my original ideo—to my original sex, and basically look crazy to the people around me. When I detransitioned—after I detransitioned, it was very difficult because I didn't have any support. The doctor basically just told me to stop the hormones. I didn't have any one to speak to about it, I didn't go to a mental health counselor, and I didn't prepare anything. I just really want to say that this is not good for children. I was harmed by this, and it should not be covered under Medicaid.

Id. at 4:2-25.

26. Katie Caterbury, a mother, spoke and stated:

> At the age of 14, my once healthy and happy daughter was convinced by the Gay-Straight Alliance at school that she was my son. At the age of 16, a physician injected her with testosterone without my consent and without my knowledge. At the age of 17, Medicaid paid surgeons to perform a double mastectomy and a hysterectomy as an outpatient. At age 19,

> Medicaid paid for her to undergo a phalloplasty. She had and still has private insurance that was bypassed. I fought against what happened to my daughter every step of the way, but to no avail. How can any rational adult, much less a physician, not know that it is impossible to change one's biological sex? Why are there doctors convincing trusting parents to affirm the lie that biological sex is changeable? They prescribe irreversible puberty-blocking drugs and powerful wrong-sex hormones and amputate healthy breasts and remove reproductive organs from children against the protests of their parents. . . . Why is this being funded with taxpayer dollars? This must be stopped. . . .

Id. at 5:3 – 6:18.

27. The agency also received comments concerning the proposed rule change. Several stakeholder and advocacy groups, including the Endocrine Society, the American Academy of Pediatrics, and Yale University, raised concerns about the proposed rule change. The agency reviewed the comments and ultimately determined that the comments were not persuasive.

28. It should also be noted that the agency offers coverage of services for gender dysphoria. Those services are community-based health services; psychiatric services; emergency services and inpatient services in hospital settings; and behavioral services provided in schools and by school districts. Documents evidencing these treatments are attached to this declaration.

"I declare under penalty of perjury under 28 U.S.C. § 1746 that the foregoing is true and correct to the best of my current knowledge and belief." Executed this 3rd day of October 2022.

Respectfully submitted,

/s/ Matthew Brackett

Matthew Brackett

TAPED PROCEEDINGS
IN RE: PROPOSED RULE 59G-1.050
HELD ON JULY 8, 2022

Transcribed by:

CLARA C. ROTRUCK

Court Reporter

TAPED PROCEEDINGS

MS. COLE: My name is Chloe Cole, and I am a 17-year-old detransitioner from the Central Valley of California. I was medically transitioned from ages 13 to 16. My parents took me to a therapist to affirm my male identity. The therapist did not care about causality or encourage me to learn to be comfortable in my body because of -- partially due to California's conversion therapy bans. He brushed off my parents' concerns about that because he had hormones, puberty blockers, and surgeries. My parents were given a suicide threat as a reason to move me forward in my transition.

My endocrinologist, after two or three appointments, put me on puberty blockers and injectable testosterone. At age 15, I asked to remove my breasts.

My therapist continued to affirm my transition. I went to a top surgery class that was filled with around 12 girls that thought they were men -- I thought that they were men. Most were my age or younger. None of us were going to be men. We were just fleeing from the uncomfortable feeling of becoming women.

I was unknowingly physically cutting off my

true self from my body, irreversibly and painfully. Our transidentities were not questioned.

I went through with the surgery. Despite having therapists and attending the top surgery class, I really didn't understand all of the ramifications of any of the medical decisions I was making. I wasn't capable of understanding it, and it was downplayed consistently.

My parents, on the other hand, were pressured to continue my so-called gender journey with the suicide threat.

I have been forced to realize that I will never be able to breastfeed a child, despite my increasing desire to as I mature. I have blood clots in my urine. I am unable to fully empty my bladder. I do not yet know if I am capable of carrying a child to full term. In fact, even the doctors who put me on puberty blockers and testosterone do not know.

No child should have to experience what I have. My consent was not informed and I was filled by (inaudible).

A VOICE: Thank you for your comment.

(Applause.)

A VOICE: The next speaker will be Sophia

Galvin.

MS. GALVIN: My name is Sophia Galvin. I am a detransitioner. I began detransitioning at 17 and a half socially. At 18 was when I began detrans- -- I mean transitioning medically.

I had a history of mental illness. I had suicidal ideation and I would self-harm. And my wanting to transition was all in an effort to escape the fear of being a woman in this society and because of traumas that I had been through in my life.

So I continued down the process, and then I ended up removing my breasts at 19 years old because I was trapped, afraid to go back to my original ideo- -- to my original sex, and basically look crazy to the people around me.

When I detransitioned -- after I detransitioned, it was very difficult because I didn't have any support. The doctor basically just told me to stop the hormones. I didn't have anyone to speak to about it, I didn't go to a mental health counselor, and I didn't prepare anything. I just really want to say that this is not good for children. I was harmed by this, and it should not be covered under Medicaid.

A VOICE: Thank you for your comments.

(Applause.)

A VOICE: The next speaker is Katie Caterbury.

MS. CATERBURY: At the age of 14, my once healthy and happy daughter was convinced by the Gay-Straight Alliance at school that she was my son. At the age of 16, a physician injected her with testosterone without my consent and without my knowledge. At the age of 17, Medicaid paid surgeons to perform a double mastectomy and a hysterectomy as an outpatient. At age 19, Medicaid paid for her to undergo a phalloplasty.

She had and still has private insurance that was bypassed. I fought against what happened to my daughter every step of the way, but to no avail.

How can any rational adult, much less a physician, not know that it is impossible to change one's biological sex? Why are there doctors convincing trusting parents to affirm the lie that biological sex is changeable? They prescribe irreversible puberty-blocking drugs and powerful wrong-sex hormones and amputate healthy breasts and remove reproductive organs from children against the protests of their parents.

Affirming the false notion to a child that it

is possible to change one's sex is child abuse. Administering powerful hormones that cause irreversible changes to their bodies and their brains is child abuse. Amputating the healthy body parts of a child whose brain has not reached full decision-making maturity is simply criminal.

Why are these doctors not criminally charged? Why is this being funded with taxpayer dollars? This must be stopped.

Three years ago, I traveled to Washington, DC -- Washington, DC, to speak to federal lawmakers. I begged their staff to do something. Democrats and Republicans, no one seemed to care. But I will not give up trying until this medical experiment on children is over.

To every single person fighting for the health and lives of our children, I am profoundly grateful. Thank you.

(Applause.)

A VOICE: Just so we get through all the speakers, we'd ask that you hold your applause until the end of the program.

Next speaker will be Jeanette Cooper.

MS. COOPER: My name is Jeanette Cooper, and I am here on behalf of Partners for Ethical Care, a

nonpartisan, nonprofit organization that has no paid staff.

No therapy is better than bad therapy, and children are suffering because parents cannot find professionals to serve the psychological needs of their families and children, and they are being met with a medical treatment for a psychological condition. We need to make space in the public sphere for ethical therapists by removing the medical treatment option.

Nearly every therapist who publicly speaks is a cheerleader for gender identity affirmation, gluing that poisoned bandage on the skin of children, causing permanent psychological and physical harm by solidifying an idea that maybe you were born in the wrong body.

We are here to state the obvious. No child can or ever will be born in the wrong body. Everyone knows what a woman is, but some people are afraid to say it. We are not afraid.

Our organization was founded by a handful of mothers who realized that no one was coming to protect these children. We could not wait any longer for help to arrive.

Families are desperate to find actual support.

They do not want a poisoned bandage that cosmetically covers a wound that grows deeper when covered and left untreated. Affirmation is a poisoned bandage that does not help to heal, but hides a deep need that will not be helped by injections and surgeries.

The state has no business using taxpayer funding to turn children into permanent medical patients. The state has no business assisting doctors in selling disabilities to vulnerable, suffering children by prescribing puberty blockers, cross-sex hormones, and extreme cosmetic body modification. These so-called treatments are not real health care.

The state should, however, fund legitimate and proven care. For many children, a transidentity is a crutch. It is a placeholder that stands in for real suffering that hasn't been named. If they can find a pediatrician, family therapist, or other professionals who will address their actual needs, children discard their transidentity and move forward with self-actualization, rather than staying in a state of stunted psychological and physical growth, surviving with superficial, short-term validation like a street drug that needs

to be injected every day. Our job is to protect children, and we have to step in because the medical field is failing these families.

Thank you for stepping in now before it costs the State of Florida much more than dollars. Thank you for this proposed rule. We support you.

(Applause.)

A VOICE: Thank you for your comments.

Next speaker, Donna Lambart.

MS. LAMBART: Hello. My name is Donna Lambart. I am here on behalf of concerned parents to speak in support of the rule to stop allowing Medicaid to pay medical transition of children in Florida.

Today I appeal to you on behalf of over 2,600 parents in our group. As parents, we know our kids. As people, we know right from wrong. But the health care professionals are presenting many of us with a false and painful choice: Accept what we know will permanently harm our children or lose them to suicide. These false ideas are being stated in the presence of children. This is not only cruel, it's simply not true. There is no data to prove that medically transitioning minors prevents suicide.

Society, the Internet, media, schools, and government convince kids that their parents que- -- if their parents question -- if their parents question their identity, it is because their parents hate them. Parents who are unwilling to drop all rational thinking and surrender to the affirmation-only model of care pay a social, emotional, and custodial price no parent should ever have to pay.

Parents lose their children every day to people who help them transition, leading them down a dangerous medical path that permanently -- permanently harming their healthy bodies with off-label drugs and experimental surgeries.

I interact with parents on a -- every day whose children are instantly derailed as a result of adopting a transgender identity. These children become angry and hostile and resentful. They begin lashing out at anyone who will not agree with their new-found identity. Parents are left -- have been forced to rely on each other to figure out how best to navigate this destructive social phenomenon.

The current one-size-fits-all affirmation model cuts parents out of the equation, charging forward with a rigid, transition-only course of

action.

A VOICE: Ma'am, excuse me, your time is up. Could you please wrap it up?

MS. LAMBART: Yes.

I would just like to say that on behalf of thousands of loving parents, we ask Florida -- the health -- to stand up for the protection of children and teens who are under -- who are being offered a magic fix. Parents deserve support and children deserve sound care.

Thank you for your support and your time.

(Applause.)

A VOICE: Thank you for your comments.

The next speaker is Gerald Buston.

MR. BUSTON: Ladies and gentlemen, I am here as a Christian pastor. 71 years ago, I gave my life to Jesus Christ and chose to live my life according to the Word of God, the Bible. The Bible teaches that God makes people male and female, and it says that repeatedly. Jesus said that himself. And for us to try to transition people away from what God did should be -- well, it definitely is a sin, but it should be a criminal abuse of children, especially when they're not at the age where they can properly process what they're doing to

themselves or allowing to be done to themselves.

I urge Medicaid don't support this. I urge the State of Florida to pass laws against it and not allow our children to be abused the way they are being abused by people that have one goal in mind, and that is depopulating the world by cutting back on the birth rate and by cutting back on the population we have in our world right now.

So I support the bill that we do not pay for this kind of stuff, and I would say let's go further and pass laws against it and make that extreme child abuse to do that to children that don't have the right to know.

(Applause.)

A VOICE: The next speaker is -- I believe it's Brady or perhaps Brandy Andrews.

MS. ANDREWS: Hey there, Brandy Andrews. I'm here to speak in support of banning Medicaid funding for transgender surgeries and treatments.

Transgender surgeries, puberty blockers, and cross-sex hormone treatments have been shown to be extremely harmful, especially to minors, causing sterility and irreversible physical and psychological damage.

Physically healthy, gender-confused girls are

being given double mastectomies at 13 and hysterectomies at 16, while males are referred for surgical castration and penectomies at 16 and 17, respectively.

How have we reached this point in life where we're allowing this at such a young age, but yet you have to be 16 to drive a car, 18 to buy a pack of cigarettes, where we're allowing children to change their genders before they've even reached puberty or shortly after?

Pharmaceutical companies are unethically enriching themselves off the destruction of countless young lives that are being fed puberty blockers, which these companies are advertising children. It's just straight-up child abuse, and it's preying on our society's most vulnerable youth.

Let kids be kids. I am asking Medicaid to stop funding experimental medical treatments on minors. Thank you.

(Applause.)

A VOICE: If I could remind folks to please state your name before you start your comments.

Next speaker is Sabrina Hartsfield.

MS. HARTSFIELD: Good afternoon. My name is

Sabrina Hartsfield, and I am speaking just from my own opinions. I am an alumni of Florida State University and I am a born-again Christian.

Because of this conviction, I believe we as human beings have an obligation to ensure poor and marginalized people of all ages have adequate medical care through the Medicaid program.

Without gender-affirming health care, transgender and gender nonconforming individuals will die. According to every major legitimate medical organization, gender affirming care is the treatment for gender dysphoria.

I am here today to speak against Rule 59G-1.050, the Florida Medicaid trans and medical care ban, from being put into place.

Gender-affirming care is medically necessary and life-saving treatment that should be decided between a patient, their caregivers, and a health care professional, not big government.

Florida is about freedom from big government overreach. Medicaid should cover all medically-necessary treatment, and under the right to privacy found in Florida's constitution, this is, again, a decision that should be hands -- in the hands of the patient and their health care

providers.

This rule also violates the nondiscrimination protections for people of all gender identities found in the Affordable Care Act and the Medicaid Act.

Transgender and gender nonconforming people who have gender dysphoria are already at increased risk for negative health outcomes, such as being diagnosed with anxiety or depression, battling a substance use disorder, and attempting suicide. Denying medical care that has been determined to be the best practice by every major medical association from the American Psychological Association to the American Medical Association to the Endocrine Society will be life-threatening. Denying transgender and gender nonconforming people medical care can lead to depression, self-harming, social rejection, and suicidal behavior.

If the trans medical care ban is enacted, it will be putting the lives of over 9,000 transgender Floridians in danger.

Please block proposed Rule 59G-1.050.

(Applause.)

A VOICE: The next speaker is Simone Chris.

MS. CHRIS: Good afternoon. My name is Simone

Chris and I'm an attorney. I'm the director of the Transgender Rights Initiative Southern Legal Council. We are a statewide, not-for-profit, public interest civil rights law firm that utilizes federal impact litigation policy reform and individual advocacy to ensure communities that we serve have access to justice and freedom from discrimination.

We vehemently oppose the proposed rule based both on the science and evidence supporting the medical necessity of treatment for gender dysphoria and our own extensive experience working with hundreds of transgender adults and minors and witnessing the tremendous benefits that access to such care provides.

In effect, the proposed rule creates a blanket exclusion for coverage of medically-necessary health care for one of the most vulnerable populations in our state, eliminating the right of all transgender Floridians with Medicaid to even have their health care needs subjected to a medical-necessity analysis. The insidiousness of this rule is exacerbated by the fact that it places in its cross-hairs the individuals in our state who are already disproportionately likely to experience

poverty, homelessness, unemployment, poor mental and physical health outcomes, and to have the least access to resources in health care as it is.

We urge AHCA to reject these proposed changes to the rule excluding the coverage for all medically-necessary gender-affirming care because it directly contravenes the widely accepted, authoritative standards of care and the consensus of every major medical association in our country. It will cause significant harm to the individuals that we serve by depriving them of critical, life-saving medical care. It interferes with and substitutes the state's judgment in place of the doctor/patient relationship, the rights of the individual, and the fundamental rights of a parent to determine appropriate medical treatment for their own child, and it is a shameful waste of state resources.

Similar exclusions have been enjoined or struck down by courts across the country as inconsistent with the rights guarantee to Medicaid recipients under the Medicaid Act, under the equal protection clause of the 14th Amendment, the Affordable Care Act. And this litigation that the state will certainly find itself embroiled in is

wasting valuable state resources that could be better utilized enhancing the lives of Floridians rather than attacking them.

Thank you.

(Applause.)

A VOICE: Matthew Benson.

DR. BENSON: My name is Matthew Benson. I'm a board-certified pediatrician and pediatric endocrinologist in the state, and I agree with this rule. I think the data on which the gender affirmative model is based is not scientific.

The National Board of Health and Welfare of Sweden has recently enacted in that country pretty significant restrictions. And if we're going to do this type of care, it needs to be under an IRB-approved protocol and it needs to be based on the best data.

I'm used to prescribing these medications in the sense of puberty blockers. And one of the largest studies that came from Sweden was published around 2016, and basically what they showed is that in those individuals who are transgender and receive these types of procedures, the rates of overall mortality compared to the general population was three times that of the general

population; completed suicide, 19 times that of the general population; five times suicide attempts of the general population. Similarly, in Denmark, out of a 20-year period, by the time a similar study was done, 10 percent of the population had died.

We need better data. We need long-term perspective trials where we can look at adverse effects. We need much more robust data to justify these kinds of very aggressive therapies. And we've already seen two individuals, Chloe and Sophia, testify here today about how they were harmed by these procedures.

Thank you for your time.

(Applause.)

A VOICE: Next speaker, Karen Shoen.

MS. SHOEN: My name is Karen Shoen. I'm with the Florida Citizens Alliance and I'm a former teacher.

I would like to know why .03 percent of the population is dictating to 99.97 percent of the population to accept and pay for an elective surgery. Kids change their minds. I can tell you as a teacher, one day they want to be a fireman, the next day they want to be an engineer, and then they go into being something else.

The problem is we are not explaining the wonders of what it is to be comfortable in your body with both our parents and in our biology and hygiene glasses. So kids become fearful. It's our job to take that fear away as a teacher, not to force them into something else.

The children may be afraid of maturing, they may be afraid of a lot of things, but we're not looking for the root cause, we are now suggesting and implanting in their brains that they're not comfortable in their body.

I'd like to leave you with this thought: Can I drive a car? No, you're 13. Can I have a drink? No, you're 13. Can I shoot a gun? No, you're 13. Can I change my gender? Yes, you're in charge. How is that possible?

(Applause.)

A VOICE: Next speaker, Bill Snyder.

MR. SNYDER: Thank you. Bill Snyder. I (inaudible) Monticello.

I want to talk about a disease that has infected society today called reality disease. Charlie had reality disease. He woke up one morning and wouldn't get out of bed and go to work. His wife said, "Charlie, you've got to get up,

you've got to go to work." He said, "I can't, I'm dead." His wife said, "You're not dead, you're talking to me. I can see you breathing." Charlie says, "I can't get up and go to work, I'm dead." The wife called in a psychologist. Psychologist gave Charlie a lengthy interview. At the end of the interview, the psychologist said, "Charlie, come on, we're going to go downtown." They went downtown to the morgue. The psychologist opened a locker, (inaudible) out a cadaver on a tray, pulled the sheet back over the feet of the cadaver, said, "Charlie, dead people's hearts don't beat, they don't have circulation, they do not bleed." He took the toe of the cadaver, stuck a pin in it. No blood came out. The psychologist said, "See, Charlie, dead people don't bleed. Now, give me your thumb." Took Charlie's thumb, stuck a pin in it, out came bright, red blood. The psychologist said, "See, Charlie, you're not dead. That's blood." Charlie said, "What do you know? Dead people do bleed."

The further we live from reality, the further we move from morality, the further we move from virtue, the more secular we become. The more secular we become, the less freedom we have.

Please approve this proposed rule change. Thank you.

(Applause.)

A VOICE: Next speaker, Ingrid Ford.

MS. FORD: Yes. Good afternoon. I'm Ingrid Ford. Thank you for the opportunity. I'm with Christian Family Coalition. I've been a college counselor 15 years, and I'm here in support -- I'm to speak in support of Rule 59G-1.050 to ban Medicaid funding from transgender surgeries and treatments.

This rule will protect Florida residents, especially minors, from harmful transgender surgeries, harmful blockers, and other unnatural therapies being promoted by radical gender ideals and with no basis in science.

This rule also will protect taxpayers from being forced to subsidize these highly unethical and dangerous procedures, which can cost upwards of $300,000.

Thank you.

(Applause.)

A VOICE: Next speaker, Richard Carlins.

MR. CARLINS: Hello, my name is Richard Carlins and I am in support of the rule and I'm

just going to speak from the heart a little bit. I feel like I'm walking in a house of mirrors or something or it's just -- it's surreal, the world that I live in today from the world that I grew up in.

I had a traditional family, a mother and father. We're saying the Pledge of Allegiance in schools and having prayer in schools. We were founded upon Biblical principles. Our constitution goes hand in hand with that. We're battling with each other right now, you know, over things that were clearly right and wrong before.

Seriously, a kid has no idea. They're being indoctrinated. They're being indoctrinated even through commercials, Disney World, Coca-Cola commercials, the restaurants they go to. And then when they want to be what it is that they were pushed to be, we mutilate their bodies and it's irreversible. It's horrendous. It's a horrendous evil.

And with that, I go. I just can't believe where we're at. And we're -- God raises up nations and he brings down nations, and we are in judgment right now. This is wrong, we need to be able to admit that it is wrong and to help the children to

have wholesome lives that history prior to us -- this is just recent this -- what we're battling with right now. I'm just -- you know, not well-studied or anything, but I think it's 1,500 years that we've been living in Judeo-Christian principles, you know, and it's just recently that we're throwing any mention of God, the Bible, under the bus. They're not allowed to hear it. They're not allowed to know it. If you feel like you want to have pleasure this way or that way, with this, with that, you can and we're going to support it and do whatever it is so that you can never change your mind again and give you nothing wholesome to hold onto. That's all.

(Applause.)

A VOICE: Amber Hand. Amber Hand.

MS. HAND: Hi, I'm Amber Hand and I am just with the body of Christ.

So I come today because I represent -- well, I come from a family, my mom was gay and my dad was gay. He struggled with his identity his whole life, but he fought against it because he was a Christian. And I was taught by my dad I was a little girl, and by mom, I was a little boy. And so I got real confused, you know what I mean, and

I'm 36 today and I just realized -- last year I was thinking about getting a sex change still. I've always thought about it. And when I was a kid, I was like, "When I get boobs, I'm going to cut them off with a butter knife," you know what I mean?

And when we're kids, we're so impressionable. I remember my sister going and seeing my dad use the bathroom, and she went to use the bathroom like him, but he corrected her, you know, because we have to teach these kids right from wrong. And it's wrong to take kids and teach them, "Hey, you can make whatever decision you want and you don't even know mentally what you're really going through as a child." We need to take Medicaid and treat people for psychiatric problems and depression and teach them like you can be a female, it's okay to be a female today and say that you're a woman, you know, like -- and I just realized now at 36 that I want to have a baby, and if I had done that, I would have never been able to have a child.

And I just have to say that the Bible says, "Beloved, I wish above all things that thou mayest prosper and be in health even as thy soul prospers." And when we struggle with identity, our souls are in turmoil. And if we just begin to

realize that we just need to teach these kids right from wrong and that it's not okay to change your identity when God made you a male or a female, and when a little boy puts on a high heel because he sees his mother wearing a high heel, it's just play, like it's okay, but that's not what you wear, and teach him what to wear. We just don't understand as kids what's going on until somebody teaches us. We have learned behavior. We're programming kids these days with everything --

A VOICE: Time's up. Please wrap it up.

MS. HAND: -- (inaudible) around us to be somebody we're not. God bless.

(Applause.)

A VOICE: Shauna Peace.

MS. PEACE: Hi, my name is Shauna Peace, and I am just am here to speak in support of Rule 59G-1.050 to ban Medicaid funding on transgender surgery and treatment.

Children are being pressured and socialized at a very young age to identify as transgender. Much of the pressure is coming from on-line social networking sites that celebrate and encourage transgenderism while denying normal heterosexual behaviors. It accounts for much of the metric rise

in the children's identifying as transgender in the recent years. It has doubled since 2017, according to the news sensors for the Centers for Disease Control and Prevention.

The most thorough followup of sex reassignment people, which was conducted in Sweden, documented that 10 to 15 years after surgical reassignment, the suicide rate is twenty times to comparable peers. The alarmingly high suicide rate among post-operative transgender demonstrates the deep regret that may feel after irreversible mutilating their bodies with these barbaric procedures.

I am here today because I have had children that have battled with identity and sexual identity, and that my stepson is now identified as female. He wanted to when he was younger in years, to change, but now that he has gotten into his 20s, he has now decided that he wants to have children, and if you mutilate these children's bodies at an early age, they don't understand that they will never be able to procreate ever again. Whether you go female or male or male or female, neither sex will be able to procreate ever again. And I just think it's mutilating and it's not right.

Thank you very much.

(Applause.)

A VOICE: The next speaker, Leonard Lord.

MR. LORD: My name is Leonard Lord. I am much in favor of the bill.

Even as a boy, I wasn't comfortable in my body because I didn't know why I was here. So when I got the age to say, "I want to find out why I'm here," I spent three days fasting, praying, seeking God. He brought me to his Word, and I found out that the only way I got comfortable in my body was to know what I was created for.

And so what I found, either we're playing games, or if we really believe there's a God and the Bible is true, we find out this whole problem happens because we do not retain the knowledge of God in our conscience and are given over onto our own deception.

And now I hear all of the mental problems we're having. Well, it's real simple. God's spirit is the answer to what's missing in our lives. We're only complete in Jesus Christ. And the scripture says in Timothy 1:7, God has not given us a spirit of fear, we ought to fear man or woman, but he's given us power, love, and a sound mind. You take the Bible out of school, you take

God out of school, you take prayer out of school, and what have you got? You have no power, you have no love, and you have no sound mind.

So I'm just saying let's go back to getting mentally right is the only way I can at 75 is to know God created me, his Word is true, live in supernatural peace and joy and know where you'll spend eternity and don't live confused.

A VOICE: Thirty seconds.

MR. LORD: The devil is the author of confusion. Get a pure heart and live in peace and joy and enjoy things. If you spend your life trying to find out if you're a man or a woman, you'll never know why you're here.

All I can say, God bless you, I'm in support of the bill, and hopefully America will wake up and be a shining city on a hill for all the nations one more time. Lord bless you.

(Applause.)

A VOICE: Pam Olsen. Pam Olsen.

A VOICE: Dan or Pam?

A VOICE: Pam.

MS. OLSEN: It's me, Pam Olsen.

Thank you for this proposal. I've read all the pages. It's excellent. I am for stopping

Medicaid from paying for children and teenagers to have sex changes.

I've talked to a lot of kids that are confused, and they are confused. That's what's going on today. There is so much onslaught against these kids, and you've got kids saying, "I'm a boy, I'm a girl; no, I'm a girl, I'm a boy." You have kids today saying, "I'm a furry animal." Are we going to start paying for them to have furry animal body parts put into them? I mean, where does this stop?

And I am so thankful that this has been proposed, that we will stop the madness in Florida and we will not do this. I hope that you guys do approve this today because it matters for the sake of the children. You know, I've got 12 grandkids and I'm going to fight tenaciously, not only for my grandkids, but for their friends and for all the children across our state, our nation. We need to say stop the nonsense and let's do what is right. There are boys, there are girls, there are men, there are women.

Thank you so much for approving this. I believe you will do that. Thank you.

(Applause.)

A VOICE: Jon Harris Maurer.

MR. MAURER: Good afternoon. My name is Jon Harris Maurer and I'm the public policy director for Equality Florida, the state's largest civil rights organization based on securing full equality for Florida's LGBTQ community.

The proposed change to Rule 59G-1.050 is without sound scientific basis, it is without legal basis, and it is clearly discriminatory. The agency should reject it.

The proposed rule is about politics, not public health. We urge you to listen to the numerous medical professionals opposed to the rule. Experts from the country's and the world's leading health organizations disagree with the fundamental premise of the proposed rule. They endorse gender-afforming [sic] care. These organizations represent millions of medical professionals, and they recommend gender-affirming care. We're talking about the American Academy of Pediatrics and its Florida chapter, the American Medical Association, the American College of Obstetricians and Gynecologists, the American College of Physicians, the American Psychiatric Association, the American Psychological Association, the

American Academy of Family Physicians, the American Academy of Child and Adolescent Psychiatry, the Endocrine Society, the Society for Adolescent Health and Medicine, the Pediatric Endocrine Society, the World Professional Health Association for Transgender Health, and others; again, representing millions of medical professionals.

Furthermore, AHCA lacks the specific delegated rulemaking authority to adopt the proposed rule. The statutes that AHCA names as its authority to make this proposed rule --

A VOICE: Thirty seconds.

MR. MAURER: -- grant no authority for (inaudible) patient of the individual role for health care practitioners to make decisions with their patients.

The rule is simply discriminatory, it undeniably targets the transgender community. You may not understand what it's like to be transgender --

A VOICE: Fifteen seconds.

MR. MAURER: -- or to be a parent of a transgender kid just trying to find the best care for your kid, but transgender Floridians are here in this audience and they're telling you about how

harmful this rule would be to the more than 9,000 transgender Floridians on Medicaid. We know these therapies are safe because the agency is not opposing them for all Floridians.

A VOICE: Sir, please wrap it up. Your time is up.

MR. MAURER: In conjunction with the state willingly ignoring the body of scientific evidence that supports gender-affirming care, there's no question of the politically-calculated animus behind this proposed rule. Please reject the proposed rule.

(Applause.)

A VOICE: I appreciate your comments. I would just ask for decorum in the crowd. We want to give everybody equal opportunity to speak.

A VOICE: Next speaker, Anthony Verdugo.

MR. VERDUGO: Thank you. Good afternoon. I want to start off by thanking all of you for being here today and for your public service.

My name is Anthony Verdugo. I am the founder and executive director of the Christian Family Coalition. We are a leading human rights and social justice advocacy organization of Florida, and we're here to strongly support Rule 59G-1.050

to ban Medicaid funding for transgender surgeries and treatment.

They call it gender-affirming care. They don't care and it's not affirming. Let's get that straight. And we know that because of heroes who are among us here today, folks like Chloe Cole and Sophia Galvin. They are heroes because they've had the courage to come out and speak the truth in love.

And everyone needs to be respected and treated with dignity, but this is a war on children. These are crimes against humanity. Groomers are using their authority as adults to pressure children and ruin their lives.

I'm going to share with you about a brand, the No. 1 prescribed puberty blocker in America. It's called Lupron. And they themselves list on their package that "Emotional instability is a side effect and warrants prescribers to monitor for development or worsening of psychiatric symptoms during treatment."

These so-called medical organizations which were just listed --

A VOICE: Thirty seconds.

MR. VERDUGO: -- have been discredited.

World-renowned organizations such as the Royal College of General Practitioners in the United Kingdom, Australian College of Physicians, and the American College of Pediatricians -- and I will end with their quote -- say, "Americans are being led astray by a medical establishment driven by a dangerous ideology and economic opportunity, not science and the Hippocratic oath." The suppression of normal puberty, the use of disease-causing cross-sex hormones, and the surgical mutilation and sterilization of children constitute atrocities to be banned, not health care. Let kids be kids.

Thank you.

(Applause.)

A VOICE: Next speaker, Roberto Rodriguez.

MR. RODRIDGUEZ: Thank you very much for this opportunity. I love America as a veteran, ex-police officer, father, grandfather -- let me see what else, you know, and a father of a veteran who is serving in the Navy today as a pilot. And first of all, I wanted to thank you. You guys made me cry. Why? Because, you know, I have a question. Has -- you know, anybody can answer it. Has a doctor ever been wrong? You know, has a parent ever been wrong? Has teachers ever been

wrong? Have scientists ever been wrong? But, then, why are we listening and waiting for scientists and doctors to talk different to what we have evidence here today?

We have the evidence right here today. They came walking in this place and we're being blind to them, and I want to recognize you and I want you to let you know that the true dream is interwoven in every atom of your existence. God will fulfill his true dream to you, no matter what man try to do to you. You have a purpose, you have a reason, and today proves it.

And I'm here to tell you that this rule, we need to go ahead, I support it. We need to stop being ignorant to what faces us and listening to people.

I am from the Centers of God and I have multiple churches that will stand here today. So I'll tell you what, we're bigger than any organization there is right now and represent that we are for this rule.

God bless you and thank you. We love you guys for serving. Thank you.

(Applause.)

A VOICE: Next speaker, Michael Haller, M.D.

All right. Michael Haller, M.D.

DR. HALLER: Good afternoon, everyone. My name is Michael Haller and I am a graduate of the University of Florida's College of Medicine, pediatric residency, and the pediatric endocrinology fellowship. I hold a Master's in clinical investigation and I am the professor and chief of the Pediatric Endocrinology Division at the University of Florida. The views expressed here are, however, my own.

I have trained thousands of medical providers, participated in the development of national guidelines, and have treated tens of thousands of children, including many transgender youth.

I provide this background with full humility, but also to establish myself as an actual expert, both in the management of gender-diverse youth and as one who can review and analyze relevant literature.

The Gapums document and proposed rule change seeking to remove Medicare -- medical -- Medicaid coverage for gender dysphoria makes numerous false claims, uses a biased review of the literature, and relies on more so-called experts who actually lack actual expertise in the care of children with

dysphoria.

While there are a number of flaws, the state's plan following deserves specific commentary.

First, the state's primary assertion that gender-affirming therapy has not demonstrated efficacy and safety is patently false. Nearly every major medical organization that provides care for children, as you heard previously, have provided well-evidenced guidelines supporting gender-affirming care as the standard of care. The assertion from the state, the data included in those guidelines, are not as robust as the state would like them to be --

A VOICE: Thirty seconds.

DR. HALLER: -- is at best a double standard, and is at worst discriminary [sic] political fear. The state is either unwilling or willfully chooses to ignore the totality of evidence in support of gender-affirming care, and the latter seems most likely.

Second, the state's use of --

A VOICE: Fifteen seconds.

DR. HALLER: -- (inaudible) experts as (inaudible) advisers seeking to discredit evidence used (inaudible) of care is laughable. Several of

the state's own experts have been legally discredited from testifying as such in cases regarding gender-affirming care, while others have acknowledged publicly that they have never provided gender-related care to children.

A VOICE: Wrap it up.

DR. HALLER: The proposal to limit gender-affirming care to those dependent on Medicaid is poorly conceived, is likely to cause significant harm to Floridians dependent on Medicaid, and should be rejected. Thank you.

(Applause.)

A VOICE: Next speaker, Robert Yules.

Jason, did you want to comment?

A VOICE: I'm sorry, we have -- the panel has one comment to that. I'm going to refer this to Dr. Van.

DR. V: So just some insight into the support of gender-affirming care by the large societies, medical societies in the United States. The American Academy of Pediatrics has actually made a statement against this -- this, and the Florida chapter as well.

These are not standards of care. Standards of care by definition are an arduous process of

listening to all input from every side, every aspect, of a medical condition, and these individuals get together and they agree on someplace in the middle that they can all live with as a then standard of care.

These are merely guidelines. The guidelines from the Endocrine Society specifically state they are not standards of care. They're just guidelines. They are the opinions of the individuals who wrote the guidelines. The Endocrine Society guidelines were written by nine people in the first go-round and ten in the second go-round, all of which were ideologues from the World Professional Association of Transgender health.

That group -- that interest group excluded world renowned experts in the field and did not listen to their input, didn't include their input on purpose. And so it's not surprising that you come up with one view that does not really represent any kind of standards of care.

So we have to stop using the term "standards of care" when there are absolutely no standards of care in this instance that have been addressed.

(Applause.)

A VOICE: Mr. Yules. Mr. Yules.

DR. HALLER: I would also --

A VOICE: Sir, you've spoken already. If you have further comments, please submit them in writing.

A VOICE: No, I'm sorry, Dr. Haller. If you have further comments, you can -- you can refer them in writing. You can refer them in writing, Doctor.

A VOICE: Robert Yules.

MR. YULES: Yes, my name is Robert Yules. It's an honor and privilege to be here. I was born and raised in St. Petersburg, Florida, and my, how things have changed. Forty-three years ago, my senior high school class came here to view the legislature, and the topic of the day was about dog-catching rules in the state of Florida. My, how far we've come.

This was not even in the purview of anyone at that time. This was not in the purview of anyone ten years ago. This was not in the purview really of anyone five years ago to bring it to the state level, the city level, the classroom level, to be driven by the teachers' unions with all of their ideology, and really it begins and ends when man

proclaims himself as God. The truth begins with me and it ends with me. And our country is in a lot of trouble because people aren't willing to say "No, that's not your truth." There is a truth. That might be your perspective of the truth, but there is not your truth, your truth, your truth, my truth, his truth. It's not the way it works, and we're going down -- just even philosophically and morally, we're going down a very, very slippery road when we start delving into these things.

It's interesting to me also how a child cannot own this or own that or own this, and the thing we've been told for the last ten years, "Well, their brain's not fully developed until around 25." Everybody says that, right? Their brains aren't developed until they're 25, and now our governor caught such flack because he said don't teach kindergarteners --

A VOICE: Thirty seconds.

MR. YULES: -- about transgendering, leave it out till third grade. I think they should leave it out till 12th grade and let parents have those conversations with people. Put it back where parents talk to their own kids, and let's -- let's make school about science, technology,

engineering --

A VOICE: Fifteen seconds.

MR. YULES: -- and mathematics and get back where we need to be.

Thank you so much for your time. Thank you.

(Applause.)

A VOICE: At this time, we would like to remind everyone that they can submit comments in writing to medicaidrulecomments@ahca.myflorida.com. Information is provided on cards at the exit when we are finished, as well as up on the screen. We'll continue with the speakers.

A VOICE: Flaugh. Keith Flaugh.

MR. FLAUGH: Good afternoon. My name is Keith Flaugh. I am one of the founders of an organization called Florida Citizens Alliance, which is a not-for-profit organization of almost 200,000 parents and grandparents, and we focus on K through 12 education.

We have recently completed a detailed study in all 67 county school districts based on 58 novels that we found throughout. I've left a copy with Cole. I would encourage you to read it.

Twenty of those are LGBTQ and gender -- promoting gender dysphoria. Some of these

materials are actually designed for pre-K.

Children in our public schools are being purposefully confused, desensitized, and even pressured into abnormal sexual behavior. Gender idealogues are coaching kids to be into this dysphoria, and even telling them to threaten suicide.

There is a considerable debate in the psychiatric and medical circles about whether the transgender condition is biological or psychological. In numerous public schools, staffs and even teachers are aiding this dysphoria and purposely hiding what they're doing from the parents. Further, taxpayers shouldn't have to pay for this.

Florida Citizens Alliance strongly supports the rule of 59G-1.050, especially to protect minors from the harmful transgender surgeries, hormone blockers, and other unnatural therapies. Thank you.

(Applause.)

A VOICE: Robert Roper.

MR. ROPER: Hi, my name is Robert Roper. I'm here to speak in support of the rule to ban Medicaid funding for transgender surgeries and

treatments. The most important aspect of this rule is that it serves to protect the children of the state of Florida.

Gender confusion is the only disorder that comes with a false assertion that a child can actually be born in the wrong body. They are led to believe that some day they'll actually become a member of the opposite sex. That's impossible. Maybe that's why they call it "transgender." You never actually arrive at the desired outcome.

Gender confusion is the only disorder that the body is mangled to conform to the thoughts of the mind.

Gender confusion is the only disorder that the child actually dictates his or her medical care to medical and -- medical professionals and counselors, instead of the other way around.

Gender confusion is the only disorder that the parent can be completely excluded from determining what is best for their own child.

Gender confusion is the only disorder that the treatment takes the child down a dead-end road literally. What we are seeing in Florida and across the nation is a social media-driven epidemic manufactured by social media influencers making a

lot of money off the very vulnerable element of our society -- that's our children.

While most counselors somehow have been convinced that affirmation is the only way, even the APA would be the first to affirm that a child simply does not have the capacity to make these kinds of long-range decisions. In fact, you don't need to be a doctor --

A VOICE: Thirty seconds.

MR. ROPER: -- of psychology to know this. Ask any parent. They will tell you that a child wants what they want, and they want it now.

What some -- some will call on their faith, some will call on a counselor, but all do so to be delivered from the disorder, not to be sent deeper into it.

A VOICE: Fifteen seconds.

A VOICE: You don't give drugs to a drug addict, alcohol to an alcoholic, porn to someone addicted to pornography. This is not a form of treatment.

In closing, transgender regret is among the fastest-growing movements on social media today --

A VOICE: (Inaudible).

MR. ROPER: -- on Reddit this morning. I

found a thread with 35,600 entries of people regretting their transgenderism. It increased to a hundred more while I drove here today.

Watchful waiting from loving parents yields an exponentially higher success rate of resolving gender disorders than any prescription drugs or surgery, 90 plus percent. This rule will protect Florida residents.

(Applause.)

A VOICE: Carl Charles.

MR. CHARLES: Good afternoon. My name is Carl Charles and I'm a senior attorney in the Atlanta, Georgia, office of Lambda Legal, the nation's oldest and largest legal organization fighting for the rights of LGBT people and everyone living with HIV.

We are here today to share that we strongly oppose and are deeply disturbed by AHCA's notice of proposed rule, which if approved will remove coverage of medically-necessary care for transgender youth and adults from the Florida Medicaid program. This essential and in some cases life-saving care is clinically effective, evidence based, and widely accepted and used by medical professionals across the country to treat gender

dysphoria.

Unlawful exclusions of this kind cause significant harm to a state's most vulnerable residents. Indeed, should this proposed rule be adopted, it will cause serious, immediate, and irreparable harm to transgender Medicaid participants in Florida who already experience well-documented and pervasive stigma, discrimination in their day-to-day lives, including significant challenges, if not all-out barriers to accessing competent health care services.

We are especially concerned by the administration's characterization of this care as experimental and ineffective. This is contrary to all available medical evidence and relies on misrepresentations of the findings of various studies, as well as reports by so-called experts, one of whom is on this panel, who have been discredited and notably do not treat transgender people --

A VOICE: Thirty seconds.

MR. CHARLES: -- in their medical practice.

Finally, I would like to note for the record as to whether or not this was a negotiated rulemaking process and who on the panel is a

transgender Medicaid recipient in Florida. Okay, there's no one.

Finally, singling out transgender Medicaid participants for unequal treatment by denying them coverage for services that non-trans Medicaid participants access plainly violates the equal protection clause of the U.S. Constitution and federal law.

A VOICE: Time. Please wrap up your comment.

A VOICE: Furthermore, Section 15-57 of the Affordable Care Act prohibits discrimination on the basis of sex by any health program or activity receiving federal financial assistance.

Finally, shame on you all for proposing this rule.

(Applause.)

A VOICE: Jason, did you want to comment?

A VOICE: Just quickly, I would like to refer everyone to the Gapums report, in particular the numerous appendices that we attached to that report. There have been references to the numerous clinical organizations that have endorsed these procedures, and in particular, I would refer you to Dr. Canter's report, pages 27 through 28 -- I'm sorry, pages 32 through 42, which go through each

one of those organizations. Thank you.

A VOICE: Speaker Ed Wilson.

MR. WILSON: Ed Wilson. I've traveled here today to speak in support of Rule 59G-1.050 to ban Medicare funding from being used for transgender treatments and surgeries.

This rule will protect children who are not mature enough to be comfortable in their own body or to have sexual desires that they have not gone through puberty yet from making mistakes that will destroy their lives.

Children are being misguided into believing that they're transgender. Taxpayer money should never be used to destroy innocent lives.

Transgender treatments and surgeries never actually succeed in changing someone to the opposite sex, but do cause permanent harm to the people who undergo such treatments.

Health care professionals need to focus on healing the mind of confused and/or abused people, not mutilating their bodies. As Anthony already quoted, I'm going to skip part of the quote from the American College of Pediatrics, but it ends with, "The suppression of normal puberty, the use of disease-causing cross-sex hormones, and the

surgical mutilation and sterilization of children constitute atrocities to be banned, not health care.

Please take their advice. Ban these atrocities --

A VOICE: Thirty seconds.

MR. WILSON: -- and keep Medicaid about health care. Thank you very much.

(Applause.)

A VOICE: Speaker Suzanne Zimmerman.

MS. ZIMMERMAN: I'm Suzanne Zimmerman, and I am merely a mother, grandmother, great-grandmother, aunt, great-aunt, and specifically great great-aunt of a young child who is going through the throes of gender dysphoria from the age -- a young age. He is now 8 years old, and I pray that our state doesn't make it easy for her parents to be dissuaded toward gender change.

I listened to the young people here who have gone through this, and I think they speak volumes more than any of the rest of us could say because they've been through the difficulties and they've learned through the difficulties.

And my bottom line is God doesn't make mistakes. We're all created equal and different,

each in His image, and there are many, many different people in this world and we are to love them all. It's a commandment, it's God commandment, and He loves us all.

I urge you to support this ban to make it easy through Medicaid to have --

A VOICE: Thirty seconds.

MS. ZIMMERMAN: -- the surgery for children who are children with very young brains. Have a heart and please pass this ban. Thank you.

(Applause.)

A VOICE: Judy Hollerza, H-o-l-l-e-r-z-a.

MS. HOLLERIN: I'm Judy Hollerin, poor work -- poor penmanship apparently.

I support -- I support that we ban -- that we ban this. I -- every day, of course, we wake up seeing new things that we can't believe are happening to us today. And I support everything that's been said -- everything in support of that has been said today.

The idea that Medicaid should be doing -- should be supporting this or paying for it -- again, this expansion of us paying for these kinds of critical things without further thought. My, I -- I would like to look 20 years younger, but I

do not expect Medicaid to be paying for it. Enough said.

(Applause.)

A VOICE: Next speaker, Ezra Stone.

MR. STONE: Good afternoon. My name is Ezra Stone and I'm a licensed clinical social worker.

Social work is a profession with a long history of valuing human dignity and autonomy, and according to the values of my profession, I have an ethical obligation to support my clients in reaching their fullest potential, problem-solving barriers to treatment with them, and collaborating with other professionals.

Additionally, we have a professional obligation to provide evidence-based treatment, and there is significant research that medical transition is safe, effective at relieving symptoms of dysphoria, and improves mental health.

In my private therapy practice, my clients express tremendous relief at being able to access medical care, which decreases their anxiety and depression and increases their feelings of safety, comfort, and joy as their bodies and minds become more congruent. Understanding and being seen as their true selves creates a sense of belonging,

which is a fundamental human need.

On the other hand, the current political climate in the state is causing significant harm to transgender, nonbinary questioning and gender diverse Floridians. My clients report increases in anxiety with each proposed anti-LGBT measure the state takes, fear violence in their daily lives, and worry about their continued access to medical care.

These observations from my clinical practice support the research on the minority stress model, which demonstrates that expecting experiences of harm, marginalization, and rejection have a negative impact on people's mental health and overall well-being.

Passing this change to Medicaid --

A VOICE: Thirty seconds.

MR. STONE: -- will not only take away medically-necessary care from several thousand of the most vulnerable Floridians, but it will also further create a climate of fear for LGBT people and their health care providers across the state.

(Applause.)

A VOICE: Jason. Speaker Peggy Joseph.

MS. JOSEPH: Hello. I'm Peggy Joseph, and I

would just like to share some thoughts from an author and doctor, Ryan T. Anderson, who wrote about -- a book called, "When Harry Became Sally."

So in 2016, the Obama administration and the Center for Medicare and Medicaid Services revisited the question of whether sex reassignment surgery would have to be covered by Medicare plans. It refused on the grounds that we lack evidence that it benefits patients. They stated, "Based on a thorough review of the clinical evidence available, there is not enough evidence to determine whether gender reassignment surgery improves health outcomes."

There were conflicting study results, and the quality and strength of evidence were low. Many studies that reported positive outcomes were exploratory-type studies with no confirming follow-up. The author says, "The lack -- the lost of follow-up could be pointing to suicide."

The largest and most robust study, a study from Sweden, found a 19 times greater likelihood of death by suicide and a host of other poor outcomes.

To provide the best possible care serving the patient's interest requires an understanding of human --

A VOICE: Thirty seconds.

MS. JOSEPH: -- wholeness and well-being. The minimal standard of care should be with a standard of normality. Our brains and senses are designed to bring us into contact with reality. Thoughts that distort --

A VOICE: Fifteen seconds.

MS. JOSEPH: -- (inaudible) are misguided and cause harm. Okay.

(Applause.)

A VOICE: Next speaker, Jack Barton.

A VOICE: Actually, I have one comment with respect to that, so as a partial addendum to my earlier answer focusing on some of the clinical organizations in the United States, but I wanted to also mention because it has come up a couple times here, that the Gamus report on pages 35 and 36 also talks about international consensus as also talked about in Dr. James Canter's report on pages 42 through 45. So I would encourage people to look at that as well.

A VOICE: Go ahead.

MR. BARTON: My name is Jack Barton. I'm here with the Christian Family Coalition. I'm an Assembly of God pastor. The 37 years I have

counseled, among them I've counseled lesbians, gays, and bisexuals. I believe in First Corinthians 6:9, that people can escape from that life. Unfortunately for the transgender, they suffer. These young people have made that clear.

I believe that gender dysphoria should be labeled as child abuse, it is not something that should be happening to our children, and with the doctors that will participate in this, it's not so unlike the doctor who tears a child apart in abortion and calls it health care.

These are the issues: The puberty blockers, the hormone manipulations, that's not science. The only name that was left out before was Anthony Fauci. I kept waiting to hear them to say that.

Every -- any procedure like this should be labeled criminal. You have a child that at that age doesn't know if they like vanilla ice cream or if they like chocolate ice cream, and yet they're going to let them march in and either make that decision to be led down that path. Nearly 90 percent of those that escape from that life do it by the time they reach the end of puberty because they come back to their senses that they were created male and female by God.

Suicide that we talk about so much comes when a person has followed up on these things, has done it, and now they are confused because they still don't find the completion that they thought they felt.

Among those that go through these processes, many of it comes from child abuse that happened when they were kids, some who have wanted to have acceptance by others and were rejected. One man, his grandmother wanted a granddaughter. She dressed him like that, and so he adopted that life.

A VOICE: Thirty seconds.

MR. BARTON: I'll close with this. There are two genders, male and female. Women bear children, women breastfeed, women have menstrual cycles. Men do not. I would not provide the anorexic with food and I would not say give money to do something that would harm a child.

A VOICE: Fifteen seconds.

MR. BARTON: It's a terrible thing to do and I ask you to stand your ground.

(Applause.)

A VOICE: Jose Martin.

MR. MARTIN: Good afternoon. Thank you for letting me speak. I'm also with the Christian

Coalition, and I'm here to speak in support of Rule 59G-1.050. I am a father and a grandfather, and I am here to stand against mutilation that we all are asked to fund. The people we are talking about need counseling, not promotion to a destructive choice.

I also want to remind that one day we will all stand before a living God and give account for where we stand on this and other issues. And I also want to thank you brave people, who I think are more qualified than all the other experts that came up, because you are living and you lived through it and you know the results of that, and I thank you. Thank you very much.

(Applause.)

A VOICE: Folks, we have a number of speakers coming up from the same organization. We just ask that you be respectful of others' time. We've got a number of speakers to get through before 5:00 p.m., so if you could just be brief and support comments of others, if possible. Thank you.

Next speaker, Bob Johnson.

MR. JOHNSON: Good afternoon, Bob Johnson. I am a retired and recovering attorney, but I am -- and I'll be very brief.

I say thank you to the Florida Division of Medicaid for putting together this report. I've read the whole report. It's not my area of expertise, but I've had significant experience working with the development of agency rules, statements of need, and reasonableness as we call them in the state that I come from, and I just want to compliment the agency. I've read through it. I think the case is compelling for the rule change. I strongly support the rule change.

There is specifics in there again that's not an area that I studied, but in reading the report and looking how thorough that it was put together, the case has been made for the need to adopt this rule change, the case has been made for the reasonableness of what you're proposing. I just found it compelling the fact that the FDA does not approve any medication as clinically indicated for gender dysphoria. The fact that there's no randomized, controlled trials for the use of these puberty suppression, that's the gold standard, I know, in medical studies, and there are no randomized, controlled trials, and the fact that there's no long-term data. I just think there is so much concrete, substantial evidence that totally

justifies it, and I would just echo many of the others that have testified here today. I urge you to go forward, adopt these rules, changes --

A VOICE: Thirty seconds.

MR. JOHNSON: -- (inaudible) we need them, we need them in the state of Florida. Thank you.

(Applause.)

A VOICE: Next speaker, Sandy Westad, W-e-s-t-a-d, I believe.

MS. WESTAD: My name is Sandy Westad and I'm also here with CFC, Christian Family Coalition.

I -- I want to speak from the heart. I'm a mother, I'm a grandmother, I'm a sister, whatever, and my heart is breaking for what these kids are going through. It just seems to me that if the parents -- the parents need to stay in control. They need to stay in the authority of their children. They need to be able to speak to their kids about the sex and the transgender.

Kids play house. They pretend. You know, they do things in a play world, but they don't want to be or understand or even know what it is to change from one sex to another. They pretend. I remember my sons playing and pretending they were girls and sometimes they would pretend they were

boys, but they were boys and they grew up to be boys. They didn't want to be girls. They felt that that was what they were supposed to be. Jesus made them boys, and they were going to stay boys. But the thing is we -- we need to understand that children cannot make those kinds of decisions. They cannot --

A VOICE: Thirty seconds.

A VOICE: -- decide who they are. The parents need to be their guide, and the parents -- God gave children parents for a reason.

So I just support this bill, this rule, and I thank you so much for everyone that's here.

(Applause.)

A VOICE: Gail Carlins.

MS. CARLINS: Good afternoon. I'm Gail Carlins and I'm with CFC also. And I am in favor, I support this rule change here with not having the funds -- the Medicaid funds go to supporting these.

My beliefs are based on the Bible, and the Bible, I believe, is the only truth that there is. And the Bible says, as was mentioned a couple times, God created male and female. If you want to bring science into it, females have two X chromosomes, males have an X and a Y chromosome.

It's an impossibility to change from one to the other. That cannot be done. And so no matter what kind of mutilation or anything is done to a person, they can't change it.

So, again, I am in support of this bill and I thank you for your time.

(Applause.)

A VOICE: Dorothy Berring.

MS. BERRING: Good afternoon. My name is Dorothy Berring, also with the Christian Family Coalition. I also live in The Villages, Florida.

First of all, I would like to thank our brave governor once again for bringing this to the forefront. We are -- Florida definitely is going to make change, and thank you to these brave people and to Amber for not going along with what you were trying to be brainwashed into believing.

Again, it's strange, you know, they're definitely targeting our -- our youngest. We can't seem to find baby formula anywhere, but yet Medicaid can fund this nonsense.

Again, this has to be left up to the parents. Whatever you choose to practice in the privacy of your own home is your business. I'm not discriminating against any genders or whatever. I

just -- it needs to be taken out of the schools, and this doctor that was from UF or USF or whatever, it's shameful, shameful what you are trying to teach our students, and that's why we are in this bloody mess right now. Okay? And this needs to be changed --

A VOICE: Thirty seconds.

MS. BERRING: -- and you all need to listen.

And thank you, doctors, for being here and for giving us this forum. Thank you.

(Applause.)

A VOICE: We would ask that the comments be focused on the rule and be respectful of other speakers, please.

Troy Peterson.

MR. PETERSON: Good afternoon, Troy Peterson. I come supporting Anthony and Christian Family Coalition. I'm also the President of Warriors of Faith here in Florida. We brought a few people with us from the Tampa Bay area, and really we come representing thousands that stand in agreement with this rule.

And I want to thank you, doctors. I read the 40-page report. I'm not a doctor, I'm a pastor. But when I saw the evidence, I could clearly see

that we need this rule.

In the book of Genesis, in the beginning God created man in his own image, male and female, and then he said, "Be fruitful and multiply the earth." So that's why I'm here is because I'm opposed to even that doctor back there. And I appreciate you said that because if I had any authority in the medical field, I would have his license revoked.

The most thorough follow-up of sex reassigning people, which was conducted in Sweden, documented that 10 to 15 years --

A VOICE: Thirty seconds.

MR. PETERSON: -- of surgical reassessment, that the suicide rate is 20 times that of the comparable peers.

I also read in the medical evidence that 50 percent --

A VOICE: Fifteen seconds.

MR. PETERSON: -- of the gender identity-confused children have thoughts of suicide.

Thank you for your time.

(Applause.)

A VOICE: Janet Rath.

MS. RATH: Hi, my name is Janet Rath. I'm a

mother, a grandmother, and a new great-grandmother. And I think 50 years ago as parents, we were smarter than what is going on today. Parents are left out of their children's lives. Some of it is the parents' fault, and some of it's the teachers' faults.

I have a granddaughter that's a teacher who has said that if she has a child that comes in and identifies as a cat, she must have a litter box there and a bowl of water.

We are as a country going absolutely insane, absolutely insane. We all bought into Dr. Fauci, who was nothing but a money-grabbing liar -- pardon my French -- and we have been hoodwinked ever since. We have got to stop this.

Chinese children in third grade are learning advanced calculus. Our third graders are learning which bathroom to use. I'm sorry, but I do not want my great granddaughter growing up in this world if this is what it's going to turn into. We have got to change, and we had best do it now. Thank you.

(Applause.)

A VOICE: Gerald Loomer, L-o-o-m-e-r, Gerald.

MR. LOOMER: Good afternoon. My name is

Gerald Loomer. I drove three and a half hours from Lady Lake, Florida, to be here because I want to support Rule 59G-1.050. Especially I want to support the best governor in the United States, Ron DeSantis who also supports this.

(Applause.)

MR. LOOMER: But I'd like to share three quick stories with you. The first is the little girl who saw her brothers go fishing with their dad, out in the backyard playing catch with a football, says, "You know, I'd like to spend more time with Dad. If I were a boy, I could spend more time with Dad."

Or the boy who said, "You know, those girls, they're in the kitchen cooking with Mom, they go shopping with Mom, they're doing makeup with Mom. I want to spend more time with Mom. I think I should be a girl, then I can spend more time with Mom." Well, those things passed.

Remember the child who said, "Can I drive the car?" "Of course not, you're 13 years old." "Well, can I drink a beer?" "Of course not, you're 13 years old." "Can I smoke a cigarette?"

A VOICE: Thirty seconds.

MR. LOOMER: "Of course not, you're 13 years old." "Can I take hormones to block puberty?"

"No, you're 13 years old. Of course, you can. You know what you want." "Can I take cross-sex hormones?"

A VOICE: Fifteen seconds.

MR. LOOMER: "You're 13 years old. Of course, you can. You know what you want." "Can I have gender sterilizing surgery?" "You're 13 years old. Of course, you can, you know what you want." "Can I have body-mutilating surgery" --

A VOICE: Time. Please wrap up your comment.

MR. LOOMER: -- "that's going to alter my sex?" "Of course, you can, you's are 13 years old, you know what you want."

A VOICE: Sir, your time is up. Please wrap it up.

MR. LOOMER: How absurd is all of this? Continue to keep this resolution.

Thank you.

(Applause.)

A VOICE: Pastor Marta Marcano.

MS. MARCANO: Good afternoon. I'm Pastor Marta Marcano from (inaudible) Jacksonville, Florida. I'm a director of Protect our Children Project, Duval County chapter, and an organizer of the Christian Family Coalition in Jacksonville too.

I'm here to let you know that I'm support of the Rule 59G-1.050 to ban Medicaid funding for transgenders, surgeries, (inaudible) blockers, and other unnatural therapies.

Also, this rule protect taxpayers from being forced to subsidize the (inaudible) is driving by unethical pharmaceutical companies enriching themselves with the puberty blockers. That is an atrocity of children abuse.

World-renowned Swedish psychiatric, Dr. Christopher Gilbert, has said that pediatric confusion is possibly one of the greater --

A VOICE: Thirty seconds.

MS. MARCANO: -- scandal in medical history and call for an immediate moratorium.

As a pastor --

A VOICE: Fifteen seconds.

MS. MARCANO: -- I want to remind you that doc do not been a stumbling block for the little one, because Hebrews 10:31 said --

A VOICE: Time. Please complete your comment.

MS. MARCANO: -- "It's a fearful thing to fall into the hands of the living God."

Please protect our children. Thank you very much for this time.

(Applause.)

A VOICE: Paul Arrans.

MR. ARRANS: Good afternoon. My name is Paul Arrans. I'm a physician. In practice, I've had transgender patients, and I have transgender personal friends with whom I discuss their medical care at length.

With profound respect for the young people who testified earlier, I still oppose this amendment (inaudible) the preponderance of medical science and practice when we do irreparable harm to the health and well-being of thousands of transgender Floridians of all ages and their families.

The American Academy of Pediatrics and its Florida chapter representing thousands of board-certified pediatricians have directly reviewed many controversial assertions in your publication on gender dysphoria, and the Florida Department of Health's statement responded.

Contrary to an earlier comment, the Endocrine Society has stated, "Both medical intervention for transgender youth and adults, including puberty suppression, hormone therapy, and medically-indicated surgery has been established as the standard of care. Federal and private

insurance should cover such interventions as prescribed by a physician," end quote.

Gender dysphoria is very real. You can learn this for yourselves by meeting with transgender people. You will then realize that denial of appropriate gender-affirming care at any age would be inhumane and a violation of human rights. These medically-necessary treatments are the generally accepted professional medical standards, (inaudible) authoritative opposition to the proposed rule.

A VOICE: Thirty seconds.

MR. ARRANS: (Inaudible) to just rush this through, thereby putting the health and lives of trans people in danger.

It feels like Medicaid is crossing into a political lane by seeking to preempt provider/patient/family decision-making here, and I urge you to withdraw this proposal.

A VOICE: Fifteen seconds.

MR. ARRANS: This represents knowledge and practice regarding gender-affirming care. If you are still determined to address this topic, at least convene (inaudible) panels of experts, including transgender community members, who inform

yourselves and the public about the overwhelming evidence --

A VOICE: Time.

MR. ARRANS -- against denying coverage for gender-affirming care.

Thank you for the opportunity to testify.

(Applause.)

A VOICE: Thank you for that comment. I'm going to refer for further comment to Dr. Van. VANMOLE, VANMO, VENMO?

DR. V: I would encourage everybody just to read the Gaplins report, and particularly the attachment to it. A great deal of attention has been put in there into evaluating the science. And some of the studies that have been brought up, both pro and con, are involved -- they're specifically the flaws that are in so many of these studies. Specifically --

A VOICE: Hold on.

A VOICE: (Inaudible) while Dr. Vanmo speaks.

DR. V: Yeah, and by the way, I like the idea that everybody lets everybody speak. So it kinds of bothers me when I'm hearing speakers shout it down because they're saying something you don't like. How we treat other people with whom we

disagree is a reflection of our own character, not theirs. So, please, let -- due decorum.

First of all, the Endocrine Society's 2017 guidelines are guidelines, just that. And it states specifically page 3895 that they do not guarantee an outcome and they do not establish a standard of care. It's in black and white there.

I would refer you also, as is mentioned in the Gaplins report, the histories in the United Kingdom, Sweden, Finland, France, four nations that were leading this from quite some time, they did national-level reviews involving scientific organizations, divisions of governments, medical professionals. And mind you, these are nations that were leading it. And after review, they all came to the same conclusion, this should not be going on in minors at all under 16, and only between 16 and 18 under tightly-regulated studies, the kind of which we really don't see happening.

And they also came to the conclusion that strong psychological support is what's needed when we talk about evaluating kids for this. We have four decades of literature showing the overwhelming probability of mental health problems, adverse childhood events, neuropsychological problems like

autism spectrum disorder, and other things that need to be addressed. And, in fact, also for these nations, somebody strongly demonstrating psychologic instability -- quite specifically, you say you're suicidal -- blocks you from the transition pathway. They insist that those things be taken care of first because transition simply won't fix them. The underlying problems of a transgender youth become the underlying problems of an adult who identifies as transgender. That's what is going on here.

So, again, I'd refer you to the report and some of the other letter, complaints, that I've seen come in in the past 24 hours from the AAP, as well as from the Endocrine Society, what they're complaining about is actually addressed here, including some of the studies they bring up, and there too, it's a very well-researched document. The State of Florida put a lot of effort into this.

You're free to disagree, but please make sure you've read it and understand it before you do.

A VOICE: Just to be a little bit more specific with respect to the report, I'd refer you to Dr. Rigner (inaudible) Peterson's report, which is Attachment C to the Gaplins report, and also a

doctor named Paul Hruz, H-r-u-z. Title of his publication is, "Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria." He did not provide an expert report for purposes of this report, but he is published in medically reviewed literature, and I would encourage you to read that as well.

Thank you.

(Applause.)

A VOICE: January Littlejohn.

MS. LITTLEJOHN: My name is January Littlejohn. I am a mother of three children and a licensed mental health counselor.

In the spring of 2020, our 13-year-old daughter told us that she was experiencing distress over her sex and that she didn't feel like a girl. She had expressed no previous signs of gender confusion, and three of her friends at school had recently started identifying as transgender.

As we tried to understand our own observations and seek professional help, we discovered that her middle school had socially transitioned her without our knowledge or consent. Her mental health spiraled. We worked with a psychologist to help our daughter explore and resolve co-occurring

issues, including low self-esteem and anxiety. We also gave her more one-on-one time, in-person activities away from trans influences, limited her Internet use, and declined to affirm her newly-chosen name and pronouns. We set appropriate boundaries and allowed her to choose her hair style and clothing, but denied harmful requests such as breast binders, puberty blockers, cross-sex hormones, and surgeries.

It was clear from our conversations that our daughter was uncomfortable with her developing body and had an intense fear of being sexualized. She was filled with self-loathing and was in true emotional pain, but had been led by peers and influencers to believe that gender was the source of her pain.

What she really needed was for us to help her make sense of her confusion and remind her that hormones and surgeries could never change her sex or resolve her issues.

A VOICE: Thirty seconds.

MS. LITTLEJOHN: I shudder to think what could have happened if we had affirmed her false identity and consented to medical treatment as opposed to what we did, which was to lovingly affirm her as

she is: Beautifully unique and irreplaceable and undeniably female.

A VOICE: Fifteen seconds.

MS. LITTLEJOHN: Our daughter has desisted and is on a path to self-love, but, unfortunately, gender-dysphoric children are being encouraged through activism and peer pressure to disassociate from their bodies and to believe their body parts can be simply removed --

A VOICE: Time. Please finish your comment.

MS. LITTLEJOHN: -- modified, or replaced.

The irreversible consequences of medically transitioning, including loss of sexual and reproductive function, cannot be fully understood by children or teens who lack the necessary maturity or experience. These children need love and therapy, not hormones or surgery.

Thank you.

(Applause.)

A VOICE: Next up, Kendra Paris.

MS. PARIS: Hi there, my name is Kendra Paris. I still suffer from being an attorney. I'm a mental health attorney, and I wanted to follow up on the comment about the lack of peer-reviewed standards of care, because as an attorney, the lack

of peer-reviewed standards of care mean that a lot of people who are harmed or experience bad outcomes from these surgeries or other interventions have no ability to sue, and I find that problematic as an attorney. They've had decades to create peer-reviewed standards of care, and they have not. And I suspect some people don't want those standards of care because it would open them up to lawsuits for bad outcomes, which is not happening right now and it really frustrates me.

You all are so brave. I'm so proud of you for coming and telling your stories.

We just don't know, and I want to talk about a particularized thing that we don't know yet. When you put a female on testosterone, within about five years, she's going to have to have a hysterectomy, though you passed most recent standards of care, recommend hormone -- cross-sex hormone therapy for females at 14. So we're talking about a potential hysterectomy before she turns 20. We have known for a very long time that hysterectomies correlated with negative mental health outcomes and cognitive decline. And we know that the earlier a hysterectomy is performed, the worse mental health and cognitive decline is. Essentially, the earlier

you do the hysterectomy, the earlier the onset of dementia.

And so what I am very concerned about is in, I don't know, 10, 20, 30 years, we're going to have an absolute wave of young females, 40, 50 years old, with early-onset cognitive decline --

A VOICE: Thirty seconds.

MS. PARIS: -- or dementia in our assisted living facilities.

And in surveys and anecdotal experience is starting to indicate that some individuals who are trans and have dementia forget that they're trans. In a state like Florida, we have substituted judgment.

A VOICE: Fifteen seconds.

MS. PARIS: So if they don't have written documentation allowing for their medical proxy to allow for detransition, they might be cut off. And I really worry that we have not considered all of the implications of this.

So I appreciate the rulemaking and I thank you --

A VOICE: Time.

MS. PARIS: -- for your time. Thank you.

(Applause.)

A VOICE: Nathan (inaudible).

MR. BRUMER: My name is Nathan Brumer. I am Florida's LGBTQ consumer advocate as appointed by Commissioner of Agriculture Nikki Fried. One of FDACS' many critical roles here in the state includes serving as Florida's consumer protection agency.

On behalf of health care consumers, I provide the following comments in opposition to the proposed changes to Rule 59G-1.050: As a state agency, FDACS encourages all consumers to remain aware, vigilant, and act when necessary, but to do so, we know consumers must be provided with accurate information, education, choice, safety, representation, and redress.

Documented, well-researched standards of care have been established, are based on a wide range of evidence, and conclude gender-affirming medical care is medically necessary and safe and effective. In other words, gender-affirming care is the standard of care, and the proposed rule as it stands would deny health care consumers in the state of Florida access to the standard of care.

State agencies must serve and advocate for all Floridians. We should not deny any Floridian the

ability to thrive. We serve the public good and we must defend the rights of every Floridian, including transgender Floridians, and this includes the right to nondiscriminatory health care coverage. We must work to increase access to health care, not lessen it or remove it all together.

A VOICE: Thirty seconds.

MR. BRUMER: On a personal note, Florida is my home state. I am one of thousands, tens of thousands of transgender Floridians here in our state who have had the privilege to have access to gender-affirming health care --

A VOICE: Fifteen seconds.

MR. BRUMER -- for decades who are happy and successful and thriving. I'm an attorney, I'm an advocate, and I work for and very hard and I'm proud to serve the State of Florida. We are part of the fabric of this nation --

A VOICE: Time. Please wrap up your comment.

MR. BRUMER -- and of this great state, and we deserve the rights and benefits afforded to all.

(Applause.)

A VOICE: Nathan Bremmer.

MR. NEWELL: Hi, I'm Nathan Newell. I think

we got the Nathans mixed up. Here (inaudible) for support. Tell you a little bit, I have a son, I have four children. My son, 15, is -- doing everything we can to keep him straight. He doesn't make good decisions. One of the things lately, you know those little things on the side of the road that flashes and tells you your speed? Well, we had one of those near our house. So he decides to take his dirt bike in pitch black and with his friends out there and go 80 miles per hour down the road. We know this because of the ring. He was bragging to his friends, so we watched the ring and saw that.

Then a couple days ago, he was upset with us and said he was leaving. So we said, "Where are you going to go, Hunter?" He goes, "I'm going to St. Teresa, I got friends down there." "How are you going to get there, Hunter?" "I'm going to ride my bike." I said, "It's going to take you forever," and he goes, "It's going to take me four hours."

So, anyways, this 15-year-old, he's not making good decisions. And to sit here and to even think that these kids can make a decision on what they want that's going to be with them for the rest of

life is child abuse. These doctors are despicable. They need to have their license taken away. They are a disgrace to the human race. It's just despicable to think that these people are taking care of us and taking care of our children, and I appreciate what y'all are doing.

(Applause.)

A VOICE: We'd ask that you please be respectful to the other speakers.

A VOICE: Thank you for your comments. We respect your comment, we respect everybody's comments, including the doctors that you referenced.

A VOICE: Nathan Brumer.

Dotty McPherson.

MS. MCPHERSON: Hi there, I'm Dotty McPherson. I'm speaking as the District 2 representative for the Florida Federation of Republican Women.

The age of majority is 18, but even at 18, children don't have the maturity to handle certain responsibilities given them, like driving, alcohol. Even older adults don't.

Your agency's safety net programs include programs for abused and neglected children, but not gender decisions. Please prevent funding the

destruction of children's genitalia and hormonal balance.

Please consider unintended consequences of, No. 1, is taxpayer money that will need to be used for lawsuits by those whose lives are ruined from surgeries that got -- that they got while they were immature or too young to understand, also by parents whose parental rights were denied to protect their children's future.

I grew up in a low-income neighborhood on the low-income side of town. When I got to junior high school, I saw how rich kids were, and a lot of them were just real brainiacs, and I felt so inadequate. I had a terrible inferiority complex, but I got over it. I graduated with honors from FSU. I had a good job and made a good life for myself and my four children. Life isn't fair. We've got to stop giving in to the poor, pitiful me syndrome. People need to get their brains right and --

A VOICE: Thirty seconds.

MS. MCPHERSON: -- get straight. Government has no business funding these things. Our elected governor has authority to make this rule, which should be upheld. Please support our governor's rule. Thank you.

(Applause.)

A VOICE: I'm going to get this first name wrong, but I think it's Marjorie Caulkins.

MS. CAULKINS: Hello, my name is (inaudible) Caulkins and I am from Milton, Florida, and I came in support of the ban of Medicaid funding for transgender surgeries and treatments.

I believe that Floridians do not need our taxpayers' money to be spent in this funding of surgeries that are both unnecessarily and tremendously harmful.

As a mother of two, I believe there is a war on our children and we need to stand on the right side of this war and protect our children, support our Governor DeSantis. We are blessed with our governor, and I think we should be on the right side and support this rule and ban Medicaid funding for transgender surgeries.

Thank you so much, and thank you for your service.

(Applause.)

A VOICE: James Caulkins.

MR. CAULKINS: Hi. I'm James Caulkins from Milton, Florida, and I just want to say we really need this rule passed to support Rule 59G-1.050 to

ban Medicaid funding for transgender surgery and treatment.

We are in a battle in this country, and I'd like to thank all the people who showed up today, because your voice matters. Our state -- the people have spoken. They elected the greatest governor in the United States, Ron DeSantis. They put Republicans in office in this state to stand for what's right, and this rule change is what's right.

We don't need this stuff, this evil, this Medicaid funding for transgender surgery. We don't need this in our state of Florida. We need to lead in Florida, we need to lead the other states in Florida against this evil transgender surgeries.

So please pass this rule. Thank you all so much for your public service and God bless the state of Florida. Thank you.

(Applause.)

A VOICE: Tuana Aman.

MS. AMAN: Thank you for the opportunity for us to be here. I am in support of the ban to the Medicaid funding for transgender surgeries and treatments. And let me say that years ago, I was told that I needed to go on hormone therapy, and I

had one doctor tell me that it was the right thing to do, but as I did more and more surg- -- more and more study and research, I saw the risks involved to hormonal therapy. And when someone tries to tell you there isn't any risk to these kinds of procedures and these kinds of things that are happening to young people, to young kids -- I mean, I'm an adult who's fully developed, right, as a human being now, right, and they say 25 generally, look at these kids and their development, the process.

And what I think is even more sad is that they're born like the young girl with a certain amount of eggs that will be released every month from the time she starts puberty, and here we're trying to prevent those natural things from occurring and expect it not to have any problems.

I was watching Bill Mayer, which he's not a favorite of conservatives, right? And he came out a couple of weeks ago and was slammed by the LGBT community because he said, "Isn't it interesting" -- and this is him, right -- "Isn't it interesting that if you look at Los Angeles and New York and Miami and all these different hubs, that's where this transgender service -- these surgeries

are going on, the focus," and he got slammed. They said they wanted him off the air, and, I mean, he had -- they had a campaign against him --

A VOICE: Thirty seconds.

MS. AMAN: -- because it was focused on the fact that he was just saying, "Isn't there something ironic about the fact that you look at the rest of the country and these things aren't going on, and then you look at these hubs where social engineering is happening and where people are being influenced that I" --

A VOICE: Fifteen seconds.

MS. AMAN: -- "can't go out into the media and say anything against transgender, because what will happen? I will be criticized and condemned." It isn't fair. I think it's right to be here and have the opportunity to give our voices, but I believe that the government should not be involved in supporting any --

A VOICE: Time. Please wrap up your comment.

MS. AMAN: -- kind of procedure for these young kids. Thank you. Amen.

(Applause.)

A VOICE: Jason, do you have a follow up?

A VOICE: Just very quickly. We appreciate

your comments, just like we appreciate the comments of everyone in this room and all the people that have made comments on-line and otherwise.

I just wanted to make sure -- clear, just so we're crystal-clear about the purpose of this rule is that we're not talking about a ban of treatment for gender dysphoria. We're talking about not covering through reimbursement in the Florida Medicaid program for the services that are enumerated in the rule itself.

I also want to make clear that there are other comprehensive coverage of services for gender dysphoria currently in the Florida Medicaid program, and I just want to read a couple of those: "Community-based health services provided by an array of provider types; psychiatric services provided by a physician or other qualified health care practitioner in office settings, clinics, and hospitals; emergency services and inpatient services in hospital settings; behavioral health services provided in schools and by school districts."

So I just wanted to make sure that everyone was crystal-clear about the purpose of this rule. I very much appreciate your comment and the

comments of everybody else.

A VOICE: Thank you, everyone, for your participation in this hearing. We will accept written material or comments until 5:00 p.m. on Monday, July 11, 2022. Comments may be submitted by e-mail to medicaidrulecomments@ahca.myflorida.com.

That being our time, this hearing is now closed. Thank you.

(Whereupon, the hearing was concluded.)

C E R T I F I C A T E

STATE OF FLORIDA)

COUNTY OF LEON)

I hereby certify that the foregoing transcript is of a tape-recording taken down by the undersigned, and the contents thereof were reduced to typewriting under my direction;

That the foregoing pages 02 through 91 represent a true, correct, and complete transcript of the tape-recording;

And I further certify that I am not of kin or counsel to the parties in the case; am not in the regular employ of counsel for any of said parties; nor am I in anywise interested in the result of said case.

Dated this 19th day of July, 2022.

Clara C. Rotruck

CLARA C. ROTRUCK

Notary Public

State of Florida at Large

Commission Expires:

November 13, 2022

Commission NO.: GG 272880

Medicaid Certified School Match Program Fee Schedule

2022

***Reimbursement amount is the Federal Share of these fees. However, reimbursement can also be based on the individual school district's cost and vary from school district to school district.**

Occupational Therapy Services				
Code	**Modifier**	**Description of Service**	**Maximum Fee**	**Maximum Allowable Units**
97165		Occupational Therapy Evaluation, Low Complexity	$51.05	1 per year
97166		Occupational Therapy Evaluation, Moderate Complexity	$51.05	1 per year
97167		Occupational Therapy Evaluation, High Complexity	$51.05	1 per year
97530		Occupational Therapy Treatment Individual Session	$17.86	4 per day, 14 per week
97530	HM	Occupational Therapy Individual Session Provided by an Occupational Therapy Assistant	$14.30	4 per day, 14 per week
97150	GO	Occupational Therapy Group Session by an Occupational Therapist	$3.47	4 per day, per week
97150	UC	Occupational Therapy Group Session by an Occupational Therapy Assistant	$2.74	4 per day
97542	GO	Wheelchair Evaluation and Fitting by an Occupational Therapist	$51.05	1 per 5 years
92597	GO	AAC Initial Evaluation Provided by an Occupational Therapist	$102.63	1 per 5 years
29799	HA	Application of Casting or Strapping	$19.56	2 per day

Physical Therapy Services				
Code	**Modifier**	**Description of Service**	**Maximum Fee**	**Maximum Allowable Units**
97161		Physical Therapy Evaluation, Low Complexity	$51.05	1 per year
97162		Physical Therapy Evaluation, Moderater Complexity	$51.05	1 per year
97163		Physical Therapy Evaluation, High Complexity	$51.05	1 per year
97110		Physical Therapy Treatment Individual Session	$17.86	4 per day, 14 per week
97110	HM	Physical Therapy Individual Session Provided by a Physical Therapy Assistant	$14.29	4 per day, 14 per week
97150	GP	Physical Therapy Group Session by a Physical Therapist	$3.47	4 per day
97150	HM	Physical Therapy Group Session by a Physical Therapist Assistant	$2.74	4 per day
97542	GP	Wheelchair Evaluation and Fitting by a Physical Therapist	$51.05	1 per 5 years
92597	GP	AAC Initial Evaluation Provided by a Physical Therapist	$102.63	1 per 5 years
29799	HA	Application of Casting or Strapping	$19.56	2 per day

Speech-Language Pathology Services				
Code	**Modifier**	**Description of Service**	**Maximum Fee**	**Maximum Allowable Units**
92521		Evaluation/ Re-evaluation of speech fluency (e.g., stuttering, cluttering)	$51.05	1 per 5 months
92522		Evaluation/ Re-evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria)	$51.05	1 per 5 months

92523		Evaluation/ Re-evaluation of speech sound production (e.g., articulation, phonological process, apraxia, dysarthria); with evaluation of language comprehension and expression (e.g., receptive and expressive language)	$51.05	1 per 5 months
92524		Evaluation/ Re-evaluation Behavioral and qualitative analysis of voice and resonance	$51.05	1 per 5 months
92610		Evaluation/Re-Evaluation of oral and pharyngeal swallowing function	$48.94	1 per 5 months
92507		Speech-Language Pathology Individual Session by a Speech-Language Pathologist	$17.86	4 per day, 14 per week
92507	HM	Speech-Language Pathology Individual Session Provided by a Speech Therapy Assistant	$14.30	4 per day, 14 per week
92508		Speech-Language Pathology Group Session by a Speech-Language Pathologist	$3.47	4 per day 14 per week
92508	HM	Speech-Language Pathology Group Session by a Speech-Language Pathology Assistant	$3.74	4 per day, 14 per week
92597		AAC Initial Evaluation Provided by a Speech-Language Pathologist	$102.63	1 per 5 years
92597	GN	AAC Re-Evaluation Provided by a Speech-Language Pathologist	$52.63	1 per 6 months
92609		AAC Fitting, Adjustment, and Training Visit	$42.11	8 per year

TRANSPORTATION

Transportation fees vary for each school district. They are not included in this appendix, instead each district is notified of its fee.

Behavioral Services					
Code	**Modifier 1**	**Modifer 2**	**Description of services**	**Maximum Fee**	**Maximum Allowable Units**
H0031	AH		Psychologist-Individual Service-Evaluation	$9.66	32 units per school district

					staff member, per day.
H0046	AH		Psychologist-Individual Service-All Else	$9.66	32 units per school district staff member, per day.
H0046	AH	HQ	Psychologist-Group Service	$4.95	32 units per school district staff member, per day.
H0031	SE		Certified Behavior Analyst-Individual Service-Evaluation	$8.00	32 units per school district staff member, per day.
H2019	HA		Certified Behavior Analyst-Individual Service-All Else	$10.41	32 units per school district staff member, per day.
H2019	HA	HQ	Certified Behavior Analyst-Group Service	$3.24	32 units per school district staff member, per day.
H0002	HA		Certified Behavior Analyst (Bachelor's Level) and Certified Assistant Behavior Analyst-Individual Service-Evaluation	$6.70	32 units per school district staff member, per day.
H2014	HA		Certified Behavior Analyst (Bachelor's Level) and Certified Assistant Behavior Analyst-Individual Service-All Else	$6.70	32 units per school district staff member, per day.
H2014	HA	HQ	Certified Behavior Analyst (Bachelor's Level) and Certified Assistant Behavior Analyst-Group Service	$3.35	32 units per school district staff member, per day.
H0031	HU		Social Worker (Master's Level); Marriage and Family Therapist; Mental Health and Guidance Counselors Individual Service - Evaluation	$8.97	32 units per school district staff member, per day.
H0046	SE		Social Worker (Master's Level);	$8.97	32 units per school district

			Marriage and Family Therapist; Mental Health and Guidance Counselors-Individual Service-All Else		staff member, per day.
H0046	SE	HQ	Social Worker (Master's Level); Marriage and Family Therapist; Mental Health and Guidance Counselors-Group Service	$4.25	32 units per school district staff member, per day.
H0002	HN		Social Worker (Bachelor's Level)-Individual Service-Evaluation	$7.17	32 units per school district staff member, per day.
H0046	HN		Social Worker (Bachelor's Level)-Individual Service-All Else	$7.17	32 units per school district staff member, per day.
H0046	HN	HQ	Social Worker (Bachelor's Level)-Group Service	$3.40	32 units per school district staff member, per day.

Nursing Services				
Code	**Modifier**	**Description of Service**	**Maximum Fee**	**Maximum Allowable Units**
T1002		Nursing Service-Registered Nurse	$6.20	32 units per nurse or aide, per day
T1003		Nursing Service-Licensed Practical Nurse	$4.80	32 units per nurse or aide, per day
T1004		Nursing Service-School Health Aide	$3.80	32 units per nurse or aide, per day
T1002	KO	Medication Administration-Registered Nurse	$2.07	32 units per nurse or aide, per day
T1003	KO	Medication Administration-Licensed Practical Nurse	$1.06	32 units per nurse or aide, per day
T1004	KO	Medication Administration-School Health Aide	$.80	32 units per nurse or aide, per day

Behavioral Health Overlay Services Fee Schedule
2022

Description of Service	Procedure Code	Modifier	Maximum Fee	Reimbursement and Service Limitations
Behavioral health overlay services	H2020	HA	$32.75 per day	Medicaid will not reimburse for behavioral health overlay services when a recipient is absent because he or she is in a Department of Juvenile Justice detention center placement. Medicaid will not reimburse a provider for behavioral health overlay services if the provider has been paid for the provision of the same type of services by another purchasing entity.

Florida Medicaid Community Behavior Health Fee Schedule
2022

Description of Service	Procedure Code	Mod	Maximum Fee	Reimbursement and Service Limitations
59G-4.028: Behavioral Health Assessment Services Coverage Policy				
Psychiatric evaluation by a physician	H2000	HP	$210.00 per evaluation	Medicaid reimburses a maximum of two psychiatric evaluations per recipient, per state fiscal year.
Psychiatric evaluation by a non-physician	H2000	HO	$150.00 per evaluation	Medicaid reimburses a maximum of two psychiatric evaluations per recipient, per state fiscal year.
Brief behavioral health status exam	H2010	HO	$14.66 per quarter hour	There is a maximum daily limit of two quarter-hour units. Medicaid reimburses for brief behavioral health status examinations a maximum of 10 quarter-hour units annually (2.5 hours), per recipient, per state fiscal year. A brief behavioral assessment is not reimbursable on the same day that a psychiatric evaluation, bio-psychosocial assessment, or in-depth assessment has been completed by a qualified treating practitioner.
Psychiatric review of records	H2000		$26.00 per review	Medicaid reimburses a maximum of two psychiatric reviews of records, per recipient, per state fiscal year. This service may not be billed for review of lab work (see medication management).
In-depth assessment, new patient, mental health	H0031	HO	$125.00 per assessment	Medicaid reimburses one in-depth assessment, per recipient, per state fiscal year. An in-depth assessment is not reimbursable on the same day for the same recipient as a biopsychosocial evaluation. A bio-psychosocial evaluation is not reimbursable for the same recipient after an in-depth assessment has been completed, unless there is a documented change in the recipient's status and additional information must be gathered to modify the recipient's treatment plan.
In-depth assessment, established patient, mental health	H0031	TS	$100.00 per assessment	Medicaid reimburses one in-depth assessment, per recipient, per state fiscal year. An in-depth assessment is not reimbursable on the same day for the same recipient as a biopsychosocial evaluation. A bio-psychosocial evaluation is not reimbursable for the same recipient after an in-depth assessment has been completed, unless there is a documented change in the recipient's status and additional information must be gathered to modify the recipient's treatment plan.
In-depth assessment, new patient, substance abuse	H0001	HO	$125.00 per assessment	Medicaid reimburses one in-depth assessment, per recipient, per state fiscal year. An in-depth assessment is not reimbursable on the same day for the same recipient as a biopsychosocial evaluation. A bio-psychosocial evaluation is not reimbursable for the same recipient after an in-depth assessment has been completed, unless there is a documented change in the recipient's status and additional information must be gathered to modify the recipient's treatment plan.
In-depth assessment, established patient, substance abuse	H0001	TS	$100.00 per assessment	Medicaid reimburses one in-depth assessment, per recipient, per state fiscal year. An in-depth assessment is not reimbursable on the same day for the same recipient as a biopsychosocial evaluation. A bio-psychosocial evaluation is not reimbursable for the same recipient after an in-depth assessment has been completed, unless there is a documented change in the recipient's status and additional information must be gathered to modify the recipient's treatment plan.

Florida Medicaid Community Behavior Health Fee Schedule
2022

Description of Service	Procedure Code	Mod	Maximum Fee	Reimbursement and Service Limitations
Bio-psychosocial Evaluation, mental health	H0031	HN	$48.00 per assessment	Medicaid reimburses one biopsychosocial evaluation, per recipient, per state fiscal year. A bio-psychosocial evaluation is not reimbursable on the same day for the same recipient as an in-depth assessment.
Bio-psychosocial evaluation, substance abuse	H0001	HN	$48.00 per assessment	Medicaid reimburses one biopsychosocial evaluation, per recipient, per state fiscal year. A bio-psychosocial evaluation is not reimbursable on the same day for the same recipient as an in-depth assessment.
Psychological testing	H2019		$15.00 per quarter hour	Medicaid reimburses a maximum of 40 quarter-hour units (10 hours) of psychological testing per state fiscal year.
Limited functional assessment, mental health	H0031		$15.00 per assessment	Medicaid reimburses a maximum of three limited functional assessments, per recipient, per state fiscal year.
Limited functional assessment, substance abuse	H0001		$15.00 per assessment	Medicaid reimburses a maximum of three limited functional assessments, per recipient, per state fiscal year.
Treatment plan development, new and established patient, mental health	H0032		$97.00 per event	Medicaid reimburses for the development of one treatment plan per provider, per state fiscal year. Medicaid reimburses for a maximum total of two treatment plans per recipient per state fiscal year. The reimbursement date for treatment plan development is the day it is authorized by the treating practitioner.
Treatment plan development, new and established patient, substance abuse	T1007		$97.00 per event	Medicaid reimburses for the development of one treatment plan per provider, per state fiscal year. Medicaid reimburses for a maximum total of two treatment plans per recipient per state fiscal year. The reimbursement date for treatment plan development is the day it is authorized by the treating practitioner.
Treatment plan review, mental health	H0032	TS	$48.50 per event	Medicaid reimburses a maximum of four treatment plan reviews, per recipient, per state fiscal year. The reimbursement date for a treatment plan review is the day it is authorized by the treating practitioner.
Treatment plan review, substance abuse	T1007	TS	$48.50 per event	Medicaid reimburses a maximum of four treatment plan reviews, per recipient, per state fiscal year. The reimbursement date for a treatment plan review is the day it is authorized by the treating practitioner.
59G-4.029: Behavioral Health Medication Management Services Coverage Policy				
Medication management	T1015		$60.00 per event	Medicaid reimburses medication management as medically necessary. Medication management is not reimbursable on the same day, for the same recipient, as brief group medical therapy or brief individual medical psychotherapy.
Behavioral health medical screening, mental health	T1023	HE	$43.62 per event	Medicaid reimburses two behavioral health medical screening services, per recipient, per state fiscal year. Behavioral health-related medical screening services are not reimbursable on the same day, for the same recipient, as behavioral health-related medical services: verbal interactions, medication management.

Florida Medicaid Community Behavior Health Fee Schedule
2022

Description of Service	Procedure Code	Mod	Maximum Fee	Reimbursement and Service Limitations
Behavioral health medical screening, substance abuse	T1023	HF	$43.62 per event	Medicaid reimburses two behavioral health medical screening services, per recipient, per state fiscal year. Behavioral health-related medical screening services are not reimbursable on the same day, for the same recipient, as behavioral health-related medical services: verbal interactions, medication management.
Behavioral health-related medical services: verbal interaction, mental health	H0046		$15.00 per event	Medicaid reimburses 52 behavioral health-related medical services: medical procedures, per recipient, per state fiscal year. Behavioral health-related medical services: verbal interactions are not reimbursable on the same day as behavioral health screening services.
Behavioral health-related medical services: verbal interaction, substance abuse	H0047		$15.00 per event	Medicaid reimburses 52 behavioral health-related medical services: medical procedures, per recipient, per state fiscal year. Behavioral health-related medical services: verbal interactions are not reimbursable on the same day as behavioral health screening services.
Behavioral health-related medical services: medical procedures, mental health	T1015	HE	$10.00 per event	Medicaid reimburses 52 behavioral health-related medical services: medical procedures, per recipient, per state fiscal year.
Behavioral health-related medical services: medical procedures, substance abuse	T1015	HF	$10.00 per event	Medicaid reimburses 52 behavioral health-related medical services: medical procedures, per recipient, per state fiscal year.
Behavioral health-related medical services: alcohol and other drug screening specimen	H0048		$10.00 per event	Medicaid reimburses 52 behavioral health – related medical services: alcohol and other drug screening specimen collections, per recipient, per state fiscal year.
Medication-assisted treatment services	H0020		$67.48 weekly rate	Medicaid reimburses medication assisted treatment services 52 times, per recipient, per state fiscal year. The service is billed one time per seven days. This service is not reimbursable using any other procedure code.
59G-4.031: Behavioral Health Community Support Services Coverage Policy				
Psychosocial rehabilitation services	H2017		$9.00 per quarter hour	Medicaid reimburses a maximum of 1,920 quarter-hour units (480 hours) of psychosocial rehabilitation services, per recipient, per state fiscal year. These units count against clubhouse service units.
Clubhouse services	H2030		$5.00 per quarter hour	Medicaid reimburses a maximum of 1920 quarter-hour units (480 hours) annually, per recipient, per state fiscal year. These units count against psychosocial rehabilitation units of service.
59G-4.052: Behavioral Health Therapy Services				
Brief individual medical psychotherapy, mental health	H2010	HE	$15.00 per quarter hour	There is a maximum daily limit of two quarter-hour units. Medicaid reimburses a maximum of 16 quarter-hour units (4 hours) of brief individual medical psychotherapy, per recipient, per state fiscal year.* Brief individual medical psychotherapy is not reimbursable on the same day, for the same recipient, as brief group medical therapy or medication management.

Florida Medicaid Community Behavior Health Fee Schedule
2022

Description of Service	Procedure Code	Mod	Maximum Fee	Reimbursement and Service Limitations
Brief individual medical psychotherapy, substance abuse	H2010	HF	$15.00 per quarter hour	There is a maximum daily limit of two quarter-hour units. Medicaid reimburses a maximum of 16 quarter-hour units (4 hours) of brief individual medical psychotherapy, per recipient, per state fiscal year. Brief individual medical psychotherapy is not reimbursable on the same day, for the same recipient, as brief group medical therapy or medication management.
Brief group medical therapy	H2010	HQ	$8.65 per quarter hour	There is a maximum daily limit of two quarter-hour units. Medicaid reimburses a maximum of 18 quarter-hour units (4.5 hours) of group medical therapy, per recipient, per state fiscal year. Brief group medical therapy is not reimbursable on the same day, for the same recipient as brief individual medical psychotherapy or behavioral health-related medical services: verbal interactions, medication management.
Individual and family therapy	H2019	HR	$18.33 per quarter	Medicaid reimburses a maximum of 104 quarter-hour units (26 hours) of individual and family therapy services, per recipient, per state fiscal year. There is a maximum daily limit of four quarter-hour units (1 hour).
Group therapy	H2019	HQ	$6.67 per quarter hour	Medicaid reimburses a maximum of 156 quarter-hour units (39 hours) of group therapy services, per recipient, per state fiscal year.
59G-4.370: Behavioral Intervention Services Coverage Policy				
Therapeutic behavioral on-site services, therapy	H2019	HO	$16.00 per quarter hour	Medicaid reimburses therapeutic behavioral on-site therapy services a maximum combined limit of a total of 36 15-minute units per month (9 hours) by a master's level or certified behavioral analyst.
Therapeutic behavioral on-site services, behavior management	H2019	HN	$10.00 per quarter hour	Medicaid reimburses therapeutic behavioral on-site behavior management and therapeutic behavioral on-site therapy services for a maximum combined total of 36 15-minute units per month (9 hours) by a master's level practitioner, certified behavioral analyst, or certified associate behavioral analyst.
Therapeutic behavioral on-site services, therapeutic support	H2019	HM	$4.00 per quarter hour	Medicaid reimburses therapeutic behavioral on-site therapeutic support services for a maximum of 128 quarter-hour units per month (32 hours), per recipient.
Behavioral health day services, mental health	H2012		$12.50 per hour	Medicaid reimburses a maximum of 190-hour units per recipient, per state fiscal year. Medicaid will not reimburse for behavioral health day services the same day as psychosocial rehabilitation services.
Behavioral health day services, substance abuse	H2012	HF	$12.50 per hour	Medicaid reimburses a maximum of 190-hour units per recipient, per state fiscal year. Medicaid will not reimburse for behavioral health day services the same day as psychosocial rehabilitation services.
59G-4.127: Florida Assertive Community Treatment (FACT) Services Coverage Policy				
Florida Assertive Community Treatment	H0040		$27.40 per day	Medicaid reimburses 1 unit per day for 365 or 366 days per state fiscal year per recipient.

Appendix Attachment

4

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

DECLARATION OF JAMES M. CANTOR, PH.D

I, James M. Cantor, Ph.D., hereby declare and state as follows:

1. I am over the age of 18, of sound mind, and in all respects competent to testify. I have personal knowledge of the information contained in this declaration and would testify completely to those facts if called to do so.

2. I am a neuroscientist and sex researcher, with an internationally recognized record studying the development of human sexuality and atypical sexualities. I am the author of over 50 peer-reviewed articles in my field, spanning the development of sexual orientation, gender identity, hypersexuality, and atypical sexualities collectively referred to as *paraphilias*. I am the author of the past three editions of the gender identity and atypical sexualities chapter of the *Oxford Textbook of Psychopathology*. These works are now routinely cited in the field and are included in numerous other textbooks of sex research. These publications span the biological and non-biological development of human sexuality, the classification of sexual interest patterns, the assessment and treatment of atypical sexualities, and the application of statistics and research methodology in sex research.

3. Over my academic career, my posts have included Senior Scientist and Psychologist at the Centre for Addiction and Mental Health (CAMH), Head of Research for CAMH's Sexual Behaviour Clinic, Associate Professor of Psychiatry on the University of Toronto Faculty of Medicine,

and Editor-in-Chief of the peer reviewed journal, *Sexual Abuse*. That journal is one of the top-impact, peer-reviewed journals in sexual behavior science and is the official journal of the Association for the Treatment of Sexual Abusers. In that appointment, I was charged to be the final arbiter for impartially deciding which contributions from other scientists in my field merited publication. I believe that appointment indicates not only my extensive experience evaluating scientific claims and methods, but also the faith put in me by the other scientists in my field. I have also served on the Editorial Boards of the *Journal of Sex Research*, the *Archives of Sexual Behavior*, and *Journal of Sexual Aggression*. I am currently the Director of the Toronto Sexuality Centre in Canada. Thus, although I cannot speak for other scientists, I regularly interact with and am routinely exposed to the views and opinions of most of the scientists active in our field today, within the United States and throughout the world.

4. For my education and training, I received my Bachelor of Science degree from Rensselaer Polytechnic Institute, where I studied mathematics, physics, and computer science. I received my Master of Arts degree in psychology from Boston University, where I studied neuropsychology. I earned my Doctoral degree in psychology from McGill University, which included successfully defending my doctoral dissertation studying the effects of psychiatric medication and neurochemical changes on sexual behavior, and included a clinical internship assessing and treating people with a wide range of sexual and gender identity issues.

5. I began providing clinical services to people with gender dysphoria in 1998. I trained under Dr. Ray Blanchard of CAMH and have participated in the assessment and treatment of over one hundred individuals at various stages of considering and enacting both transition and detransition, including its legal, social, and medical (both cross-hormonal and surgical) aspects. My clinical experience includes the assessment and treatment of several thousand individuals experiencing other atypical sexuality issues. I am regularly called upon to provide objective assessment of the science of

human sexuality by the courts (prosecution and defense), professional media, and mental health care providers.

6. I have been retained by the Defendants in the case to describe opinions regarding the science of gender dysphoria and transsexualism, as previously stated in a report that I prepared for the Florida Agency for Healthcare Administration. A copy of that report is attached and incorporated by reference as Exhibit "B." I also have been asked to respond to criticisms of my report made in declarations If called to testify in this matter, I would testify truthfully based on my personal experience and knowledge.

7. I have testified in deposition or at trial in the following cases within the last four years:

2022	Roe v Utah High School Activities Assn.	Salt Lake County, UT
2022	Re Commitment of Baunee	Syracuse, NY
2022	PFLAG et al. v Abbott	Travis County, TX
2022	Doe v Texas	Travis County, TX
2022	A.M. v Indiana Public Schools	Southern District, IN
2022	Ricard v Kansas	Geery County, KS
2022	Eknes-Tucker v Alabama	Montgomery County, AL
2022	Hersom & Doe v WVa Health & Human Services	Southern District, WVa
2022	BPJ v West Virginia Board of Education	Southern District, WVa
2021	Cox v Indiana Child Services	Child Services, IN
2021	Cross et al. v Loudoun School Board	Loudoun, VA
2021	Josephson v University of Kentucky	Western District, KY
2021	Re Commitment of Michael Hughes (Frye Hearing)	Cook County, IL
2019	US v Peter Bright	Southern District, NY
2019	Spiegel-Savoie v Savoie-Sexten (Custody Hearing)	Boston, MA
2019	Re Commitment of Steven Casper (Frye Hearing)	Kendall County, IL
2019	Re Commitment of Inger (Frye Hearing)	Poughkeepsie, NY

8. A list of my publications within the past 10 years is provided in my curriculum vitae.

9. I was compensated $400 per hour for preparing my initial report ("Exhibit "B"), totaling $9600. I am being compensated at an hourly rate of $400 per hour for my time preparing this declaration. My compensation does not depend on the outcome of this litigation, the opinions I express, or the testimony I may provide.

10. My report summarized the scientific evidence which lead to these conclusions:

- The science shows more than one phenomenon can lead to gender dysphoria, distinguishable by their ages of onset. Each type shows distinct epidemiological and demographic patterns, unique psychological and behavioral profiles, and differing responses to treatment options. Much misunderstanding follows from incorrectly extrapolating information about one type to another.
- The science shows neurological and prenatal components to sexual orientation, but not to gender dysphoria. The terms *innate* and *immutable* pertain to sexual orientation, but not to gender dysphoria.
- For *prepubescent* children supported in their biological sex, there have been 11 cohort studies. All 11 showed that feelings of gender dysphoria *desisted* by puberty for most, resolving as gay or lesbian and realizing they had misinterpreted their cross-sex interests.
- For *pubescent* minors undergoing medical transition (puberty blockers or cross-sex hormones) there have been 11 cohort studies. In four, mental health failed to improve or outright deteriorated. In seven, psychotherapy and medical interventions were provided together, and none found advantage to medical over non-medical intervention. Transition may be the best available option for some, but only a small proportion of the total.
- There has been a single cohort study of prepubescent children supported as their cross-sex identity: Feelings of gender dysphoria persisted past puberty for the majority of children, in contrast with studies of children supported in their biological sex.
- Internet surveys of youth show correlations between transition and mental health variables. Tracking cases over time, cohort studies demonstrated, not that mental health improves with transition, but that minors with better mental health are those permitted to transition.
- U.S. medical organizations are increasingly out of line with international consensus. Although initially supportive of early transition, Sweden, Finland, France, U.K., and Australia have issued increasingly strong policies of psychotherapy as the first line treatment, including an outright ban on medical transition of minors in Sweden.
- Youth with gender dysphoria do not show extreme rates of suicide—Suicide remains exceptionally rare. In behavioral science, *suicide* is distinct from *suicidality* (ideation, gestures, and attempts). Suicide occurs primarily among biological males in middle age, uses highly lethal means, and involves an impulsive but sincere intent to die. Suicidality occurs primarily among biological females in adolescence, uses less lethal means, and represents psychological distress, cries for help or attention, or manipulation with emotional blackmail. The evidence is not consistent with transphobia as a substantial cause, but is strongly consistent with other mental health issues being responsible for each of suicidality, generally unstable identity, and other issues.
- The first set of age requirements for transition proposed for minors was the Dutch Protocol. Subsequent guidelines were released by the Endocrine Society and WPATH, lowering ages and repeatedly notes that medical judgement may overrule standards; however, neither document cites any research justifying the loosening of restrictions.

11. Dr. Karasic asserted (without citing scientific support) that "being transgender is not a paraphilic disorder" (Karasic, footnote-2). That assertion is not the whole truth: As detailed in my report, there is a substantial overlap gender identity and the paraphilias, with a well-documented paraphilia called autogynephilia motivating most cases of adult-onset gender dysphoria, but being unrelated to cases of childhood-onset gender dysphoria, which is instead primarily motivated by homosexuality. It is exactly because I am a recognized expert with a history of published, peer-reviewed research in each sexual orientation, gender identity, and the paraphilias that I am uniquely qualified to discuss exactly this point, whereas neither Dr. Olson-Kennedy nor Dr. Karasic has or claims any expertise at all, whether scientific or clinical anecdote, in the paraphilias.

12. Dr. Karasic asserts that "Dr. Cantor focuses on desistance rates of prepubertal children brought into clinics in Toronto and Amsterdam" (Karasic para 75). Despite such language insinuating cherry-picking of evidence on my part, my report actually provides the comprehensive set of every such outcome study available. Moreover, because every single study, without exception, came to the same conclusion, whether from Toronto, from Amsterdam, or from elsewhere, the entire point is moot. The complete listing of all cohort studies of pre-pubescent children is reprinted as Table 1 at the end of the present report. Neither Drs. Karasic nor Olson-Kennedy cites any study to be missing.

13. Dr. Karasic next faults cohort studies of pre-pubescent because they included a combination of children, some with and some with out formal diagnoses of gender dysphoria, and Dr Karasic offers in their place the results of the recent Olson et al. (2022) study. In each of these claims, Dr. Karasic's report withholds key information that, when revealed, show the precisely opposite conclusions to Dr. Karasic's claims: First, the evidence shows that having versus not having a formal diagnosis makes no difference in the outcomes of this population. The cohort study following up the Canadian sample directly compared the children with and without a formal diagnosis: Of the 88

children meeting criteria for a formal diagnosis, 13.6% were still gender dysphoric at follow-up, and of the 51 children who did not meet formal criteria, 9.8% were (Singh et al., 2021).

14. Next, the Olson study that Dr. Karasic prefers engaged in exactly the same mixing of diagnostic status to which Karasic objected in the studies he wanted to reject. As noted by Olson et al.: "This study did not assess whether participants met criteria for the DSM-5 diagnosis of Gender Dysphoria in Children. Many parents in this study did not believe that such diagnoses were either ethical or useful and some children did not experience the required distress criterion" (Olson et al., 2022, p. 2). Dr. Karasic is attempting to have it both ways, criticizing or exempting research according to its convenience to his argument rather than providing any unbiased or even consistent accounting of the scientific evidence.

15. Finally, despite Dr. Karasic suggesting that the high persistence rates (97.5%) reported by Olson et al. (2022) should entirely replace the low persistence rates of the 11 other studies, Dr. Karasic left out that Olson et al. (2022) differs from the other 11 studies in being the only one in which the children had already socially transitioned, whereas the other 11 came from clinics that did not permit transition. That is, Olson et al. (2022) is much better explained as evidence that social transition causes a large increase in persistence rates.

16. Dr. Karasic's language is similarly misleading in describing Olson et al. to be current while all other studies are outdated. Karasic refers to Olson as "a more recent study, which is the only large American prospective study that has been published in the past 35 years" (Karasic para 75). As Table 1 demonstrates, there has actually been a consistent flow of results, show the same result over and over, including as recently as 2021. Dr. Karasic's emphasis the difference between American versus all international results, however inadvertently, supports the conclusion that differences reflect cultural and social issues rather than medical ones.

17. Dr. Karasic claimed "longitudinal studies show that gender dysphoria in adolescence usually persists" (Karasic, para 76), citing DeVries et al. (2011). That is, once again, not the whole truth: The de Vries study did not pertain to "gender dysphoria in adolescence," but rather to gender dysphoria *that began in early childhood and continued to persist* in adolescence. Dr. Karasic's language, whether strategic or just carelessly vague, extrapolates without justification from a very small and specific population to the many times larger group of adolescent-onset cases, who differ on every objective variable available.

18. Dr. Karasic's reminder that "no medical treatment, let alone irreversible medical and surgical interventions, is used prior to puberty" (para 76) again fails to provide the full evidence. The evidence consistently suggests that each stage of transition makes taking the next step more likely. Prepubescent children permitted to socially transition are more likely to go on to puberty blockers than are children who are not permitted to socially transition. Pubescent age children who begin puberty blockers are more likely to go on to cross-sex hormones than those who do not begin puberty blockers. Etc. By ignoring the clear implications of this clear pattern, Dr. Karasic minimizes the caution required at each decision-making step, whereas a valid risk:benefit analysis must include such clearly foreseeable outcomes.

19. It is not clear on what basis Dr. Karasic believes he contradicts me in his next two points (Karasic, para 75): Already emphasized in my report are that researchers have experimented with puberty blockers for childhood-onset gender dysphoria persisting into adolescence and that evidence regarding childhood-onset should not be generalized to adult-onset or adolescent-onset gender dysphoria.

20. Regarding mental illness, Dr. Karasic cites the (now outdated) 2012 version of the WPATH Standards of Care to assert that "in most cases, having a history of mental illness should not

prevent people from receiving gender-affirming medical and surgical treatment" (para 77). The current (2022) version of the WPATH Standards of Care include[1]:

> 18.1- We recommend mental health professionals address mental health symptoms that interfere with a person's capacity to consent to gender-affirming treatment before gender-affirming treatment is initiated.
>
> 18.2- We recommend mental health professionals offer care and support to transgender and gender diverse people to address mental health symptoms that interfere with a person's capacity to participate in essential perioperative care before gender-affirmation surgery.
>
> 18.3- We recommend when significant mental health symptoms or substance abuse exists, mental health professionals assess the potential negative impact that mental health symptoms may have on outcomes based on the nature of the specific gender-affirming surgical procedure.

Dr. Karasic does not indicate what in my report is inconsistent with any of this. Dr. Karasic's assertion beg the question: The vague language of the WPATH standards allow care providers to draw at any arbitrary point any arbitrary line between (for example) what does or does not count as potential interference, with no objective basis and no accounting for consistency.

21. Dr. Karasic contests my use of the phrase "affirmation on demand" because the (outdated) WPATH Standards of Care "requires a comprehensive mental health assessment" (Karasic, para 78). Dr. Karasic is in error to refer to anything in the WPATH documents as a requirement—the document itself is not binding, there does not exist any system for assessing adherence to it, WPATH has no professional disciplinary system for reported violations, and the contents of the WPATH SOC repeatedly explicate that health care providers may provide exceptions to guidelines due to "professional judgment." As already noted, the sketchy language of the WPATH and repeated indications that care providers may make exceptions without consequence allows any cursory assessment to be deemed "comprehensive" simply by declaring it to be so.

[1] Coleman et al., 2022, p. S171

22. As already noted, my report summarized all 11 cohort studies of people with childhood onset gender dysphoria that persisted into adolescence. Of these, Dr. Karasic mentions three. In all three, Dr. Karasic's criticism is that they showed evidence of mental health improvement. Thus, in all three, Dr. Karasic makes the same error: That some people in some studies showed some improvement is not the question. The point is that these studies are unable to determine if the mental health improvements were caused by transition or by the mental health treatments that these people were also receiving at the same time.

23. The only, even theoretically possible, exception was reported by Achille et al. (2020). That was a small (n = 50) study that conducted very many analyses, using a very liberal statistical threshold, and finding overall that "Given our modest sample size, particularly when stratified by gender, most predictors did not reach statistical significance" (Achille et al., 2020, p. 3). The single analysis that did meet the (liberal) threshold for statistical significance was in the male-to-female group on one of the several mental health measures. In an analysis such as this, it is unclear whether a result is genuine or a statistical fluke, called a "False Positive." That the other studies have failed to replicate the finding indicates it indeed represents a false positive, also called a "Type I Error."

24. Dr. Olson-Kennedy claimed I "incorrectly allege that an increase in numbers of youth presenting for care related to GD provides support for the social contagion theory" (Olson-Kennedy, para 63). My report, however, includes no such allegation: I never mention social contagion at all, and Dr. Olson-Kennedy provides no reference to where I allegedly did.

25. My report does, however, include the following information from the peer-reviewed literature (Cantor, para 48)[2]:

[2] Footnote-58 of that document is the citation to Littman, 2018, and footnote-29 is the citation to Kaltiala-Heino, *et al.*, 2015; Littman, 2018; and Warrier, *et al.*, 2020.

> The majority of cases appear to occur within clusters of peers and in association with increased social media use[58] and especially among people with autism or other neurodevelopmental or mental health issues.[59]

These features—clustering and co-occurrence in people with social difficulties—are indeed consistent with the social contagion theory, but my report never attempts to make that argument. Moreover, although Olson-Kennedy tries to explain why the "increases in numbers" do not support social contagion theory, she offers no alternative explanation for the social group clustering or clinical history of social impediments.

26. Dr. Olson-Kennedy next claimed (Olson-Kennedy, para 67):

> Dr. Cantor is wrong to assert that affirmation "increases the probability of unnecessary transition and unnecessary medical risks." (Cantor ¶ 21). There is no evidence to support the notion that affirmation of gender in pre-pubertal children, or at any age, leads to transition.

That evidence does indeed exist, and it is easily cited: As already indicated, there have been 11 follow-up studies of pre-pubertal children of clinics which did not permit social transition, and the feelings of gender dysphoria desisted 61–88% of cases (Table 1). In direct contrast, Olson et al. (2022) published the follow-up data from children that *did* transition socially before puberty, finding that desistance occurred in only 6%. It is difficult to explain these results in any way other than as social transition greatly increasing the probability of the persistence of gender dysphoria in children. Not only is the allegedly missing evidence easily cited, it was cited by Dr. Karasic (although he indicated a desistance rate of 2.5% instead of 6%).

27. Dr. Olson-Kennedy's next claim regarding my report was (Olson-Kennedy para 92):

> The GAPMS Memo and Dr. Cantor criticize that the diagnosis of gender dysphoria is based, at least in part, on a patient's self-report. (GAPMS Memo at 19, 24, 28; Cantor ¶¶ 42, 49). This critique demonstrates a fundamental misunderstanding of how gender-affirming care is provided.

Any review of my report reveals it to say no such thing. Paragraph 42 of my report instead states, very clearly, that the systematic and objective procedures used by the original research clinics have been replaced with non-systematic and subjective procedures[3]:

> 42. The authors of the original Dutch studies were careful not to overstate the implications of their results, "We *cautiously* conclude that puberty suppression *may be* a valuable *element* in clinical management of adolescent gender dysphoria."[47] Nonetheless, many other clinics and clinicians intrepidly proceeded on the basis of only the perceived positives, broadened the range of people beyond those represented in the research findings, and removed the protections applied in the procedures that led to those outcomes. Many clinics and individual clinicians have reduced the minimum age for transition to 10 instead of 12. While the Dutch Protocol involves interdisciplinary teams of clinicians, many clinics now rely on a single assessor, in some cases one without adequate professional training in childhood and adolescent mental health. Comprehensive, longitudinal assessments (*e.g.*, 1 to 2 *years*[48]) became approvals after one or two assessment sessions. Validated, objective measures of youths' psychological functioning were replaced with clinicians' subjective (and first) opinions, often reflecting only the clients' own self-report. Systematic recordings of outcomes, so as to allow for detection and correction of clinical deficiencies, were eliminated.

Dr. Olson-Kennedy's commentary regarding the inclusion of self-report evades the point: It is the self-report despite the availability of superior procedures and in addition to the simultaneous degradation of the multiple other safe-guards that demonstrates the loss of safety in the provision of health care with this issue. Moreover, despite my listing very many problems in providing high quality care, Dr. Olson-Kennedy contests only this one aspect.

28. Regarding my paragraph 49, I wrote[4]:

> It cannot be easily determined whether the self-reported gender dysphoria is a result of other underlying issues or if those mental health issues are the result of the stresses of being a sexual minority, as some writers are quick to assume.[60]

The only way in which Dr. Olson-Kennedy could find this objectionable would be if she believes it easy to distinguish exactly which of multiple stressors result in exactly which of multiple mental health symptoms. There does not exist any published research leading to such a conclusion.

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[3] Footnote-47 of that report is the citation to de Vries et al., 2011, at 2282; footnote-48 of that report is the citation to de Vries et al., 2011.

[4] Footnote-60 of that document is the citation to Boivin, *et al.*, 2020.

29. Next, Dr. Olson-Kennedy writes, "The GAPMS Memo and Dr. Cantor allege that the provision of puberty delaying medications for the treatment of gender dysphoria are not effective. This is not true" (Olson-Kennedy, para 95). Not only do I not make that claim, it is not scientifically possible to make such a claim. It represents what in science is called "proving the null hypothesis." In the scientific method, we assume the null hypothesis and retain it until there is evidence requiring us to reject it, and future evidence remains eternally (even if only theoretically) possible.

30. What my report does provide is: first, a depiction of the routine, scientific hierarchy of higher quality to lower quality research and, second, a comprehensive review providing all 11 cohort studies (the highest research quality level currently available in the peer reviewed literature). Among those 11 studies, four found no mental health improvement, five provided psychotherapy at the same time as medicalize transition leaving unknown which resulted in mental health improvement, and two found no superiority of medical intervention over psychotherapy on mental health.

31. Dr. Olson-Kennedy does not appear to contest of this. Rather, her report simply reiterates the portions of the subset of studies suggesting improved mental health and fails to address the central issue—whether those mental health improvements (when detected at all) resulted from mental health treatment or from medicalized transition.

32. Dr. Olson-Kennedy's report (para 110) is misleading in saying "Dr. Cantor describes several studies…" when I summarized the research literature: What I describe in my report is an exhaustive list including every single cohort study in the literature. It is only with comprehensive evidence that one can avoid biased cherry-picking of the research. Dr. Olson-Kennedy cites no example of any cohort (or higher quality) study that I missed.

33. Dr. Olson-Kennedy objects to the highly plausible and parsimoniously superior idea that mental health treatment is what causes mental health improvement, but the basis of her objection is, however, entirely tangential: I did not, and the studies I cited did not, suggest psychotherapy was

changing *gender identity*, as Dr. Olson-Kennedy mistakes. Rather, and to repeat, I point out the obvious explanation that improvements in mental health resulted from mental health treatment.

34. Dr. Olson-Kennedy also misrepresents the comments from Harry Benjamin's 1966 *The Transsexual Phenomenon*. That text refers to adult, and only to adult, gender dysphoria. Children are never mentioned.

35. In summary, Drs. Karasic and Olson-Kennedy fail to provide any scientifically legitimate analysis of the type provided by experts in the development of human sexuality. Their claims repeatedly extrapolate information from one population to others. Their claims rely on subjective and anecdotal evidence, rejecting the objective evidence. They fail to provide any consideration of alternative explanations to the objective evidence, actively avoiding superior and more parsimonious interpretations. Their reports fail to provide any meaningfully full accounting of the science, instead citing and addressing only selective pieces, with language insinuating the presence of evidence that does not exist.

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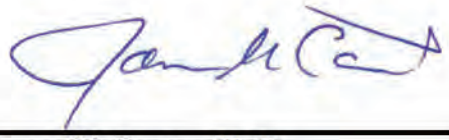
Table 1. Cohort Studies of Gender Dysphoric Children

2/16 4/16 10/16	gay trans-/crossdress straight/uncertain	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283–1289.
2/16 2/16 12/16	trans- uncertain gay	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. *Comprehensive Psychiatry, 19, 363–369.*
0/9 9/9	trans- gay	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. *Journal of Pediatric Psychology, 4,* 29–41.
2/45 10/45 33/45	trans-/crossdress uncertain gay	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90–97.
1/10 2/10 3/10 4/10	trans- gay uncertain straight	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. *Archives of Sexual Behavior, 15,* 511–517.
1/44 43/44	trans- cis-	Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality.* New Haven, CT: Yale University Press.
0/8 8/8	trans- cis-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565–569.
21/54 33/54	trans- cis-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413–1423.
3/25 6/25 16/25	trans- lesbian/bi- straight	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology, 44,* 34–45.
47/127 80/127	trans- cis-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582–590.
17/139 122/139	trans- cis-	Singh, D., Bradley, S. J., and Zucker, K. J. (2021) A follow-up study of boys with gender identity disorder. *Frontiers in Psychiatry, 12,* 632784. doi: 10.3389/fpsyt.2021.632784

I declare under penalty of perjury that the foregoing is true and correct. Executed this 2nd day of October 2022.

Respectfully submitted,



James M. Cantor, Ph.D

EXHIBIT "A"

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EDUCATION

Postdoctoral Fellowship — Jan., 2000–May, 2004
Centre for Addiction and Mental Health • Toronto, Canada

Doctor of Philosophy — Sep., 1993–Jun., 2000
Psychology • McGill University • Montréal, Canada

Master of Arts — Sep., 1990–Jan., 1992
Psychology • Boston University • Boston, MA

Bachelor of Science — Sep. 1984–Aug., 1988
Interdisciplinary Science • Rensselaer Polytechnic Institute • Troy, NY
Concentrations: Computer science, mathematics, physics

EMPLOYMENT HISTORY

Director — Feb., 2017–Present
Toronto Sexuality Centre • Toronto, Canada

Senior Scientist (Inaugural Member) — Aug., 2012–May, 2018
Campbell Family Mental Health Research Institute
Centre for Addiction and Mental Health • Toronto, Canada

Senior Scientist — Jan., 2012–May, 2018
Complex Mental Illness Program
Centre for Addiction and Mental Health • Toronto, Canada

Head of Research — Nov., 2010–Apr. 2014
Sexual Behaviours Clinic
Centre for Addiction and Mental Health • Toronto, Canada

Research Section Head — Dec., 2009–Sep. 2012
Law & Mental Health Program
Centre for Addiction and Mental Health • Toronto, Canada

Psychologist — May, 2004–Dec., 2011
Law & Mental Health Program
Centre for Addiction and Mental Health • Toronto, Canada

Clinical Psychology Intern Sep., 1998–Aug., 1999
Centre for Addiction and Mental Health • Toronto, Canada

Teaching Assistant Sep., 1993–May, 1998
Department of Psychology
McGill University • Montréal, Canada

Pre-Doctoral Practicum Sep., 1993–Jun., 1997
Sex and Couples Therapy Unit
Royal Victoria Hospital • Montréal, Canada

Pre-Doctoral Practicum May, 1994–Dec., 1994
Department of Psychiatry
Queen Elizabeth Hospital • Montréal, Canada

ACADEMIC APPOINTMENTS

Associate Professor Jul., 2010–May, 2019
Department of Psychiatry
University of Toronto Faculty of Medicine • Toronto, Canada

Adjunct Faculty Aug. 2013–Jun., 2018
Graduate Program in Psychology
York University • Toronto, Canada

Associate Faculty (Hon) Oct., 2017–Dec., 2017
School of Behavioural, Cognitive & Social Science
University of New England • Armidale, Australia

Assistant Professor Jun., 2005–Jun., 2010
Department of Psychiatry
University of Toronto Faculty of Medicine • Toronto, Canada

Adjunct Faculty Sep., 2004–Jun., 2010
Clinical Psychology Residency Program
St. Joseph's Healthcare • Hamilton, Canada

PUBLICATIONS

1. Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy, 46,* 307–313. doi: 10.1080/0092623X.2019.1698481
2. Shirazi, T., Self, H., Cantor, J., Dawood, K., Cardenas, R., Rosenfield, K., Ortiz, T., Carré, J., McDaniel, M., Blanchard, R., Balasubramanian, R., Delaney, A., Crowley, W., S Marc Breedlove, S. M., & Puts, D. (2020). Timing of peripubertal steroid exposure predicts visuospatial cognition in men: Evidence from three samples. *Hormones and Behavior, 121, 104712*.
3. Stephens, S., Seto, M. C., Cantor, J. M., & Lalumière, M. L. (2019). The Screening Scale for Pedophilic Interest-Revised (SSPI-2) may be a measure of pedohebephilia. *Journal of Sexual Medicine, 16,* 1655−1663. doi: 10.1016/j.jsxm.2019.07.015
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5. Cantor, J. M. (2018). Can pedophiles change? *Current Sexual Health Reports, 10,* 203–206. doi: 10.1007/s11930-018-0165-2
6. Cantor, J. M., & Fedoroff, J. P. (2018). Can pedophiles change? Response to opening arguments and conclusions. *Current Sexual Health Reports, 10,* 213–220. doi: 10.1007/s11930-018-0167-0z
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9. Stephens, S., Newman, J. E., Cantor, J. M., & Seto, M. C. (2018). The Static-99R predicts sexual and violent recidivism for individuals with low intellectual functioning. *Journal of Sexual Aggression, 24,* 1–11. doi: 10.1080/13552600.2017.1372936
10. Cantor, J. M. (2017). Sexual deviance or social deviance: What MRI research reveals about pedophilia. *ATSA Forum, 29*(2). Association for the Treatment of Sexual Abusers. Beaverton, OR. http://newsmanager.commpartners.com/atsa/issues/2017-03-15/2.html
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12. Stephens, S., Leroux, E., Skilling, T., Cantor, J. M., & Seto, M. C. (2017). A taxometric analysis of pedophilia utilizing self-report, behavioral, and sexual arousal indicators. *Journal of Abnormal Psychology, 126,* 1114–1119. doi: 10.1037/abn0000291
13. Fazio, R. L., Dyshniku, F., Lykins, A. D., & Cantor, J. M. (2017). Leg length versus torso length in pedophilia: Further evidence of atypical physical development early in life. *Sexual Abuse: A Journal of Research and Treatment, 29,* 500–514. doi: 10.1177/1079063215609936
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16. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2017). Evidence of construct validity in the assessment of hebephilia. *Archives of Sexual Behavior, 46,* 301–309. doi: 10.1007/s10508-016-0907-z
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20. Cantor, J. M. (2015). Milestones in sex research: What causes pedophilia? In J. S. Hyde, J. D. DeLamater, & E. S. Byers (Eds.), *Understanding human sexuality* (6th Canadian ed.) (pp. 452–453). Toronto: McGraw-Hill Ryerson.
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64. Pilkington, N. W., & Cantor, J. M. (1996). Perceptions of heterosexual bias in professional psychology programs: A survey of graduate students. *Professional Psychology: Research and Practice*, *27*, 604–612.

PUBLICATIONS

LETTERS AND COMMENTARIES

1. Cantor, J. M. (2015). Research methods, statistical analysis, and the phallometric test for hebephilia: Response to Fedoroff [Editorial Commentary]. *Journal of Sexual Medicine, 12,* 2499–2500. doi: 10.1111/jsm.13040
2. Cantor, J. M. (2015). In his own words: Response to Moser [Editorial Commentary]. *Journal of Sexual Medicine, 12,* 2502–2503. doi: 10.1111/jsm.13075
3. Cantor, J. M. (2015). Purported changes in pedophilia as statistical artefacts: Comment on Müller et al. (2014). *Archives of Sexual Behavior, 44,* 253–254. doi: 10.1007/s10508-014-0343-x
4. McPhail, I. V., & Cantor, J. M. (2015). Pedophilia, height, and the magnitude of the association: A research note. *Deviant Behavior, 36,* 288–292. doi: 10.1080/01639625.2014.935644
5. Soh, D. W., & Cantor, J. M. (2015). A peek inside a furry convention [Letter to the Editor]. *Archives of Sexual Behavior, 44,* 1–2. doi: 10.1007/s10508-014-0423-y
6. Cantor, J. M. (2012). Reply to Italiano's (2012) comment on Cantor (2011) [Letter to the Editor]. *Archives of Sexual Behavior, 41,* 1081–1082. doi: 10.1007/s10508-012-0011-y
7. Cantor, J. M. (2012). The errors of Karen Franklin's *Pretextuality* [Commentary]. *International Journal of Forensic Mental Health, 11,* 59–62. doi: 10.1080/14999013.2012.672945
8. Cantor, J. M., & Blanchard, R. (2012). White matter volumes in pedophiles, hebephiles, and teleiophiles [Letter to the Editor]. *Archives of Sexual Behavior, 41, 749–752.* doi: 10.1007/s10508-012-9954-2
9. Cantor, J. M. (2011). New MRI studies support the Blanchard typology of male-to-female transsexualism [Letter to the Editor]. *Archives of Sexual Behavior, 40*, 863–864. doi: 10.1007/s10508-011-9805-6
10. Zucker, K. J., Bradley, S. J., Own-Anderson, A., Kibblewhite, S. J., & Cantor, J. M. (2008). Is gender identity disorder in adolescents coming out of the closet? *Journal of Sex and Marital Therapy, 34,* 287–290.
11. Cantor, J. M. (2003, Summer). Review of the book *The Man Who Would Be Queen* by J. Michael Bailey. *Newsletter of Division 44 of the American Psychological Association, 19*(2), 6.
12. Cantor, J. M. (2003, Spring). What are the hot topics in LGBT research in psychology? *Newsletter of Division 44 of the American Psychological Association, 19*(1), 21–24.
13. Cantor, J. M. (2002, Fall). Male homosexuality, science, and pedophilia. *Newsletter of Division 44 of the American Psychological Association, 18*(3), 5–8.
14. Cantor, J. M. (2000). Review of the book *Sexual Addiction: An Integrated Approach. Journal of Sex and Marital Therapy, 26*, 107–109.

EDITORIALS

1. Cantor, J. M. (2012). Editorial. *Sexual Abuse: A Journal of Research and Treatment, 24.*

2. Cantor, J. M. (2011). Editorial note. *Sexual Abuse: A Journal of Research and Treatment, 23,* 414.
3. Barbaree, H. E., & Cantor, J. M. (2010). Performance indicates for *Sexual Abuse: A Journal of Research and Treatment* (SAJRT) [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 22,* 371–373.
4. Barbaree, H. E., & Cantor, J. M. (2009). *Sexual Abuse: A Journal of Research and Treatment* performance indicators for 2007 [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 21,* 3–5.
5. Zucker, K. J., & Cantor, J. M. (2009). Cruising: Impact factor data [Editorial]. *Archives of Sexual Research, 38,* 878–882.
6. Barbaree, H. E., & Cantor, J. M. (2008). Performance indicators for *Sexual Abuse: A Journal of Research and Treatment* [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 20,* 3–4.
7. Zucker, K. J., & Cantor, J. M. (2008). The *Archives* in the era of online first ahead of print[Editorial]. *Archives of Sexual Behavior, 37,* 512–516.
8. Zucker, K. J., & Cantor, J. M. (2006). The impact factor: The *Archives* breaks from the pack [Editorial]. *Archives of Sexual Behavior, 35,* 7–9.
9. Zucker, K. J., & Cantor, J. M. (2005). The impact factor: "Goin' up" [Editorial]. *Archives of Sexual Behavior, 34,* 7–9.
10. Zucker, K., & Cantor, J. M. (2003). The numbers game: The impact factor and all that jazz [Editorial]. *Archives of Sexual Behavior, 32,* 3–5.

FUNDING HISTORY

Principal Investigators:	Doug VanderLaan, Meng-Chuan Lai
Co-Investigators:	James M. Cantor, Megha Mallar Chakravarty, Nancy Lobaugh, M. Palmert, M. Skorska
Title:	*Brain function and connectomics following sex hormone treatment in adolescents experience gender dysphoria*
Agency:	Canadian Institutes of Health Research (CIHR), Behavioural Sciences-B-2
Funds:	$650,250 / 5 years (July, 2018)
Principal Investigator:	Michael C. Seto
Co-Investigators:	Martin Lalumière , James M. Cantor
Title:	*Are connectivity differences unique to pedophilia?*
Agency:	University Medical Research Fund, Royal Ottawa Hospital
Funds:	$50,000 / 1 year (January, 2018)
Principal Investigator:	Lori Brotto
Co-Investigators:	Anthony Bogaert, James M. Cantor, Gerulf Rieger
Title:	*Investigations into the neural underpinnings and biological correlates of asexuality*
Agency:	Natural Sciences and Engineering Research Council (NSERC), Discovery Grants Program
Funds:	$195,000 / 5 years (April, 2017)
Principal Investigator:	Doug VanderLaan
Co-Investigators:	Jerald Bain, James M. Cantor, Megha Mallar Chakravarty, Sofia Chavez, Nancy Lobaugh, and Kenneth J. Zucker
Title:	*Effects of sex hormone treatment on brain development: A magnetic resonance imaging study of adolescents with gender dysphoria*
Agency:	Canadian Institutes of Health Research (CIHR), Transitional Open Grant Program
Funds:	$952,955 / 5 years (September, 2015)
Principal Investigator:	James M. Cantor
Co-Investigators:	Howard E. Barbaree, Ray Blanchard, Robert Dickey, Todd A. Girard, Phillip E. Klassen, and David J. Mikulis
Title:	*Neuroanatomic features specific to pedophilia*
Agency:	Canadian Institutes of Health Research (CIHR)
Funds:	$1,071,920 / 5 years (October, 2008)
Principal Investigator:	James M. Cantor
Title:	*A preliminary study of fMRI as a diagnostic test of pedophilia*
Agency:	Dean of Medicine New Faculty Grant Competition, Univ. of Toronto
Funds:	$10,000 (July, 2008)

Principal Investigator:	James M. Cantor
Co-Investigator:	Ray Blanchard
Title:	*Morphological and neuropsychological correlates of pedophilia*
Agency:	Canadian Institutes of Health Research (CIHR)
Funds:	$196,902 / 3 years (April, 2006)

KEYNOTE AND INVITED ADDRESSES

1. Cantor, J. M. (2021, September 28). *No topic too tough for this expert panel: A year in review.* Plenary Session for the 40th Annual Research and Treatment Conference, Association for the Treatment of Sexual Abusers.
2. Cantor, J. M. (2019, May 1). *Introduction and Q&A for 'I, Pedophile.'* StopSO 2nd Annual Conference, London, UK.
3. Cantor, J. M. (2018, August 29). *Neurobiology of pedophilia or paraphilia? Towards a 'Grand Unified Theory' of sexual interests.* Keynote address to the International Association for the Treatment of Sexual Offenders, Vilnius, Lithuania.
4. Cantor, J. M. (2018, August 29). *Pedophilia and the brain: Three questions asked and answered.* Preconference training presented to the International Association for the Treatment of Sexual Offenders, Vilnius, Lithuania.
5. Cantor, J. M. (2018, April 13). *The responses to* I, Pedophile *from We, the people.* Keynote address to the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, Minnesota.
6. Cantor, J. M. (2018, April 11). *Studying atypical sexualities: From vanilla to* I, Pedophile. Full day workshop at the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, Minnesota.
7. Cantor, J. M. (2018, January 20). *How much sex is enough for a happy life?* Invited lecture to the University of Toronto Division of Urology Men's Health Summit, Toronto, Canada.
8. Cantor, J. M. (2017, November 2). Pedophilia as a phenomenon of the brain: Update of evidence and the public response. Invited presentation to the 7th annual SBC education event, Centre for Addiction and Mental Health, Toronto, Canada.
9. Cantor, J. M. (2017, June 9). Pedophilia being in the brain: The evidence and the public's reaction. Invited presentation to *SEXposium at the ROM: The science of love and sex,* Toronto, Canada.
10. Cantor, J. M., & Campea, M. (2017, April 20). *"I, Pedophile" showing and discussion.* Invited presentation to the 42nd annual meeting of the Society for Sex Therapy and Research, Montréal, Canada.
11. Cantor, J. M. (2017, March 1). *Functional and structural neuroimaging of pedophilia: Consistencies across methods and modalities.* Invited lecture to the Brain Imaging Centre, Royal Ottawa Hospital, Ottawa, Canada.
12. Cantor, J. M. (2017, January 26). *Pedophilia being in the brain: The evidence and the public reaction.* Inaugural keynote address to the University of Toronto Sexuality Interest Network, Toronto, Ontario, Canada.
13. Cantor, J. M. (2016, October 14). *Discussion of CBC's "I, Pedophile."* Office of the Children's Lawyer Educational Session, Toronto, Ontario, Canada.
14. Cantor, J. M. (2016, September 15). *Evaluating the risk to reoffend: What we know and what we don't.* Invited lecture to the Association of Ontario Judges, Ontario Court of Justice Annual Family Law Program, Blue Mountains, Ontario, Canada. [Private link only: https://vimeo.com/239131108/3387c80652]
15. Cantor, J. M. (2016, April 8). *Pedophilia and the brain: Conclusions from the second generation of research.* Invited lecture at the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.

16. Cantor, J. M. (2016, April 7). *Hypersexuality without the hyperbole.* Keynote address to the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.
17. Cantor, J. M. (2015, November). *No one asks to be sexually attracted to children: Living in Daniel's World.* Grand Rounds, Centre for Addiction and Mental Health. Toronto, Canada.
18. Cantor, J. M. (2015, August). *Hypersexuality: Getting past whether "it" is or "it" isn't.* Invited address at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
19. Cantor, J. M. (2015, July). *A unified theory of typical and atypical sexual interest in men: Paraphilia, hypersexuality, asexuality, and vanilla as outcomes of a single, dual opponent process.* Invited presentation to the 2015 Puzzles of Sexual Orientation conference, Lethbridge, AL, Canada.
20. Cantor, J. M. (2015, June). *Hypersexuality.* Keynote Address to the Ontario Problem Gambling Provincial Forum. Toronto, Canada.
21. Cantor, J. M. (2015, May). *Assessment of pedophilia: Past, present, future.* Keynote Address to the International Symposium on Neural Mechanisms Underlying Pedophilia and Child Sexual Abuse (NeMUP). Berlin, Germany.
22. Cantor, J. M. (2015, March). *Prevention of sexual abuse by tackling the biggest stigma of them all: Making sex therapy available to pedophiles.* Keynote address to the 40th annual meeting of the Society for Sex Therapy and Research, Boston, MA.
23. Cantor, J. M. (2015, March. *Pedophilia: Predisposition or perversion?* Panel discussion at Columbia University School of Journalism. New York, NY.
24. Cantor, J. M. (2015, February). *Hypersexuality.* Research Day Grand Rounds presentation to Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario, Canada.
25. Cantor, J. M. (2015, January). *Brain research and pedophilia: What it means for assessment, research, and policy.* Keynote address to the inaugural meeting of the Netherlands Association for the Treatment of Sexual Abusers, Utrecht, Netherlands.
26. Cantor, J. M. (2014, December). *Understanding pedophilia and the brain: Implications for safety and society.* Keynote address for The Jewish Community Confronts Violence and Abuse: Crisis Centre for Religious Women, Jerusalem, Israel.
27. Cantor, J. M. (2014, October). *Understanding pedophilia & the brain.* Invited full-day workshop for the Sex Offender Assessment Board of Pennsylvania, Harrisburg, PA.
28. Cantor, J. M. (2014, September). *Understanding neuroimaging of pedophilia: Current status and implications.* Invited lecture presented to the Mental Health and Addition Rounds, St. Joseph's Healthcare, Hamilton, Ontario, Canada.
29. Cantor, J. M. (2014, June). *An evening with Dr. James Cantor.* Invited lecture presented to the Ontario Medical Association, District 11 Doctors' Lounge Program, Toronto, Ontario, Canada.
30. Cantor, J. M. (2014, April). *Pedophilia and the brain.* Invited lecture presented to the University of Toronto Medical Students lunchtime lecture. Toronto, Ontario, Canada.
31. Cantor, J. M. (2014, February). *Pedophilia and the brain: Recap and update.* Workshop presented at the 2014 annual meeting of the Washington State Association for the Treatment of Sexual Abusers, Cle Elum, WA.
32. Cantor, J. M., Lafaille, S., Hannah, J., Kucyi, A., Soh, D., Girard, T. A., & Mikulis, D. M. (2014, February). *Functional connectivity in pedophilia.* Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario, Canada.

33. Cantor, J. M. (2013, November). *Understanding pedophilia and the brain: The basics, the current status, and their implications.* Invited lecture to the Forensic Psychology Research Centre, Carleton University, Ottawa, Canada.
34. Cantor, J. M. (2013, November). *Mistaking puberty, mistaking hebephilia.* Keynote address presented to the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
35. Cantor, J. M. (2013, October). *Understanding pedophilia and the brain: A recap and update.* Invited workshop presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
36. Cantor, J. M. (2013, October). *Compulsive-hyper-sex-addiction: I don't care what we all it, what can we* do? Invited address presented to the Board of Examiners of Sex Therapists and Counselors of Ontario, Toronto, Ontario, Canada.
37. Cantor, J. M. (2013, September). *Neuroimaging of pedophilia: Current status and implications.* McGill University Health Centre, Department of Psychiatry Grand Rounds presentation, Montréal, Québec, Canada.
38. Cantor, J. M. (2013, April). *Understanding pedophilia and the brain.* Invited workshop presented at the 2013 meeting of the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, MN.
39. Cantor, J. M. (2013, April). *The neurobiology of pedophilia and its implications for assessment, treatment, and public policy.* Invited lecture at the 38th annual meeting of the Society for Sex Therapy and Research, Baltimore, MD.
40. Cantor, J. M. (2013, April). *Sex offenders: Relating research to policy.* Invited roundtable presentation at the annual meeting of the Academy of Criminal Justice Sciences, Dallas, TX.
41. Cantor, J. M. (2013, March). *Pedophilia and brain research: From the basics to the state-of-the-art.* Invited workshop presented to the annual meeting of the Forensic Mental Health Association of California, Monterey, CA.
42. Cantor, J. M. (2013, January). *Pedophilia and child molestation.* Invited lecture presented to the Canadian Border Services Agency, Toronto, Ontario, Canada.
43. Cantor, J. M. (2012, November). *Understanding pedophilia and sexual offenders against children: Neuroimaging and its implications for public safety.* Invited guest lecture to University of New Mexico School of Medicine Health Sciences Center, Albuquerque, NM.
44. Cantor, J. M. (2012, November). *Pedophilia and brain research.* Invited guest lecture to the annual meeting of the Circles of Support and Accountability, Toronto, Ontario, Canada.
45. Cantor, J. M. (2012, January). *Current findings on pedophilia brain research.* Invited workshop at the San Diego International Conference on Child and Family Maltreatment, San Diego, CA.
46. Cantor, J. M. (2012, January). *Pedophilia and the risk to re-offend.* Invited lecture to the Ontario Court of Justice Judicial Development Institute, Toronto, Ontario, Canada.
47. Cantor, J. M. (2011, November). *Pedophilia and the brain: What it means for assessment, treatment, and policy.* Plenary Lecture presented at the Association for the Treatment of Sexual Abusers, Toronto, Ontario, Canada.
48. Cantor, J. M. (2011, July). *Towards understanding contradictory findings in the neuroimaging of pedophilic men.* Keynote address to 7th annual conference on Research in Forensic Psychiatry, Regensberg, Germany.

49. Cantor, J. M. (2011, March). *Understanding sexual offending and the brain: Brain basics to the state of the art.* Workshop presented at the winter conference of the Oregon Association for the Treatment of Sexual Abusers, Oregon City, OR.
50. Cantor, J. M. (2010, October). *Manuscript publishing for students.* Workshop presented at the 29th annual meeting of the Association for the Treatment of Sexual Abusers, Phoenix, AZ.
51. Cantor, J. M. (2010, August). *Is sexual orientation a paraphilia?* Invited lecture at the International Behavioral Development Symposium, Lethbridge, Alberta, Canada.
52. Cantor, J. M. (2010, March). *Understanding sexual offending and the brain: From the basics to the state of the art.* Workshop presented at the annual meeting of the Washington State Association for the Treatment of Sexual Abusers, Blaine, WA.
53. Cantor, J. M. (2009, January). *Brain structure and function of pedophilia men.* Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario.
54. Cantor, J. M. (2008, April). *Is pedophilia caused by brain dysfunction?* Invited address to the University-wide Science Day Lecture Series, SUNY Oswego, Oswego, NY.
55. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2006, September). *MRIs of pedophilic men.* Invited presentation at the 25th annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
56. Cantor, J. M., Blanchard, R., & Christensen, B. K. (2003, March). *Findings in and implications of neuropsychology and epidemiology of pedophilia.* Invited lecture at the 28th annual meeting of the Society for Sex Therapy and Research, Miami.
57. Cantor, J. M., Christensen, B. K., Klassen, P. E., Dickey, R., & Blanchard, R. (2001, July). *Neuropsychological functioning in pedophiles.* Invited lecture presented at the 27th annual meeting of the International Academy of Sex Research, Bromont, Canada.
58. Cantor, J. M., Blanchard, R., Christensen, B., Klassen, P., & Dickey, R. (2001, February). *First glance at IQ, memory functioning and handedness in sex offenders.* Lecture presented at the Forensic Lecture Series, Centre for Addiction and Mental Health, Toronto, Ontario, Canada.
59. Cantor, J. M. (1999, November). *Reversal of SSRI-induced male sexual dysfunction: Suggestions from an animal model.* Grand Rounds presentation at the Allan Memorial Institute, Royal Victoria Hospital, Montréal, Canada.

PAPER PRESENTATIONS AND SYMPOSIA

1. Cantor, J. M. (2020, April). "I'd rather have a trans kid than a dead kid": Critical assessment of reported rates of suicidality in trans kids. *Paper presented at the annual meeting of the Society for the Sex Therapy and Research.* Online in lieu of in person meeting.
2. Stephens, S., Lalumière, M., Seto, M. C., & Cantor, J. M. (2017, October). *The relationship between sexual responsiveness and sexual exclusivity in phallometric profiles.* Paper presented at the annual meeting of the Canadian Sex Research Forum, Fredericton, New Brunswick, Canada.
3. Stephens, S., Cantor, J. M., & Seto, M. C. (2017, March). *Can the SSPI-2 detect hebephilic sexual interest?* Paper presented at the annual meeting of the American-Psychology Law Society Annual Meeting, Seattle, WA.
4. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2015, October). *Victim choice polymorphism and recidivism.* Symposium Presentation. Paper presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
5. McPhail, I. V., Hermann, C. A., Fernane, S. Fernandez, Y., Cantor, J. M., & Nunes, K. L. (2014, October). *Sexual deviance in sexual offenders against children: A meta-analytic review of phallometric research.* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
6. Stephens, S., Seto, M. C., Cantor, J. M., & Goodwill, A. M. (2014, October). *Is hebephilic sexual interest a criminogenic need?: A large scale recidivism study.* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
7. Stephens, S., Seto, M. C., Cantor, J. M., & Lalumière, M. (2014, October). *Development and validation of the Revised Screening Scale for Pedophilic Interests (SSPI–2).* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
8. Cantor, J. M., Lafaille, S., Hannah, J., Kucyi, A., Soh, D., Girard, T. A., & Mikulis, D. M. (2014, September). *Pedophilia and the brain: White matter differences detected with DTI.* Paper presented at the 13th annual meeting of the International Association for the Treatment of Sexual Abusers, Porto, Portugal.
9. Stephens, S., Seto, M., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2014, March). *The role of hebephilic sexual interests in sexual victim choice.* Paper presented at the annual meeting of the American Psychology and Law Society, New Orleans, LA.
10. McPhail, I. V., Fernane, S. A., Hermann, C. A., Fernandez, Y. M., Nunes, K. L., & Cantor, J. M. (2013, November). *Sexual deviance and sexual recidivism in sexual offenders against children: A meta-analysis.* Paper presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
11. Cantor, J. M. (2013, September). *Pedophilia and the brain: Current MRI research and its implications.* Paper presented at the 21st annual World Congress for Sexual Health, Porto Alegre, Brazil. [Featured among Best Abstracts, top 10 of 500.]
12. Cantor, J. M. (Chair). (2012, March). *Innovations in sex research.* Symposium conducted at the 37th annual meeting of the Society for Sex Therapy and Research, Chicago.
13. Cantor, J. M., & Blanchard, R. (2011, August). fMRI versus phallometry in the diagnosis of pedophilia and hebephilia. In J. M. Cantor (Chair), *Neuroimaging of men's object*

preferences. Symposium presented at the 37th annual meeting of the International Academy of Sex Research, Los Angeles, USA.

14. Cantor, J. M. (Chair). (2011, August). *Neuroimaging of men's object preferences.* Symposium conducted at the 37th annual meeting of the International Academy of Sex Research, Los Angeles.
15. Cantor, J. M. (2010, October). A meta-analysis of neuroimaging studies of male sexual arousal. In S. Stolerú (Chair), *Brain processing of sexual stimuli in pedophilia: An application of functional neuroimaging.* Symposium presented at the 29th annual meeting of the Association for the Treatment of Sexual Abusers, Phoenix, AZ.
16. Chivers, M. L., Seto, M. C., Cantor, J. C., Grimbos, T., & Roy, C. (April, 2010). *Psychophysiological assessment of sexual activity preferences in women.* Paper presented at the 35th annual meeting of the Society for Sex Therapy and Research, Boston, USA.
17. Cantor, J. M., Girard, T. A., & Lovett-Barron, M. (2008, November). *The brain regions that respond to erotica: Sexual neuroscience for dummies.* Paper presented at the 51st annual meeting of the Society for the Scientific Study of Sexuality, San Juan, Puerto Rico.
18. Barbaree, H., Langton, C., Blanchard, R., & Cantor, J. M. (2007, October). *The role of age-at-release in the evaluation of recidivism risk of sexual offenders.* Paper presented at the 26th annual meetingof the Association for the Treatment of Sexual Abusers, San Diego.
19. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2006, July). *Pedophilia and brain morphology.* Abstract and paper presented at the 32nd annual meeting of the International Academy of Sex Research, Amsterdam, Netherlands.
20. Seto, M. C., Cantor, J. M., & Blanchard, R. (2006, March). *Child pornography offending is a diagnostic indicator of pedophilia*. Paper presented at the 2006 annual meeting of the American Psychology-Law Society Conference, St. Petersburg, Florida.
21. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove, S. M., & Ellis, L. (2005, August). *Interaction of fraternal birth order and handedness in the development of male homosexuality.* Abstract and paper presented at the International Behavioral Development Symposium, Minot, North Dakota.
22. Cantor, J. M., & Blanchard, R. (2005, July). *Quantitative reanalysis of aggregate data on IQ in sexual offenders.* Abstract and poster presented at the 31st annual meeting of the International Academy of Sex Research, Ottawa, Canada.
23. Cantor, J. M. (2003, August). *Sex reassignment on demand: The clinician's dilemma.* Paper presented at the 111th annual meeting of the American Psychological Association, Toronto, Canada.
24. Cantor, J. M. (2003, June). *Meta-analysis of VIQ–PIQ differences in male sex offenders.* Paper presented at the Harvey Stancer Research Day, Toronto, Ontario, Canada.
25. Cantor, J. M. (2002, August). *Gender role in autogynephilic transsexuals: The more things change...* Paper presented at the 110th annual meeting of the American Psychological Association, Chicago.

26. Cantor, J. M., Christensen, B. K., Klassen, P. E., Dickey, R., & Blanchard, R. (2001, June). *IQ, memory functioning, and handedness in male sex offenders*. Paper presented at the Harvey Stancer Research Day, Toronto, Ontario, Canada.
27. Cantor, J. M. (1998, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 106th annual meeting of the American Psychological Association.
28. Cantor, J. M. (1997, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 105th annual meeting of the American Psychological Association.
29. Cantor, J. M. (1997, August). *Convention orientation for lesbian, gay, and bisexual students*. Paper presented at the 105th annual meeting of the American Psychological Association.
30. Cantor, J. M. (1996, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 104th annual meeting of the American Psychological Association.
31. Cantor, J. M. (1996, August). *Symposium: Question of inclusion: Lesbian and gay psychologists and accreditation*. Paper presented at the 104th annual meeting of the American Psychological Association, Toronto.
32. Cantor, J. M. (1996, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 104th annual meeting of the American Psychological Association.
33. Cantor, J. M. (1995, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 103rd annual meeting of the American Psychological Association.
34. Cantor, J. M. (1995, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 103rd annual meeting of the American Psychological Association.
35. Cantor, J. M. (1994, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 102nd annual meeting of the American Psychological Association.
36. Cantor, J. M. (1994, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 102nd annual meeting of the American Psychological Association.
37. Cantor, J. M., & Pilkington, N. W. (1992, August). *Homophobia in psychology programs: A survey of graduate students*. Paper presented at the Centennial Convention of the American Psychological Association, Washington, DC. (ERIC Document Reproduction Service No. ED 351 618)
38. Cantor, J. M. (1991, August). *Being gay and being a graduate student: Double the memberships, four times the problems*. Paper presented at the 99th annual meeting of the American Psychological Association, San Francisco.

POSTER PRESENTATIONS

1. Klein, L., Stephens, S., Goodwill, A. M., Cantor, J. M., & Seto, M. C. (2015, October). *The psychological propensities of risk in undetected sexual offenders.* Poster presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
2. Pullman, L. E., Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2015, October). *Why are incest offenders less likely to recidivate?* Poster presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
3. Seto, M. C., Stephens, S. M., Cantor, J. M., Lalumiere, M. L., Sandler, J. C., & Freeman, N. A. (2015, August). *The development and validation of the Revised Screening Scale for Pedophilic Interests (SSPI-2).* Poster presentation at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
4. Soh, D. W., & Cantor, J. M. (2015, August). *A peek inside a furry convention.* Poster presentation at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
5. VanderLaan, D. P., Lobaugh, N. J., Chakravarty, M. M., Patel, R., Chavez, S. Stojanovski, S. O., Takagi, A., Hughes, S. K., Wasserman, L., Bain, J., Cantor, J. M., & Zucker, K. J. (2015, August). *The neurohormonal hypothesis of gender dysphoria: Preliminary evidence of cortical surface area differences in adolescent natal females.* Poster presentation at the 31st annual meeting of the International Academy of Sex Research. Toronto, Canada.
6. Cantor, J. M., Lafaille, S. J., Moayedi, M., Mikulis, D. M., & Girard, T. A. (2015, June). *Diffusion tensor imaging (DTI) of the brain in pedohebephilic men: Preliminary analyses.* Harvey Stancer Research Day, Toronto, Ontario Canada.
7. Newman, J. E., Stephens, S., Seto, M. C., & Cantor, J. M. (2014, October). *The validity of the Static-99 in sexual offenders with low intellectual abilities.* Poster presentation at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
8. Lykins, A. D., Walton, M. T., & Cantor, J. M. (2014, June). *An online assessment of personality, psychological, and sexuality trait variables associated with self-reported hypersexual behavior.* Poster presentation at the 30th annual meeting of the International Academy of Sex Research, Dubrovnik, Croatia.
9. Stephens, S., Seto, M. C., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2013, November). *The utility of phallometry in the assessment of hebephilia.* Poster presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
10. Stephens, S., Seto, M. C., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2013, October). *The role of hebephilic sexual interests in sexual victim choice.* Poster presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
11. Fazio, R. L., & Cantor, J. M. (2013, October). *Analysis of the Fazio Laterality Inventory (FLI) in a population with established atypical handedness.* Poster presented at the 33rd annual meeting of the National Academy of Neuropsychology, San Diego.
12. Lafaille, S., Hannah, J., Soh, D., Kucyi, A., Girard, T. A., Mikulis, D. M., & Cantor, J. M. (2013, August). *Investigating resting state networks in pedohebephiles.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.

13. McPhail, I. V., Lykins, A. D., Robinson, J. J., LeBlanc, S., & Cantor, J. M. (2013, August). *Effects of prescription medication on volumetric phallometry output.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.
14. Murray, M. E., Dyshniku, F., Fazio, R. L., & Cantor, J. M. (2013, August). *Minor physical anomalies as a window into the prenatal origins of pedophilia.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.
15. Sutton, K. S., Stephens, S., Dyshniku, F., Tulloch, T., & Cantor, J. M. (2013, August). *Pilot group treatment for "procrasturbation."* Poster presented at 39th annual meeting of the International Academy of Sex Research, Chicago.
16. Sutton, K. S., Pytyck, J., Stratton, N., Sylva, D., Kolla, N., & Cantor, J. M. (2013, August). *Client characteristics by type of hypersexuality referral: A quantitative chart review.* Poster presented at the 39th annual meeting of the International Academy of Sex Research, Chicago.
17. Fazio, R. L., & Cantor, J. M. (2013, June). *A replication and extension of the psychometric properties of the Digit Vigilance Test.* Poster presented at the 11th annual meeting of the American Academy of Clinical Neuropsychology, Chicago.
18. Lafaille, S., Moayedi, M., Mikulis, D. M., Girard, T. A., Kuban, M., Blak, T., & Cantor, J. M. (2012, July). *Diffusion Tensor Imaging (DTI) of the brain in pedohebephilic men: Preliminary analyses.* Poster presented at the 38th annual meeting of the International Academy of Sex Research, Lisbon, Portugal.
19. Lykins, A. D., Cantor, J. M., Kuban, M. E., Blak, T., Dickey, R., Klassen, P. E., & Blanchard, R. (2010, July). *Sexual arousal to female children in gynephilic men.* Poster presented at the 38th annual meeting of the International Academy of Sex Research, Prague, Czech Republic.
20. Cantor, J. M., Girard, T. A., Lovett-Barron, M., & Blak, T. (2008, July). *Brain regions responding to visual sexual stimuli: Meta-analysis of PET and fMRI studies.* Abstract and poster presented at the 34th annual meeting of the International Academy of Sex Research, Leuven, Belgium.
21. Lykins, A. D., Blanchard, R., Cantor, J. M., Blak, T., & Kuban, M. E. (2008, July). *Diagnosing sexual attraction to children: Considerations for DSM-V.* Poster presented at the 34th annual meeting of the International Academy of Sex Research, Leuven, Belgium.
22. Cantor, J. M., Blak, T., Kuban, M. E., Klassen, P. E., Dickey, R. and Blanchard, R. (2007, October). *Physical height in pedophilia and hebephilia.* Poster presented at the 26th annual meeting of the Association for the Treatment of Sexual Abusers, San Diego.
23. Cantor, J. M., Blak, T., Kuban, M. E., Klassen, P. E., Dickey, R. and Blanchard, R. (2007, August). *Physical height in pedophilia and hebephilia.* Abstract and poster presented at the 33rd annual meeting of the International Academy of Sex Research, Vancouver, Canada.
24. Puts, D. A., Blanchard, R., Cardenas, R., Cantor, J., Jordan, C. L., & Breedlove, S. M. (2007, August). *Earlier puberty predicts superior performance on male-biased visuospatial tasks in men but not women.* Abstract and poster presented at the 33rd annual meeting of the International Academy of Sex Research, Vancouver, Canada.
25. Seto, M. C., Cantor, J. M., & Blanchard, R. (2005, November). *Possession of child pornography is a diagnostic indicator of pedophilia.* Poster presented at the 24th annual meeting of the Association for the Treatment of Sexual Abusers, New Orleans.

26. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove. S. M., & Ellis, L. (2005, July). *Interaction of fraternal birth order and handedness in the development of male homosexuality.* Abstract and poster presented at the 31st annual meeting of the International Academy of Sex Research, Ottawa, Canada.
27. Cantor, J. M., & Blanchard, R. (2003, July). *The reported VIQ–PIQ differences in male sex offenders are artifactual?* Abstract and poster presented at the 29th annual meeting of the International Academy of Sex Research, Bloomington, Indiana.
28. Christensen, B. K., Cantor, J. M., Millikin, C., & Blanchard, R. (2002, February). *Factor analysis of two brief memory tests: Preliminary evidence for modality-specific measurement.* Poster presented at the 30th annual meeting of the International Neuropsychological Society, Toronto, Ontario, Canada.
29. Cantor, J. M., Blanchard, R., Paterson, A., Bogaert, A. (2000, June). *How many gay men owe their sexual orientation to fraternal birth order?* Abstract and poster presented at the International Behavioral Development Symposium, Minot, North Dakota.
30. Cantor, J. M., Binik, Y., & Pfaus, J. G. (1996, November). *Fluoxetine inhibition of male rat sexual behavior: Reversal by oxytocin*. Poster presented at the 26th annual meeting of the Society for Neurosciences, Washington, DC.
31. Cantor, J. M., Binik, Y., & Pfaus, J. G. (1996, June). *An animal model of fluoxetine-induced sexual dysfunction: Dose dependence and time course*. Poster presented at the 28th annual Conference on Reproductive Behavior, Montréal, Canada.
32. Cantor, J. M., O'Connor, M. G., Kaplan, B., & Cermak, L. S. (1993, June). *Transient events test of retrograde memory: Performance of amnestic and unimpaired populations*. Poster presented at the 2nd annual science symposium of the Massachusetts Neuropsychological Society, Cambridge, MA.

EDITORIAL AND PEER-REVIEWING ACTIVITIES

Editor-in-Chief

Sexual Abuse: A Journal of Research and Treatment	Jan., 2010–Dec., 2014

Editorial Board Memberships

Journal of Sexual Aggression	Jan., 2010–Dec., 2021
Journal of Sex Research, The	Jan., 2008–Aug., 2020
Sexual Abuse: A Journal of Research and Treatment	Jan., 2006–Dec., 2019
Archives of Sexual Behavior	Jan., 2004–Present
The Clinical Psychologist	Jan., 2004–Dec., 2005

Ad hoc Journal Reviewer Activity

American Journal of Psychiatry
Annual Review of Sex Research
Archives of General Psychiatry
Assessment
Biological Psychiatry
BMC Psychiatry
Brain Structure and Function
British Journal of Psychiatry
British Medical Journal
Canadian Journal of Behavioural Science
Canadian Journal of Psychiatry
Cerebral Cortex
Clinical Case Studies
Comprehensive Psychiatry
Developmental Psychology
European Psychologist
Frontiers in Human Neuroscience
Human Brain Mapping
International Journal of Epidemiology
International Journal of Impotence Research
International Journal of Sexual Health
International Journal of Transgenderism
Journal of Abnormal Psychology
Journal of Clinical Psychology
Journal of Consulting and Clinical Psychology
Journal of Forensic Psychology Practice
Journal for the Scientific Study of Religion
Journal of Sexual Aggression
Journal of Sexual Medicine
Journal of Psychiatric Research
Nature Neuroscience
Neurobiology Reviews
Neuroscience & Biobehavioral Reviews
Neuroscience Letters
Proceedings of the Royal Society B (Biological Sciences)
Psychological Assessment
Psychological Medicine
Psychological Science
Psychology of Men & Masculinity
Sex Roles
Sexual and Marital Therapy
Sexual and Relationship Therapy
Sexuality & Culture
Sexuality Research and Social Policy
The Clinical Psychologist
Traumatology
World Journal of Biological Psychiatry

GRANT REVIEW PANELS

2017–2021	Member, College of Reviewers, *Canadian Institutes of Health Research,* Canada.
2017	Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.
2017	Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence. *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.
2016	Reviewer. National Science Center [*Narodowe Centrum Nauki*], Poland.
2016	Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.
2015	Assessor (Peer Reviewer). Discovery Grants Program. *Australian Research Council,* Australia.
2015	Reviewer. *Czech Science Foundation,* Czech Republic.
2015	Reviewer, "Off the beaten track" grant scheme. *Volkswagen Foundation,* Germany.
2015	External Reviewer, Discovery Grants program—Biological Systems and Functions. *National Sciences and Engineering Research Council of Canada*, Canada
2015	Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.
2014	Assessor (Peer Reviewer). Discovery Grants Program. *Australian Research Council,* Australia.
2014	External Reviewer, Discovery Grants program—Biological Systems and Functions. *National Sciences and Engineering Research Council of Canada*, Canada.
2014	Panel Member, Dean's Fund—Clinical Science Panel. *University of Toronto Faculty of Medicine*, Canada.
2014	Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.
2013	Panel Member, Grant Miller Cancer Research Grant Panel. *University of Toronto Faculty of Medicine*, Canada.

2013	Panel Member, Dean of Medicine Fund New Faculty Grant Clinical Science Panel. *University of Toronto Faculty of Medicine,* Canada.
2012	Board Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence (2nd round). *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.
2012	External Reviewer, University of Ottawa Medical Research Fund. *University of Ottawa Department of Psychiatry*, Canada.
2012	External Reviewer, Behavioural Sciences—B. *Canadian Institutes of Health Research*, Canada.
2011	Board Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence. *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.

TEACHING AND TRAINING

PostDoctoral Research Supervision
Law & Mental Health Program, Centre for Addiction and Mental Health, Toronto, Canada

Dr. Katherine S. Sutton	Sept., 2012–Dec., 2013
Dr. Rachel Fazio	Sept., 2012–Aug., 2013
Dr. Amy Lykins	Sept., 2008–Nov., 2009

Doctoral Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Michael Walton • University of New England, Australia	Sept., 2017–Aug., 2018
Debra Soh • York University	May, 2013–Aug, 2017
Skye Stephens • Ryerson University	April, 2012–June, 2016

Masters Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Nicole Cormier • Ryerson University	June, 2012–present
Debra Soh • Ryerson University	May, 2009–April, 2010

Undergraduate Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Kylie Reale • Ryerson University	Spring, 2014
Jarrett Hannah • University of Rochester	Summer, 2013
Michael Humeniuk • University of Toronto	Summer, 2012

Clinical Supervision (Doctoral Internship)
Clinical Internship Program, Centre for Addiction and Mental Health, Toronto, Canada

Katherine S. Sutton • Queen's University	2011–2012
David Sylva • Northwestern University	2011–2012
Jordan Rullo • University of Utah	2010–2011
Lea Thaler • University of Nevada, Las Vegas	2010–2011
Carolin Klein • University of British Columbia	2009–2010
Bobby R. Walling • University of Manitoba	2009–2010

TEACHING AND TRAINING

Clinical Supervision (Doctoral- and Masters- level practica)
Centre for Addiction and Mental Health, Toronto, Canada

Tyler Tulloch • Ryerson University	2013–2014
Natalie Stratton • Ryerson University	Summer, 2013
Fiona Dyshniku • University of Windsor	Summer, 2013
Mackenzie Becker • McMaster University	Summer, 2013
Skye Stephens • Ryerson University	2012–2013
Vivian Nyantakyi • Capella University	2010–2011
Cailey Hartwick • University of Guelph	Fall, 2010
Tricia Teeft • Humber College	Summer, 2010
Allison Reeves • Ontario Institute for Studies in Education/Univ. of Toronto	2009–2010
Helen Bailey • Ryerson University	Summer, 2009
Edna Aryee • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Iryna Ivanova • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Jennifer Robinson • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Zoë Laksman • Adler School of Professional Psychology	2005–2006
Diana Mandelew • Adler School of Professional Psychology	2005–2006
Susan Wnuk • York University	2004–2005
Hiten Lad • Adler School of Professional Psychology	2004–2005
Natasha Williams • Adler School of Professional Psychology	2003–2004
Lisa Couperthwaite • Ontario Institute for Studies in Education/Univ. of Toronto	2003–2004
Lori Gray, née Robichaud • University of Windsor	Summer, 2003
Sandra Belfry • Ontario Institute for Studies in Education/Univ. of Toronto	2002–2003
Althea Monteiro • York University	Summer, 2002
Samantha Dworsky • York University	2001–2002
Kerry Collins • University of Windsor	Summer, 2001
Jennifer Fogarty • Waterloo University	2000–2001
Emily Cripps • Waterloo University	Summer, 2000
Lee Beckstead • University of Utah	2000

PROFESSIONAL SOCIETY ACTIVITIES

OFFICES HELD

2018–2019	Local Host. Society for Sex Therapy and Research.
2015	Member, International Scientific Committee, World Association for Sexual Health.
2015	Member, Program Planning and Conference Committee, Association for the Treatment of Sexual Abusers
2012–2013	Chair, Student Research Awards Committee, Society for Sex Therapy & Research
2012–2013	Member, Program Planning and Conference Committee, Association for the Treatment of Sexual Abusers
2011–2012	Chair, Student Research Awards Committee, Society for Sex Therapy & Research
2010–2011	Scientific Program Committee, International Academy of Sex Research
2002–2004	Membership Committee • APA Division 12 (Clinical Psychology)
2002–2003	Chair, Committee on Science Issues, APA Division 44
2002	Observer, Grant Review Committee • Canadian Institutes of Health Research Behavioural Sciences (B)
2001–2009	Reviewer • APA Division 44 Convention Program Committee
2001, 2002	Reviewer • APA Malyon-Smith Scholarship Committee
2000–2005	Task Force on Transgender Issues, APA Division 44
1998–1999	Consultant, APA Board of Directors Working Group on Psychology Marketplace
1997	Student Representative • APA Board of Professional Affairs' Institute on TeleHealth
1997–1998	Founder and Chair • APA/APAGS Task Force on New Psychologists' Concerns
1997–1999	Student Representative • APA/CAPP Sub-Committee for a National Strategy for Prescription Privileges
1997–1999	Liaison • APA Committee for the Advancement of Professional Practice
1997–1998	Liaison • APA Board of Professional Affairs
1993–1997	Founder and Chair • APA/APAGS Committee on LGB Concerns

PROFESSIONAL SOCIETY ACTIVITIES

MEMBERSHIPS

2017–2021 Member • *Canadian Sex Research Forum*

2009–Present Member • *Society for Sex Therapy and Research*

2006–Present Member (elected) • *International Academy of Sex Research*

2006–Present Research and Clinical Member • *Association for the Treatment of Sex Abusers*

2003–2006 Associate Member (elected) • *International Academy of Sex Research*

2002 Founding Member • CPA Section on Sexual Orientation and Gender Identity

2001–2013 Member • *Canadian Psychological Association* (CPA)

2000–2015 Member • *American Association for the Advancement of Science*

2000–2015 Member • *American Psychological Association* (APA)

APA Division 12 (Clinical Psychology)

APA Division 44 (Society for the Psychological Study of LGB Issues)

2000–2020 Member • *Society for the Scientific Study of Sexuality*

1995–2000 Student Member • *Society for the Scientific Study of Sexuality*

1993–2000 Student Affiliate • *American Psychological Association*

1990–1999 Member, American Psychological Association of Graduate Students (APAGS)

CLINICAL LICENSURE/REGISTRATION

Certificate of Registration, Number 3793
College of Psychologists of Ontario, Ontario, Canada

AWARDS AND HONORS

2017 Elected Fellow, Association for the Treatment of Sexual Abusers

2011 Howard E. Barbaree Award for Excellence in Research
Centre for Addiction and Mental Health, Law and Mental Health Program

2004 fMRI Visiting Fellowship Program at Massachusetts General Hospital
American Psychological Association Advanced Training Institute and NIH

1999–2001 CAMH Post-Doctoral Research Fellowship
Centre for Addiction and Mental Health Foundation and Ontario Ministry of Health

1998 Award for Distinguished Contribution by a Student
American Psychological Association, Division 44

1995 Dissertation Research Grant
Society for the Scientific Study of Sexuality

1994–1996 McGill University Doctoral Scholarship

1994 Award for Outstanding Contribution to Undergraduate Teaching
"TA of the Year Award," from the McGill Psychology Undergraduate Student Association

MAJOR MEDIA

(Complete list available upon request.)

Feature-length Documentaries

Vice Canada Reports. *Age of Consent.* 14 Jan 2017.
Canadian Broadcasting Company. *I, Pedophile.* Firsthand documentaries. 10 Mar 2016.

Appearances and Interviews

11 Mar 2020. Ibbitson, John. It is crucial that Parliament gets the conversion-therapy ban right. *The Globe & Mail.*
25 Jan 2020. Ook de hulpvaardige buurman kan verzamelaar van kinderporno zin. *De Morgen.*
3 Nov 2019. Village of the damned. *60 Minutes Australia.*
1 Nov 2019. HÅKON F. HØYDAL. Norsk nettovergriper: – Jeg hater meg selv: Nordmannen laster ned overgrepsmateriale fra nettet – og oppfordrer politiet til å gi amnesti for slike som ham.
10 Oct 2019. Smith, T. Growing efforts are looking at how—or if—#MeToo offenders can be reformed. *National Public Radio.*
29 Sep 2019. Carey, B. Preying on Children: The Emerging Psychology of Pedophiles. *New York Times.*
29 Apr 2019. Mathieu, Isabelle. La poupée qui a troublé les Terre-Neuviens. *La Tribune.*
21 Mar 2019. Pope Francis wants psychological testing to prevent problem priests. But can it really do that? *The Washington Post.*
12 Dec 2018. Child sex dolls: Illegal in Canada, and dozens seized at the border. Ontario Today with Rita Celli. *CBC.*
12 Dec 2018. Celli, R. & Harris, K. Dozens of child sex dolls seized by Canadian border agents. *CBC News.*
27 Apr 2018. Rogers, Brook A. The online 'incel' culture is real–and dangerous. *New York Post.*
25 Apr 2018. Yang, J. Number cited in cryptic Facebook post matches Alek Minassian's military ID: Source. *Toronto Star.*
24 Ap 2018 Understanding 'incel'. *CTV News.*
27 Nov 2017. Carey, B. Therapy for Sexual Misconduct? It's Mostly Unproven. *New York Times.*
14 Nov 2017. Tremonti, A. M. The Current. *CBC.*
9 Nov2017. Christensen, J. Why men use masturbation to harass women. *CNN.* http://www.cnn.com/2017/11/09/health/masturbation-sexual-harassment/index.html
7 Nov 2017. Nazaryan, A. Why is the alt-right obsessed with pedophilia? *Newsweek.*
15 Oct 2017. Ouatik, B. Déscouvre. Pédophilie et science. *CBC Radio Canada.*
12 Oct 2017. Ouatik, B. Peut-on guérir la pédophilie? *CBC Radio Canada.*
11 Sep 2017. Burns, C. The young paedophiles who say they don't abuse children. *BBC News.*
18 Aug 2017. Interview. *National Post Radio.* Sirius XM Canada.
16 Aug 2017. Blackwell, Tom. Man says he was cured of pedophilia at Ottawa clinic: 'It's like a weight that's been lifted': But skeptics worry about the impact of sending pedophiles into the world convinced their curse has been vanquished. *National Post.*
26 Apr 2017. Zalkind, S. Prep schools hid sex abuse just like the catholic church. *VICE.*
24 Apr 2017. Sastre, P. Pédophilie: une panique morale jamais n'abolira un crime. *Slate France.*
12 Feb 2017. Payette, G. Child sex doll trial opens Pandora's box of questions. *CBC News.*
26 Nov 2016. Det morke uvettet ["The unknown darkness]". *Fedrelandsvennen.*
13 July 2016. Paedophilia: Shedding light on the dark field. *The Economist.*

1 Jul 2016. Debusschere, B. Niet iedereen die kinderporno kijkt, is een pedofiel: De mythes rond pedofilie ontkracht. *De Morgen.*
12 Apr 2016. O'Connor, R. Terence Martin: The Tasmanian MP whose medication 'turned him into a paedophile'. *The Independent.*
8 Mar 2016. Bielski, Z. 'The most viscerally hated group on earth': Documentary explores how intervention can stop pedophiles. *The Globe and Mail.*
1 Mar 2016. Elmhirst, S. What should we do about paedophiles? *The Guardian.*
24 Feb 2016. The man whose brain tumour 'turned him into a paedophile'. *The Independent.*
24 Nov 2015. Byron, T. The truth about child sex abuse. *BBC Two.*
20 Aug 2015. The Jared Fogle case: Why we understand so little about abuse. *Washington Post.*
19 Aug 2015. Blackwell, T. Treat sex offenders for impotence—to keep them out of trouble, Canadian psychiatrist says. *National Post.*
2 Aug 2015. Menendez, J. BBC News Hour. *BBC World Service.*
13 Jul 2015. The nature of pedophilia. *BBC Radio 4.*
9 Jul 2015. The sex-offender test: How a computerized assessment can help determine the fate of men who've been accused of sexually abusing children. *The Atlantic.*
10 Apr 2015. NWT failed to prevent sex offender from abusing stepdaughter again. *CBC News.*
10 Feb 2015. Savage, D. "The ethical sadist." In Savage Love. *The Stranger.*
31 Jan 2015. Begrip voor/van pedofilie [Understanding pedophilia]. *de Volkskrant.*
9 Dec 2014. Carey, B. When a rapist's weapon is a pill. *New York Times.*
1 Dec 2014. Singal, J. Can virtual reality help pedophiles? *New York Magazine.*
17 Nov2014. Say pedófile, busco aydua. *El Pais.*
4 Sep 2014. Born that way? *Ideas, with Paul Kennedy.* CBC Radio One.
27 Aug 2014. Interrogating the statistics for the prevalence of paedophilia. BBC.
25 Jul 2014. Stephenson, W. The prevalence of paedophilia. *BBC World Service.*
21 Jul 2014. Hildebrandt, A. Virtuous Pedophiles group gives support therapy cannot. *CBC.*
26 Jan 2014. Paedophilia a result of faulty wiring, scientists suggest. *Daily Mail.*
22 Dec 2013. Kane, L. Is pedophilia a sexual orientation? *Toronto Star.*
21 Jul 2013. Miller, L. The turn-on switch: Fetish theory, post-Freud. *New York Magazine.*
1 Jul 2013. Morin, H. Pédophilie: la difficile quête d'une origine biologique. *Le Monde.*
2 Jun 2013. Malcolm, L. The psychology of paedophilia. *Australian National Radio.*
1 Mar 2013. Kay, J. The mobbing of Tom Flanagan is unwarranted and cruel. *National Post.*
6 Feb 2013. Boy Scouts board delays vote on lifting ban on gays. *L.A. Times.*
31 Aug 2012. CNN Newsroom interview with Ashleigh Banfield. *CNN.*
24 Jun 2012. CNN Newsroom interview with Don Lemon. *CNN.*

EXPERT WITNESS TESTIMONY

1.	2022	Roe v Utah High School Activities Assn.	Salt Lake County, UT
2.	2022	Re Commitment of Baunee	Syracuse, NY
3.	2022	PFLAG, et al. v Abbott	Travis County, TX
4.	2022	Doe v Texas	Travis County, TX
5.	2022	A.M. v Indiana Public Schools	Southern District, IN
6.	2022	Ricard v Kansas	Geery County, KS
7.	2022	Eknes-Tucker v Alabama	Montgomery County, AL
8.	2022	Hersom & Doe v WVa Health & Human Services	Southern District, WVa
9.	2022	BPJ v West Virginia Board of Education	Southern District, WVa
10.	2021	Cox v Indiana Child Services	Child Services, IN
11.	2021	Cross et al. v Loudoun School Board	Loudoun, VA
12.	2021	Josephson v University of Kentucky	Western District, KY
13.	2021	Re Commitment of Michael Hughes (Frye Hearing)	Cook County, IL
14.	2019	US v Peter Bright	Southern District, NY
15.	2019	Spiegel-Savoie v Savoie-Sexten (Custody Hearing)	Boston, MA
16.	2019	Re Commitment of Steven Casper (Frye Hearing)	Kendall County, IL
17.	2019	Re Commitment of Inger (Frye Hearing)	Poughkeepsie, NY
18.	2018	Re Commitment of Little (Frye Hearing)	Utica, NY
19.	2018	Canada vs John Fitzpatrick (Sentencing Hearing)	Toronto, ON, Canada
20.	2017	Re Commitment of Nicholas Bauer (Frye Hearing)	Lee County, IL
21.	2017	US vs William Leford (Presentencing Hearing)	Warnock, GA
22.	2015	Florida v Jon Herb	Naples, FL
23.	2010	Re Detention of William Dutcher	Seattle, WA

EXHIBIT "B"

THE SCIENCE OF GENDER DYSPHORIA AND TRANSSEXUALISM

REPORT SUBMITTED TO THE FLORIDA AGENCY FOR HEALTHCARE ADMINISTRATION

JAMES M. CANTOR, PHD

17 MAY 2022

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I.Ā Background & Credentials

1.Ā I am a research scientist and clinical psychologist and am currently the Director of the Toronto Sexuality Centre in Canada. For my education and training, I received my Bachelor of Science degree from Rensselaer Polytechnic Institute, where I studied mathematics, physics, and computer science. I received my Master of Arts degree in psychology from Boston University, where I studied neuropsychology. I earned my Doctoral degree in psychology from McGill University, which included successfully defending my doctoral dissertation studying the effects of psychiatric medication and neurochemical changes on sexual behavior, and included a clinical internship assessing and treating people with a wide range of sexual and gender identity issues.

2.Ā Over my academic career, my posts have included Senior Scientist and Psychologist at the Centre for Addiction and Mental Health (CAMH), Head of Research for CAMH's Sexual Behaviour Clinic, Associate Professor of Psychiatry on the University of Toronto Faculty of Medicine, and Editor-in-Chief of the peer reviewed journal, *Sexual Abuse*. That journal is one of the top-impact, peer-reviewed journals in sexual behavior science and is the official journal of the Association for the Treatment of Sexual Abusers. In that appointment, I was charged to be the final arbiter for impartially deciding which contributions from other scientists in my field merited publication. I believe that appointment indicates not only my extensive experience evaluating scientific claims and methods, but also the faith put in me by the other scientists in my field. I have also served on the Editorial Boards of the *Journal of Sex Research*, the *Archives of Sexual Behavior*, and *Journal of Sexual Aggression*. Thus, although I cannot speak for other scientists, I regularly interact with and am routinely exposed to the views and opinions of most of the scientists active in our field today, within the United States and throughout the world.

3.Ā My scientific expertise spans the biological and non-biological development

of human sexuality, the classification of sexual interest patterns, the assessment and treatment of atypical sexualities, and the application of statistics and research methodology in sex research. I am the author of over 50 peer-reviewed articles in my field, spanning the development of sexual orientation, gender identity, hypersexuality, and atypical sexualities collectively referred to as *paraphilias*. I am the author of the past three editions of the gender identity and atypical sexualities chapter of the *Oxford Textbook of Psychopathology*. These works are now routinely cited in the field and are included in numerous other textbooks of sex research.

4.Ā I began providing clinical services to people with gender dysphoria in 1998. I trained under Dr. Ray Blanchard of CAMH and have participated in the assessment and treatment of over one hundred individuals at various stages of considering and enacting both transition and detransition, including its legal, social, and medical (both cross-hormonal and surgical) aspects. My clinical experience includes the assessment and treatment of several thousand individuals experiencing other atypical sexuality issues. I am regularly called upon to provide objective assessment of the science of human sexuality by the courts (prosecution and defense), professional media, and mental health care providers.

5.Ā A substantial proportion of the existing research on gender dysphoria comes from two clinics, one in Canada and one in the Netherlands. The CAMH gender clinic (previously, Clarke Institute of Psychiatry) was in operation for several decades, and its research was directed by Dr. Kenneth Zucker. I was employed by CAMH between 1998 and 2018. Although I was a member of the hospital's adult forensic program, I remained in regular contact with members of the CAMH child psychiatry program (of which Dr. Zucker was a member), and we collaborated on multiple research projects.

II.Ā Summary of Conclusions

- The scientific research consistently demonstrates that there is more than one distinct phenomenon that can lead to gender dysphoria. These types are distinguished by differing epidemiological and demographic patterns, unique psychological and behavioral profiles, and differing responses to the treatment options.
- Studies show that otherwise mentally healthy adults—undergoing thorough assessment (1–2 year Real Life Experience) and supervised by clinics engaged in gate-keeping roles—adjust well to life as the opposite sex.
- Regarding pre-pubescent children with gender dysphoria, there have been 11 outcomes studies. All 11 reported the majority of children to cease to feel dysphoric by puberty. They typically report being gay or lesbian instead.
- Regarding pubescent and adolescent age minors, there have been (also) 11 follow-up studies of puberty blockers and cross-sex hormones. In four, mental health failed to improve at all. In five, mental health improved, but because psychotherapy and medical interventions were both provided, which one caused the improvement could not be identified. The two remaining studies employed methods that did permit psychotherapy effects to be distinguished from medical effects, and neither found medical intervention to be superior to psychotherapy-only.
- The research importantly distinguishes completed suicides—which occur primarily in biological males and involve the intent to die—from suicidal ideation, gestures, and attempts—which occur primarily in biological females and represent psychological distress and cries for help. The evidence is minimally consistent with transphobia being the predominant cause of suicidality. The evidence is very strongly consistent with the hypothesis that other mental health issues, such as Borderline Personality Disorder (BPD), cause suicidality and unstable identities, including gender identity confusion.
- The international consensus of public health care services is that there remains no evidence to support medicalized transition for youth. The responses in the U.S. stand in stark contrast with Sweden, Finland, France, and the United Kingdom, which are issuing increasingly restrictive statements and policies, including bans on all medical transition of minors.

III. Science of Gender Dysphoria and Transsexualism

6. One of the most widespread public misunderstandings about transsexualism and people with gender dysphoria is that all cases of gender dysphoria represent the same phenomenon; however, the clinical science has long and consistently demonstrated that gender dysphoric children (cases of *early-onset* gender dysphoria) do not represent the same phenomenon as adult gender dysphoria

(cases of *late-onset* gender dysphoria),[1] merely attending clinics at younger ages. That is, gender dysphoric children are not simply younger versions of gender dysphoric adults. They differ in every known regard, from sexual interest patterns, to responses to treatments. A third presentation has recently become increasingly observed among people presenting to gender clinics: These cases appear to have an onset in adolescence in the absence of any childhood history of gender dysphoria. Such cases have been called adolescent-onset or "rapid-onset" gender dysphoria (ROGD). Very many public misunderstandings and expert misstatements come from misattributing evidence or personal experience from one of these types to another.

A. Adult-Onset Gender Dysphoria

7.Ā People with adult-onset gender dysphoria typically attend clinics requesting transition services in mid-adulthood, usually in their 30s or 40s. Such individuals are nearly exclusively biological males.[2] They typically report being sexually attracted to women and sometimes to both men and women. Some cases profess asexuality, but very few indicate any sexual interest in or behavior involving men.[3] Cases of adult-onset gender dysphoria are typically associated with a sexual interest pattern (medically, a *paraphilia*) involving themselves in female form.[4]

1.ĀOutcome Studies of Transition in Adult-Onset Gender Dysphoria

8.Ā Clinical research facilities studying gender dysphoria have repeatedly reported low rates of regret (less than 3%) among adult-onset patients who underwent complete transition (*i.e.*, social, plus hormonal, plus surgical transition). This has been widely reported by clinics in Canada,[5] Sweden,[6] and the Netherlands.[7]

9.Ā Importantly, each of the Canadian, Swedish, and Dutch clinics for adults

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1 Blanchard, 1985.
2 Blanchard, 1990, 1991.
3 Blanchard, 1988.
4 Blanchard 1989a, 1989b, 1991.
5 Blanchard, *et al.*, 1989.
6 Dhejneberg, *et al.*, 2014.
7 Wiepjes, *et al.*, 2018.

with gender dysphoria all performed "gate-keeping" procedures, disqualifying from medical services people with mental health or other contraindications. One would not expect the same results to emerge in the absence of such gate-keeping or when gate-keepers apply only minimal standards or cursory assessment.

10.Ā An important caution applies to interpreting these results: The side-effect of removing these people from the samples of transitioners is that if a researcher compared the average mental health of individuals coming into the clinic with the average mental health of individuals going through medical transition, then the post-transition group would appear to show a substantial improvement, even though transition had *no effect at all*: The removal of people with poorer mental health created the statistical illusion of improvement among the remaining people.

2.ĀMental Health Issues in Adult-Onset Gender Dysphoria

11.Ā The research evidence on mental health issues in gender dysphoria indicates it to be different between adult-onset versus adolescent-onset versus prepubescent-onset types. The co-occurrence of mental illness with gender dysphoria in adults is widely recognized and widely documented.[8] A research team in 2016 published a comprehensive and systematic review of all studies examining rates of mental health issues in transgender adults.[9] There were 38 studies in total. The review indicated that many studies were methodologically weak, but nonetheless demonstrated (1) that rates of mental health issues among people are highly elevated both before *and after* transition, (2) but that rates were less elevated among those who completed transition. Analyses were not conducted in a way so as to compare the elevation in mental health issues observed among people newly attending clinics to improvement after transition. Also, several studies showed more than 40% of patients to become "lost to follow-up." With attrition rates that high, it is unclear to what

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8 *See, e.g.*, Hepp, *et al.*, 2005.
9 Dhejne, *et al.*, 2016.

extent the information from the remaining participants would accurately reflect the whole population. The very high rate of "lost to follow-up" leaves open the possibility of considerably more negative results overall.

12.Ā The long-standing and consistent finding that gender dysphoric adults continue to show high rates of mental health issues after transition indicates a critical point: To the extent that gender dysphoric children resemble adults, we should not expect mental health to improve as a result of transition—that is, transition does not appear to be what causes mental health improvement. Rather, mental health issues should be resolved before any transition, as has been noted in multiple standards of care documents, as detailed in their own section of this report.

B. Childhood Onset (Pre-Puberty) Gender Dysphoria

1.ĀFollow-up Studies Show Most Children Desist by Puberty

13.Ā Prepubescent children (and their parents) have been approaching mental health professionals for help with their unhappiness with their sex and belief they would be happier living as the other for many decades. The large majority of childhood onset cases of gender dysphoria occur in biological males, with clinics reporting 2–6 biological male children to each female.[10]

14.Ā In total, there have been 11 outcomes studies of these children, listed in Appendix 1. In sum, despite coming from a variety of countries, conducted by a variety of labs, using a variety of methods, all spanning four decades, every study without exception has come to the identical conclusion: Among prepubescent children who feel gender dysphoric, the majority cease to want to be the other gender over the course of puberty—ranging from 61–88% desistance across the large, prospective studies. Such cases are often referred to as "desisters," whereas children who continue to feel gender dysphoric are often called "persisters."

15.Ā Notably, in most cases, these children were receiving professional

[10] Cohen-Kettenis, *et al.*, 2003; Steensma, *et al.*, 2018; Wood, *et al.*, 2013.

psychosocial support across the study period aimed, not at affirming cross-gender identification, but at resolving stressors and issues potentially interfering with desistance. While beneficial to these children and their families, the inclusion of therapy in the study protocol represents a complication for the interpretation of the results: It is not possible to know to what extent the outcomes were influenced by the psychosocial support or would have emerged regardless. In science, this is referred to as a confound.

16.Ā While the absolute number of those who present as prepubescent children with gender dysphoria and "persist" through adolescence is very small in relation to the total population, persistence in some subjects was observed in each of these studies. Thus, a clinician cannot take either outcome for granted.

17.Ā It is because of this long-established and unanimous research finding of desistance being probable but not inevitable, that the "watchful waiting" method became the standard approach for assisting gender dysphoric children. The balance of potential risks to potential benefits is very different for groups likely to desist versus groups unlikely to desist: If a child is very likely to persist, then taking on the risks of medical transition might be more worthwhile than if that child is very likely to desist in transgender feelings.

18.Ā The consistent observation of high rates of desistance among pre-pubertal children who present with gender dysphoria demonstrates a pivotally important—yet often overlooked—feature: because gender dysphoria so often desists on its own, clinical researchers cannot assume that therapeutic intervention cannot facilitate or speed desistance for at least some patients. That is, gender identity is not the same as sexual orientation, and it cannot be assumed that gender identity is as unchangeable as is sexual orientation. Such is an empirical question, and there has not yet been any such study.

19.Ā It is also important to note that research has not yet identified any reliable

procedure for discerning which children who present with gender dysphoria will persist, as against the majority who will desist, absent transition and "affirmation." Such a method would be valuable, as the more accurately that potential persisters can be distinguished from desisters, the better the risks and benefits of options can be weighted. Such "risk prediction" and "test construction" are standard components of applied statistics in the behavioral sciences. Multiple research teams have reported that, on average, groups of persisters are somewhat more gender non-conforming than desisters, but not so different as to usefully predict the course of a particular child.[11]

20.Ā In contrast, one research team (the aforementioned Olson group) claimed the opposite, asserting that they developed a method of distinguishing persisters from desisters, using a single composite score representing a combination of children's "peer preference, toy preference, clothing preference, gender similarity, and gender identity."[12] They reported a statistical association (mathematically equivalent to a correlation) between that composite score and the probability of persistence. As they indicated, "Our model predicted that a child with a gender-nonconformity score of .50 would have roughly a .30 probability . . . of socially transitioning. By contrast, a child with gender-nonconformity score of .75 would have roughly a .48 probability."[13] Although the Olson team declared that "social transitions may be predictable from gender identification and preferences,"[14] their actual results suggest the opposite: The gender-nonconforming group who went on to transition (socially) had a mean composite score of .73 (which is less than .75), and the gender-nonconforming group who did not transition had a mean composite score of .61, also less than .75.[15] Both of those are lower than the value of .75, so both of those would be more likely than not

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11 Singh, *et al.* (2021); Steensma *et al.*, 2013.
12 Rae, *et al.*, 2019, at 671.
13 Rae, *et al.*, 2019, at 673.
14 Rae, *et al.*, 2019, at 669.
15 Rae, *et al.*, 2019, Supplemental Material at 6, Table S1, bottom line.

to desist, rather than to proceed to transition. That is, Olson's model does not distinguish likely from unlikely to transition; rather, it distinguishes unlikely from even less likely to transition.

21.Ā Although it remains possible for some future discovery to yield a method to identify with sufficient accuracy which gender dysphoric children will persist, there does not exist such a method at the present time. Moreover, in the absence of long-term follow-up, it cannot be known what proportions come to regret having transitioned and then *de*transition. Because only a minority of gender dysphoric children persist in feeling gender dysphoric in the first place, "transition-on-demand" increases the probability of unnecessary transition and unnecessary medical risks.

2.Ā"Watchful Waiting" and "The Dutch Protocol"

22.Ā It was this state of the science—that the majority of prepubescent children will desist in their feelings of gender dysphoria and that we lack an accurate method of identifying which children will persist—that led to the development of a clinical approach, The Dutch Protocol,[16] including its "Watchful Waiting" period. Internationally, the Dutch Protocol remains the most empirically supported protocol for the treatment of children with gender dysphoria.

23.Ā The purpose of the protocol was to compromise the conflicting needs among: clients' initial wishes upon assessment, the long-established and repeated observation that those wishes will change in the majority of (but not in all) childhood cases, and that cosmetic aspects of medical transition are perceived to be better when they occur earlier rather than later.

24.Ā The Dutch Protocol was developed over many years by the Netherlands' child gender identity clinic, incorporating the accumulating findings from their own research as well as those reported by other clinics working with gender dysphoric

[16] Delemarre-van de Waal & Cohen-Kettenis (2006).

children. They summarized and explicated the approach in their peer-reviewed report, *Clinical management of gender dysphoria in children and adolescents: The Dutch Approach*.[17] The components of the Dutch Approach are:

- no social transition at all considered before age 12 (watchful waiting period),
- no puberty blockers considered before age 12,
- cross-sex hormones considered only after age 16, and
- resolution of mental health issues before any transition.

25. For youth under age 12, "the general recommendation is watchful waiting and carefully observing how gender dysphoria develops in the first stages of puberty."[18]

26. The age cut-offs of the Dutch Approach were not based on any research demonstrating their superiority over other potential age cut-off's. Rather, they were chosen to correspond to the ages of consent to medical procedures under Dutch law. Nevertheless, whatever the original rationale, the data from this clinic simply contain no information about the safety or efficacy of employing these measures at younger ages.

27. The authors of the Dutch Approach repeatedly and consistently emphasize the need for extensive mental health assessment, including clinical interviews, formal psychological testing with validated psychometric instruments, and multiple sessions with the child and the child's parents.

28. Within the Dutch approach, there is no social transition before age twelve. That is, social affirmation of the new gender may not begin until age 12—as desistance is less likely to occur past that age. "Watchful Waiting" refers to a child's developmental period up to that age. Watchful waiting does not mean do nothing but passively observe the child. Rather, such children and families typically present with substantial distress involving both gender and non-gender issues, and it is during the watchful waiting period that a child (and other family members as appropriate) would

[17] de Vries & Cohen-Kettenis, 2012
[18] de Vries & Cohen-Kettenis, 2012, at 301.

undergo therapy, resolving other issues which may be exacerbating psychological stress or dysphoria. As noted by the Dutch clinic, "[T]he adolescents in this study received extensive family or other social support . . . [and they] were all regularly seen by one of the clinic's psychologists or psychiatrists."[19] One is actively treating the person, while carefully "watching" the dysphoria.

3.ĀFollow-Up Studies of Puberty Blockers and Cross-Sex Hormones

29.Ā Very many strong claims have appeared in the media and on social media asserting that transition results in improved mental health or, contradictorily, in decreased mental health. In the highly politicized context of gender and transgender research, many outlets have cited only the findings which appear to support one side, cherry-picking from the complete set of research reports. It total, there have been 11 prospective outcomes studies following up gender dysphoric children undergoing medically induced suppression of puberty or cross-sex hormone treatment. Four studies failed to find evidence of improvement in mental health functioning at all, and some groups deteriorated on some variables.[20] Five studies successfully identified evidence of improvement, but because patients received psychotherapy along with medical services, which of those treatments caused the improvement is unknowable.[21] In the remaining two studies, both psychotherapy and medical interventions were provided, but the studies were designed in such a way as to allow the effects of psychotherapy to be separated from the effects of the puberty-blocking medications.[22] As detailed in the following, neither identified benefits of medication over psychotherapy alone.

a.ĀFour studies found no mental health improvement

30.Ā Carmichael, *et al.* (2021) recently released its findings from the Tavistock

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19 de Vries, *et al.*, 2011, at 2280-2281.
20 Carmichael, *et al.*, 2021; Hisle-Gorman, *et al.*, 2021; Kaltiala, *et al.*, 2020; Kuper, *et al.*, 2020.
21 de Vries, *et al.*, 2011; Tordoff, *et al.*, 2022; van der Miesen, *et al.*, 2020.
22 Achille, *et al.*, 2020; Costa, *et al.*, 2015.

and Portman clinic in the U.K.[23] Study participants were ages 12–15 (Tanner stage 3 for natal males, Tanner stage 2 for natal females) and were repeatedly tested before beginning puberty-blocking medications and then every six months thereafter. Cases exhibiting serious mental illnesses (*e.g.*, psychosis, bipolar disorder, anorexia nervosa, severe body-dysmorphic disorder unrelated to gender dysphoria) were excluded. Relative to the time point before beginning puberty suppression, there were *no* significant changes in any psychological measure, from either the patients' or their parents' perspective.

31.Ā In Kuper, *et al.* (2020), a multidisciplinary team from Dallas published a prospective follow-up study which included 25 youths as they began puberty suppression.[24] (The other 123 study participants were undergoing cross-sex hormone treatment.) Interventions were administered according to practice guidelines from the Endocrine Society.[25] Their analyses found *no statistically significant changes* in the group undergoing puberty suppression on any of the nine measures of wellbeing measured, spanning tests of body satisfaction, depressive symptoms, or anxiety symptoms.[26] Notably, whereas the Dutch Protocol includes age 12 as a minimum for puberty suppression treatment, this team provided such treatment beginning at age 9.8 years (full range: 9.8–14.9 years).[27]

32.Ā Hisle-Gorman, *et al.* (2021) analyzed military families' healthcare data to compare 963 transgender and gender-diverse youth before versus after hormonal treatment, with their non-gender dysphoric siblings as controls. The study participants included youth undergoing puberty-blocking as well as those undergoing cross-sex hormone treatment, but these subgroups did not differ from each other. Study participants had a mean age of 18 years when beginning the study, but their

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23 Carmichael, *et al.*, 2021.
24 Kuper, *et al.*, 2020, at 5.
25 Kuper, *et al.*, 2020, at 3, referring to Hembree, *et al.*, 2017.
26 Kuper, *et al.*, 2020, at Table 2.
27 Kuper, *et al.*, 2020, at 4.

initial clinical contacts and diagnoses occurred at a mean age of 10 years. According to the study, "mental health care visits overall did not significantly change following gender-affirming pharmaceutical care,"[28] yet, "psychotropic medication use *increased,*"[29] indicating *deteriorating* mental health.

33.Ā Kaltiala et al. (2020) similarly reported that after cross-sex hormone treatment, "Those who had psychiatric treatment needs or problems in school, peer relationships and managing everyday matters outside of home continued to have problems during real-life."[30] They concluded, "Medical gender reassignment is not enough to improve functioning and relieve psychiatric comorbidities among adolescents with gender dysphoria. Appropriate interventions are warranted for psychiatric comorbidities and problems in adolescent development."[31]

b.ĀFive studies confounded psychotherapy and medical treatment

34.Ā The initial enthusiasm for medical blocking of puberty followed largely from early reports from the Dutch clinical research team suggesting at least some mental health improvement.[32] It was when subsequent research studies failed to replicate those successes that it became apparent that the successes were due, not to the medical interventions, but to the psychotherapy that accompanied such interventions in most clinics, including the Dutch clinic.

35.Ā The Dutch clinical research team followed up a cohort of youth at their clinic undergoing puberty suppression[33] and later cross-hormone treatment and surgical sex reassignment.[34] The youth improved on several variables upon follow-up as compared to pre-suppression measurement, including depressive symptoms and

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28 Hisle-Gorman, et al., 2021, at 1448.
29 Hisle-Gorman, et al., 2021, at 1448, emphasis added.
30 Kaltiala et al., 2020, at 213.
31 Kaltiala et al., 2020, at 213.
32 de Vries, *et al.*, 2011; de Vries, *et al.*, 2014
33 de Vries, *et al.*, 2011.
34 de Vries, *et al.*, 2014.

general functioning. No changes were detected in feelings of anxiety or anger or in gender dysphoria as a result of puberty suppression; however, natal females using puberty suppression suffered *increased* body dissatisfaction both with their secondary sex characteristics and with nonsexual characteristics.[35]

36.Ā As the report authors noted, while it is possible that the improvement on some variables was due to the puberty-blockers, it is also possible that the improvement was due to the mental health support, and it is possible that the improvement occurred only on its own with natural maturation. So any conclusion that puberty blockers improved the mental health of the treated children is not justified by the data. Because this study did not include a control group (another group of adolescents matching the first group, but *not* receiving medical or social support), these possibilities cannot be distinguished from each other. The authors of the study were explicit in noting this themselves: "All these factors may have contributed to the psychological well-being of these gender dysphoric adolescents."[36]

37.Ā In a 2020 update, the Dutch clinic reported continuing to find improvement in transgender adolescents' psychological functioning, reaching age-typical levels, "after the start of specialized transgender care involving puberty suppression."[37] Unfortunately, because the transgender care method of that clinic involves both psychosocial support and puberty suppression, it again cannot be known which of those (or their combination) is driving the improvement. Also, the authors indicate that the changing demographic and other features among gender dysphoric youth might have caused the treated group to differ from the control group in unknown ways. As the study authors noted again, "The present study can, therefore, not provide evidence about the direct benefits of puberty suppression over time and long-

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35 Biggs, 2020.
36 de Vries, *et al.* 2011, at 2281.
37 van der Miesen, *et al.*, 2020, at 699.

term mental health outcomes."[38]

38.Ā Allen, *et al.* (2019) reported on a sample of 47 youth, ages 13–20, undergoing cross-sex hormone treatment. They reported observing increases in measures of well-being and decreases in measures of suicidality; however, as the authors also noted, "whether a patient is actively receiving psychotherapy" may have been a confounding variable.[39]

39.Ā Tordoff, *et al.* (2022) reported on a sample of youth, ages 13–20 years, treated with either puberty blockers or cross-sex hormones. There were improvements in mental health functioning; however, 62.5% of the sample was again receiving mental health therapy.[40]

c.ĀTwo studies showed no superiority of medical intervention above psychotherapy

40.Ā Costa, *et al.* (2015) reported on preliminary outcomes from the Tavistock and Portman NHS Foundation Trust clinic in the UK. They compared the psychological functioning of one group of youth receiving psychological support with a second group receiving both psychological support as well as puberty blocking medication. Both groups improved in psychological functioning over the course of the study, but no statistically significant differences between the groups was detected at any point.[41] As those authors concluded, "Psychological support and puberty suppression were both associated with an improved global psychosocial functioning in GD adolescence. Both these interventions may be considered effective in the clinical management of psychosocial functioning difficulties in GD adolescence."[42] Because psychological support does not pose the physical health risks that hormonal interventions or surgery does (such as loss of reproductive function) however, one

38 van der Miesen, *et al.*, 2020, at 703.
39 Allen, *et al.*, 2019.
40 Tordoff, et al., 2022, Table 1.
41 Costa, *et al.*, at 2212 Table 2.
42 Costa, *et al.*, at 2206.

cannot justify taking on the greater risks of social transition, puberty blockers or surgery without evidence of such treatment producing superior results. Such evidence does not exist. Moreover, this clinical team subsequently released the final version of this preliminary report, finding that neither group actually experienced significant improvement,[43] making moot any discussion of the source any improvement.

41.Ā Achille, *et al.* (2020) at Stony Brook Children's Hospital in New York treated a sample of 95 youth with gender dysphoria, providing follow-up data on 50 of them. (The report did not indicate how these 50 were selected from the 95.) As well as receiving puberty blocking medications, "Most subjects were followed by mental health professionals. Those that were not were encouraged to see a mental health professional."[44] The puberty blockers themselves "were introduced in accordance with the Endocrine Society and the WPATH guidelines."[45] Upon follow-up, some incremental improvements were noted; however, after statistically adjusting for psychiatric medication and engagement in counselling, "*most predictors did not reach statistical significance.*"[46] That is, puberty blockers did not improve mental health any more than did mental health care on its own.

d.ĀConclusions

42.Ā The authors of the original Dutch studies were careful not to overstate the implications of their results, "We *cautiously* conclude that puberty suppression *may be* a valuable *element* in clinical management of adolescent gender dysphoria."[47] Nonetheless, many other clinics and clinicians intrepidly proceeded on the basis of only the perceived positives, broadened the range of people beyond those represented in the research findings, and removed the protections applied in the procedures that

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43 Carmichael, et al., 2021.
44 Achille, *et al.*, 2020, at 2.
45 Achille, *et al.*, 2020, at 2.
46 Achille, *et al.*, 2020, at 3 (italics added).
47 de Vries, *et al.* 2011, at 2282, italics added.

led to those outcomes. Many clinics and individual clinicians have reduced the minimum age for transition to 10 instead of 12. While the Dutch Protocol involves interdisciplinary teams of clinicians, many clinics now rely on a single assessor, in some cases one without adequate professional training in childhood and adolescent mental health. Comprehensive, longitudinal assessments (*e.g.*, 1 to 2 *years*[48]) became approvals after one or two assessment sessions. Validated, objective measures of youths' psychological functioning were replaced with clinicians' subjective (and first) opinions, often reflecting only the clients' own self-report. Systematic recordings of outcomes, so as to allow for detection and correction of clinical deficiencies, were eliminated.

43.Ā Notably, Dr. Thomas Steensma, central researcher of the Dutch clinic, has decried other clinics for "blindly adopting our research" despite the indications that those results may not actually apply: "We don't know whether studies we have done in the past are still applicable to today. Many more children are registering, and also a different type."[49] Steensma opined that "every doctor or psychologist who is involved in transgender care should feel the obligation to do a good pre- and post-test." But few if any are doing so.

4.ĀMental Health Issues in Childhood-Onset Gender Dysphoria

44.Ā As shown by the outcomes studies, there is little evidence that transition improves the mental well-being of children. As shown repeatedly by clinical guidelines from multiple professional associations, mental health issues are expected or required to be resolved *before* undergoing transition. The reasoning behind these conclusions is that children may be expressing gender dysphoria, not because they are experiencing what gender dysphoric adults report, but because they mistake what their experiences indicate or to what they might lead. For example, a child

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[48] de Vries, *et al.*, 2011.
[49] Tetelepta, 2021.

experiencing depression from social isolation might develop the hope—and the unrealistic expectation—that transition will help them fit in, this time as and with the other sex.

45.Ā If a child undergoes transition, discovering only then that their mental health or social situations will not in fact change, the medical risks and side-effects (such as sterilization) will have been borne for no reason. If, however, a child resolves the mental health issues first, with the gender dysphoria resolving with it (which the research literature shows to be the case in the large majority), then the child need not undergo transition at all, but retains the opportunity to do so later.

46.Ā Elevated rates of multiple mental health issues among gender dysphoric children are reported throughout the research literature. A formal analysis of children (ages 4–11) undergoing assessment at the Dutch child gender clinic showed 52% fulfilled criteria for a DSM axis-I disorder.[50] A comparison of the children attending the Canadian versus Dutch child gender dysphoria clinic showed only few differences between them, but a large proportion in both groups were diagnosable with clinically significant mental health issues. Results of standard assessment instruments (Child Behavior Check List, or CBCL) demonstrated that the average score was in the clinical rather than healthy range, among children in both clinics.[51] When expressed as percentages, among 6–11-year-olds, 61.7% of the Canadian and 62.1% of the Dutch sample were in the clinical range.

47.Ā A systematic, comprehensive review of all studies of Autism Spectrum Disorders (ASDs) and Attention-Deficit Hyperactivity Disorder (ADHD) among children diagnosed with gender dysphoria was recently conducted. It was able to identify a total of 22 studies examining the prevalence of ASD or ADHD I youth with gender dysphoria. Studies reviewing medical records of children and adolescents

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[50] Wallien, *et al.*, 2007.
[51] Cohen-Kettenis, *et al.*, 2003, at 46.

referred to gender clinics showed 5–26% to have been diagnosed with ASD.[52] Moreover, those authors gave specific caution on the "considerable overlap between symptoms of ASD and symptoms of gender variance, exemplified by the subthreshold group which may display symptoms which could be interpreted as either ASD or gender variance. Overlap between symptoms of ASD and symptoms of GD may well confound results."[53] As noted elsewhere herein, when two or more issues are present at the same time, researchers cannot distinguish when a result is associated with or caused by the issue of interest or one of the side issues.[54] The rate of ADHD among children with GD was 8.3–11%. Conversely, in data from children (ages 6–18) with Autism Spectrum Disorders (ASDs) show they are more than seven times more likely to have parent-reported "gender variance."[55]

C. Adolescent-Onset Gender Dysphoria

1.ĀFeatures of Adolescent-Onset Gender Dysphoria

48.Ā In the social media age, a third profile has recently begun to present clinically or socially, characteristically distinct from the two previously identified profiles.[56] Unlike adult-onset or childhood-onset gender dysphoria, this group is predominately biologically female. This group typically presents in adolescence, but lacks the history of cross-gender behavior in childhood like the childhood-onset cases have. It is that feature which led to the term Rapid Onset Gender Dysphoria (ROGD).[57] The majority of cases appear to occur within clusters of peers and in association with increased social media use[58] and especially among people with autism or other neurodevelopmental or mental health issues.[59]

49.Ā It cannot be easily determined whether the self-reported gender dysphoria

52 Thrower, *et al.*, 2020.
53 Thrower, *et al.*, 2020, at 703.
54 Cohen-Kettenis *et al.*, 2003, at 51; Skelly *et al.*, 2012.
55 Janssen, *et al.*, 2016.
56 Kaltiala-Heino, *et al.*, 2015; Littman, 2018.
57 Littman, 2018.
58 Littman, 2018.
59 Kaltiala-Heino, *et al.*, 2015; Littman, 2018; Warrier, *et al.*, 2020.

is a result of other underlying issues or if those mental health issues are the result of the stresses of being a sexual minority, as some writers are quick to assume.[60] (The science of the *Minority Stress Hypothesis* appears in its own section.) Importantly, and unlike other presentations of gender dysphoria, people with rapid-onset gender dysphoria often (47.2%) experienced *declines* rather than improvements in mental health when they publicly acknowledged their gender status.[61] Although long-term outcomes have not yet been reported, these distinctions demonstrate that one cannot apply findings from the other types of gender dysphoria to this type. That is, in the absence of evidence, researchers cannot assume that the pattern found in childhood-onset or adult-onset gender dysphoria also applies to adolescent-onset gender dysphoria. The multiple differences already observed between these groups argue against predicting that features present in one type would generalize to be present in all types of gender dysphoria.

2.ĀSocial Transition and Puberty Blockers with Adolescent Onset

50.Ā There do not yet exist prospective outcomes studies either for social transition or for medical interventions for people whose gender dysphoria began in adolescence. That is, instead of taking a sample of individuals and following them forward over time (thus permitting researchers to account for people dropping out of the study, people misremembering the order of events, etc.), all studies have thus far been *retrospective*. It is not possible for such studies to identify what factors caused what outcomes. No study has yet been organized in such a way as to allow for an analysis of the adolescent-onset group, as distinct from childhood-onset or adult-onset cases. Many of the newer clinics (not the original clinics which systematically tracked and reported on their cases' results) fail to distinguish between people who had childhood-onset gender dysphoria and have aged into adolescence versus people

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60 Boivin, *et al.*, 2020.
61 Biggs, 2020; Littman, 2018.

whose onset was not until adolescence. (Analogously, there are reports failing to distinguish people who had adolescent-onset gender dysphoria and aged into adulthood from adult-onset gender dysphoria.) Studies selecting groups according to their current age instead of their ages of onset produces confounded results, representing unclear mixes according to how many of each type of case wound up in the final sample.

3.ĀMental Illness in Adolescent-Onset Gender Dysphoria

51.Ā In 2019, a Special Section appeared in the *Archives of Sexual Behavior* titled, "Clinical Approaches to Adolescents with Gender Dysphoria." It included this brief yet thorough summary of rates of mental health issues among adolescents expressing gender dysphoria, by Dr. Aron Janssen of the Department of Child and Adolescent Psychiatry of New York University:[62] The literature varies in the range of percentages of adolescents with co-occurring disorders. The range for depressive symptoms ranges was 6–42%,[63] with suicide attempts ranging 10 to 45%.[64] Self-injurious thoughts and behaviors range 14–39%.[65] Anxiety disorders and disruptive behavior difficulties including Attention Deficit/Hyperactivity Disorder are also prevalent.[66] Gender dysphoria also overlaps with Autism Spectrum Disorder.[67]

52.Ā Of particular concern in the context of adolescent onset gender dysphoria is Borderline Personality Disorder (BPD; diagnostic criteria to follow). It is increasingly hypothesized that very many cases appearing to be adolescent-onset gender dysphoria actually represent cases of BPD.[68] That is, some people may be misinterpreting their experiencing of the broader "identity disturbance" of symptom Criterion 3 to represent a gender identity issue specifically. Like adolescent-onset

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62 Janssen, *et al.*, 2019.
63 Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013; Wallien, *et al.*, 2007.
64 Reisner, *et al.*, 2015.
65 Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013.
66 de Vries, *et al.*, 2011; Mustanski, *et al.*, 2010; Wallien, *et al.*, 2007.
67 de Vries, *et al.*, 2010; Jacobs, *et al.*, 2014; Janssen, *et al.*, 2016; May, *et al.*, 2016; Strang, *et al.*, 2014, 2016.
68 *E.g.*, Anzani, *et al.*, 2020; Zucker, 2019.

gender dysphoria, BPD begins to manifest in adolescence, is three times more common in biological females than males, and occurs in 2–3% of the population, rather than 1-in-5,000 people. (Thus, if even only a portion of people with BPD experienced an identity disturbance that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.)

53. DSM-5-TR Diagnostic Criteria for Borderline Personality Disorder:

> A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:
>
> 1. Frantic efforts to avoid real or imagined abandonment. (Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5.)
> 2. A pattern of unstable and intense interpersonal relationship characterized by alternating between extremes of idealization and devaluation.
> 3. *Identity disturbance: markedly and persistently unstable self-image or sense of self.*
> 4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (Note: Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
> 5. *Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behavior.*
> 6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
> 7. Chronic feelings of emptiness.
> 8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
> 9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

(Italics added.)

54. Mistaking cases of BPD for cases of Gender Dysphoria may prevent such youth from receiving the correct mental health services for their condition, and a primary cause for concern is symptom Criterion 5: Recurrent suicidality. (The research on suicide and suicidality are detailed in their own section herein.)

Regarding the provision of mental health care, the distinction between these conditions is crucial: A person with BPD going undiagnosed will not receive the appropriate treatments (the currently most effective of which is Dialectical Behavior Therapy). A person with a cross-gender identity would be expected to feel relief from medical transition, but someone with BPD would not: The problem was not about *gender* identity, but about having an *unstable* identity. Moreover, after a failure of medical transition to provide relief, one would predict for these people increased levels of hopelessness and increased risk of suicidality.

55.Ā Regarding research, there have now been several attempts to document rates of suicidality among gender dysphoric adolescents. The scientific concern presented by BPD is that it poses a potential confound: Samples of gender dysphoric adolescents could appear to have elevated rates of suicidality, not because of the gender dysphoria (or transphobia in society), but because of the number of people with BPD in the sample.

IV.Ā Other Scientific Claims Assessed

A. Suicide and Suicidality

56.Ā Social media increasingly circulate demands for transition accompanied by hyperbolic warnings of suicide should there be delay or obstacle. Claims accompany admissions that "I'd rather have a trans daughter than a dead son," and such threats are treated as the justification for referring to affirming gender transitions as 'life-saving' or 'medically necessary'. Such claims convey only grossly misleading misrepresentations of the research literature, however, deploying terms for their shock value rather than accuracy, and exploiting common public misperceptions about suicide. Indeed, suicide prevention research and public health campaigns repeatedly warn against circulating such exaggerations, due to the risk of copy-cat

behavior they encourage.[69]

57.Ā Despite that the media treat them as near synonyms, suicide and suicidality are distinct phenomena. They represent different behaviors with different motivations, with different mental health issues, and with different clinical needs. *Suicide* refers to completed suicides and the sincere intent to die. It is substantially associated with impulsivity, using more lethal means, and being a biological male.[70] *Suicidality* refers to parasuicidal behaviors, including suicidal ideation, threats, and gestures. These typically represent cries for help rather than an intent to die and are more common among biological females. Suicidal threats can indicate any of many problems or represent emotional blackmail, as typified by "If you leave me, I will kill myself." Professing suicidality is also used for attention-seeking or for the support or sympathy it evokes from others, denoting distress much more frequently than an intent to die.

58.Ā Notwithstanding public misconceptions about the frequency of suicide and related behaviors, the highest rates of suicide are among middle-aged and elderly men in high income countries.[71] Biological males are at three times greater risk of death by suicide than are biological females, whereas suicidal ideation, plans, and attempts are three times more common among biological females.[72] In contrast with completed suicides, the frequency of suicidal ideation, plans, and attempts is highest during adolescence and young adulthood, with reported ideation rates spanning 12.1–33%.[73] Relative to other countries, Americans report elevated rates of each of suicidal ideation (15.6%), plans (5.4%), and attempts (5.0%).[74] Suicide attempts occur up to 30

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69 Gould & Lake, 2013.
70 Freeman, *et al.*, 2017.
71 Turecki & Brent, 2016
72 Klonsky et al., 2016; Turecki & Brent, 2016
73 Borges et a., 2010; Nock et al., 2008
74 Klonsky, et al., 2016.

times more frequently than completed suicides.[75] The rate of completed suicides in the U.S. population is 14.5 per 100,000 people.[76] The widely discrepant numbers representing completed suicides versus transient suicidal ideation has left those statistics open to substantial abuse in the media and social media. Despite public media guidelines urging "Avoid dramatic headlines and strong terms such as 'suicide epidemic'",[77] that is exactly what mainstream outlets have done.[78]

59.Ā There is substantial research associating sexual orientation with suicidality, but much less so with completed suicide.[79] More specifically, there is some evidence suggesting gay adult men are more likely to die by suicide than are heterosexual men, but there is less evidence of an analogous pattern among lesbian women. Regarding suicidality, surveys of self-identified LGB Americans repeatedly report rates of suicidal ideation and suicide attempts 2–7 times higher than their heterosexual counterparts. Because of this association of suicidality with sexual orientation, one must apply caution in interpreting findings allegedly about gender identity: Because of the overlap between people who self-identify as non-heterosexual and as non-cis-gendered, correlations detected between suicidality and gender dysphoria may instead reflect (be confounded by) homosexuality. Indeed, other authors have made explicit their surprise that so many studies, purportedly of gender identity, entirely omitted measurement or consideration of sexual orientation, creating the situation where features that seem to be associated with gender identity instead reflect the sexual orientation of the members of the sample.[80]

60.Ā Among post-transition transsexuals, completed suicide rates are elevated,

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75 Bachman, 2018.
76 World Health Organization, 2022.
77 Samaritans, 2020.
78 E.g., MSNBC, 2015, *Trans youth and suicide: An epidemic.*
79 Haas, *et al.*, 2011.
80 McNeil, *et al.* (2017)

but are nonetheless rare.[81] Regarding suicidality, there have been three recent, systematic reviews of the research literature.[82] All three included specific methods to minimize any potential effects of cherry-picking findings from within the research literature. Compiling the results of 108 articles reported from 64 research projects, Adams and Vincent (2019) found an overall average rate of 46.55% for suicidal ideation (ranging 18.18%–95.5%) and an overall average rate of 27.19% for suicidal attempts (ranging 8.57%–52.4%). These findings confirmed those reported by McNeil, *et al.* (2017), whose review of 30 articles revealed a range of 37%–83% for suicidal ideation and 9.8%–43% for suicidal attempts. Thus, on the one hand, these ranges are greater than those reported for the mainstream population—They instead approximate the rates reported among sexual orientation minorities. On the other hand, with measures so lacking in reliability that they produce every result from 'rare' to 'almost everyone', it is unclear which, if any of them, represents a valid conclusion.

61.Ā McNeil *et al.* (2017) observed also the research to reveal rates of suicidal ideation and suicidal attempts to be related—not to transition status—but to the social support received: The studies reviewed showed support to decrease suicidality, but transition not to. Indeed, in some situations, social support was associated with *increased* suicide attempts, suggesting the reported suicidality may represent attempts to evoke more support.[83]

62.Ā Marshall et al. (2016) identified and examined 31 studies, again finding rates of suicidal ideation and suicide attempts to be elevated, particularly among biological females, indicating that suicidality patterns correspond to biological sex rather than self-identified gender.[84]

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81 Wiepjes, *et al.*, 2020.
82 Adams & Vincent, 2019; Marshall, *et al.*, 2016; McNeil, *et al.* (2017).
83 Bauer, *et al.*, 2015; Canetto, et al., 2021.
84 Marshall, et al., 2016.

63.Ā Despite that mental health issues, including suicidality, are repeatedly required by clinical standards of care to be resolved before transition, threats of suicide are instead oftentimes used as the very justification for labelling transition a 'medical necessity'. However plausible it might seem that failing to affirm transition causes suicidality, the epidemiological evidence indicates that hypothesis to be incorrect: Suicide rates remains elevated even after complete transition, as shown by a comprehensive review of 17 studies of suicidality in gender dysphoria.[85]

64.Ā The scientific study of suicide is inextricably linked to that of mental illness, and Borderline Personality Disorder is repeatedly documented to be greatly elevated among sexual minorities[86].

B. Conversion Therapy

65.Ā Activists and social media increasingly, but erroneously, apply the term "conversion therapy" moving farther and farther from what the research has reported. "Conversion therapy" (or "reparative therapy" and other names) was the attempt to change a person's sexual orientation; however, with the public more frequently accustomed to "LGB" being expanded to "LGBTQ+", the claims relevant only to sexual orientation are being misapplied to gender identity. The research has repeatedly demonstrated that once one explicitly acknowledges being gay or lesbian, this is only very rarely are mistaken. That is entirely unlike gender identity, wherein the great majority of children who declare cross-gender identity cease to do so by puberty, as already shown unanimously by all follow-up studies. As the field grows increasingly polarized, any therapy failing to provide affirmation-on-demand is mislabeled "conversion therapy."[87] Indeed, even actions of non-therapists, unrelated

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85 McNeil, *et al.*, 2017.
86 Reuter, *et al.*, 2016; Rodriguez-Seiljas, *et al.*, 2021; Zanarni, *et al.*, 2021.
87 D'Angelo, *et al.*, 2021.

to any therapy, have been labelled conversion therapy, including the prohibition of biological males competing on female teams.[88]

C. Assessing Demands for Social Transition and Affirmation-Only or Affirmation-on-Demand Treatment in Pre-Pubertal Children.

66.Ā Colloquially, affirmation refers broadly to any actions that treat the person as belonging to a new gender. In different contexts, that could apply to social actions (use of a new name and pronouns), legal actions (changes to birth certificates), or medical actions (hormonal and surgical interventions). That is, social transition, legal transition, and medical transition (and subparts thereof) need not, and rarely do, occur at the same time. In practice, there are cases in which a child has socially only partially transitioned, such as presenting as one gender at home and another at school or presenting as one gender with one custodial parent and another gender with the other parent.

67.Ā Referring to "affirmation" as a treatment approach is ambiguous: Although often used in public discourse to take advantage of the positive connotations of the term, it obfuscates what exactly is being affirmed. This often leads to confusion, such as quoting a study of the benefits and risks of social affirmation in a discussion of medical affirmation, where the appearance of the isolated word "affirmation" refers to entirely different actions.

68.Ā It is also an error to divide treatment approaches into affirmative versus non-affirmative. As noted already, the widely adopted Dutch Approach (and the guidelines of the multiple professional associations based on it) cannot be said to be either: It is a staged set of interventions, wherein social transition (and puberty blocking) may not begin until age 12 and cross-sex hormonal and other medical interventions, later.

69.Ā Formal clinical approaches to helping children expressing gender dysphoria

[88] Turban, 2021, March 16.

employ a gate-keeper model, with decision trees to help clinicians decide when and if the potential benefits of affirmation of the new gender would outweigh the potential risks of doing so. Because the gate-keepers and decision-trees generally include the possibility of affirmation in at least some cases, it is misleading to refer to any one approach as "the affirmation approach." The most extreme decision-tree would be accurately called affirmation-*on-demand,* involving little or no opportunity for children to explore at all whether the distress they feel is due to some other, less obvious, factor, whereas more moderate gate-keeping would endorse transition only in select situations, when the likelihood of regretting transition is minimized.

70.Ā Many outcomes studies have been published examining the results of gate-keeper models, but no such studies have been published regarding affirmation-on-demand with children. Although there have been claims that affirmation-on-demand causes mental health or other improvement, these have been the result only of "retrospective" rather than "prospective" studies. That is, such studies did not take a sample of children and follow them up over time, to see how many dropped out altogether, how many transitioned successfully, and how many transitioned and regretted it or detransitioned. Rather, such studies took a sample of successfully transitioned adults and asked them retrospective questions about their past. In such studies, it is not possible to know how many other people dropped out or regretted transition, and it is not possible to infer causality from any of the correlations detected, despite authors implying and inferring causality.

D. Assessing the "Minority Stress Hypothesis"

71.Ā The elevated levels of mental health problems among lesbian, gay, and bisexual populations is a well-documented phenomenon, and the idea that it is caused by living within a socially hostile environment is called the *Minority Stress Hypothesis*.[89] The association is not entirely straight-forward, however. For example,

[89] Meyer, 2003.

although lesbian, gay, and bisexual populations are more vulnerable to suicide ideation overall, the evidence specifically on adult lesbian and bisexual women is unclear. Meyer did not include transgender populations in originating the hypothesis, and it remains a legitimate question to what extent and in what ways it might apply to gender identity.

72.Ā Minority stress is associated, in large part, with being a visible minority. There is little evidence that transgender populations show the patterns suggested by the hypothesis. For example, the minority stress hypothesis would predict differences according to how visibly a person is discernable as a member of the minority, which often changes greatly upon transition. Biological males who are very effeminate stand out throughout childhood, but in some cases can successfully blend in as adult females; whereas the adult-onset transitioners blend in very much as heterosexual cis-gendered males during their youth and begin visibly to stand out in adulthood, only for the first time.

73.Ā Also suggesting minority stress cannot be the full story is that the mental health symptoms associated with minority stress do not entirely correspond with those associated with gender dysphoria. The primary symptoms associated with minority stress are depressive symptoms, substance use, and suicidal ideation.[90] The symptoms associated with gender dysphoria indeed include depressive symptoms and suicidal ideation, but also include anxiety symptoms, Autism Spectrum Disorders, and personality disorders.

74.Ā A primary criterion for readiness for transition used by the clinics demonstrating successful transition is the absence or resolution of other mental health concerns, such as suicidality. In the popular media, however, indications of mental health concerns are instead often dismissed as an expectable result caused by Sexual Minority Stress (SMS). It is generally implied that such symptoms will resolve

[90] Meyer, 2003.

upon transition and integration into an affirming environment.

V.Ā Assessing Statements from Professional Associations

A. Understanding the Value of Statements from Professional Associations

75.Ā The value of position statements from professional associations should be neither over- nor under-estimated. In the ideal, an organization of licensed health care professionals would convene a panel of experts who would systematically collect all the available evidence about an issue, synthesizing it into recommendations or enforceable standards for clinical care, according to the quality of the evidence for each alternative. For politically neutral issues, with relevant expertise contained among association members, this ideal can be readily achievable. For controversial issues with no clear consensus, the optimal statement would summarize each perspective and explicate the strengths and weaknesses of each, providing relatively reserved recommendations and suggestions for future research that might resolve the continuing questions. Several obstacles can hinder that goal, however. Committees within professional organizations are typically volunteer activities, subject to the same internal politics of all human social structures. That is, committee members are not necessarily committees of experts on a topic—they are often committees of generalists handling a wide variety of issues or members of an interest group who feel strongly about political implications of an issue, instead of scientists engaged in the objective study of the topic.

76.Ā Thus, documents from professional associations may represent required standards, the violation of which may merit sanctions, or may represent only recommendations or guidelines. A document may represent the views of an association's full membership or only of the committee's members (or majorities thereof). Documents may be based on systematic, comprehensive reviews of the available research or selected portions of the research. In sum, the weight best placed

on any association's statement is the amount by which that association employed evidence versus other considerations in its process.

B. Misrepresentations of statements of professional associations.

77.Ā In the presently highly politicized context, official statements of professional associations have been widely misrepresented. In preparing the present report, I searched the professional research literature for documentation of statements from these bodies and from my own files, for which I have been collecting such information for many years. I was able to identify statements from six such organizations. Although not strictly a medical association, the World Professional Association for Transgender Health (WPATH) also distributed a set of guidelines in wide use and on which other organizations' guidelines are based.

78.Ā Notably, despite that all these medical associations reiterate the need for mental health issues to be resolved before engaging in medical transition, only the AACAP members have medical training in mental health. The other medical specialties include clinical participation with this population, but their assistance in transition generally assumes the mental health aspects have already been assessed and treated beforehand.

79.Ā With the broad exception of the AAP, their statements repeatedly noted instead that:

- Ā Desistance of gender dysphoria occurs in the majority of prepubescent children.
- Ā Mental health issues need to be assessed as potentially contributing factors and need to be addressed before transition.
- Ā Puberty-blocking medication is an experimental, not a routine, treatment.
- Ā Social transition is not generally recommended until after puberty.

Although some other associations have published broad statements of moral support for sexual minorities and against discrimination, they did not include any specific standards or guidelines regarding medical- or transition-related care.

1.ĀWorld Professional Association for Transgender Health (WPATH)

80.Ā The WPATH standards as they relate to prepubescent children begin with the acknowledgement of the known rates of desistance among gender dysphoric children:

> [I]n follow-up studies of prepubertal children (mainly boys) who were referred to clinics for assessment of gender dysphoria, the dysphoria persisted into adulthood for only 6–23% of children (Cohen-Kettenis, 2001; Zucker & Bradley, 1995). Boys in these studies were more likely to identify as gay in adulthood than as transgender (Green, 1987; Money & Russo, 1979; Zucker & Bradley, 1995; Zuger, 1984). Newer studies, also including girls, showed a 12–27% persistence rate of gender dysphoria into adulthood (Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008).[91]

81.Ā That is, "In most children, gender dysphoria will disappear before, or early in, puberty."[92]

82.Ā Although WPATH does not refer to puberty blocking medications as "experimental," the document indicates the non-routine, or at least inconsistent availability of the treatment:

> Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. If such treatment is offered, the pubertal stage at which adolescents are allowed to start varies from Tanner stage 2 to stage 4 (Delemarre-van de Waal & Cohen-Kettenis, 2006; Zucker et al., [2012]).[93]

83.Ā WPATH neither endorses nor proscribes social transitions before puberty, instead recognizing the diversity among families' decisions:

> Social transitions in early childhood do occur within some families with early success. This is a controversial issue, and divergent views are held by health professionals. The current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood.[94]

84.Ā It does caution, however, "Relevant in this respect are the previously described relatively low persistence rates of childhood gender dysphoria."[95]

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91 Coleman, *et al.*, 2012, at 172.
92 Coleman, *et al.*, 2012, at 173.
93 Coleman, *et al.*, 2012, at 173.
94 Coleman, *et al.*, 2012, at 176.
95 Coleman, *et al.*, 2012, at 176 (quoting Drummond, *et al.*, 2008; Wallien & Cohen-Kettenis, 2008).

85.Ā The WPATH standards have been subjected to standardized evaluation, the Appraisal of Guidelines for Research and Evaluation ("AGREE II") method, as part of an appraisal of all published Clinical Practice Guidelines (CPGs) regarding sex and gender minority healthcare.[96] Utilizing community stakeholders to set domain priorities for the evaluation, the assessment concluded that the guidelines regarding HIV and its prevention were of high quality, but that "[t]ransition-related CPGs tended to lack methodological rigour and rely on patchier, lower-quality primary research."[97] The WPATH guidelines were recommended for use. Indeed, the WPATH guidelines received unanimous ratings of "Do not recommend."[98]

86.Ā Finally, it should be noted that WPATH is in stark opposition to international standards: Public healthcare systems throughout the world have instead been ending the practice of medical transition of minors, responding to the increasingly recognized risks associated with hormonal interventions and the now clear lack of evidence that medical transition was benefitting most children, as opposed to the mental health counseling accompanying transition.

2.ĀEndocrine Society (ES)

87.Ā The 150,000-member Endocrine Society appointed a nine-member task force, plus a methodologist and a medical writer, who commissioned two systematic reviews of the research literature and, in 2017, published an update of their 2009 recommendations, based on the best available evidence identified. The guideline was co-sponsored by the American Association of Clinical Endocrinologists, American Society of Andrology, European Society for Paediatric Endocrinology, European Society of Endocrinology, Pediatric Endocrine Society (PES), and the World Professional Association for Transgender Health (WPATH).

88.Ā The document acknowledged the frequency of desistance among gender

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96 Dahlen, *et al.*, 2021.
97 Dahlen, *et al.*, 2021, at 6.
98 Dahlen, *et al.*, 2021, at 7.

dysphoric children:

> Prospective follow-up studies show that childhood GD/gender incongruence does not invariably persist into adolescence and adulthood (so-called "desisters"). Combining all outcome studies to date, the GD/gender incongruence of a minority of prepubertal children appears to persist in adolescence. . . . In adolescence, a significant number of these desisters identify as homosexual or bisexual.[99]

89.Ā The statement similarly acknowledges inability to predict desistance or persistence, "With current knowledge, we cannot predict the psychosexual outcome for any specific child."[100]

90.Ā Although outside their area of professional expertise, mental health issues were also addressed by the Endocrine Society, repeating the need to handle such issues before engaging in transition, "In cases in which severe psychopathology, circumstances, or both seriously interfere with the diagnostic work or make satisfactory treatment unlikely, clinicians should assist the adolescent in managing these other issues."[101] This ordering—to address mental health issues before embarking on transition—avoids relying on the unproven belief that transition will solve such issues.

91.Ā The Endocrine Society did not endorse any affirmation-only approach. The guidelines were neutral with regard to social transitions before puberty, instead advising that such decisions be made only under clinical supervision: "We advise that decisions regarding the social transition of prepubertal youth are made with the assistance of a mental health professional or similarly experienced professional."[102]

92.Ā The Endocrine Society guidelines make explicit that, after gathering information from adolescent clients seeking medical interventions and their parents, the clinician "provides correct information to prevent unrealistically high expectations [and] assesses whether medical interventions may result in unfavorable

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99 Hembree, *et al.*, 2017, at 3876.
100 Hembree, *et al.*, 2017, at 3876.
101 Hembree, *et al.*, 2017, at 3877.
102 Hembree, *et al.*, 2017, at 3872.

psychological and social outcomes."[103]

3.ĀPediatric Endocrine Society and Endocrine Society (ES/PES)

93.Ā In 2020, the 1500-member Pediatric Endocrine Society partnered with the Endocrine Society to create and endorse a brief, two-page position statement.[104] Although strongly worded, the document provided no specific guidelines, instead deferring to the Endocrine Society guidelines.[105]

94.Ā It is not clear to what extent this endorsement is meaningful, however. According to the PES, the Endocrine Society "recommendations include evidence that treatment of gender dysphoria/gender incongruence is medically necessary and should be covered by insurance."[106] However, the Endocrine Society makes neither statement. Although the two-page PES document mentioned insurance coverage four times, the only mention of health insurance by the Endocrine Society was: "If GnRH analog treatment is not available (insurance denial, prohibitive cost, or other reasons), postpubertal, transgender female adolescents may be treated with an antiandrogen that directly suppresses androgen synthesis or action."[107] Despite the PES asserting it as "medically necessary," the Endocrine Society stopped short of that. Its only use of that phrase was instead limiting: "We recommend that a patient pursue genital gender-affirming surgery only after the MHP and the clinician responsible for endocrine transition therapy both agree that surgery is medically necessary and would benefit the patient's overall health and/or well-being."[108]

4.ĀAmerican Academy of Child & Adolescent Psychiatry (AACAP)

95.Ā The 2012 statement of the American Academy of Child & Adolescent Psychiatry (AACAP) is not an affirmation-only policy. It notes:

Just as family rejection is associated with problems such as depression,

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103 Hembree, *et al.*, 2017, at 3877.
104 PES, online; Pediatric Endocrine Society & Endocrine Society, Dec. 2020.
105 Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1; Hembree, *et al.*, 2017.
106 Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1.
107 Hembree, *et al.* 2017, at 3883.
108 Hembree, *et al.*, 2017 at 3872, 3894.

> suicidality, and substance abuse in gay youth, the proposed benefits of treatment to eliminate gender discordance in youth must be carefully weighed against such possible deleterious effects. . . . In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood, or at least until the wish to change sex is unequivocal, consistent, and made with appropriate consent.[109]

96.Ā The AACAP's language repeats the description of the use of puberty blockers only as an exception: "For situations in which deferral of sex reassignment decisions until adulthood is *not clinically feasible,* one approach that has been described in case series is sex hormone suppression under endocrinological management with psychiatric consultation using gonadotropin-releasing hormone analogues."[110]

97.Ā The AACAP statement acknowledges the long-term outcomes literature for gender dysphoric children: "In follow-up studies of prepubertal boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood,"[111] adding that "[c]linicians should be aware of current evidence on the natural course of gender discordance and associated psychopathology in children and adolescents in choosing the treatment goals and modality."[112]

98.Ā The policy similarly includes a provision for resolving mental health issues: "Gender reassignment services are available in conjunction with mental health services focusing on exploration of gender identity, cross-sex treatment wishes, counseling during such treatment if any, and *treatment of associated mental health problems*."[113] The document also includes minority stress issues and the need to deal with mental health aspects of minority status (*e.g.*, bullying).[114]

99.Ā Rather than endorse social transition for prepubertal children, the AACAP

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109 Adelson & AACAP, 2012, at 969.
110 Adelson & AACAP, 2012, at 969 (italics added).
111 Adelson & AACAP, 2012, at 963.
112 Adelson & AACAP, 2012, at 968.
113 Adelson & AACAP, 2012, at 970 (italics added).
114 Adelson & AACAP, 2012, at 969.

indicates: "There is similarly no data at present from controlled studies to guide clinical decisions regarding the risks and benefits of sending gender discordant children to school in their desired gender. Such decisions must be made based on clinical judgment, bearing in mind the potential risks and benefits of doing so."[115]

5.ĀAmerican College of Obstetricians & Gynecologists (ACOG)

100.Ā The American College of Obstetricians & Gynecologists (ACOG) published a "Committee Opinion" expressing recommendations in 2017. The statement indicates it was developed by the ACOG's Committee on Adolescent Health Care, but does not indicate participation based on professional expertise or a systematic method of objectively assessing the existing research. It includes the disclaimer: "This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed."[116]

101.Ā Prepubertal children do not typically have clinical contact with gynecologists, and the ACOG recommendations include that the client additionally have a primary health care provider.[117]

102.Ā The ACOG statement cites the statements made by other medical associations—European Society for Pediatric Endocrinology (ESPE),, PES, and the Endocrine Society—and by WPATH.[118] It does not cite any professional association of *mental* health care providers, however. The ACOG recommendations repeat the previously mentioned eligibility/readiness criteria of having no mental illness that would hamper diagnosis and no medical contraindications to treatment. It notes: "*Before* any treatment is undertaken, the patient must display eligibility and readiness (Table 1), meaning that the adolescent has been evaluated by a mental

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115 Adelson & AACAP, 2012, at 969.
116 ACOG, 2017, at 1.
117 ACOG, 2017, at 1.
118 ACOG, 2017, at 1, 3.

health professional, has no contraindications to therapy, and displays an understanding of the risks involved."[119]

103.Ā The "Eligibility and Readiness Criteria" also include, "Diagnosis established for gender dysphoria, transgender, transsexualism."[120] This standard, requiring a formal diagnosis, forestalls affirmation-on-demand because self-declared self-identification is not sufficient for DSM diagnosis.

104.Ā ACOG's remaining recommendations pertain only to post-transition, medically oriented concerns. Pre-pubertal social transition is not mentioned in the document, and the outcomes studies of gender dysphoric (prepubescent) children are not cited.

6.ĀAmerican College of Physicians (ACP)

105.Ā The American College of Physicians published a position paper broadly expressing support for the treatment of LGBT patients and their families, including nondiscrimination, antiharassment, and defining "family" by emotional rather than biological or legal relationships in visitation policies, and the inclusion of transgender health care services in public and private health benefit plans.[121]

106.Ā ACP did not provide guidelines or standards for child or adult gender transitions. The policy paper opposed attempting "reparative therapy;" however, the paper confabulated sexual orientation with gender identity in doing so. That is, on the one hand, ACP explicitly recognized that "[s]exual orientation and gender identity are inherently different."[122] It based this statement on the fact that "the American Psychological Association conducted a literature review of 83 studies on the efficacy of efforts to change *sexual orientation*."[123] The APA's document, entitled "Report of the American Psychological Task Force on appropriate therapeutic responses to

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119 ACOG, 2017, at 1, 3 (citing the Endocrine Society guidelines) (italics added).
120 ACOG, 2017, at 3 Table 1.
121 Daniel & Butkus, 2015a, 2015b.
122 Daniel & Butkus, 2015b, at 2.
123 Daniel & Butkus, 2015b, at 8 (italics added).

sexual orientation" does not include or reference research on gender identity.[124] Despite citing no research about transgenderism, the ACP nonetheless included in its statement: "Available research does not support the use of reparative therapy as an effective method in the treatment of LGB*T* persons."[125] That is, the inclusion of "T" with "LGB" is based on something other than the existing evidence.

107. There is another statement,[126] which was funded by ACP and published in the Annals of Internal Medicine under its "*In the Clinic*" feature, noting that "'In the Clinic' does not necessarily represent official ACP clinical policy."[127] The document discusses medical transition procedures for adults rather than for children, except to note that "[n]o medical intervention is indicated for prepubescent youth,"[128] that a "mental health provider can assist the child and family with identifying an appropriate time for a social transition,"[129] and that the "child should be assessed and managed for coexisting mood disorders during this period because risk for suicide is higher than in their cisgender peers."[130]

7. American Academy of Pediatrics (AAP)

108. The policy of the American Academy of Pediatrics (AAP) is unique among the major medical associations in being the only one to endorse an affirmation-on-demand policy, including social transition before puberty without any watchful waiting period. Although changes in recommendations can obviously be appropriate in response to new research evidence, the AAP provided none. Rather, the research studies AAP cited in support of its policy simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing watchful waiting.[131] Moreover, of all

124 APA, 2009 (italics added).
125 Daniel & Butkus, 2015b, at 8 (italics added).
126 Safer & Tangpricha, 2019.
127 Safer & Tangpricha, 2019, at ITC1.
128 Safer & Tangpricha, 2019, at ITC9.
129 Safer & Tangpricha, 2019, at ITC9.
130 Safer & Tangpricha, 2019, at ITC9.
131 Cantor, 2020.

the outcomes research published, the AAP policy cited *one*, and that without mentioning the outcome data it contained.[132].

109.Ā Immediately following the publication of the AAP policy, I conducted a point-by-point fact-check of the claims it asserted and the references it cited in support. I submitted that to the *Journal of Sex & Marital Therapy*, a well-known research journal of my field, where it underwent blind peer review and was published. I append that article as part of this report. *See* Appendix 2. A great deal of published attention ensued; however, the AAP has yet to respond to the errors I demonstrated its policy contained. Writing for *The Economist* about the use of puberty blockers, Helen Joyce asked AAP directly, "Has the AAP responded to Dr Cantor? If not, have you any response now?" The AAP Media Relations Manager, Lisa Black, responded: "We do not have anyone available for comment."

8.ĀThe ESPE-LWPES GnRH Analogs Consensus Conference Group

110.Ā Included in the interest of completeness, there was also a collaborative report in 2009, between the European Society for Pediatric Endocrinology (ESPE) and the Lawson Wilkins Pediatric Endocrine Society (LWPES).[133] Thirty experts were convened, evenly divided between North American and European labs and evenly divided male/female, who comprehensively rated the research literature on gonadotropin-release hormone analogs in children.

111.Ā The effort concluded that "[u]se of gonadotropin-releasing hormone analogs for conditions other than central precocious puberty requires additional investigation and cannot be suggested routinely."[134] However, gender dysphoria was not explicitly mentioned as one of those other conditions.

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[132] Cantor, 2020, at 1.
[133] Carel et al., 2009.
[134] Carel et al. 2009, at 752.

VI.Ā International Health Care Consensus

1. United Kingdom

112.Ā The National Health Service (NHS) of the United Kingdom centralizes gender counselling and transitioning services in a single clinic, the Gender Identity Development Service (GIDS) of the Tavistock and Portman NHS Foundation Trust. Between 2008 and 2018, the number of referrals to the clinic had increased by a factor of 40, leading to a government inquiry into the causes[135]. The GIDS was repeatedly accused of over-diagnosing and permitting transition in cases despite indicators against patient transition, including by 35 members of the GIDS staff, who resigned by 2019[136].

113.Ā The NHS appointed Dr. Hilary Cass, former President of the Royal College of Paediatrics and Child Health, to conduct an independent review[137]. That review included a systematic consolidation of all the research evidence, following established procedures for preventing the "cherry-picking" or selective citation favouring or down-playing any one conclusion[138]. The review's results were unambiguous: "The critical outcomes for decision making are the impact on gender dysphoria, mental health and quality of life. The quality of evidence for these outcomes was assessed as very low"[139], again using established procedures for assessing clinical research evidence (called GRADE). The review also assessed as "very low" the quality of evidence regarding "body image, psychosocial impact, engagement with health care services, impact on extent of an satisfaction with surgery and stopping treatment"[140]. The report concluded that of the existing research, "The studies included in this evidence review are all small, uncontrolled observational studies, which are subject to bias and confounding….They suggest little change with GnRH analogues [puberty

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135 Marsh, 2020; Rayner, 2018.
136 BBC, 2021; Donnelly, 2019.
137 National Health Service, 2020, Sept. 22.
138 National Institute for Health and Care Excellence, 2020.
139 National Institute for Health and Care Excellence, 2020, p. 4.
140 National Institute for Health and Care Excellence, 2020, p. 5.

blockers] from baseline to follow-up"[141].

2. Finland

114.Ā In Finland, the assessments of mental health and preparedness of minors for transition services are centralized by law into two research clinics, Helsinki University Central Hospital and Tampere University Hospital. The eligibility of minors began in 2011. In 2019, Finnish researchers published an analysis of the outcomes of adolescents diagnosed with transsexualism and receiving cross-sex hormone treatment[142]. That study showed that despite the purpose of medical transition to improve mental health: "Medical gender reassignment is not enough to improve functioning and relieve psychiatric comorbidities among adolescents with gender dysphoria. Appropriate interventions are warranted for psychiatric comorbidities and problems in adolescent development"[143]. The patients who were functioning well after transition were those who were already functioning well before transition, and those who were functioning poorly, continued to function poorly after transition.

115.Ā Consistent with the evidence, Finland's health care service (Council for Choices in Health Care in Finland—COHERE) thus ended the surgical transition of minors, ruling in 2020 that "Surgical treatments are not part of the treatment methods for dysphoria caused by gender-related conflicts in minors" (COHERE, 2020). The review of the research concluded that "[N]o conclusions can be drawn on the stability of gender identity during the period of disorder caused by a psychiatric illness with symptoms that hamper development." COHERE also greatly restricted access to puberty-blocking and other hormonal treatments, indicating they "may be considered if the need for it continues *after* the other psychiatric symptoms have

141 National Institute for Health and Care Excellence, 2020, p. 13.
142 Kaltiala et al., 2020.
143 Kaltiala et al., 2020, p. 213.

ceased and adolescent development is progressing normally"[144]. The council was explicit in noting the lack of research needed for decision-making, "There is also a need for more information on the *disadvantages* of procedures and on people who regret them"[145].

3. Sweden

116.Ā Sweden's national health care policy regarding trans issues has developed quite similarly to that of the UK. Already in place 20 years ago, Swedish health care policy permitted otherwise eligible minors to receive puberty-blockers beginning at age 14 and cross-sex hormones at age 16.) At that time, only small numbers of minors sought medical transition services. An explosion of referrals ensued in 2013–2014. Sweden's Board of Health and Welfare reported that, in 2018, the number of diagnoses of gender dysphoria was 15 times higher than 2008 among girls ages 13–17.

117.Ā Sweden has long been very accepting with regard to sexual and gender diversity. In 2018, a law was proposed to lower the age of eligibility for surgical care from age 18 to 15, remove the requirement for parental consent, and lower legal change of gender to age 12. A series of cases of regret and suicide were reported in the Swedish media, leading to questions of mental health professionals failing to consider. In 2019, the Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) therefore conducted its own comprehensive review of the research[146]. Like the UK, the Swedish investigation employed methods to ensure the encapsulation of the all the relevant evidence[147].

118.Ā The SBU report came to the same conclusions as the UK commission. From 2022 forward, the Swedish National Board or Health and Welfare therefore

144 Council for Choices in Health Care in Finland, 2020; italics added.
145 Council for Choices in Health Care in Finland, 2020; italics added.
146 Orange, 2020, Feb 22.
147 Swedish Agency for Health Technology Assessment and Assessment of Social Services, 2019.

"recommends restraint when it comes to hormone treatment…Based on the results that have emerged, the National Board of Health and Welfare's overall conclusion is that the risks of anti-puberty and sex-confirming hormone treatment for those under 18 currently outweigh the possible benefits for the group as a whole"[148]. Neither puberty blockers nor cross-sex hormones would be provided under age 16, and patients ages 16–18 would receive such treatments only within research settings (clinical trials monitored by the appropriate Swedish research ethics board).

4.ĀFrance

119.Ā In 2022, the Académie Nationale de Médecine of France issued a strongly worded statement, citing the Swedish ban on hormone treatments. "[A] great medical caution must be taken in children and adolescents, given the vulnerability, particularly psychological, of this population and the many undesirable effects, and even serious complications, that some of the available therapies can cause…such as impact on growth, bone fragility, risk of sterility, emotional and intellectual consequences and, for girls, symptoms reminiscent of menopause"[149]. For hormones, the Académie concluded "the greatest reserve is required in their use," and for surgical treatments, "[T]heir irreversible nature must be emphasized." The Académie did not outright ban medical interventions, but warned "the risk of over-diagnosis is real, as shown by the increasing number of transgender young adults wishing to "detransition". Rather than medical interventions, it advised health care providers "to extend as much as possible the psychological support phase." The Académie reviewed and emphasized the evidence indicating the very large and very sudden increase in youth requesting medical transition. It attributed the change, not to society now being more accepting of sexual diversity, but to social media, "underlining the addictive character of excessive consultation of social networks which is both

148 Swedish National Board of Health and Welfare, 2022.
149 Académie Nationale de Médecine, 2022, Feb. 25.

harmful to the psychological development of young people and responsible, for a very important part, of the growing sense of gender incongruence."

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APPENDICES

Appendix 1

The Outcomes Studies of Childhood-Onset Gender Dysphoria

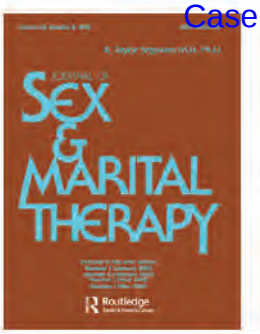
Appendix 2

Peer-reviewed article:

Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy, 46,* 307–313. doi: 10.1080/0092623X.2019.1698481

Prospective Outcomes Studies of Gender Dysphoric Children

2/16 4/16 10/16	gay trans-/crossdress straight/uncertain	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283–1289.
2/16 2/16 12/16	trans- uncertain gay	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. *Comprehensive Psychiatry, 19, 363–369.*
0/9 9/9	trans- gay	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. *Journal of Pediatric Psychology, 4,* 29–41.
2/45 10/45 33/45	trans-/crossdress uncertain gay	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90–97.
1/10 2/10 3/10 4/10	trans- gay uncertain straight	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. *Archives of Sexual Behavior, 15,*511–517.
1/44 43/44	trans- cis-	Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality.* New Haven, CT: Yale University Press.
0/8 8/8	trans- cis-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565–569.
21/54 33/54	trans- cis-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413–1423.
3/25 6/25 16/25	trans- lesbian/bi- straight	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology, 44,* 34–45.
47/127 80/127	trans- cis-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582–590.
17/139 122/139	trans- cis-	Singh, D., Bradley, S. J., and Zucker, K. J. (2021) A follow-up study of boys with gender identity disorder. Frontiers in Psychiatry, 12, 632784. doi: 10.3389/fpsyt.2021.632784



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Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy

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ABSTRACT

The American Academy of Pediatrics (AAP) recently published a policy statement: *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents*. Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping gender diverse (GD) children, the AAP statement instead rejected that consensus, endorsing *gender affirmation* as the only acceptable approach. Remarkably, not only did the AAP statement fail to include any of the actual outcomes literature on such cases, but it also misrepresented the contents of its citations, which repeatedly said the very opposite of what AAP attributed to them.

The American Academy of Pediatrics (AAP) recently published a policy statement entitled, *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents* (Rafferty, AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, 2018). These are children who manifest discontent with the sex they were born as and desire to live as the other sex (or as some alternative gender role). The policy was quite a remarkable document: Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping transgender and gender diverse (GD) children, the AAP statement rejected that consensus, endorsing only *gender affirmation*. That is, where the consensus is to delay any transitions after the onset of puberty, AAP instead rejected waiting before transition. With AAP taking such a dramatic departure from other professional associations, I was immediately curious about what evidence led them to that conclusion. As I read the works on which they based their policy, however, I was pretty surprised—rather alarmed, actually: These documents simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing *watchful waiting*.

The AAP statement was also remarkable in what it left out—namely, the actual outcomes research on GD children. In total, there have been 11 follow-up studies of GD children, of which AAP cited one (Wallien & Cohen-Kettenis, 2008), doing so without actually mentioning the outcome data it contained. The literature on outcomes was neither reviewed, summarized, nor subjected to meta-analysis to be considered in the aggregate—It was merely disappeared. (The list of all existing studies appears in the appendix.) As they make clear, *every* follow-up study of GD children, without exception, found the same thing: Over puberty, the majority of GD children cease to want to transition. AAP is, of course, free to establish whatever policy it likes on

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whatever basis it likes. But any assertion that their policy is based on evidence is demonstrably false, as detailed below.

AAP divided clinical approaches into three types—conversion therapy, watchful waiting, and gender affirmation. It rejected the first two and endorsed *gender affirmation* as the only acceptable alternative. Most readers will likely be familiar already with attempts to use conversion therapy to change sexual orientation. With regard to gender identity, AAP wrote:

> "[C]onversion" or "reparative" treatment models are used to prevent children and adolescents from identifying as transgender or to dissuade them from exhibiting gender-diverse expressions. ... Reparative approaches have been proven to be not only unsuccessful[38] but also deleterious and are considered outside the mainstream of traditional medical practice.[29,39–42]

The citations were:

38. Haldeman DC. The practice and ethics of sexual orientation conversion therapy. *J Consult Clin Psychol.* 1994;62(2):221–227.

29. Adelson SL; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *J Am Acad Child Adolesc Psychiatry.* 2012;51(9):957–974.

39. Byne W. Regulations restrict practice of conversion therapy. *LGBT Health.* 2016;3(2):97–99.

40. Cohen-Kettenis PT, Delemarrevan de Waal HA, Gooren LJ. The treatment of adolescent transsexuals: changing insights. *J Sex Med.* 2008;5(8):1892–1897.

41. Bryant K. Making gender identity disorder of childhood: historical lessons for contemporary debates. *Sex Res Soc Policy.* 2006;3(3):23–39.

42. World Professional Association for Transgender Health. *WPATH De-Psychopathologisation Statement.* Minneapolis, MN: World Professional Association for Transgender Health; 2010.

AAP's claims struck me as odd because *there are no studies of conversion therapy for gender identity.* Studies of conversion therapy have been limited to *sexual orientation,* and, moreover, to the sexual orientation *of adults,* not to gender identity and not of children in any case. The article AAP cited to support their claim (reference number 38) is indeed a classic and well-known review, but it is a review of sexual orientation research *only.* Neither gender identity, nor even children, received a single mention in it. Indeed, the narrower scope of that article should be clear to anyone reading even just its title: "The practice and ethics of *sexual orientation* conversion therapy" [italics added].

AAP continued, saying that conversion approaches for GD children have already been rejected by medical consensus, citing five sources. This claim struck me as just as odd, however—I recalled associations banning conversion therapy for sexual orientation, but not for gender identity, exactly because there is no evidence for generalizing from adult sexual orientation to childhood gender identity. So, I started checking AAP's citations for that, and these sources too pertained only to sexual orientation, not gender identity (specifics below). What AAP's sources *did* repeatedly emphasize was that:

A. Sexual orientation of adults is unaffected by conversion therapy and any other [known] intervention;
B. Gender dysphoria in childhood before puberty desists in the majority of cases, becoming (cis-gendered) homosexuality in adulthood, again regardless of any [known] intervention; and
C. Gender dysphoria in childhood persisting after puberty tends to persist entirely.

That is, in the context of GD children, it simply makes no sense to refer to externally induced "conversion": The majority of children "convert" to cisgender or "desist" from transgender

regardless of any attempt to change them. "Conversion" only makes sense with regard to adult sexual orientation because (unlike childhood gender identity), adult homosexuality never or nearly never spontaneously changes to heterosexuality. Although gender identity and sexual orientation may often be analogous and discussed together with regard to social or political values and to civil rights, they are nonetheless distinct—with distinct origins, needs, and responses to medical and mental health care choices. Although AAP emphasized to the reader that "gender identity is not synonymous with 'sexual orientation'" (Rafferty et al., 2018, p. 3), they went ahead to treat them as such nonetheless.

To return to checking AAP's fidelity to its sources: Reference 29 was a practice guideline from the Committee on Quality Issues of the American Academy of Child and Adolescent Psychiatry (AACAP). Despite AAP applying this source to *gender identity*, AACAP was quite unambiguous regarding their intent to speak to sexual orientation and *only* to sexual orientation: "Principle 6. Clinicians should be aware that there is no evidence that *sexual orientation* can be altered through therapy, and that attempts to do so may be harmful. There is no established evidence that change in a predominant, enduring *homosexual* pattern of development is possible. Although sexual fantasies can, to some degree, be suppressed or repressed by those who are ashamed of or in conflict about them, sexual desire is not a choice. However, behavior, social role, and—to a degree—identity and self-acceptance are. Although operant conditioning modifies sexual fetishes, it does not alter *homosexuality*. Psychiatric efforts to alter *sexual orientation* through 'reparative therapy' *in adults* have found little or no change in *sexual orientation*, while causing significant risk of harm to self-esteem" (AACAP, 2012, p. 967, italics added).

Whereas AAP cites AACAP to support gender affirmation as the only alternative for treating GD children, AACAP's actual view was decidedly neutral, noting the lack of evidence: "Given the lack of empirical evidence from randomized, controlled trials of the efficacy of treatment aimed at eliminating gender discordance, the potential risks of treatment, and longitudinal evidence that gender discordance persists in only a small minority of untreated cases arising in childhood, further research is needed on predictors of persistence and desistence of childhood gender discordance as well as the long-term risks and benefits of intervention before any treatment to eliminate gender discordance can be endorsed" (AACAP, 2012, p. 969). Moreover, whereas AAP rejected watchful waiting, what AACAP recommended was: "In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood" (AACAP, 2012, p. 969). So, not only did AAP attribute to AACAP something AACAP never said, but also AAP withheld from readers AACAP's actual view.

Next, in reference 39, Byne (2016) also addressed only sexual orientation, doing so very clearly: "Reparative therapy is a subset of conversion therapies based on the premise that *same-sex attraction* are reparations for childhood trauma. Thus, practitioners of reparative therapy believe that exploring, isolating, and repairing these childhood emotional wounds will often result in reducing *same-sex attractions*" (Byne, 2016, p. 97). Byne does not say this of gender identity, as the AAP statement misrepresents.

In AAP reference 40, Cohen-Kettenis et al. (2008) did finally pertain to gender identity; however, this article never mentions conversion therapy. (!) Rather, in this study, the authors presented that clinic's lowering of their minimum age for cross-sex hormone treatment from age 18 to 16, which they did on the basis of a series of studies showing the high rates of success with this age group. Although it did strike me as odd that AAP picked as support against conversion therapy an article that did not mention conversion therapy, I could imagine AAP cited the article as an example of what the "mainstream of traditional medical practice" consists of (the logic being that conversion therapy falls outside what an 'ideal' clinic like this one provides). However, what this clinic provides is the very *watchful waiting* approach that AAP rejected. The approach

espoused by Cohen-Kettenis (and the other clinics mentioned in the source—Gent, Boston, Oslo, and now formerly, Toronto) is to make puberty-halting interventions available at age 12 because: "[P]ubertal suppression may give adolescents, together with the attending health professional, more time to explore their gender identity, without the distress of the developing secondary sex characteristics. The precision of the diagnosis may thus be improved" (Cohen-Kettenis et al., 2008, p. 1894).

Reference 41 presented a very interesting history spanning the 1960s–1990s about how feminine boys and tomboyish girls came to be recognized as mostly pre-homosexual, and how that status came to be entered into the DSM at the same time as homosexuality was being *removed* from the DSM. Conversion therapy is never mentioned. Indeed, to the extent that Bryant mentions treatment at all, it is to say that treatment is entirely irrelevant to his analysis: "An important omission from the *DSM* is a discussion of the kinds of treatment that GIDC children should receive. (This omission is a general orientation of the DSM and not unique to GIDC)" (Bryant, 2006, p. 35). How this article supports AAP's claim is a mystery. Moreover, how AAP could cite a 2006 history discussing events of the 1990s and earlier to support a claim about the *current* consensus in this quickly evolving discussion remains all the more unfathomable.

Cited last in this section was a one-paragraph press release from the World Professional Association for Transgender Health. Written during the early stages of the American Psychiatric Association's (APA's) update of the DSM, the statement asserted simply that "The WPATH Board of Directors strongly urges the de-psychopathologisation of gender variance worldwide." Very reasonable debate can (and should) be had regarding whether gender dysphoria should be removed from the DSM as homosexuality was, and WPATH was well within its purview to assert that it should. Now that the DSM revision process is years completed however, history has seen that APA ultimately retained the diagnostic categories, rejecting WPATH's urging. This makes AAP's logic entirely backwards: That WPATH's request to depathologize gender dysphoria was *rejected* suggests that it is *WPATH's* view—and therefore the AAP policy—which fall "outside the mainstream of traditional medical practice." (!)

AAP based this entire line of reasoning on their belief that conversion therapy is being used "to prevent children and adolescents from identifying as transgender" (Rafferty et al., 2018, p. 4). That claim is left without citation or support. In contrast, what is said by AAP's sources is "delaying affirmation should *not* be construed as conversion therapy or an attempt to change gender identity" in the first place (Byne, 2016, p. 2). Nonetheless, AAP seems to be doing exactly that: simply relabeling any alternative approach as equivalent to conversion therapy.

Although AAP (and anyone else) may reject (what they label to be) conversion therapy purely on the basis of political or personal values, there is no evidence to back the AAP's stated claim about the existing science on gender identity at all, never mind gender identity of children.

AAP also dismissed the watchful waiting approach out of hand, not citing any evidence, but repeatedly calling it "outdated." The criticisms AAP provided, however, again defied the existing evidence, with even its own sources repeatedly calling watchful waiting the current standard. According to AAP:

> [G]ender affirmation is in contrast to the outdated approach in which a child's gender-diverse assertions are held as "possibly true" until an arbitrary age (often after pubertal onset) when they can be considered valid, an approach that authors of the literature have termed "watchful waiting." This outdated approach does not serve the child because critical support is withheld. Watchful waiting is based on binary notions of gender in which gender diversity and fluidity is pathologized; in watchful waiting, it is also assumed that notions of gender identity become fixed at a certain age. The approach is also influenced by a group of early studies with validity concerns, methodologic flaws, and limited follow-up on children who identified as TGD and, by adolescence, did not seek further treatment ("desisters").[45,47]

The citations from AAP's reference list are:

45. Ehrensaft D, Giammattei SV, Storck K, Tishelman AC, Keo-Meier C. Prepubertal social gender transitions: what we know; what we can learn—a view from a gender affirmative lens. *Int J Transgend.* 2018;19(2):251–268

47. Olson KR. Prepubescent transgender children: what we do and do not know. *J Am Acad Child Adolesc Psychiatry.* 2016;55(3):155–156.e3

I was surprised first by the AAP's claim that watchful waiting's delay to puberty was somehow "arbitrary." The literature, including AAP's sources, repeatedly indicated the pivotal importance of puberty, noting that outcomes strongly diverge at that point. According to AAP reference 29, in "*prepubertal* boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood, with only 2.2% to 11.9% continuing to experience gender discordance" (Adelson & AACAP, 2012, p. 963, italics added), whereas "when gender variance with the desire to be the other sex is present *in adolescence*, this desire usually does persist through adulthood" (Adelson & AACAP, 2012, p. 964, italics added). Similarly, according to AAP reference 40, "Symptoms of GID *at prepubertal ages* decrease or even disappear in a considerable percentage of children (estimates range from 80–95%). Therefore, any intervention in childhood would seem premature and inappropriate. However, GID persisting *into early puberty* appears to be highly persistent" (Cohen-Kettenis et al., 2008, p. 1895, italics added). That follow-up studies of prepubertal transition differ from postpubertal transition is the very meaning of non-arbitrary. AAP gave readers exactly the reverse of what was contained in its own sources. If AAP were correct in saying that puberty is an arbitrarily selected age, then AAP will be able to offer another point to wait for with as much empirical backing as puberty has.

Next, it was not clear on what basis AAP could say that watchful waiting withholds support—AAP cited no support for its claim. The people in such programs often receive substantial support during this period. Also unclear is on what basis AAP could already know exactly which treatments are "critical" and which are not—Answering that question is the very purpose of this entire endeavor. Indeed, the logic of AAP's claim appears entirely circular: It is only if one were already pre-convinced that gender affirmation is the only acceptable alternative that would make watchful waiting seem to withhold critical support—What it delays is gender affirmation, the method one has already decided to be critical.

Although AAP's next claim did not have a citation appearing at the end of its sentence, binary notions of gender were mentioned both in references 45 and 47. Specifically, both pointed out that existing outcome studies have been about people transitioning from one sex to the other, rather than from one sex to an in-between status or a combination of masculine/feminine features. Neither reference presented this as a reason to reject the results from the existing studies of complete transition however (which is how AAP cast it). Although it is indeed true that the outcome data have been about complete transition, some future study showing that partial transition shows a different outcome would not invalidate what is known about complete transition. Indeed, data showing that partial transition gives better outcomes than complete transition would, once again, support the watchful waiting approach which AAP rejected.

Next was a vague reference alleging concerns and criticisms about early studies. Had AAP indicated what those alleged concerns and flaws were (or which studies they were), then it would be possible to evaluate or address them. Nonetheless, the argument is a red herring: Because all of the later studies showed the same result as did the early studies, any such allegation is necessarily moot.

Reference 47 was a one-and-a-half page commentary in which the author off-handedly mentions criticisms previously made of three of the eleven outcome studies of GD children, but does not provide any analysis or discussion. The only specific claim was that studies (whether early or late) had limited follow-up periods—the logic being that had outcome researchers lengthened the follow-up period, then people who seemed to have desisted might have returned to the clinic as

cases of "persistence-after-interruption." Although one could debate the merits of that prediction, AAP instead simply withheld from the reader the result from the original researchers having tested that very prediction directly: Steensma and Cohen-Kettenis (2015) conducted another analysis of their cohort, by then ages 19–28 (mean age 25.9 years), and found that 3.3% (5 people of the sample of 150) later returned. That is, in long-term follow-up, the childhood sample showed 66.7% desistence instead of 70.0% desistance.

Reference 45 did not support the claim that watchful-waiting is "outdated" either. Indeed, that source said the very opposite, explicitly referring to watchful waiting as the *current* approach: "Put another way, if clinicians are straying from SOC 7 guidelines for social transitions, not abiding by the watchful waiting model *favored by the standards*, we will have adolescents who have been consistently living in their affirmed gender since age 3, 4, or 5" (Ehrensaft et al., 2018, p. 255). Moreover, Ehrensaft et al. said there are cases in which they too would still use watchful waiting: "When a child's gender identity is unclear, the watchful waiting approach can give the child and their family time to develop a clearer understanding and is not necessarily in contrast to the needs of the child" (p. 259). Ehrensaft et al. are indeed critical of the watchful waiting model (which they feel is applied too conservatively), but they do not come close to the position the AAP policy espouses. Where Ehrensaft summaries the potential benefits and potential risks both to transitioning and not transitioning, the AAP presents an ironically binary narrative.

In its policy statement, AAP told neither the truth nor the whole truth, committing sins both of commission and of omission, asserting claims easily falsified by anyone caring to do any fact-checking at all. AAP claimed, "This policy statement is focused specifically on children and youth that identify as TGD rather than the larger LGBTQ population"; however, much of that evidence was about sexual orientation, not gender identity. AAP claimed, "Current available research and expert opinion from clinical and research leaders … will serve as the basis for recommendations" (pp. 1–2); however, they provided recommendations entirely unsupported and even in direct opposition to that research and opinion.

AAP is advocating for something far in excess of mainstream practice and medical consensus. In the presence of compelling evidence, that is just what is called for. The problems with Rafferty, however, do not constitute merely a misquote, a misinterpretation of an ambiguous statement, or a missing reference or two. Rather, AAP's statement is a systematic exclusion and misrepresentation of entire literatures. Not only did AAP fail to provide compelling evidence, it failed to provide the evidence at all. Indeed, AAP's recommendations are *despite* the existing evidence.

Disclosure statement

No potential conflict of interest was reported by the author.

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Steensma, T. D., & Cohen-Kettenis, P. T. (2015). More than two developmental pathways in children with gender dysphoria? *Journal of the American Academy of Child and Adolescent Psychiatry*, *52*, 147–148. doi:10.1016/j.jaac.2014.10.016

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Appendix

Count	Group	Study
2/16 4/16 10/16	gay* trans-/crossdress straight*/uncertain	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283–1289.
2/16 2/16 12/16	trans- uncertain gay	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. *Comprehensive Psychiatry, 19,* 363–369.
0/9 9/9	trans- gay	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. *Journal of Pediatric Psychology, 4,* 29–41.
2/45 10/45 33/45	trans-/crossdress uncertain gay	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90–97.
1/10 2/10 3/10 4/10	trans- gay uncertain straight	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. *Archives of Sexual Behavior, 15,* 511–517.
1/44 43/44	trans- cis-	Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality.* New Haven, CT: Yale University Press.
0/8 8/8	trans- cis-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565–569.
21/54 33/54	trans- cis-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413–1423.
3/25 6/25 16/25	trans- lesbian/bi- straight	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology, 44,* 34–45.
17/139 122/139	trans- cis-	Singh, D. (2012). *A follow-up study of boys with gender identity disorder.* Unpublished doctoral dissertation, University of Toronto.
47/127 80/127	trans- cis-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582–590.

*For brevity, the list uses "gay" for "gay and cis-", "straight" for "straight and cis-", etc.

Appendix Attachment

5

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

DECLARATION OF QUENTIN L. VAN METER, MD

I, Quentin L. Van Meter., hereby declare and state as follows:

1. I am over the age of 18, of sound mind, and in all respects competent to testify. I have personal knowledge of the information contained in this declaration and would testify completely to those facts if called to do so.

2. I received my B.A. in Science at the College of William and Mary and my M.D. from the Medical College of Virginia, Virginia Commonwealth University. I am currently a pediatric endocrinologist in private practice in Atlanta, Georgia. I am the President of Van Meter Pediatric Endocrinology, P.C. I am on the clinical faculties of Emory University School of Medicine and Morehouse College of Medicine, in the role of adjunct Associate Professor of Pediatrics. I am board certified in Pediatrics and Pediatric Endocrinology. I have been licensed to practice medicine in Georgia since 1991. I have been previously licensed to practice medicine in California, Louisiana, and Maryland.

3. I did my Pediatric Endocrine fellowship at Johns Hopkins Hospital from 1978-1980. The faculty present at that time had carried on the tradition of excellence established by Lawson Wilkins, M.D. Because of the reputation of the endocrine program as a center for exceptional care for children with disorders of sexual differentiation, I had well-above average exposure to such patients. As a

Pediatric Fellow, I was also exposed to adults with Gender Identity Disorder, then called Trans-Sexuality, and received training from John Money, Ph.D., in his Psycho-hormonal Division. Over the past 44 years, I have closely followed the topic of incongruent gender in children adolescents and adults.

4. I am the author of a report attached to the Florida Agency for Healthcare Administration's Generally Accepted Professional Medical Standards on the Treatment of Gender Dysphoria. A copy of my report is attached and incorporated by reference as Exhibit "A" to this declaration.

5. I have been retained by the Defendants in this case to respond to statements of Johanna Olsen-Kennedy about my report.

6. I have testified in deposition or at trial in the following cases within the last four years: Siefert *v.* Hamilton County, Ohio, Grahm *v.* Gloucester County Schools, Virginia, Ray et al *v.*Himes et al, U.S. District Court for the Southern District, Ohio, A.Loughman *v* .C. Loughman 311th Judicial District Court, Harris County TX, L.C. Cauthen *v.* J.B. Cauthen Cobb Country Superior Court, Georgia, and LL Spahr *v.* R.S.Spahr, St. Louis County Court, MO.

7. A list of my publications is included in my curriculum vitae, which is attached.

8. I was compensated $350 per hour for preparing my initial report ("Exhibit "A")I am being compensated at an hourly rate of $450 per hour for my time preparing this declaration. My compensation does not depend on the outcome of this litigation, the opinions I express, or the testimony I may provide.

7. In paragraph 63 of her declaration, Dr. Olsen-Kennedy states that I "incorrectly allege that an increase in numbers of youth presenting for care related to GD provides support for the social contagion theory." In doing so, she summarily dismisses the fact that the numbers of children and adolescents presenting with gender identity incongruence (GII) has increased because of social

contagion and asserts that the "old numbers" were from the time when the diagnosis was for Gender Identity Disorder (GID), not Gender Dysphoria. She categorizes GID as a completely separate disorder from Gender Dysphoria, which is patently wrong. GID was banished from the DSM-V because the committee that was in charge of revising the DSM-IV threatened its chairman, Kenneth Zucker, with loss of his position at the prestigious clinic in Toronto where so much work had been done with children and adolescents using counseling therapies to bring about desistance of the gender identity incongruence. Zucker, in order to protect his patients from losing all health care funding for their counseling therapies, pleaded that erasing GID would leave the patients with no diagnosis at all and that, at least Gender Dysphoria would allow these patients to seek the care they needed and not have to pay out of pocket. His efforts still got him fired.

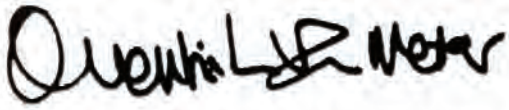
8. It flies in the face of reality that online communication is the not the first and foremost place where the patient with GII searches. If you search transgender on Google, you find 513,000,000 entries, with Planned Parenthood at the top of the list. This is social contagion by definition. At 5000% increase in clinic consultations over 10 years in the Tavistock clinic does not happen with resolution of the minority stress theory.

9. In paragraphs 89-91 of her declaration, Dr. Olson-Kennedystates that "[b]oth the GAPMS Memo and Dr. Van Meter repeatedly express concern that the U.S. Food and Drug Administration (FDA) has not approved puberty blockers or hormone therapy for the treatment of gender dysphoria." In doing so, she argues that many drugs are used off label and therefore the use of off-label drugs for gender dysphoria is no different. Those drugs that are used off-label are either not shown to have any significant adverse outcome, or they are used in a very limited fashion until it can be proven they are safe and efficacious. An example of this is the use of aromatase inhibitors in adolescent males to stall off epiphyseal closure in hopes of achieving a better final height. This class of drugs was brought under scrutiny by the Pediatric Endocrine Society Committee on

Pharmacotherapeutics, and very strict safety monitoring standards were proposed. There are unquestionable issues with adverse outcomes using GnRH analogs in adolescents: bone density, interruption of gonadal maturation, inhibition of brain development are just a few. There is no ongoing, centralized unbiased assessment of these issues, despite the clear call by the Endocrine Society Guidelines of 2009 and revised Guidelines of 2017. Because the necessary, RECOMMENDED controlled studies are not being done, proceeding with the use of GNRH agonists is unquestionably experimenting on children.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 2nd day of October, 2022.

Respectfully submitted,



Quentin L. Van Meter, MD

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PERSONAL

Home Address:	1080 Peachtree St. NE #3507, Atlanta, GA 30309
Home Phone:	(404) 963-5618
Date of Birth:	September 13, 1947
Place of Birth:	Laramie, Wyoming
Citizenship:	USA

EDUCATION:

Undergraduate:	College of William & Mary, 1969 B.S. – 1969
Medical School:	Medical College of Virginia, 1973 M.D. – 1973

CLINICAL TRAINING:

Institution:	The University of California, San Francisco
Hospital:	Naval Regional Medical Center, Oakland
Position:	Pediatric Intern – 1973 – 1974 Pediatric Resident – 1974 – 1976
Institution:	Johns Hopkins University
Hospital:	Johns Hopkins Hospital
Position:	Fellow, Pediatric Endocrinology 1978 – 1980 Fellowship Program Director: Claude Migeon, M.D.
Current Position:	Pediatric Endocrinologist Van Meter Pediatric Endocrinology, P.C. 1800 Howell Mill Road, Suite 475 Atlanta, Georgia 30318

PROFESSIONAL CERTIFICATION & SOCIETIES:

Diplomate, National Board of Medical Examiners, 1974

American Board of Pediatrics, certified in general pediatrics, 1978, sub-board certified in Pediatric Endocrinology, 1983

Fellow:	American Academy of Pediatrics, Georgia Chapter 1975 -present President, Uniformed Services West Chapter, 1987 – 1990 District VIII member, AAP Committee on Awards for Excellence in Research, 1990-1994 Editor, The Georgia Pediatrician, 1994 – 1998 Chairman, Georgia Chapter Legislative Committee, 1996 – 2006
Fellow:	The American College of Pediatricians, 2007 – present Member of the Board of Directors, 2008- present President, 2018-present
Member:	Pediatric Endocrine Society, 1989 – present
Member:	American Diabetes Association Professional Section, 1988 – present
Member:	Endocrine Society, 1994-present
Member:	Southern Pediatric Endocrine Society, 1992 – Present
Member:	American Association of Clinical Endocrinologists, 2005 – present
Licensure:	Georgia, #34734

FACULTY POSITIONS:

Institution:	Morehouse School of Medicine
Position:	Associate Clinical Professor, Pediatrics, 2004 – present
Institution:	Emory University School of Medicine
Position:	Adjunct Associate Professor, Pediatrics, 1991 – present
Institution:	University of California, San Francisco
Position:	Associate Clinical Professor, Pediatrics, 1989 – 1991
Institution:	University of California, San Diego, School of Medicine
Position:	Assistant Clinical Professor, Pediatrics, 1980 – 1986
Institution:	LSU School of Medicine, Clinical Instructor, Pediatrics, 1977 – 1978

MILITARY SERVICE:

Commission:	Medical Corps, United States Navy, August 1971
Rank:	Captain, retired
Duty Stations:	Health Professional Scholarship Student, 1971 – 1974 Intern and Resident, Pediatrics, Naval Regional Medical Center, Oakland, 1973 – 1976 Staff Pediatrician, Naval Regional Medical Center, Oakland, 1976

Staff Pediatrician, Naval Regional Medical Center,
New Orleans, 1976 – 1978

Full time out-service fellow in Pediatric Endocrinology,
Johns Hopkins Hospital, 1978 – 1980

Staff Pediatric Endocrinologist, Naval Hospital San Diego,
1980 – 1986

Chairman and Director, Residency Training, Department of Pediatrics
Naval Hospital Oakland, 1986 – 1991

OTHER PROFESSIONAL ACTIVITIES:

Consultant, Pediatric Endocrinology,
Nellis Air Force Base Hospital, Las Vegas, Nevada
1981 – 1991

Consultant, Pediatric Endocrinology,
Naval Hospital Lemoore, CA
1986 – 1991

Consultant, Pediatric Endocrinology,
Letterman Army Medical Center, Presidio of San Francisco, CA
1990 – 1991

Consulting Endocrinologist,
Columbus Regional Medical Center, Columbus, GA
1991 – 1994

Pediatrician and Pediatric Endocrinologist, partner
Fayette Medical Clinic
Peachtree City, Georgia 30269
September 1991 – October 2003

Pediatric Endocrinologist Peer Reviewer 2006 – present
MCMC, LLC, Boston, MA
IMEDECS, Lansdale PA

Speaker's Bureau
Novo Nordisk
AAP Eqipp course on Growth- development committee- 2012

PUBLICATIONS: (Articles in Peer Reviewed Journals)

Riddick, JR, Flora R., Van Meter, QL:
"Computerized Preparation of Two-Way Analysis of Variance Control Charts for Clinical Chemistry," Clinical Chemistry, 18:250, March 1972.

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Rogol AD Midyett LK Van Meter Q, Frane J, Baily J, and Bright GM, Recombinant Human IGF-1 for Children with Primary IGF-1 Deficiency (IGFD): Safety Data from Ongoing Clinical Trials (presented at the PAS 2007, Toronto).

Van Meter Q, Midyett LK, Deeb L et al, Prevalence of primary IGFD among untreated children with short stature in a prospective, multicenter study (Poster POO715) ICE Rio de Janeiro, Brazil 2008.

G.M. Bright[1], W.V.Moore[2], J.Nguyen[3], G. Kletter[4], B. S. Miller[5], Q. L. Van Meter[6], E. Humphriss[1], J.A. Moore[7] and J.L. Cleland[1] Results of a Phase 1b Study of a new long-acting human growth hormone (VRS-317) in pediatric growth hormone deficiency (PGHD). PAS 2014 May 2014

Van Meter Q, Welstead B and Low J, Characteristics of a Population of Obese Children and Adolescents: Suggesting a New Paradigm, presented at ESPE meeting, Dublin 2014.

Wayne V. Moore[1], Patricia Y. Fechner[2], Huong Jil Nguyen[3], Quentin L. Van Meter[4], John S. Fuqua[5] , Bradley S. Miller[6], David Ng[7], Eric Humphriss[8], R. W. Charlton[8], George M. Bright[8], Safety and Efficacy of Somavaratan (VRS-317), a Long-Acting rhGH, in Children with Growth Hormone Deficiency (GHD): 3-Year Update of the VERTICAL & VISTA Trials, presented at the 2017 Endocrine Society meeting in Orlando FL

Bradley S. Miller[1], Wayne V. Moore[2], Patricia Y. Fechner[3], Huong Jil Nguyen[4], Quentin L. Van Meter[5], John S. Fuqua[6], David Ng[7], Eric Humphriss[8], R. W. Charlton[8], George M. Bright[8], 3-Year Update of the Phase 2a and Long-term Safety Studies (VERTICAL and VISTA) of Somavaratan (VRS-317), a Long-acting rhGH for the Treatment of Pediatric Growth Hormone Deficiency, presented at the 2017 IMPE meeting in Washington D.C.

ADDITIONAL PRESENTATIONS/LECTURES:

Pediatrics Update, CME Associates, San Diego – Orlando Annual Conferences: Lectures on Pediatric Endocrine Subjects – 1986 – 2001. Course Moderator, 1997, 1998, 1999, 2000, 2001

Endocrine and Gastroenterology Update, CME Associates, Maui HI Nov 2001, Lecturer and Course Moderator

Lecture on Panhypopitutarism, Pharmacia Conference, Nashville TN April 2002.

Family Medicine Review Course, Orlando, FL, 1992 – 2001

Pediatric Grand Rounds, Tanner Medical Center, October 1997

Pediatric Grand Rounds, Hughes Spaulding Children's Hospital, September, 2003

Pediatrics in the Park, Fall CME meeting for the Georgia Chapter of the American Academy of Pediatrics, November 2003

Pediatric Grand Rounds, Columbus Regional Medical Center, January 2004

Frontiers in Pediatrics CME Course, sponsored by the Atlanta Children's Health Network, Atlanta, March 2004.

Pediatric Grand Rounds, Eggleston Children's Hospital, May 2004.

Sue Schley Matthews Pediatric Conference, Columbus Regional Medical Center, September 2004

56th Annual Scientific Assembly and Exhibition of the Georgia Academy of Family Physicians, Nov 2004

Program Co-Chairman: Southern Pediatric Endocrine Society Annual meeting, Nov 2004, November 2014

Presentations on Diabetes, Growth Failure, and Thyroid Disease to the Postgraduate Pediatric Nurse Practitioner Program, Georgia State University, Nov 2005, June 2006, May 2007

Issues in Medicine, US Medical Congress Conference and Exhibition, Las Vegas, meeting planner and speaker, June, 2006

CME Presentations for the Georgia Chapter of the American Academy of Pediatrics Spring and Fall Meetings 2004-present

Pediatric Grand Rounds, Columbus Regional Medical Center, Columbus, GA, 2011-present

Human Growth Foundation Regional CME Conference, Atlanta GA March 2013, February 2014 Columbus Georgia

International Federation of Therapeutic Counseling Choice: Transgender Medicine, IFTCC Launch, October 15, 2018 London, Third International Congress, October 25 2018 Budapest.

Southern Pediatric Endocrine Society, Orlando FL, Feb 2019

Matthew Bulfin Conference, Indianapolis IN April 2019

CMDA annual conference, Ridgecrest NC, May 2019

Support 4 Family conference, London, UK June 2019

Audio Digest Pediatrics - ① v. 41, no. 4; ② v. 41, no. 20; ③ v. 43, no. 17

Audio Digest Family Practice - ① v. 42, no. 5; ② v. 44, no. 11; ③ v. 44, no. 44; ④ v. 45, no 15

Audio Digest Otolaryngology - ① v. 32, no. 14

CURRENT HOSPITAL APPOINTMENTS:

Eggleston/Scottish Rite Children's Hospitals, active staff, Pediatric Endocrinology

PAST AND CURRENT CLINICAL RESEARCH:

2006	Sanofi-Aventis HMR1964D/3001	study completed 2007
2006	Tercica MS301-	study completed 2008
2007	Tercica MS310-	study completed 2008
2007	Tercica MS306-	study completed 2010
2007	Tercica MS316-	study completed 2012
2008	EMD Serono 28358	study completed 2009
2012	Versartis 12VR2	study completed 2014
2012	Debiopharm 8206-CPP-301	study started July 2012
2013	Versartis 13 VR3	study started Dec 2013
2014	Novo-Nordisk Elipse	study started 2014
2015	Versartis 14 VR4	study completed 2017
2017	Mannkind MKC-TI-155	study completed 2019
2018	Abbvie M16-904	study started 2018
2019	Novo-Nordisk Real-4	study started 2019
2019	Lilly 18B-MC-ITSB	study started 2019
2021	Pfizer PROGRES	study started 2021

2021	Lumos OragrowtH210	study started July 2021
2022	Novo-Nordisk Real-8	study starts July 2022

LEGAL EXPERT WITNESS:

2017	North Carolina Legislature- transgender bathroom bill
2018	Jessica Siefert transgender case, Cincinnati, OH
2018	Alberta, Canada school system transgender case
2018	Decatur GA School Board transgender case
2019	British Columbia transgender case
2019	Gavin Grimm transgender case, Gloucester County, VA
2019	Rowe vs Isle of Wight School Board, UK
2019	Younger transgender case, Dallas, TX
2020	Alabama State House and Senate committee hearings
2020	Pennsylvania State House Health Subcommittee hearings
2020	Iowa State House committee hearing
2020	California State House committee hearing
2020	Harris Count TX custody case
2021	Missouri State House committee hearing
2021	NAACP *v* State of Arkansas

EXHIBIT "A"

Concerns about Affirmation of an Incongruent Gender in a Child or Adolescent

Quentin L. Van Meter, M.D.
May 17, 2022

Qualifications

I received my B.A. in Science at the College of William and Mary and my M.D. from the Medical College of Virginia, Virginia Commonwealth University. I am currently a pediatric endocrinologist in private practice in Atlanta, Georgia. I am the President of Van Meter Pediatric Endocrinology, P.C. I am on the clinical faculties of Emory University School of Medicine and Morehouse College of Medicine, in the role of adjunct Associate Professor of Pediatrics. I am board certified in Pediatrics and Pediatric Endocrinology. I have been licensed to practice medicine in Georgia since 1991. I have been previously licensed to practice medicine in California, Louisiana, and Maryland.

I did my Pediatric Endocrine fellowship at Johns Hopkins Hospital from 1978-1980. The faculty present at that time had carried on the tradition of excellence established by Lawson Wilkins, M.D. Because of the reputation of the endocrine program as a center for exceptional care for children with disorders of sexual differentiation, I had well-above average exposure to such patients. As a Pediatric Fellow, I was also exposed to adults with Gender Identity Disorder, then called Trans-Sexuality, and received training from John Money, Ph.D., in his Psycho-hormonal Division. Over the past 44 years, I have closely followed the topic of incongruent gender in children adolescents and adults, but I am focusing in this document on working with children and adolescents. To get a more solid understanding of how male and female human beings develop in utero, it is important to start at the point when a sperm meets an egg.

Differentiation in the Fetus

From the moment of conception, a fetus is determined to be either a male (XY), female (XX), or in rare cases, to have a combination of sex-determining chromosomes, many of which are not compatible with life, and some of which are the cause of identifiable clinical syndromes. The presence of a Y chromosome in the developing fetus directs the developing gonadal tissue to develop as a testicle. The absence of a functional Y chromosome allows the gonadal tissue to develop as an ovary. Under the influence of the mother's placental hormones, the testicle will produce testosterone which directs the genital tissue to form a penis and a scrotum. Simultaneously, the testicle produces anti-Müllerian Hormone (AMH) which regresses development of the tissue that would otherwise develop into the uterus, fallopian tubes, and upper third of the vagina. This combination of actions in early fetal development is responsible for what we subsequently see on fetal sonograms, and what we observe at birth as male or female genitalia. It is only when the genital structures are ambiguous in appearance that sex determination is withheld until a thorough expert team evaluation has occurred.

For reasons most often occurring as random events, there are malfunctions of the normal differentiation. These aberrations of normal development are responsible for what we classify as Disorders of Sexual Differentiation (DSD), and they represent a very small fraction of the human population. The incidence of such circumstances occurs in 1:4500 to 1:5500 births.[1] Sex is binary, male or female, and is determined by chromosomal complement and corresponding reproductive role. The exceedingly rare DSDs are all medically identifiable deviations from this sexual binary norm. The 2006 consensus statement of the Intersex Society of North America and the 2015 revision of the Statement do not endorse DSD as a third sex.[2] DSD outcomes range from appearance of female external genitalia in an XY male (complete androgen insensitivity syndrome) to appearance of male external genitalia in an XX female (severe congenital adrenal hyperplasia).

As one would expect, there are variations of the degree of hormonally driven changes that create ambiguous genital development that prevent assigning of a specific classification as either male or female at birth. DSD patients are not "transgender"; they have an objective, physical, medically verifiable, physiologic condition. Transgender people generally do not have intersex conditions or any other verifiable physical anomaly. People who identify as "feeling like the opposite sex" or "somewhere in between" do not comprise a third sex. They remain biological men or biological women.

In some DSDs there exist more than one set of chromosomes. When there is a divergence of the appearance of the external genitalia from the chromosomally determined sex due to the presence of both an ovarian and testicular cell lines in a patient simultaneously, the patient is classified as having ovo-testicular DSD (formerly termed a true hermaphrodite). When there is a disruption in the development of genital structures but there is solely testicular tissue present in the chromosomal male or solely ovarian tissue in the chromosomal female, the term 46 XY DSD or 46 XX DSD is used instead respectively (formerly termed male pseudohermaphrodite or female pseudohermaphrodite).

The decision to assign a sex of rearing is complex and is specific to the diagnosis. Patients with complete androgen insensitivity (CAIS) are XY DSD but are never reared as a male. Because testosterone never influences development, they become happy, functional female adults with infertility. Females with severe congenital adrenal hyperplasia (CAH) are XX DSD but are not reared as males despite the male appearance of the genitalia at birth. Although these girls may show a tendency for male play behaviors as children, they generally assume a female sexual identity. Therapeutic interventions in the DSD individuals from infancy onward are aimed at what function can be expected from their disordered sexual anatomy in terms of function and fertility. Most often, the chromosomal sex aligns with the sex of rearing.

Gender Identity

"Gender" is a term that refers to the psychological and cultural characteristics associated with biological sex. It is a psychological concept and sociological term, not a biological one. The term gender possessed solely a linguistic meaning prior to the 1950s. This changed when sexologists of the 1950s and 1960s co-opted the term to conceptualize cross-dressing and transsexualism in their psychological practice. "Gender identity" is a term coined by my former endocrine faculty member John Money in the 1970s and has come to refer to an individual's mental and emotional sense of being male or female. The norm is for individuals to have a gender identity that aligns with one's biological sex.

Gender discordance (formerly Gender Identity Disorder) is used to describe a psychological condition in which a person experiences marked incongruence between his experienced gender and the gender associated with his biological sex. He will often express the belief that he is the opposite sex. Up until 2010, gender discordance occurred in 0.001% of biological females and in 0.0033% of biological males.[3] Exact numbers are hard to document since reporting is often anecdotal. Gender discordance is not considered a normal developmental variation.

"Gender Dysphoria" is a diagnostic term to describe the emotional distress caused by gender incongruity.[4] John Money played a prominent role in the early development of gender theory and transgenderism. He understood gender to be "the social performance indicative of an internal sexed identity."[5] He joined the Johns Hopkins faculty in 1951 specifically to have access to children diagnosed with DSD, hoping to prove his theory that gender was arbitrary and fluid. Money experimented with DSD infants by assigning them to the opposite biological sex through surgical revision, counseling, and hormonal manipulation during puberty. His mode of operation was to have a theory and then experiment with patients to see how his theory worked.

Ethics in Clinical Research on Human Subjects

It is important to discuss the need for ethics to play a role in the design of clinical studies involving human patients. To have a hypothesis, as did John Money, is not at issue. However, to clearly elucidate the potential for harm and balance that knowledge with the potential benefits is key and essential. After the travesties of open-ended experimentation in the Nazi concentration camps, international guidelines were established to protect human subjects from just such experimentation.[6] John Money ignored these guidelines as he assigned genders to infants and toddlers with ambiguous genitalia. There was no informed consent of the patients, who were infants and toddlers, and their parents were just told to follow the advice of Dr. Money and to trust that he had the correct information. There was no standardized protocol to follow, and no known outcome that could be guaranteed. This kind of endeavor did not anticipate or prevent adverse outcomes and was the antithesis of ethical science. Money never submitted his research proposals for review by an independent external review board. This left the patients unprotected and vulnerable to harm, and, indeed, in the case of the Reimer twins, to death due to drug addiction/overdose in one brother to and suicide in the other.[7]

Near the end of my fellowship training at Johns Hopkins, a male infant was sent to our clinic to assess the cause of his very small penis and testicles. My attending physician and I laid out a diagnostic work-up based on the known science which would help us understand whether the problem was due to a pituitary deficiency or an inability of tissue response to hormones. We purposely left John Money off the care "team," having some serious concerns about his tendency to dismiss science and to experiment. We sent the family home with their son and were quite surprised when the mother returned six weeks later with a baby wearing a pink dress and an eyelet bonnet. Without our knowledge, Dr. Money had intervened and told the family that our protocol was nonsense and the baby needed to be reared as female. On physical exam, there was clear evidence that not only was the baby able to produce testosterone, but his penis responded well, as expected, to the hormone production by his own body. The family was relieved but had not been spared suffering under the experimentation by Dr. Money. They had suffered deeply when they divulged to their extended family that their baby boy was actually a baby girl, and then they suffered even more when they recanted and resumed calling him a boy.

Because of his experience with infants, Money initially garnered support from endocrine colleagues and surgical colleagues, and Johns Hopkins became a renowned center for care of patients with DSD in the 1970s, receiving referrals from around the world. Follow-up studies on these infants later showed, however, that altering their natal sexual identity via social intervention could lead to severe psychological harm. Clinical case reports of children with DSD have revealed that gender identity is indeed not immune to environmental input.[8]

Meanwhile, Money had expanded into the field of adult patients with persistent gender identity disorder. This very small group of patients chose voluntarily, as adults, to enter a very precise protocol which began with living socially as the opposite sex for a year, eventually receiving hormonal therapy to change their physical appearance to some extent. The final step was surgical revision of the body structures that would otherwise be at odds with their desired gender identity. This small group of patients was followed for a number of years past their final surgical procedures and required continuous counseling. These patients expressed some degree of subjective satisfaction but showed no objective improvement in overall wellbeing.[9] The legacy of John Money fell into disrepute and the transsexual treatment program at Johns Hopkin was closed in the 1980s based on the lack of evidence that this protocol produced an effective cure.

Etiology of Gender Disorders

Transgender affirming professionals claim transgender individuals have a "feminized brain" trapped in a male body at birth and vice versa based upon various brain studies. Diffusion-weighted MRI scans have demonstrated that the pubertal testosterone surge in boys increases white matter volume. A study by Rametti and colleagues found that the white matter microstructure of the brains of female-to-male (FtM) transsexual adults, who had not begun testosterone treatment, more closely resembled that of men than that of women.[10] Other

diffusion-weighted MRI studies have concluded that the white matter microstructure in both FtM and male-to-female (MtF) transsexuals falls halfway between that of genetic females and males.[11] These studies, however, are of limited clinical significance due to the small number of subjects and failure to account for neuroplasticity.

Neuroplasticity is the well-established phenomenon in which long-term behavior alters brain microstructure. For example, the MRI scans of experienced cab drivers in London are distinctly different from those of non-cab drivers, and the changes noted are dependent on the years of experience.[12] There is no evidence that people are born with brain microstructures that are forever unalterable, but there is significant evidence that experience changes brain microstructure.[13,14] Therefore, any transgender brain differences would more likely be the result of transgender behavior than its cause.

Furthermore, infants' brains are imprinted prenatally by their own endogenous sex hormones, which are secreted from their gonads beginning at approximately eight weeks' gestation.[15,16,17] There are no published studies documenting MRI-verified differences in the brains of gender-disordered children or adolescents. The DSD guidelines also specifically state that current MRI technology cannot be used to identify those patients who should be raised as males or raised as females.[18] Behavior geneticists have known for decades that while genes and hormones influence behavior, they do not hard-wire a person to think, feel, or behave in a particular way. The science of epigenetics has established that genes are not analogous to rigid "blueprints" for behavior. Rather, humans "develop traits through the dynamic process of gene-environment interaction. ... [genes alone] don't determine who we are." [19]

Regarding transgenderism, twin studies of adults prove definitively that prenatal genetic and hormone influence is minimal. The largest twin study of transgender adults found that only 20 percent of identical twins were both transgender-identified.[20] Since identical twins contain 100 percent of the same DNA from conception and develop in exactly the same prenatal environment exposed to the same prenatal hormones, if genes and/or prenatal hormones contributed to a significant degree to transgenderism, the concordance rates would be close to 100 percent. Instead, 80 percent of identical twin pairs were discordant. This difference would indicate that at least 80 percent of what contributes to transgenderism as an adult in one co-twin consists of one or more non-shared post-natal experiences including but not limited to non-shared family experiences. These findings also mean that persistent GD is due predominately to the impact of nonshared environmental influences. These studies provide compelling evidence that discordant gender is not hard-wired genetically.

Gender Dysphoria vs. Gender Identity Disorder

Up until the recent revision of the DSM-IV criteria, the American Psychological Association (APA) held that Gender Identity Disorder (GID) was the mental disorder described as a discordance between the natal sex and the gender identity of the patient. Dr. Kenneth Zucker, who is a highly respected clinician and researcher from Toronto, carried on evaluation and

treatment of GID patients for forty years. His works, widely published, found that the vast majority of boys and girls with GID identify with their biological sex by the time they emerge from puberty to adulthood, through either watchful waiting or family and individual counseling.[21] His results were mirrored in studies from Europe.[22,23]

When the DSM-V revision of the diagnosis of GID was proposed by the APA committee responsible for revision, Dr. Zucker strongly opposed the change to the term Gender Dysphoria, which purposefully removed gender discordance as a mental disorder apart from the presence of significant emotional distress. With this revision, Gender Dysphoria describes the mental anguish which is experienced by the gender discordant patient. The theory that societal rejection is the root cause of Gender Dysphoria was validly questioned by a study from Sweden which showed that the dysphoria was not eliminated by hormones and sex reassignment surgery even with widespread societal acceptance.[24]

Treatment of Gender Dysphoria

The treatment of children and adolescents with gender discordance and accompanying gender dysphoria should include an in-depth evaluation of the child and family dynamics. This evaluation provides a basis on which to proceed with psychologic therapy. The entire biologic and social family should be involved in psychological therapy designed to assist the patient, if at all possible, to align gender identity with natal sex. Psychological support by competent counselors with an intent of resolving the gender conflict should be provided as long as the patient continues to suffer emotionally. Given the high degree of eventual desistance of gender discordance/dysphoria by the end of puberty, it would be ethical and logical to counsel the patient and family to rear the child in conformity with natal sex.

There should be no interruption of natural puberty. Natural pubertal maturation in accordance with one's natal sex is not a disease. It is designed to carry malleable, immature children forward to be healthy adults capable of conceiving their own progeny by providing either a sperm or an egg. Puberty affects physical changes, some of them painful, unique to the natal sex to reflect the laws of nature. Interruption of puberty has been reserved for children who begin puberty at an age much younger than normal in an effort to preserve final height potential and avoid the social consequences of precocious maturation.[25]

There are a number of physical changes that are a consequence of normally timed puberty that could be classified as disadvantageous: changes in body proportions can alter success with dance and gymnastics; acne can be severe and disfiguring; a boy soprano can suddenly hardly carry a tune. It has not been the ethical standard of care to stop puberty so that these changes can be circumvented. Erikson described the stage of adolescence as "Identity versus Role Confusion" during which the teen works at developing a sense of self by testing roles then integrating them into a single identity.[26] This process is often unpleasant regardless of the presence or absence of gender identity conflicts. The major benefit of enduring puberty in a GD patient is that it provides a strong likelihood of alignment of his gender identity with his

natal sex. There is no doubt that these patients need compassionate care to get them through their innate pubertal changes.

The light at the end of the tunnel is the proven scientific evidence that 80%- 95% of pre-pubertal children with GD will come to identify with their biological sex by late adolescence. Some will require lifelong supportive counseling while others will not.[27] Intervention at a young age with gonadotropin releasing hormone analogs (often referred to as puberty blockers) to either stop puberty early on or prevent it from starting before it naturally occurs is suggested by guidelines developed by WPATH without scientific basis. These guidelines are essentially nothing more than an open-ended experiment in the manner of John Money. They represent the ideas of their authors with clear admission that there is no long-term evidence that harm will exceed benefits as these patients grow to old age. There is evidence that bone mineral density is irreversibly decreased if puberty blockers are used during the years of adolescence.[28] To treat puberty as a pathologic state of health that should be avoided by using puberty blockers (GnRH analogs) is to interrupt a major necessary physiologic transformation at a critical age when such changes can effectively happen. We have definite evidence of the need for estrogen in females to store calcium in their skeleton in their teen years. That physiologic event can't be put off successfully to a later date. It is very difficult to imagine ethical controlled clinical trials that could elucidate the effects of delaying puberty until the age of consent.

The use of cross-sex hormones during this same time frame has no basis of safety and efficacy. The use of such treatment in adults raises scientifically valid concerns that were amply expressed in the 2009 Endocrine Society Guidelines on Transgender treatment. The next step in WPATH-recommended intervention is to use cross-sex hormone therapy during the time when the patient would naturally be experiencing endogenous pubertal changes. This too is not based on scientifically proven theories. The use of cross-sex hormones can cause permanent infertility.[29]

The final recommended step is so-called "sex reassignment surgery," which can include surgical removal of the breasts in natal females, or removal of the penis and scrotum in natal males. Each of these steps has adverse outcomes, some reversible and others not. Mastectomies leave scars, and there is great difficulty in creating a functional vaginal-like orifice, and certainly no success in creating an innervated erectile penis where none existed previously. Sex reassignment surgery is, by nature, permanent.

Recurrent Themes that Are Repeatedly Published

Puberty blockers are stated to be completely reversible in their effects on the adolescent who has entered puberty based on clinical studies in young children with precocious puberty who have been treated with these drugs. This is comparing apples to oranges. Precocious puberty, by definition, is defined as puberty which starts before the 8th birthday for a female child or the before the 9th birthday in a male child. The end of treatment is carefully timed so that resumption of puberty occurs at the average age for females (10.5 years) and males (11.5

years). This allows the necessary functions of puberty to prepare the body for reproduction and affects the bones, gonads, and brain, among other body systems. On the other hand, blocking puberty at the age of normal puberty prevents the needed accretion of calcium into the skeleton and prevents the maturation of the gonads. There is no long-term data that compares bone, gonad, and brain health in pubertal-aged patients who have had puberty interrupted and those who have not, as was noted as a concern in the Endocrine Society Guidelines. There are no such ongoing studies completed that guarantee the full reversibility of blocking puberty in this age group, but there is evidence that normal bone density can't be fully reestablished. Without any verifiable safety data, using the puberty blockers for interrupting normal puberty is not a sanctionable off-label use of these drugs and is therefore to be considered uncontrolled, non-consentable experimentation on children.

Advocates for the social, medical and surgical affirmation of gender incongruent children insist that they are only following established standards of care. There are no standards of care for transgender health. Standards of care established by broad consensus are reached by inclusion of the whole spectrum of opinions, clinical experience and published science in the formation thereof. The guidelines published by WPATH[30], the Endocrine Society,[29,31] the American Academy of Pediatrics[32], and the Pediatric Endocrine Society[33] are solely the opinions of like-minded practitioners who excluded any contrary opinion. The Endocrine Society Guidelines, as mentioned before, clearly stated that they are not to be considered standards of care. Before true consensus-driven standards of care are established for the treatment of transgender patients of all ages, following the current guidelines is risky experimentation in a manner reminiscent of John Money's tactics.

What We Do Know and Do Not Know

We do know that social affirmation of an incongruent gender tears the fabric of the patient's life into pieces- pitting family members against each other, ruining child friendships and it introduces the child to a fantasy world, much of it on the internet. Kenneth Zucker aptly documented the detrimental effects of such affirmation and the immense amount of work it takes to undo these effects when the child does come to realize they can't change their sex and wants to go back to identifying with their sex[34]. We do not know that social affirmation does anything other than push the child away from the proven, 80-90% effective, so-called watch-and wait treatment option. Embarrassingly unscientific short term convenience sample studies purport to show that all gender incongruent children who are socially affirmed have improved mental health and are therefore better off than those children who are not allowed to socially transition.[35]

We do know that blocking puberty during the age when puberty naturally happens lessens accretion of calcium into the skeleton and that this can't be regained by allowing puberty to resume or by using cross sex hormones. We do know that the ovary and testicle cease to mature with treatment. What we do not know is whether allowing puberty to resume will allow the ovary and testicle to fully mature and have full function in terms of fertility. We do

not know if brain development that is halted with puberty blockers can return to full function once puberty is allowed to resume.

We do know that elevated levels of testosterone in females and of estrogen in males create significant medical morbidity. This knowledge comes from the evaluation and treatment of naturally occurring disease states in children and adults. Treatment of these conditions is aimed at returning hormone levels to normal, thereby avoiding cancers, heart disease, and stroke. We do not know that elevating testosterone in females and estrogen in males to levels ten-fold higher than these known disease states is safe, but common sense would say it can't possibly be safe.

The Myth of Increased Suicide

The affirmation advocates repeatedly refer to the established increased risk of suicide if any of the affirmation strategies are not followed to completion. They point to their own published studies touting dramatic improvement in mental health status of patients who are affirmed in all three ways, but they cite data from convenience sampling, which never should be sued to prove anything other than association, at best. Such studies can never prove causation. There are only two total population studies in the peer-reviewed medical literature.[24,36,37] They show that when every recorded case in the population of Sweden was analyzed, neither medical affirmation nor medical affirmation followed by surgical affirmation improved the mental health of the patients in the long run.

What of the Nearly Logarithmic Increase in Incidence of Gender Incongruence?

Data collection in this regard is subject to estimates based on surveys, which can easily alter the numbers upward or downward, depending on who designed the survey and to whom it was presented. Fear, self-loathing or suicide will necessarily lower the numbers of survey participants whose lives are made miserable by the choice to affirm an incongruent gender. Instant gratification, payback to strict parents, and current celebrity will draw survey participants to express euphoric satisfaction with their decision to affirm their incongruent gender, especially when the surveys are circulated by trans-activist organizations, such as the Trevor Project. What had been in 2010 a nearly invisible fraction of adults who admitted to living with an incongruent gender has exponentially increased in frequency to as many as one out of five students in a suburban Pittsburgh school district in 2021. After I completed my fellowship at Johns Hopkins in 1980, it was not until 1993 that a biologic male presented to my private practice office with a desire to be treated with estrogen to feminize his body so that he could appear to be a female and identify as such. There was nothing in published medical literature that I could find to guide my treatment options. I canvassed my broad contact pediatric endocrinology network across the United States, and nobody had heard of such a clinical case, and none had any suggestions about what I should do. In the ensuing 19 years, the number of transgender treatment centers have burgeoned from zero to several hundred between university-based centers and Planned parenthood. Minority stress theory is frequently used to cover this explosion in numbers, but that is utterly impossible. What does

explain this increase is online recruiting and grooming of vulnerable children and adolescents by a generously funded political movement aimed at dissolving the reality and birthright of biologic sex. This will not end well. By the time a plethora of legal action against those who promoted and engineered the social, medical, and surgical affirmation of incongruent gender knocks down this house of cards, millions of children and adolescents will have been medically, surgically, and mentally maimed as well sterilized.

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Appendix Attachment

6

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

DECLARATION OF ANDRE VAN MOL, MD

I, ANDRE VAN MOL, MD am submitting this declaration in support of the Agency for Healthcare Administration's (AHCA) response in opposition to the Plaintiffs' motion for preliminary injunction.

1. This declaration provides the following expert opinions, which are explained in further details below:

a. The expert declaration of Dr. Armand H. Matheny Antommaria is in error regarding his stated primary objections to the Florida Agency for Health Care Administration (AHCA) Medicaid's Generally Accepted Professional Medical Standards Determination of Treatment of Gender Dysphoria (GAPMS

Report) specified in his assertions that Florida AHCA "mischaracterizes":

i. "individuals as diagnosing themselves with gender dysphoria,"

ii. "treatments for gender dysphoria and "off-label" treatments as experimental,"

iii. "treatments of gender dysphoria as "eminence-based medicine" and

the evidence base supporting many medical treatments, and"

iv. the informed consent process for the treatment of gender dysphoria

BACKGROUND AND QUALIFICATIONS

2. I am a board-certified family physician in full-time practice in California where I am licensed to practice.

3. In 1986 I received my medical degree from the Medical College of Wisconsin. I completed flight surgeon training in the US Navy in 1988 at the Naval Aerospace Medical Institute in 1988. My family medicine residency was completed in 1992 at Charleston Naval Hospital in South Carolina.

4. I have been licensed to practice medicine in California since 1988 and have been certified by the American Board of Family Practice since 1993.

5. My practice of family medicine is entirely clinic based, caring for patients from neonates to the elderly. I have no academic appointments.

6. I serve the American College of Pediatricians, with whom I am a fellow, as Co-chair of the Council on Adolescent Sexuality and the Christian Medical & Dental Associations as Co-chair of the Sexual & Gender Identity Task Force. I am a member of the American Academic of Family Physicians. I work with Alliance Defending Freedom in a coalition of professionals advising on policy matters addressing sexual orientation and gender identity, including serving as amicus curiae/friend of court in federal appellate and SCOTUS cases.

7. I am author or co-author of six peer-reviewed commentaries and letters, and author of numerous articles in professional and general publications in the USA and abroad.

8. I am an active peer reviewer for several medical journals.

9. I previously offered an expert witness affidavit in Court of Appeal File No. CA45940, Vancouver Registry. B.C. Supreme Court File No. E190334, between A.B. Respondent/Claimant, and C.D. Appellant/Respondent, and E.F. Respondent/Respondent. July 23, 2019.

10. I have served federal courts as a medical professional *amicus curiae* in:

Harris Funeral Homes, Inc. v. EEOC, No. 18-107 (U.S. Supreme Court, July 24, 2018); *Adams v. School Board of St. Johns County, Florida*, No. 18-13592 (11th Cir. Aug. 23, 2018); *Doe v. Boyertown Area School District*, No. 18-658 (3rd Cir. Nov. 21, 2018); *Meriwether v. Trustees of Shawnee State University*, No. 20-3289 (6th Cir. Mar. 12, 2020); *Hecox v. Little*, Nos. 20-35813 (9th Cir., Nov. 19, 2020); *Adams v. School Board of St. Johns County, Florida*, No. 18-13592 (11th Circuit, Oct. 26, 2021); and *Brandt v. Rutledge*, No. 21-2875 (8th Circuit, Nov. 14, 2021).

11. I have provided written reports, consultation by teleconferences, and/or written testimony to many state legislatures and several parliaments on proposed legislation concerning gender dysphoria and sexual minority issues. I have testified in legislative committees in both California (2018) and Ohio (2022) regarding gender dysphoria related legislation.

12. I have been contracted by the state of Florida Department of Medicaid, and continue to work with them as a registered vendor in the state of Florida, in the preparation of the GAPMS Determination on the Treatment of Gender Dysphoria and the General Medicaid Policy Rule 59G-1.050 rule exclusion (7) Gender Dysphoria.

13. I am being compensated at a rate of $350 an hour for preparation of expert declarations and reports, and $600 per hour for time spent preparing for or giving deposition or trial testimony. My compensation is independent of the outcome of said efforts and litigation, my stated opinions, or the content of my testimony.

GENDER DYSPHORIA AS A MEDICAL DIAGNOSIS BUT ALSO A SELF-DIAGNOSIS

14. The Matheny Antommaria declaration is correct that gender dysphoria is a medical diagnosis, which is not quite the point addressed when the GAPMS report notes that it arrives as a self-diagnosis. The Matheny Antommaria declaration then concedes on page 7, "The diagnosis of gender dysphoria in adolescents and adults, like many other common medical diagnoses, relies on individuals' self-report of symptoms." Yes, it does. The problem is that proper, extensive psychological evaluation and support of the gender dysphoric patient and family both is not assured or even consistent. And there is tremendous pressure on the clinician to affirm upon request. This deficiency is internationally recognized.

15. Psychiatry professor Stephen B. Levine observed that "Clinicians who have embraced the gender-affirmative model of care operate on the

assumption that children and teens know best what they need to be happy and productive (Ehrensaft, 2017)."[1] Self-diagnosis has limits, and the risk from it rises the further the self-diagnosis is allowed to mandate treatment options.

16. Professor Levine notes elsewhere that "The World Professional Association for Transgender Health's Standards of Care recommend an informed consent process, which is at odds with its recommendation of providing hormones on demand."[2] Again, the common practice of self-diagnosis leads to a common demand of medicalization.

17. The Interim Cass Review from the United Kingdom[3] resulted in the closure of the world's largest pediatric gender clinic, the National Health Service's Gender Identity Development service, or GIDS.[4] "The Cass Review specified on page 17, "1.14 Primary and secondary care staff have told us that they feel under pressure to adopt an unquestioning affirmative approach and that this is at odds with the standard process of clinical assessment and

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[1] Stephen B. Levine, E. Abbruzzese & Julia W. Mason (2022): Reconsidering Informed Consent for Trans-Identified Children, Adolescents, and Young Adults, Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2022.2046221.
[2] Stephen B. Levine (2018): Informed Consent for Transgendered Patients, Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2018.1518885.
[3] https://cass.independent-review.uk/publications/interim-report/
[4] NHS to close Tavistock child gender identity clinic" 7/28/2022. https://www.bbc.com/news/uk-62335665

diagnosis that they have been trained to undertake in all other clinical encounters." Page 17 states "1.15 Another significant issue raised with us is one of diagnostic overshadowing – many of the children and young people presenting have complex needs, but once they are identified as having gender-related distress, other important healthcare issues that would normally be managed by local services can sometimes be overlooked." Thus, the very presence of gender-related distress resulted in other mental health concerns being pushed aside, or "overshadowed".

18. The UK NHS's GIDS experienced the resignation of thirty-five psychologists over a three year period due to the over-prescribing of the medicalization of minors with gender dysphoria "with psychologists unable to properly assess patients over fears they will be branded 'transphobic...'" It was added, "we fear that we have had front row seats to a medical scandal."[5]

19. A prospective study from an Australian multidisciplinary gender service in 2021 revealed "Key challenges faced by the clinicians included the following: the effects of increasingly dominant, polarized discourses on daily clinical practice; issues pertaining to patient and clinician safety (including pressures to abandon the holistic [biopsychosocial] model); the difficulties of

[5] "NHS 'over-diagnosing' children having transgender treatment, former staff warn," news.sky.com, 12 Dec. 2019. https://news.sky.com/story/nhs-over-diagnosing-children-having-transgender-treatment-former-staff-warn-11875624 .

untangling gender dysphoria from comorbid factors such as anxiety, depression, and sexual abuse; and the factual uncertainties present in the currently available literature on longitudinal outcomes."[6]

20. The Matheny Antommaria declaration furthermore states on page 7, "Like gender dysphoria, there is no confirmatory laboratory or radiographic study for the diagnosis of migraine headaches." But the approved and off-label treatments for migraines do not risk sterility, compromised sexual function, brain development, heart attacks, strokes, blood clots, or cancer in the way puberty blocking agents and cross-sex hormones do.[7][8][9][10]

21. One must weigh the risks against the benefits as well as alternatives, and the alternative of psychological treatment of patient and family is not proven inferior to gender (transition) affirming interventions, as

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[6] Kozlowska K, McClure G, Chudleigh C, et al. Australian children and adolescents with gender dysphoria: Clinical presentations and challenges experienced by a multidisciplinary team and gender service. *Human Systems*. 2021;1(1):70-95. doi:10.1177/26344041211010777.

[7] Hembree, Wylie C, et al. "Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society* Clinical Practice Guideline." The Journal of Clinical Endocrinology & Metabolism, vol. 102, no. 11, 2017, pp. 3869–3903., doi:10.1210/jc.2017-01658.

[8] Alzahrani, Talal, et al. "Cardiovascular Disease Risk Factors and Myocardial Infarction in the Transgender Population." Circulation: Cardiovascular Quality and Outcomes, vol. 12, no. 4, 2019, doi:10.1161/circoutcomes.119.005597.

[9] Getahun D, Nash R, Flanders WD, Baird TC, Becerra-Culqui TA, Cromwell L, et al. Cross-sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study. Ann Intern Med. [Epub ahead of print 10 July 2018]169:205–213.doi: 10.7326/M17-2785.

[10] Irwig MS. Cardiovascular Health in Transgender People. Rev Endocr Metab Disord. 2018 Aug 3 epub.

noted in Dr. Cantor's Attachment D in the GAPMS report. Extensive and continuing psychological intervention is a priority in the new guidelines for treatment of gender dysphoria now noted in the United Kingdom, Sweden, Finland, and France, as noted adeptly in Dr. Cantor's Attachment D.

22. Self-reporting is a low-certainty form of diagnosis when other more precise diagnostic tools exist, such as the Diagnostic and Statistical Manual (DSM) of the American Psychiatric Association. When affirmation on demand is common, clear diagnosis and addressing of underlying factors becomes uncommon, leaving the patient to suffer with unresolved psychological distress, adverse childhood experiences, neurodevelopmental disorders like autism spectrum, and possible poor family dynamics, as noted in the literature.[11][12][13]

23. The Matheny Antommaria declaration states on page 8, "Only licensed healthcare providers or teams of providers, based on patient reports and, in the case of minors, parent reports, make the diagnosis of gender

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[11] Kozlowska K, McClure G, Chudleigh C, et al. Australian children and adolescents with gender dysphoria: Clinical presentations and challenges experienced by a multidisciplinary team and gender service. *Human Systems*. 2021;1(1):70-95. doi:10.1177/26344041211010777

[12] Becerra-Culqui TA, Liu Y, Nash R, et al. Mental Health of Transgender and Gender Nonconforming Youth Compared with Their Peers. Pediatrics. 2018;141(5):e20173845

[13] Heylens G, et al. "Psychiatric characteristics in transsexual individuals: multicentre study in four European countries," The British Journal of Psychiatry Feb 2014, 204 (2) 151-156; DOI: 10.1192/bjp.bp.112.121954.

dysphoria and any subsequent treatment recommendations." Were that the case, Planned Parenthood clinics would not be one of the largest sources of gender (transition) affirming hormones in the USA, with their availability boldly advertised on their web page.[14]

GENDER (TRANSITION) AFFIRMING MEDICAL INTERVENTIONS ARE VIEWED AS EXPERIMENTAL BY MANY

24. The Matheny Antommaria declaration stated on page 9, "the GAPMS Memo uses the term "experimental" or "investigational" to convey that gender-affirming medical care is new, untested, or different, that suggestion is baseless." Yes, it is not new, but assertions and evidence abound of gender (transition) affirming medical care being insufficiently tested, still investigational, and experimental despite its age. I will discuss this further in the section on lack of evidence-basing for G(T)AMC, but note here that the declaration paragraph 4 lists the 2011 de Vries, et al study[15] as the inaugural example of the "Prospective observational trials of puberty blockers" supporting their use in gender dysphoria.

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[14] Planned Parenthood "Transgender Hormone Therapy" web page https://www.plannedparenthood.org/get-care/our-services/transgender-hormone-therapy .

[15] de Vries AL, Steensma TD, Doreleijers TA, Cohen- Kettenis PT. Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. J Sex Med. 2011;8(8):2276-2283.

25. Levine, et al, wrote that both the 2011 de Vries, et al, puberty blocking study and its sister study dealing with surgeries "suffer from a high risk of bias due to their study design, which is effectively a non-randomized case series— one of the lowest levels of evidence..." and that "In addition, the studies suffer from limited applicability to the populations of adolescents presenting today (de Vries, 2020). The interventions described in the study are currently being applied to adolescents who were not cross-gender identified prior to puberty, who have significant mental health problems, as well as those who have non-binary identities—all of these presentations were explicitly disqualified from the Dutch protocol." Levine, et al, conclude, "We contend that the Dutch studies have been misunderstood and misrepresented as providing evidence of the safety and efficacy of these interventions for all youth." And this appears to be the case with this point of the Matheny Antommaria declaration.

26. Prof. Michael Biggs of Oxford published a recent detailed critique of the Dutch Protocols in which he asserted "The Dutch clinicians chose incommensurable scales to measure gender dysphoria, which calls into

question their finding that dysphoria declined following cross-sex hormones and surgery."[16]

27. One of those Dutch clinicians, Thomas Steensma, co-author of the studies in question, reported to the Dutch media "Little research has yet been done on the treatment with puberty inhibitors and in young people. That is why it is also seen as experimental." [17] Dr. Steensma cautioned that "The rest of the world is blindly adopting our research."

28. The Matheny Antommaria declaration protests in paragraphs 24 and 25 that "off-label" does not mean experimental, untested, or unsafe, and further specifies, "Once the FDA has approved a medication for one indication,[12] thereby agreeing that it is safe (i.e., its benefits outweigh its potential risks) and effective for this intended use, as is the case with the medications at issue here, prescribers are generally free to prescribe it for other indications." But a more direct quote from the FDA Website warns: "If you and your healthcare provider decide to use an approved drug for an

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[16] Michael Biggs (2022): The Dutch Protocol for Juvenile Transsexuals: Origins and Evidence, Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2022.2121238.

[17] https://www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grote-stroom-kinderen-vandaan~aec79d00/ reported in "Dutch Doctor Who Pioneered Early Transgender Treatment Says World is "Blindly" Adopting His Approach," March 12, 2021, Minnesota Family Council The Family Beacon. https://www.mfc.org/familybeacon/dutch-doctor-who-pioneered-early-transgender-treatment-says-world-is-blindly-adopting-his-approach

unapproved use to treat your disease or medical condition, remember that FDA has not determined that the drug is safe and effective for the unapproved use."[18] Safe and effective for a given approved indication should not be assumed to mean safe and effective for any other.

29. The Matheny Antommaria declaration claims on page 13, "The GAPMS Memo misleadingly notes that testosterone is a Schedule III controlled substance because of its 'high probability of abuse.'" The US FDA does not support this Matheny Antommaria claim. An FDA statement from October 25, 2016 is titled, "FDA approves new changes to testosterone labeling regarding the risks associated with abuse and dependence of testosterone and other anabolic androgenic steroids (AAS)."[19] It details "class-wide labeling changes for all prescription testosterone products" to this effect, "to include new safety information from published literature and case reports regarding the risks associated with abuse and dependence of testosterone and other AAS."

GENDER (TRANSITION) AFFIRMING MEDICAL CARE LACKS THE EVIDENCE BASE IT SHOULD HAVE AT THIS POINT

[18] https://www.fda.gov/patients/learn-about-expanded-access-and-other-treatment-options/understanding-unapproved-use-approved-drugs-label .
[19] https://www.fda.gov/drugs/drug-safety-and-availability/fda-approves-new-changes-testosterone-labeling-regarding-risks-associated-abuse-and-dependence .

30. Paragraph 29 of the Matheny Antommaria Declaration protests, "AHCA also incorrectly characterizes gender-affirming medical treatment as lacking sufficient evidence of safety and efficacy." This accusation does not hold up well to scrutiny.

31. The Matheny Antommaria Declaration repeats a false belief stated in para. 35, "Under the applicable ethical standards, randomized, placebo-controlled

trials that compare pharmacological treatment to no pharmacological treatment in gender dysphoria are currently unethical." Para. 31 states, "randomized controlled trials may not be feasible or ethical..."

32. Oxford's Michael Biggs' critique of what has been known as the Dutch Protocol derived from de Vries, et al. ("The Dutch Protocol for Juvenile Transsexuals: Origins and Evidence")[20] targets this false claim and its pre-ordained conclusions, observing that the study authors excuse that ".. it would have been unethical to withhold GnRHa from the control group, because the clinicians believed the treatment to be beneficial—this rationale is circular because discovering whether a treatment is truly beneficial requires a randomized control trial." As a consequence of their choice, "The decision to

[20] Michael Biggs (2022): The Dutch Protocol for Juvenile Transsexuals: Origins and Evidence, Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2022.2121238

rely on uncontrolled studies was exacerbated by other decisions. The Dutch clinicians chose incommensurable scales to measure gender dysphoria, which calls into question their finding that dysphoria declined following cross-sex hormones and surgery."

33. Yet reproducibility is critical to the advancement of science. A 2005 PLOS Medicine article by Stanford's P.A. Ioannidis was titled "Why Most Published Research Findings Are False." Ioannidis asserted this was true "for Most Research Designs and for Most Fields," adding "...research findings may often be... accurate measures of the prevailing bias," and that the hotter the field, the more likely the error.[21] And the gender dysphoria field would be accurately described as "hot." A 2015 study in Science journal assembled teams of 270 scientists on 5 continents to repeat 100 studies in three major psychology journals. The results were that only one-third to one-half of the studies were reproducible, meaning one-half to two-thirds were not.[22] The National Association of Scholars published "The Irreproducibility Crisis of

[21] "Why Most Published Research Findings Are False,' John P. A. Ioannidis, August 30, 2005 PLOS Medicine. DOI: 10.1371/journal.pmed.0020124.
[22] "Estimating the reproducibility of psychological science," Science, 28 August 2015: Vol. 349 no. 6251. DOI: 10.1126/science.aac4716.

Modern Science" in 2018, calling detailed attention to the problem, a problem which is abundant in gender (transition) affirming medical care.[23]

34. There is no field of science or medicine so nailed down, so certain, so overwhelmingly proven as to rise above the continuing need for controlled studies under strict ethical supervision and ongoing critical review. Assertions of it being unethical to do so in G(T)AMC are premature, pre-emptive, and unmerited.

35. There is another factor for those insisting that undertaking randomized, controlled trials in gender care would be unethical, and that is the mistaken premise that the gender dysphoric control group would be denied any therapy. But in clinical trials only the independent variable – the intervention under study -- is different between the control and the experimental groups. This means all study participants could benefit from all other treatments and support indicated for the diagnosis, particularly psychological support. The study group is not left out to flounder. Controlled clinical trials are essential to medical science and medical care, and gender (transition) affirming medical care is severely deficient in them.

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[23] David Randall and Christopher Welser, "The Irreproducibility Crisis of Modern Science," April 09, 2018. https://www.nas.org/reports/the-irreproducibility-crisis-of-modern-science/full-report

36. The Matheny Antommaria Declaration references de Vries 2011 several times, and it is a weak study of questionable findings, as I have noted. Para. 33 of the declaration offers up as evidence of "ongoing, federally funded, prospective observational studies of gender-affirming healthcare for adolescents with gender dysphoria in the U.S." the controversial National Institutes of Health study led by J. Olson-Kennedy, who also has submitted a declaration to this case.[24]

37. A letter (included as Attachment A) was signed and sent by 28 members of the Congress and Senate to NIH Secretary Alex Azar May 28, 2020 "to express our deep concerns regarding the above-mentioned study… This study clearly violates sound medical ethics with its experimental interventions into the normal physical development of children before they are old enough to understand or consent to such procedures." Among the numerous problems they found with the study were "there is no control group." "The minimum age for participation in the cross-sex hormone cohort

[24] National Institutes of Health Reporter, The impact of early medical treatment in transgender youth. Accessed August 25, 2022. Available at http://reporter.nih.gov/search/lGJnh68uokiic97N2X00kA/project-details/8965408 ; Olson-Kennedy J, Chan YM, Garofalo R, et al. Impact of early medical treatment for transgender youth: Protocol for the longitudinal, observational trans youth care study. JMIR Res Protoc. 2019;8(7):e14434.

of the study was originally 13, but the age was decreased to 8 years old in 2017, mid-study." (Attachment B.)

38. An additional Congressional concern regarding the J. Olson-Kennedy lead study was that "it also appears that the Children's Hospital of Los Angeles used funds from its grant to study the effects of double-mastectomies on girls as young as 13." They specifically call attention to J. Olson-Kennedy's 2018 JAMA Pediatrics "Chest Reconstruction and Chest Dysphoria…" study.[25] Allow me to present suspect items of that study. "Chest dysphoria" is a neologism of convenience, not a DSM-5 diagnosis but an invention of the paper. The "chest dysphoria scale" measuring tool of the authors (p. 435) "is not yet validated," thus another unproven invention of convenience. Mastectomies were done on girls as young as 13 or 14 years of age, who lacking the capacity for mature decision making or informed consent (I will discuss in a later section of this declaration). J. Olson-Kennedy is elsewhere quoted at a 2018 California symposium regarding such a life-altering decision for adolescents, stating "If you want breasts at a later point

[25] Olson-Kennedy J, Warus J, Okonta V, Belzer M, Clark LF. Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults: Comparisons of Nonsurgical and Postsurgical Cohorts. *JAMA Pediatr.*2018;172(5):431–436. doi:10.1001/jamapediatrics.2017.5440

in your life, you can go and get them."[26] No, in fact mastectomies are permanent. Implants can be acquired, functional breasts cannot. The highly consequential nature of these hormonal and surgical procedures should generate more pause and humility than the referenced comment or the documented procedures reflect.

39. Levine, Abbruzzese, and Mason note "the widely recognized deficiencies in the evidence supporting gender-affirmative interventions (National Institute for Health & Care Excellence, 2020a; 2020b)."[27] They add, "The evidence underlying the practice of pediatric gender transition is widely recognized to be of very low quality (Hembree et al., 2017). In 2020, the most comprehensive systematic review of evidence to date, commissioned by the UK National Health System (NHS) and conducted by the National Institute for Health and Care Excellence (NICE), concluded that the evidence for both puberty blocking and cross-sex hormones is of very low certainty (National Institute for Health & Care Excellence, 2020a; 2020b)." The Hembree 2017

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[26] "Watch This 'Transyouth' Doctor Downplay The Significance Of 'Life Altering' Chest Surgery For Young Girls," May 25, 2021, Daily Caller News Foundation. https://www.tampafp.com/watch-this-transyouth-doctor-downplay-the-significance-of-life-altering-chest-surgery-for-young-girls/

[27] Stephen B. Levine, E. Abbruzzese & Julia W. Mason (2022): Reconsidering Informed Consent for Trans-Identified Children, Adolescents, and Young Adults, Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2022.2046221

citation is the Endocrine Society Guidelines for the treatment of "Gender Dysphoric/Gender-Incongruent Persons" and its recommendation of puberty blocking and cross-sex hormone administration for selected minors citing "low evidence" and genital surgery for selected adults citing "very low evidence."[28]

40. *British Medical Journal* editor in chief Carl Heneghan wrote in 2019, "The current evidence does not support informed decision making and safe practice in children."[29] A 2019 paper in *Archives of Disease in Childhood* by C. Richards, et al., carried the revealing title "Use of puberty blockers for gender dysphoria: a momentous step in the dark."[30]

41. The Cass Review Interim Report from the United Kingdom stated this on page 18 regarding the "Existing evidence base": "Evidence on the appropriate management of children and young people with gender incongruence and dysphoria is inconclusive both nationally and

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[28] Wylie C Hembree, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, *The Journal of Clinical Endocrinology & Metabolism*, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, https://doi.org/10.1210/jc.2017-01658

[29] Heneghan, Carl. "Gender-Affirming Hormone in Children and Adolescents." BMJ EBM Spotlight, 21 May 2019, blogs.bmj.com/bmjebmspotlight/2019/02/25/gender-affirming-hormone-inchildren-and-adolescents-evidence-review/.

[30] Richards C, Maxwell J, McCune N. Use of puberty blockers for gender dysphoria: a momentous step in the dark. *Archives of Disease in Childhood* 2019;104:611-612.

internationally."[31] On page 19 the report states "1.26. Internationally as well as nationally, longer-term follow-up data on children and young people who have been seen by gender identity services is limited, including for those who have received physical interventions; who were transferred to adult services and/or accessed private services; or who desisted, experienced regret or detransitioned."

42. James Cantor's report to the Florida Agency for Healthcare Adminstration's GAPMS report Attachment D, section 3, "Follow-Up Studies of Puberty Blockers and Cross-Sex Hormones" found "I[n] total, there have been 11 prospective outcomes studies following up gender dysphoric children undergoing medically induced suppression of puberty or cross-sex hormone treatment. Four studies failed to find evidence of improvement in mental health functioning at all, and some groups deteriorated on some variables.20 Five studies successfully identified evidence of improvement, but because patients received psychotherapy along with medical services, which of those treatments caused the improvement is unknowable.21 In the remaining two studies, both psychotherapy and medical interventions were provided, but the studies were designed in such a way as to allow the effects of psychotherapy

[31] Cass Review, Interim Report. https://cass.independent-review.uk/publications/interim-report/.

to be separated from the effects of the puberty-blocking medications.22" The body of scientific evidence supporting gender (transition) affirming medical care is far less convincing than the Matheny Antommaria Declaration repeatedly states.

43. There are, however, two higher quality studies with more robust follow-up periods regarding the impact on mental health of gender (transition) affirming medical care, and they show poor results. A 30-year population-based matched cohort study of all 324 sex-reassigned adult persons in Sweden was published in 2011 by Dhejne, et al., which revealed they demonstrated a completed suicide rate 19 times that of the general population 10 years post-transition, along with nearly 3 times the rate of all-cause (overall) mortality and psychiatric inpatient care.[32] A 2020 study by Branstrom and Pachankis was the first total population study of 9.7 million Swedish residents, and it ultimately showed that neither "gender affirming hormone treatment" nor "gender affirming surgeries" achieved improvement in the mental health service usages and endpoints assessed.[33]

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[32] Dhejne C, Lichtenstein P, Boman M, Johansson ALV, Langstrom N, et al. (2011) Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden. PLoS ONE 6(2): e16885. doi:10.1371/journal.pone.0016885.
[33] Branstrom, R., & Pachankis, J. E. (2020a). Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: A total population study. American Journal of Psychiatry, 177(8),727–734. doi:10.1176/appi.ajp.2019.19010080

44. James Cantor's report to the Florida Agency for Healthcare Adminstration's GAPMS report Attachment D, Section IV "International Health Care Consensus" (pages 42-46) offers an excellent and concise summary of the dissatisfaction with the lack of convincing evidence for the effectiveness and long-term safety of hormonal and surgical interventions for gender dysphoria in minors and the resultant retreat from them in favor of strong emphasis on psychological evaluation and intervention currently underway in the United Kingdom, Sweden, Finland, and France.

45. Para. 38 of the Matheny Antommaria Declaration states, "One directly relevant example of a widely accepted and Florida Medicaid program covered treatment that is based on prospective observational studies is the use of puberty blockers to treat central precocious puberty." Furthermore, "There are no randomized controlled trials evaluating the adult height of treated and untreated individuals." The analogy to gender (transition) affirming medical care is a non sequitur in that precocious puberty is a disease state in a compromised body, whereas gender dysphoria is neither. The natural course of untreated precocious puberty involves lasting physical

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Branstrom, R., & Pachankis, J. E. (2020b). Correction to Br.nstr.m and Pachankis. (2020). American Journal of Psychiatry, 177(8), 734–734. doi:10.1176/appi.ajp.2020.1778correction

problems and complications, whereas the natural history of gender dysphoria in minors is desistance and a body with a healthy and intact endocrine system. The Endocrine Society Guidelines state, "... the large majority (about 85%) of prepubertal children with a childhood diagnosis (of GD) did not remain gender dysphoric in adolescence."[34] A 2021 study by Singh, Bradley, Zucker, 2021 found a desistance rate of 87.8% in "largest sample to date of boys clinic-referred for gender dysphoria."[35] The gender dysphoric usually carry no inherent defect in sex organ development, function, or fertility. A 2020 study from the UK's Gender Identity Development Service found that "All had normal karyotype and endocrinology" function in 44 GD youth.[36]

GENDER (TRANSITION) AFFIRMING MEDICAL INTERVENTION IS NOT THE STANDARD OF CARE

46. Para. 39 of the Matheny Antommaria Declaration notes, "Professional medical organizations develop evidence-based clinical practice guidelines to provide clinicians with helpful, evidence-based

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[34] Hembree, W., Cohen-Kettenis, et al., (2017) Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guildeline. J Clin Endocrinol Metab,102:1–35.
[35] Singh D, Bradley SJ and Zucker KJ (2021) A Follow-Up Study of Boys With Gender Identity Disorder. *Front. Psychiatry* 12:632784. doi: 10.3389/fpsyt.2021.632784
[36] Polly Carmichael, Gary Butler, et al. Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. medRxiv 2020.12.01.20241653; doi:https://doi.org/10.1101/2020.12.01.20241653

recommendations and improve patient care and outcomes." But the declaration states repeatedly that the quality of said evidence, namely the "low" to "very low" quality recognized in studies supporting gender (transition) affirming medical interventions, is of little consequence to medical practice along with the invalid assertion that controlled trials of high quality would of necessity be unethical. This invites several observations. If the quality of the data is of limited consequence to practice, what is the point of grading systems and guidelines? What is the point of evidence at all if its quality is superfluous? And why is there such international pushback and retraction of gender (transition) medical interventions as noted in the United Kingdom, Sweden, Finland, and France, as notes previously in the declaration along with the GAPMS Report Attachment D from Dr. Cantor?

47. The Matheny Antommaria Declaration para. 42 states that "...none of the Endocrine Society's 84 recommendations in 2 of its other guidelines that focus on the pediatric population—guidelines on pediatric obesity and congenital adrenal hyperplasia—is based on "high quality" evidence. Twenty-four (29%) of the recommendations are based on "moderate," and 49 (58%) on "low" or "very low quality" evidence." This evades the fact that nearly all the Endocrine Society Guidelines for gender (transition) affirming interventions are graded as low to very low quality, not

a mixed bag. Also, pediatric obesity and congenital adrenal hyperplasia are disease states, whereas gender dysphoria and incongruence are not. The consequences of proposed medicinal and surgical interventions must continuously be viewed in that light.

48. Levine, Abbruzzese, and Mason observe, "It is common for gender-affirmative specialists to erroneously believe that gender-affirmative interventions are a standard of care (Malone, D'Angelo, Beck, Mason, & Evans, 2021; Malone, Hruz, Mason, Beck, et al:, 2021). Despite the increasingly widespread professional beliefs in the safety and efficacy of pediatric gender transition, and the endorsement of this treatment pathway by a number of professional medical societies, the best available evidence suggests that the benefits of gender-affirmative interventions are of very low certainty (Clayton et al., 2021; National Institute for Health & Care Excellence, 2020a; 2020b) and must be carefully weighed against the health risks to fertility, bone, and cardiovascular health (Alzahrani et al., 2019; Biggs, 2021; Getahun et al., 2018; Hembree et al., 2017; Nota et al., 2019).[37]

[37] Stephen B. Levine, E. Abbruzzese & Julia W. Mason (2022): Reconsidering Informed Consent for Trans-Identified Children, Adolescents, and Young Adults, Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2022.2046221

49. The Levine, et al., clarification that "the endorsement of this treatment pathway by a number of professional medical societies" despite contradicting the "best available evidence" is precisely what is meant by the term "eminence-based" as opposed to "evidence-based" medicine. The weight of the organizational name is used as its own proof of concept. That is not evidence-based care.

50. Any mention of the Endocrine Society Guidelines merits squaring with these quotes from it on page 3985, "The guidelines should not be considered inclusive of all proper approaches or methods, or exclusive of others. The guidelines cannot guarantee any specific outcome, nor do they establish a standard of care. The guidelines are not intended to dictate the treatment of a particular patient." To reiterate, "The guidelines should not be considered inclusive of all proper approaches or methods, or exclusive of others[,]" "nor do they establish a standard of care."

51. The American Academic of Pediatrics appears in several declarations. Dr. Cantor's GAPMS Report Attachment D, Section V "Assessing Statements from Professional Associations" (pages 31-41) with its included Appendix 2 peer-reviewed "point-by-point check" of the American Academic of Pediatrics policy on "transgender and gender diverse children and

adolescents"[38] provides an excellent review of their policy contents, their misrepresentation, and where merited, their failures. In para. 108 of page 40 of Attachment D, Dr. Cantor asserts, "The policy of the American Academy of Pediatrics (AAP) is unique among the major medical associations in being the only one to endorse an affirmation-on-demand policy, including social transition before puberty without any watchful waiting period. Although changes in recommendations can obviously be appropriate in response to new research evidence, the AAP provided none. Rather, the research studies AAP cited in support of its policy simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing watchful waiting."

52. Dr. Cantor's included 2019 peer-review article on the AAP policy concluded, "Rather, AAP's statement is a systematic exclusion and misrepresentation of entire literatures. Not only did AAP fail to provide *extraordinary* evidence, it failed to provide the evidence at all. Indeed, AAP's recommendations are *despite* the existing evidence."[39]

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[38] As Appendix 2 to attachment D Dr. Cantor included his peer-reviewed "point-by-point fact-check" of the AAP claims. (Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. Journal of Sex & Marital Therapy, 46, 307–313. doi: 10.1080/0092623X.2019.1698481)

[39] James M. Cantor (2019): Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy, Journal of Sex & Marital Therapy, DOI:10.1080/0092623X.2019.1698481

53. The international standard of care is watchful waiting, including psychological evaluation of the child and family both, not gender (transition) affirming therapy.[40] James Cantor asserts, "...almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping GD children...."[41] Michael Laidlaw, et al., agree "...watchful waiting with support for gender-dysphoric children and adolescents up to the age of 16 years is the current standard of care worldwide, not gender affirmative therapy...."[42]

INFORMED CONSENT AND MINORS

54. The Matheny Antommaria Declaration para. 47 claims, "Adolescents generally possess comparable medical decision-making capacity to adults.39 There is evidence that most adolescents with gender dysphoria have sufficient medical decision-making capacity to make decisions regarding

[40] Michael Laidlaw, Michelle Cretella & Kevin Donovan (2019) The Right to Best Care for Children Does Not Include the Right to Medical Transition, The American Journal of Bioethics, 19:2, 75-77, DOI: 10.1080/15265161.2018.1557288
[41] James M. Cantor (2019): Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy, Journal of Sex & Marital Therapy, DOI:10.1080/0092623X.2019.1698481
[42] Michael Laidlaw, Michelle Cretella & Kevin Donovan (2019) The Right to Best Care for Children Does Not Include the Right to Medical Transition, The American Journal of Bioethics, 19:2, 75-77, DOI: 10.1080/15265161.2018.1557288

puberty blockers." Para. 48 adds, "The current standard of care for treating gender dysphoria in minors is

consistent with general ethical principles instantiated in the practices of informed consent and shared decision-making." There is much to object to in these assertions.

55. Levine, Abbruzzese, and Mason observe, "...the process of obtaining informed consent from patients and their families has no established standard. There is no consensus about the requisite elements of evaluations, nor is there unanimity about how informed consent processes should be conducted (Byne et al., 2012). These two matters are inconsistent from practitioner to practitioner, clinic to clinic, and country to country."[43]

56. The Swedish Pediatric Society issues a letter supporting the Swedish National Council for Medical Ethics' (SMER) proposed systematic review of gender dysphoria treatment in which they cautioned, "Giving children the right to independently make vital decisions whereby at that age they cannot be expected to understand the consequences of their decisions is not scientifically founded and contrary to medical practice."[44]

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[43] Stephen B. Levine, E. Abbruzzese & Julia W. Mason (2022): Reconsidering Informed Consent for Trans-Identified Children, Adolescents, and Young Adults, Journal of Sex & Marital Therapy, DOI: 10.1080/0092623X.2022.2046221

[44] http://www.barnlakarforeningen.se/2019/05/02/blf-staller-sig-bakom-smers-skrivelse-angaende-konsdysfori/

57. A United Kingdom High Court in Bell vs. Tavistock (December 12, 2020) ruled that gender (transition) affirming medical care in minors was experimental and could not, in most cases, be given to minors under 16 without court order, and that such was advisable for those 16-17. They added in para. 144, "There is no age appropriate way to explain to many of these children what losing their fertility or full sexual function may mean to them in later years."[45] In para. 141 it explained, "That adolescents find it difficult to contemplate or comprehend what their life will be like as adults and that they do not always consider the longer-term consequences of their actions is perhaps a statement of the obvious." Obvious, indeed.

58. Anthony Latham, family physician and chair of the Scottish Council on Human Bioethics, published a 2022 paper "Puberty Blockers for Children: Can They Consent?" in which he asserted, "The young brain is biologically and socially immature, tends towards short-term risk taking, does not possess the ability to comprehend long term consequences and is highly influenced by peers…" He concluded, "Children cannot consent, and therefore should not be asked to consent to being treated with puberty blockers for gender dysphoria. This does not deny the reality of GD or that future forms of

[45] https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf

treatment may be acceptable, but it does rule out such an experimental medication which has such profound and potentially very harmful irreversible consequences."

59. The Matheny Antommaria Declaration para. 48 states, "The current version of

guideline states clinicians should individualize decision-making for chest surgery in

transgender males (individuals assigned female at birth who identify as male) and

that chest surgery may be considered in some instances for individuals under 18

years old." Please review para. 38 of my declaration regarding J. Olson-Kennedy 's 2018 JAMA Pediatrics article "Chest Reconstruction and Chest Dysphoria..."[46]

Double-mastectomies, the "chest surgery" in question, are being performed on biological females as young as 13.

[46] Olson-Kennedy J, Warus J, Okonta V, Belzer M, Clark LF. Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults: Comparisons of Nonsurgical and Postsurgical Cohorts. *JAMA Pediatr.*2018;172(5):431–436. doi:10.1001/jamapediatrics.2017.5440

60. The Matheny Antommaria Declaration notes in para. 50 that, "...Medicaid beneficiaries are provided coverage for comparable surgeries, such as those for gynecomastia." This is followed in para. 51 with the statement, "There is nothing unique about chest surgery for gender dysphoria that justifies singling out this and other medical treatments for gender dysphoria for noncoverage..." Yes, there clearly is. Gynecomastia is a disease state in biological males and the surgery for it removes the small amount of additional glandular breast tissue it represents. It is not a complete mastectomy on a biological female with total loss of healthy functional breasts.

THE FLORIDA MEDICAID RULE IS NON-DISCRIMINATORY

61. Implicit in the Matheny Antommaria Declaration, and explicit in some organizational complaints, against the Florida Medicaid rule excluding gender (transition) affirming medical interventions is the charge of discrimination.

62. Florida Medicaid rules state that "As a condition of coverage, sex reassignment treatment must be "consistent with generally accepted

professional medical standards (GAPMS) and not experimental or investigational" (Rule 59G-1.035, F.A.C....).[47]

63. The GAPMS report concludes: "Considering the weak evidence supporting the use of puberty suppression, cross-sex hormones, and surgical procedures when compared to the stronger research demonstrating the permanent effects they cause, these treatments do not conform to GAPMS and are experimental and investigational."

64. Declining to provide gender (transition) affirming health care is non-discriminatory and appropriate both professionally and scientifically.

a. G(T)AHC has not been proven safe, effective, or of more benefit than harm particularly long term. This was emphasized in the 2020 UK High Court Bell v Tavistock case,[48] the UK's Cass Interim Report of 2022,[49] the UK's 2020 National Institute for Health and Care Excellence reviews of puberty blockers and cross-sex hormones,[50] the UK's NHS closure of the world's largest pediatric gender clinic,[51] the Swedish Agency for Health Technology

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47 https://www.ahca.myflorida.com/Medicaid/review/General/59G_1035_Determining_Generally_Accepted_Professional_Medical_Standards.pdf

48 https://www.judiciary.uk/wp-content/uploads/2020/12/Bell-v-Tavistock-Judgment.pdf

49 https://cass.independent-review.uk/publications/interim-report/

50 https://arms.nice.org.uk/resources/hub/1070871/attachment and https://arms.nice.org.uk/resources/hub/1070905/attachment

51 https://www.bbc.com/news/uk-62335665

Assessment and Assessment of Social Services' 2019 literature review,[52] Sweden's Karolinska Hospital (affecting Astrid Lindgren Children's Hospital's pediatric gender services) 2021 policy change,[53] Finland's COHERE 2020 policy reform,[54] and the French National Academy of Medicine press release.[55]

b. Physicians take an oath to do no harm, and G(T)AHC is documented to lead to significant harm without proof of compensatory benefit.

c. Withholding unproven interventions is non-discriminatory.

d. The problem of diagnosis: "There is currently no way to predict who will desist and who will remain dysphoric."[56] Withholding unproven treatments for uncertain diagnostic or ideological identifications is non-discriminatory and simply wise medical practice protecting both the patient and physician.

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[52] https://www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/

[53] Karolinska Policyförändring K2021-3343 March 2021 (Swedish).pdf; Karolinska Policy Change K2021-3343 March 2021 (English, unofficial translation).pdf

[54] https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en.pdf/aaf9a6e7-b970-9de9-165c-abedfae46f2e/Summary_minors_en.pdf

[55] https://www.academie-medecine.fr/la-medecine-face-a-la-transidentite-de-genre-chez-les-enfants-et-les-adolescents/

[56] Michael K Laidlaw; Quentin L Van Meter; Paul W Hruz; Andre Van Mol; William J Malone. Letter to the Editor: "Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline" The Journal of Clinical Endocrinology & Metabolism, Volume 104, Issue 3, 1 March 2019, Pages 686–687, https://doi.org/10.1210/jc.2018-01925, Online, November 23, 2018.

e. There are alternative treatments of mental health natures which are at least as effective and without the harms of hormonal and surgical interventions.

CONCLUSION

65. Gender (transition) affirming health care imperils already at-risk gender dysphoric youth with experimental and unproven hormonal and surgical interventions which medicalize prematurely and permanently. G(T)AHC is not proven effective, not proven to have long-term safety, does not reduce suicides, and is not the standard of care for gender dysphoria. Scientific and legal evidence is driving an international pushback against G(T)AHC in favor of intensive psychological evaluation and support, and the lawsuits over the harms of G(T)AHC have begun. Florida Medicaid is on solid ground in excluding gender (transition) affirming medical interventions from payment.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on September 27, 2022

//s//Andre Van Mol, MD
ANDRE VAN MOL, MD

Appendix Attachment

7

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

DECLARATION OF PATRICK W. LAPPERT, MD

I, Patrick W. Lappert, MD., hereby declare and state as follows:

1. I am over the age of eighteen and submit this expert declaration based on my personal knowledge.

2. I have been retained by counsel for the defendants in the above captioned lawsuit to provide an expert opinion concerning the nature of gender surgery. That opinion will be based primarily in my own experience as a physician and surgeon. It will also be based in an evaluation of the scientific publications that Plaintiffs have provided to the court in support of their complaint. It will additionally include an examination the world literature on the subject, as well as an examination of the massive public controversies that have led to near complete reversal of public health policy in multiple European states who have turned away from the social, medical, and surgical transitioning of minors.

3. I am a retired plastic surgeon, as well as a retired senior medical officer in the United States Navy. I have been a physician for 40 years. I completed my undergraduate education at the University of California, Santa Barbara. While there I had significant experience in university level research having been invited to be an undergraduate research assistant, working in the laboratory of Dr. Philip C. Laris. It gave me experience in the evaluation of research publications. We were involved in the collaborative work of elucidating the electrodynamic and stoichiometric quantification of the sodium and potassium pump, located in every living cell. I completed my undergraduate degree in four years, and went directly to medical school.

4. I completed my preliminary medical training while on active duty in the US Navy. I attended the Uniformed Services University of the Health Sciences, F. Edward Hebert School of Medicine, graduating as Doctor of Medicine in 1983.

5. I completed a surgical internship at the Oakland Naval Hospital, followed by Aerospace Medicine/ Flight Surgeon Training at the Naval Aerospace Medical Institute, Naval Air Station Pensacola.

6. I then served for 2 1/2 years with a deploying, front-line Marine Corps fighter squadron, serving in the dual functions of medical department head, and squadron Radar Intercept Officer flying in the F-4 Phantom. I was deployed to Asia and the Western Pacific. I provided medical care to squadron personnel while deployed in Japan, Korea, and the Philippines.

7. I completed my General Surgery residency at the Oakland Naval Hospital-University of California, Davis/ East Bay Consortium. Following residency, I was retained there as a staff surgeon, and was responsible for the training of surgical residents. I was awarded the inaugural "Resident's Choice" award given to the attending surgeon deemed most effective by the residents in training, and presented by Claude Organ, MD, past President, American College of Surgeons.

8. I trained in Plastic and Reconstructive Surgery at the University of Tennessee, Memphis, graduating in 1994. During that training I traveled to Peru and provided craniofacial surgical care for indigent Peruvian children. This included the publication of a case report of surgical management of a very late post traumatic ectopic frontal sinus mucocele.

9. I received Board Certification in General Surgery from the American Board of Surgery in 1992. I received Board Certification in Plastic and Reconstructive Surgery in 1997 from the American Board of Plastic Surgery. I re-certified in Plastic and Reconstructive Surgery in 2008.

10. I served as a staff plastic surgeon at Naval Hospital Portsmouth, Virginia from 1994 to 2002. I became Department Chairman in 1998, and served in that office until my retirement. We had 5 staff plastic surgeons, and 10 Enlisted and civilian members. I established the Wound Care Center, providing specialized wound care services to a global catchment area. For example, our department was responsible for the limb and pelvic reconstruction of some of the sailors wounded when the USS Cole was attacked while at anchor at Aden in Yemen. I also established and chaired the

multi-disciplinary Cleft Palate, Craniofacial Board. We provided comprehensive services for congenital pediatric deformities to a global catchment area.

11. Following selection to the rank of Captain, USN, I was selected to serve as Specialty Leader, Plastic and Reconstructive Surgery for the office of the Surgeon General, USN. In addition to being responsible for the selection and training of surgical residents, I was also responsible for Navy Medical Department policy concerning coverage for services, and medical evaluation and evacuation policy. I was responsible for the resolution of issues concerning what conditions constitute a requirement for immediate care in military hospitals, what may be purchased from civilian medical organizations and provided to eligible members on a delayed (elective) basis, and what is to be considered cosmetic surgery and therefore not an obligation of the government. I served in that position until my retirement. While serving as Department Chairman, I co-authored a textbook chapter on the management of combat injuries with the Chairman of Plastic Surgery at Harvard University, Dr. Eloff Ericksson. During that time I also published the first case report in the world literature detailing the use of endoscopic technique for reduction and plate fixation of a fronto-facial fracture.

12. I retired from the Navy after 24 years of continuous active duty. I was invited to join a surgical group in Scottsbluff Nebraska, primarily to provide comprehensive reconstructive surgery for women suffering breast cancer. I also provided reconstructive services to a very large regional catchment served by the Level II trauma center at Regional West Medical Center (RWMC). I established and chaired the Cleft Palate/ Craniofacial multi-specialty clinic at RWMC. I also established comprehensive wound care services for the many rural community hospitals in the western prairie including Nebraska, Eastern Wyoming, southwest South Dakota and northeast Colorado.

13. For reasons pertaining to the education of our six children, I moved my practice to Northern Alabama in 2005. I have been a solo practitioner here for the last 17 years. I was brought here by a local hospital that wanted to offer comprehensive breast reconstruction to women affected by breast cancer. I also started a comprehensive wound care center. I have also had a very active practice in aesthetic/ cosmetic surgery. I maintained my own surgical suite for in-office facial rejuvenation procedures as well as minimally invasive body contouring procedures. I was an early adopter of advanced techniques in autologous fat grafting for facial re- contouring as well as for the resolution of radiation burn wounds of the skin. I continued to serve in the training of medical students in my office practice.

14. Although I maintain a practice in wound consultation, skin care, and laser services, I retired from my surgical practice in 2020, after having practiced as a plastic and reconstructive surgeon for 30 years. I was an Active Member in good standing of the American Society of Plastic Surgery for all but the last two years in practice. With only two years remaining in my practice, I elected to forgo a third certification by the American Board of Plastic Surgery. The certification was no longer necessary for maintaining my hospital credentials, and I saw it as an unjustifiable expense for a solo practitioner planning retirement.

15. As can be gleaned from this summary, I have a meaningful breadth of experience, not only in the advanced surgical care of trauma, cancer, head/ neck disease, as well as cranial and facial birth defects. Many of those procedures require the use of the most advanced sensate, microvascular flaps, including composite and pre- fabricated flaps. These are all the same techniques employed by today's gender surgeons. As regards surgery of the breast, I co-authored a ground-breaking article regarding pre-operative plastic surgical planning in the care of women suffering from breast cancer. It is among the most frequently cited papers in the field of breast reconstruction.[1]

16. Since 2014 I have made a concerted effort to examine the medical literature as it pertains to the care of self-identified transgender persons including children and adults. I have had an eight year long running discussion on these issues with Family Practitioners, Pediatricians, Pediatric and Adult Psychologists and Psychiatrists, Pediatric Endocrinologists, as well as PhDs who specialize in the evaluation of the validity of scientific publications. During that time I have made many public presentations to teachers, counselors, pastors, and administrators on the subject of transgender, and the medical-scientific evidence that informs that care.

17. My curriculum vitae, which is attached as Exhibit "A", provides a list of my publications

18. I prepared a report which is attached to the Florida Agency for Healthcare Administration's "Generally Accepted Professional Medical Standards Determination for the Treatment of Gender Dysphoria" A copy of my report is attached and incorporated by reference as Exhibit "B" to this declaration.

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[1] Toth, B.A. and Lappert, P. (1991) Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Pre-Operative Planning. Plastic and Reconstructive Surgery, 87, 1048-1053. http://dx.doi.org/10.1097/00006534-199106000-00006

19. I have offered testimony, both written and in person on this issue to state legislators, state health benefits management agencies, as well as to State Attorneys General.

20. I have also had experience in making judgements concerning distinctions between reconstructive surgery and cosmetic surgery. I gained this experience while serving in senior leadership for a government medical care system in which I had no financial stake. I have no financial interests in the matter in question, and the professional opinion that I offer is not influenced by my sources of income nor by my position in any organization that financially benefits from medical services that are discussed in this opinion.

21. For my services as an expert witness I am being compensated at an hourly rate of $400 for preparation of my written testimony as well for deposition and hearing. Additionally my travel expenses will be reimbursed. My compensation is not dependent upon the substance of my opinion nor upon the outcome of the litigation.

22. If called to testify in this matter I will do so truthfully, and to the best of my ability.

23. The Plaintiffs, supported by the opinions of Dr. Schechter, among others, are making the claim that "gender affirmation care" including "gender affirming (or confirming) surgery" should be paid for by the State of Florida because such care has scientifically proven efficacy, and safety. Furthermore they claim that there is such an abundance of scientific support for these treatments that they must be understood to be the standard of care, and that there is no controversy in the matter. In support of this position they have provided in their declaration an abundance of citations from professional scientific publications that they expect will furnish the court with sufficient reliable evidence that Plaintiffs claims will be upheld. As shall be seen in this response, their claims are not supported in the science. This will be seen in the examination of those scientific documents which they have cited.

24. In recent years professional medical societies have been making a concerted effort to strengthen the scientific basis upon which their particular specialties stand. This effort is commonly given the name "evidence based medicine". It is a systematic effort to categorize the quality of prognostic and therapeutic studies so that physicians reading these publications can distinguish what is vague and speculative from what is a matter of high likelihood, or grave certainty. Tools for making such

distinctions have been developed that categorize clinical or experimental findings on the basis of how that data was obtained, the reliability of the test instruments used, the variability of the results, the sample size, and the likelihood of bias among other factors. For the purposes of this response, I will use the tool developed by the American Society of Plastic Surgery.[2] For prognostic studies, the categorization of evidence is divided into Levels I- V, with Level I being the most rigorous and having the highest likelihood of scientific certainty, and Level V having the least rigor, and having very little certainty. Here are the definitions of those levels according to the American Society of Plastic Surgery:

Level I: High quality prospective cohorts study with adequate power or systematic review of these studies.

Level II: Lesser quality prospective cohort, retrospective cohort study, untreated controls from an RCT (randomized control study), or systematic review of these studies.

Level III: Case- control study or systematic review of these studies.

Level IV: Case series

Level V: Expert opinion; case report or clinical example; or evidence based on physiology, bench research or "first principles".

23. For therapeutic studies, the ASPS categorization is similar, but with a few helpful distinctions:

Leve	Type of evidence
1A	Systematic review (with homogeneity) of RCTs
1B	Individual RCT (with narrow confidence intervals)
1C	All or none study
2A	Systematic review (with homogeneity) of cohort studies

[2] The Levels of Evidence and their role in Evidence-Based Medicine Patricia B. Burns, MPH,1 Rod J. Rohrich, MD,2 and Kevin C. Chung, MD, MS3 Plast Reconstr Surg. 2011 Jul; 128(1): 305–310. http://www.plasticsurgery.org/Medical_Professionals/Health_Policy_and_Advocacy/Health_Policy_Resources/Evidence-based_GuidelinesPractice_Parameters/Description_and_Development_of_Evidence-based_Practice_Guidelines/ASPS_Evidence_Rating_Scales.html.

2B	Individual Cohort study (including low quality RCT, e.g.
2C	"Outcomes" research; Ecological studies
3A	Systematic review (with homogeneity) of case-control studies
3B	Individual Case-control study
4	Case series (and poor quality cohort and case-control study
5	Expert opinion without explicit critical appraisal or based on physiology bench research or "first principles"

24. These distinctions are very important to physicians who seek to understand the weight of the evidence presented in support of a change in therapeutic care. Sometimes such scientific findings can be so compelling regarding an issue, that professional societies will publish clinical guidelines that strongly suggest conformity to a new treatment plan based in that evidence. Occasionally the evidence will be of such certainty, on a matter that is so grave, that professional societies and even public law will assert that there exists a standard of care based in this evidence that if ignored has a high probability of injury or harm to the patient. That is what is implied when the phrase "standard of care" is used.

25. To that end, the ASPS document provides a grading system for Practice Recommendations that helps in the decision making. It is a synthesis of the breadth of scientific data that addresses the issue in question. In the case of Grade A ther is an accompanying "Strong recommendation", versus Grade D where the evidence is so lacking in empirical value that the proposed treatment can only be offered as an option if at all, depending upon the strength of existing or alternative treatments, and the particular issues of a particular patient.

26. To summarize, it can be said that Level-V evidence is anecdotal, and in the world of surgery it is typified by the phrase "expert opinion". Such evidence is not to be dismissed since it is the known starting point for much meaningful research and discovery. A surgeon with great experience and unassailable credentials will observe something peculiar. He will form a hypothesis about its cause or treatment. Hopefully he will publish his single case report, and share his thoughts with the wider surgical community. Perhaps one of his residents will start a hunt for other cases. Perhaps

surgeons who read his paper will report similar cases. Eventually it might lead the surgeon to apply his new principal to a series of cases. The series may already be there in his own case files. If he publishes his series of cases, that would constitute an improvement to Level-IV evidence. Even then, it would be considered "poor" evidence because it suffers from the fact that it is a small collection of cases, from a single surgeon, and perhaps no one has yet replicated his observations. Additionally it may suffer from "selection bias" (as when the patient decides if he will receive long term follow up), lack of proper controls (which help us to separate out what is the result of our treatment, and what is within the range of normal variation in the population), inadequate study duration (if you claim a long term improvement in survival, you have to follow the patients long-term).

27. An example from the history of surgery will serve to illustrate how Level-IV and V evidence, when widely encouraged and applied through expert opinion, can result in grave missteps. For over 100 years, ulcer disease of the stomach was considered a surgical problem. This very debilitating disease did not appear to be manageable through medical means. Laboratory study of the stomach had already demonstrated that acid production in the stomach is regulated by particular nerves. That finding suggested that if those nerves are cut, acid production will decline, and the ulcer will heal. It was also determined that the surgery must include some form of "drainage procedure" because cutting the nerves would also impair the muscular contracture of the stomach. Through the course of the decades many of the greatest surgeons gave their names to the elegant techniques for selectively cutting the nerves, or draining the stomach in ways that hopefully would not result in a "gastric cripple" (an all too common outcome). Long hospitalizations, and many months spent accommodating to the reordering of their digestive tract was expected. There is a syndrome of bad effects from these surgeries that most people adapt to but some never do. Nonetheless, untreated peptic ulcer disease was often deadly, either from peritoneal sepsis, or bleeding to death. Because of the gravity of ulcer disease, it was ethically sound to risk "post gastrectomy syndrome" if it meant saving a life.[3] By the 1980s, level II and I studies had demonstrated that peptic ulcer disease is actually a bacterial infection that can be treated with antibiotics and an acid-reducing medication. This had been very seriously suspected for at least 30 years. However, poorly designed studies published by the greatest academic surgeons of the day had utterly suppressed the bacterial explanation in favor of the surgical solution. A very well reasoned 2014 paper by Seselja and Strasser[4] shows the heuristic pitfalls that can result in unintended harms to

[3] History and evolution of peptic ulcer surgery; John B.BlalockJr.MD1; The American Journal of Surgery Volume 141, Issue 3, March 1981, Pages 317-322

patients when surgical decision making is driven by expert opinions that aren't well supported by quality scientific evidence.

28. Generations of surgeons will follow what is taught to them by the academic surgeons. These are esteemed mentors who are responsible for training the next generation of surgeons. That is how it has always been. However today, medical science has advanced in crucial ways through the application of the "science of science". We understand better now how to examine the evidence. We are less likely to make needless errors of judgment because we are better able to analyze the data particularly with regard to its reliability. This is indispensable when studying biological systems that, in every measurable trait, demonstrate great variability. It is particularly essential when examining and caring for the human person, because you have the added dimension of their subjective interior life.

29. Dr. Schechter, by every measure known to me, is of very accomplishmed in the world of plastic surgery. It is on that basis that we can expect that the published literature which he has offered in support of Plaintiff's assertions will be of the highest level available to him. But the literature he offered does not bear out his conclusions

30. In para. 21, Dr. Schechter defines the word "transgender" on the basis of a subjective conflict within the patient's internal sense of themselves. He affirms this interior subjective division on the basis of an idea that sex is somehow "assigned" at birth, rather than scientifically discovered through tissue sampling, in utero ultrasound, or simple inspection at birth. In 99.98% of cases, simple inspection correctly detects the sex of the subject. Furthermore, this test can be administered by untrained personnel. His use of the term "assigned" implies that there can be errors of "assignment". Such an assertion demands not only that we examine the result, but we must also look at the consistency of the data. We have seen previously that consistency of the data is one of the hallmarks of good evidence. Any test that can be correct 99.98% of the time regardless of who administers the test is perhaps unequaled in scientific medicine.

31. Gender, on the other hand, as it relates to sex, is a very different matter. While there are some aspects of gender that are more fixedly related to the sex, there are large areas of gender that are learned within the milieu of the local culture, and find their origins in family life. There is no objective, repeatable test, with known error rates that can be used to detect "gender". Gender, as the term is used in the world of medicine and surgery is not objectively measurable. Such traits as hair length,

[4] Dunja Šešelja 1, Christian Straßer; Heuristic reevaluation of the bacterial hypothesis of peptic ulcer disease in the 1950s; Acta Biotheor 2014 Dec;62(4):429-54.

occupation, preference for violent sport, clothing selection, among others, may have vague gender associations, but are so variable from culture to culture as to be useless for our purposes. This is because "gender" is one of the many expressions of the interior life of the person. It is a mercurial thing because it is not entirely fixed to that part of the patient that is a reliable object for examination and treatment. That difficulty with diagnosis and prognosis is further complicated by the fact that variability in gender presentation doesn't just occur within any particular human grouping, it is also known to vary within the span of the life of a single patient.(Zucker)

33. Beginning in 23, Dr. Schechter makes the claim that "hormone therapy and gender confirmation surgeries can help alleviate gender dysphoria" and that these treatments "have been shown to be an effective treatment for gender dysphoria". In para. 24 he further states that it is his professional opinion "supported by prevailing consensus of the medical community" that these treatments are medically necessary, and are "safe and effective treatments for gender dysphoria". We will examine the claims of efficacy, and safety by examining the papers offered in support of his claim. We will examine the world literature more broadly in order to examine Dr. Schechter's claim that there is a "prevailing consensus", which is a claim that suggests that there is no meaningful controversy surrounding the use of social, medical, and surgical gender affirmation, particularly with regard to the young.

34. The first support that Dr. Schechter offers is the WPATH "Standards of Care". This document is the product of the World Professional Association of Transgender Health. It has had 7 iterations, with the 8th version now pending publication. This document has been, and continues to be produced through a process of consensus-seeking within working committees of experts. As we have seen in our discussion about the grading of scientific evidence, expert opinion is the most rudimentary level of evidence. It is the starting point of scientific investigation, not the end. As any medical subject is investigated over time, the expert opinion becomes better supported by well developed and monitored scientific processes. In short, expert consensus is only as valuable as the scientific evidence that can be reviewed and evaluated which supports the opinion. If the evidence hasn't progressed very far beyond the category of expert opinion, then we are speaking about evidence that is not sufficiently developed so as too drive either clinical decision making, nor fiduciary decision making when public or invested resources are involved.

35. It will be recalled that the use of the words "standards of care" imply that a particular treatment or clinical principle, if not employed, would have an unacceptable probability of harm to the patient. The term "standard of care" addresses issues of

duty, negligence, harm, and causation. It is a legal term that is applied when evaluating the malpractice of medicine. In its Introduction to the WPATH standards, the authors acknowledge that their document is meant to be a guideline only, and subject to individual and local adaptation, and that it is not binding in any way. On page 2 of v.7 in bold face it states "The Standards of Care are flexible clinical guidelines". This calls into question the motivation for the use of the phrase "standards of care" in all of its publications and statements.

36. If the WPATH document is actually a collection of clinical guidelines, then we must examine how such guidelines are developed. In the International Journal of Quality in Healthcare (2016) Kredo et al.[5] (&) offer a helpful examination of that process. They point out that in the past they were just consensus statements offered by experts in the field. They were "'systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances." With the push toward evidence based medicine, it was realized that guidelines required more scientific rigor, so in 2011 the definition was changed to, "statements that include recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options'". In order to have real value, clinical practice guidelines must therefore do two things: Use high quality scientific data to evaluate risks, and beneficial results while presenting alternative approaches for the practitioner and patient to consider.

37. As Dr. Schechter has stated in his expert declaration, he is a co-author of the WPATH chapter on surgery in version 7, and is the co-lead author of the same chapter in version 8. It would be expected therefore that what Dr. Schechter has offered to the court is "high quality scientific data to evaluate risks, and results while presenting alternative approaches for the practitioner and patient to consider", since it is precisely that which is the question here.

38. The first scientific publication he offers is one that is in support of hormonal treatment of transgender persons. It is a paper by Hembree et al.[6] which is itself a clinical practice guideline promulgated by the Endocrine Society (hereafter ES). This guideline was produced in order to update an earlier guideline from 2009. It was produced using GRADE consensus methodology, and is the product of 9 experts who

[5] Guide to clinical practice guidelines: the current state of play; Kredo et al. Int J Qual Health Care. 2016 Feb; 28(1): 122–128.Published online 2016 Jan 21. doi: 10.1093/ intqhc/mzv115

[6] Wylie C Hembree, et al. Endocrine Treatment of Gender-Dysphoric/Gender- Incongruent Persons: An Endocrine Society Clinical Practice Guideline, The Journal of Clinical Endocrinology & Metabolism, Volume 102, Issue 11, 1 November 2017, Pages 3869–3903, https://doi.org/10.1210/jc.2017-01658

formed the committee. The GRADE methodology cautions its users that "inconsistency of result across multiple studies", "indirectness of evidence", "imprecision in measurement", and "publication bias" are to be watched for in its application; essentially that doctors must watch out for sloppy measurement, and bias in the working group. The scientific evidence used to support the Endocrine Society's special treatment guidelines for gender dysphoric/ gender incongruent persons appears to be of low to very low quality, since the clinical recommendations were so equivocal. It was published in 2017 and includes the statement:

"guidelines cannot guarantee any specific outcome, nor do they establish a standard of care": "The guidelines should not be considered inclusive of all proper approaches or methods, or exclusive of others. The guidelines cannot guarantee any specific outcome, nor do they establish a standard of care. The guidelines are not intended to dictate the treatment of a particular patient." P. 3895.

39. As was discussed earlier, this language of uncertainty when included in a clinical practice guideline is what we would expect with low quality evidence. This is what the ASPS would call a Grade D result that rests on level IV-V evidence, and is therefore not useful in directing clinical decision making. This consensus process described by Hembree et al. would likely appear very similar to the decision making that drove peptic ulcer surgery in opposition to evidence that it is a bacterial disease. Academic physicians of the highest caliber were making recommendations to their fellow practitioners, as they are now, based upon anecdotal experience and low level evidence.

40. Just 2 years later, in 2019, the ES , along with an international panel of endocrinology societies, concluded "**the only evidence-based indication for testosterone therapy for women is for the treatment of HSDD** [Hypoactive sexual desire disorder]," and that "There are **insufficient data to support the use of testosterone for the treatment of any other symptom or clinical condition,** or for disease prevention." Also, "The **safety of** long-term testosterone therapy has not been established."[7] It is somewhat alarming to note that these findings are entirely consistent with a consensus statement from 5 years earlier in 2014. In the span of just 5 years, the Endocrine Society consensus has swung from "no other indication for androgen in women" to something akin to, "it is crucial that androgens be given to women who are

[7] Endocrine Society Susan R Davis, et al, Global Consensus Position Statement on the Use of Testosterone Therapy for Women, The Journal of Clinical Endocrinology & Metabolism, Volume 104, Issue 10, October 2019, Pages 4660–4666, https://doi.org/10.1210/jc.2019-01603.

gender dysphoric", and then back to "no other indication for androgen". This kind of consensus oscillation is what you would expect when there is such scant scientific basis for the decision making.

41. Dr. Schechter presented the ES guidelines as the "criteria for initiation of surgical treatment". Between para. 27 and 28 he claims that gender surgery is "often necessary and effective" citing the same ES document. He also correctly reports parallel, committee based consensus statements by the numerous academic societies, produced in the same way, and resting upon similar evidence as discussed above re: ES guidelines, and WPATH "standard of care".

42. In para. 29 Dr. Schechter offers a listing of all of the surgeries that would be considered "generally accepted in the medical community". He does not explain how he measured the level of acceptance that transgender breast and genital surgery enjoys in the medical community. He further explains that all of the listed surgeries are "consistent with the standard of care". By the phrase "Standards of Care", he appears to refer to the WPATH document. The main salient chapter in that document was authored by Dr. Schechter, in his capacity as a leading academic expert in the field of transgender surgery. It is his own expert opinion that he cites as an authoritative guide in surgical decision making in matters relating to the care of transgender persons. Ipse dixit.

42. In para. 30, while discussing surgeries for women who seek to present as men, he describes the removal of healthy breasts and the cosmetic masculinizing procedure as "reconstructive". This is somewhat problematic, particularly as regards the duties of third party payors, including the State of Florida Medicaid program, which includes the management of payment for services. The distinction between what is cosmetic (aesthetic) versus reconstructive is one of the key issues in the just management of payments by insurers, including the State of Florida. This distinction was a daily issue for me when I was in Navy Medical Department leadership. The distinction between cosmetic and reconstructive surgery rests upon objective, observable, repeatably measurable markers of conditions that diminish or impair human functioning. It is based in comprehensive objective knowledge of human structure and function and is in the service of human flourishing.

Reconstructive surgery is the restoration of form and function for a person who has suffered a loss through genetic or developmental in utero accident, trauma, infection, or surgery for infectious events or cancer. It begins with the most comprehensive knowledge available concerning the nature and function of the injured part, and seeks to optimize function as the primary goal, while seeking to restoring the

natural form. Both form and function are understood objectively, and both have subjective effects. Restoration of form and function in a combat injured leg has measurable effects on mobility, range of motion, strength, and capacity for work. Subjectively, the impact is profound as well, but it is not the central purpose of the operation.

In contrast, aesthetic surgery begins in the subjective life of the patient. The patient presents seeking an opinion concerning the aesthetics of a particular feature, such as the nose. They will express a dislike of the feature. Their hope is that by modifying its appearance, they will improve their interior subjective life. What the patient is seeking is a normal human objective: to improve the aesthetics of things, for ourselves and for the people around us. When the surgeon is planning and performing the operation on the nose, there is great objective precision, however all of it is placed in the service of the subjective life of the patient. It is of no use for the surgeon to impress himself with a technically perfect result if the patient loathes it. The surgeon additionally has the grave duty of managing the risk for the patient and weighing it against the potential benefit. The patient must not be submitted for a surgery which entails a significant risk of loss if the surgery is being performed only to achieve an aesthetic outcome. If there is a certainty of loss, then there is a certainty of error. To give a young woman a perfect nose, and in the process destroy her ability to breath through it would be a terrible error of surgical decision making. It is axiomatic in plastic surgery that we are to avoid a predictable sacrificing function in the pursuit of cosmetic improvement.

The procedure which Dr. Schechter labels “chest reconstruction surgery” in female to male presentation patients actually begins with the known expectation that the surgery will produce a degradation or loss of two essential human functions, namely: sexual arousal, and breast feeding. Both functions are permanently and irretrievably lost, and that loss is one of the expected results or the surgery. This step is then followed by the cosmetic shaping of the chest through the use of liposuctioning in an effort to further masculinize the appearance of the chest. This surgery is now being routinely performed on minor girls, and version 8 of the WPATH “standards of care”, written by Dr. Schechter and presented here as authoritative, actually recommends mastectomy in girls as young as 15 years of age. This surgery does not involve the restoration of form and function, and is therefore not reconstructive. It is an operation that begins in the subjective life of the patient, and aims at a result that also resides entirely within the subjective life of the patient. It is thus by definition an aesthetic (cosmetic) surgery. Because it includes the 100% likelihood of a massive functional loss, it must be considered unsupportable as a matter of policy.

Similarly, genital surgery procedures listed in Dr. Schechter's declaration can not be considered reconstructive because they do not meet the definition of reconstructive surgery. They begin with an obsessive concern or anxiety in the subjective life of an otherwise normal, healthy person. They involve the planned destruction of an essential human function, and they are not restoring a form that is missing due to trauma, genetic accident, in utero event, or disease. The surgery seeks to create counterfeit structures that never could have existed in the patient, except as an artifact of surgery. I have done many reconstructive surgeries involving the entire genital area in patients with military injuries and infectious illnesses. If the injury is so devastating as to require a counterfeit structure, and that is all that can be offered, then there is no question as to how the surgeon must proceed.

In contrast, gender affirmation surgery only produces counterfeit structures that are created to serve the subjective life of the patient. Because these surgeries are cosmetic, and because they are 100% certain to produce grave functional losses, they must not be supported as a matter of public policy, and never be paid for by use of public funds.

43. In para.31 Dr. Schechter discusses what he calls "medical necessity criteria for initiation of surgical treatment". His sole reference is the WPATH "standards of care" of which he is the principal author. It should be remembered that the WPATH standard of medical necessity is not supported in reliable scientific evidence, but only on rudimentary, low level data. His first criteria is that the patient must have "the capacity to make fully informed decisions and to consent for treatment". He adds that mental health concern must be "reasonably well controlled prior to surgery".

It is firmly established in high quality research that persons with gender dysphoria have a greater than 30% likelihood of being on the autism spectrum, and a nearly 40% probability of a diagnosis of depression or major anxiety disorder. The proponents of gender surgery will rightly point to the high probability of self-harming behavior, including suicide attempts and completed suicide among self-identified transgender persons.

In my experience as a surgeon, it is considered imprudent to obtain consent from patients suffering from psychological conditions that provoke the patient to acts of self-harm and/ or suicidal ideation. These psychological disturbances are known to impair the patient's capacity for understanding the information offered by the surgeon, interpreting that information, and reasoning from that information. If those capacities are

impaired by psychological disturbances sufficient to consider suicide, then meaningful consent must be questioned. Certainly in the case of conditions that constitute a threat to life and limb in a patient with decreased competence. consent may be obtained with the assistance of family, guardian, or in particularly urgent cases a group of professionals who agree on the grave necessity to proceed with surgery.

The difficulty here is that none of the surgeries on Dr. Schechter's list are emergency operations performed to save the life of the patient. They are all elective (scheduled when convenient and patient is deemed ready). Furthermore, an ever-growing percentage of patients submitted for gender surgeries are minors who by definition are not competent to consent. The claim is made that these surgeries are in fact "life saving". This is a claim that is not supported in high quality scientific evidence. In fact high quality evidence, which I will present below, shows that while self-harm and suicide rates are improved in the very short term for some sub-groupings of patients, in the long-term these problems remain if not worsen.

When Dr. Schechter speaks of the need to have these psychological disturbances "well- controlled" prior to surgery, he must certainly mean that self-harming or suicidal thoughts have been well controlled. If that is the case, then the chiefly claimed reason for the surgery has been successfully treated medically, and the patient would no longer require the surgery.

What is troubling is that the co-morbid conditions of autism spectrum disorder, clinical depression, and major anxiety disorder are never examined as the possible causes of the gender identity disturbance. These are conditions that, if treated, might improve if not resolve the gender problem. To the contrary, these serious problems are viewed as mere impediments to gender surgery that must be "reasonably well-controlled" so that surgery may proceed. This is consistent with the regnant WPATH model that there is a single explanation (disconnection between biological reality and subjective identity which has an as-yet undiscovered cause), and has only a single solution (social, medical, and surgical affirmation). Such a single cause/ single solution assumption would seem to be unlikely, given the massive range and the recent complete reversal in the demographics of transgenderism. What used to be a condition that was nearly exclusively found in little boys (and resolved nearly 90% of the time), is now predominantly a condition affecting young women, and at a rate that has risen between 4000 and 5000% in the course of the last decade.(Shreier et al.)

44. In para.33 Dr. Schechter begins the evidentiary support for the assertion that "Gender Confirmation Surgeries are Medically Necessary". In para.34 he states that the "medical community generally considers those surgeries to be medically

necessary". He makes this assertion of broad acceptance in the medical community without evidence to support it. How was the data gathered and interpreted to support the assertion that the medical community broadly shares his opinion? I am not aware of any published study that has measured the acceptance of this therapeutic model among the members of the medical community. The only evidence he has presented concerning the broader medical community is the collection of consensus statements, produced by the various specialty committees which was produced using the faulty methodology described above, and supported with the lowest levels of evidence.

45. In para.34 Dr. Schechter asserts that "gender confirming surgeries are not cosmetic because, when performed in accordance with the Standards of Care, they are clinically indicated to treat the underlying medical condition of gender dysphoria". He appears to be saying that medical necessity exists because he said so himself when he wrote the chapter for the Standards of Care. He is again standing upon his considerable expertise, but he hasn't up to this point supported the assertion with scientific evidence. This is entirely analogous to the history of peptic ulcer surgery: driven by the highest level of academic expertise, but lacking rigorous scientific support.

46. In para. 35 he continues his assertion that gender surgery is not cosmetic by making the claim that gender dysphoria is a medical diagnosis. This is an extremely problematic statement for him to make, given that the diagnosis comes to us from the Diagnostic and Statistical Manual of Mental Disorders (DSM) vol. 5 (2013). As Dr. Schechter described in his outline of the diagnostic and pre-operative selection for surgery, the patients are referred to him by a process that begins in psychology, continues with psycholgical support, and concludes with certification by psychological services that the patient is ready for surgical modification. At no point has he described any medical diagnostic process of history-taking, physical examination, laboratory evaluation, or radiographic examination that he has used to confirm a diagnosis which was produced and sustained by psychological services. The indication for surgery begins in the subjective life of the patient. Surgery is offered to the patient with the assurance that it is likely to improve the subjective life of the patient, and is therefore by definition cosmetic surgery.

47. One of the essential mechanisms that third-party payors (including state Medicaid agencies) have for distinguishing reconstructive surgery from cosmetic surgery is found in the pathology department. Two operations may be outwardly identical even while one is reconstructive and the other cosmetic. An excellent example is the breast reduction surgery which I discussed in my previously submitted assessment. This surgery may be reconstructive when the size of the breast is being

sufficiently reduced in order to remedy a condition of orthopedic pain. These patients suffer from chronic neck, back, and shoulder pain caused by the orthopedic effects of their heavy breasts. The same, technically identical operation, might be done for purely cosmetic reasons. In the case of reconstruction, the patient has a condition that causes lost time from work, frequent covered visits to physical therapy, or to pain clinics, chiropractors and radiologists. There is abundant actuarial data, based upon the highest levels of scientific support, that a breast reduction of sufficient weight (based upon the anthropometric measurement of the patient) has a very high probability of resolving the chronic pain. High quality medical literature that addresses this issue, and its importance to insurance plans, is typically very precise in its data gathering and actuarial interpretation.[8] However, pain cannot really be measured. Pain is reported by the patient. Health insurance plans are able to distinguish cosmetic breast lift from reconstructive breast reduction based upon the reported weights of the breast tissue that is submitted to pathology. An objective, repeatable medical test, with known error rates is used to confirm the diagnosis, ensure correct care for the patient, and separate cosmetic surgery from reconstructive surgery in the interest of preserving medical resources and preventing fraud. No such process exists in the case of mastectomy for chest masculinization. There is no physical, biochemical, hormonal or tissue pathology, that can be demonstrated to localize the patient's condition in her healthy breasts. It is the young woman's subjective sense of revulsion when she looks at herself that has caused her to believe that mastectomy might make her feel better.

48. Similarly, the pathology department helps us to make distinctions between reconstructive and cosmetic surgery in the case of gynecomastia, which is a condition that affects biological males, and results in the growth of female glandular breast tissue. Men who have enlargement of the soft tissue of the chest area may come to the surgeon seeking improvement in appearance. Most often this problem is caused by varying degrees of obesity, and in such cases surgical improvement would be rightly categorized as cosmetic. The patient is motivated by a dissatisfaction with his appearance, which he wishes to improve, so that he can feel better about his appearance. In contrast, the man with gynecomastia might present with a mass behind one nipple, that is tender, and disfiguring. Perhaps it interferes with his occupation because it is impinged upon by safety equipment that he has to wear in his occupation. In this case, the surgical removal of the mass (gynecomastectomy) would rightly be considered reconstructive because surgery is used to restore function and form in a person who has an objective finding (female glandular tissue in a male chest). As in the earlier case, insurance plans rely on the evaluation provided by the pathology

[8] Accuracy of Predicted Resection Weights in Breast Reduction Surgery: Kung, Theodore A. MD; Plastic and Reconstructive Surgery - Global Open: June 2018 - Volume 6 - Issue 6 - p e1830

department when surgical specimens are submitted. The lab, using proven, repeatable, accurate testing methodologies can report either the presence of nothing more than adult fat tissue, as would be expected in the case of the cosmetic chest re-contouring, or they would report the presence of "fibroglandular breast tissue", which would be the expected and necessary finding that would warrant payment for a reconstructive surgery that is a covered benefit in the insurance plan. Thus, the findings provided by the pathology department serve to confirm what expert opinion, supported by high quality evidence, diagnosed before the patient was brought to surgery. Such objective, measurable, repeatable findings from pathology help to advance the quality of care because outcomes of care can be evaluated in the long term, and the consistent language and data can be compared among multiple studies from multiple centers of care, thus increasing the reliability of expert opinion throughout the medical community.

In footnote #8 of Dr. Schechter's declaration he says that "Dr. Lappert incorrectly refers to breast growth in transgender women as "gynecomastia", and that "Gynecomastia refers to enlargement of the male breast, not to breast growth in transgender women" (biological males who present as women). From the standpoint of the validity of scientific-medical information, this is a very troubling statement for Dr. Schechter to make. He is essentially saying that the validity of objective, measurable, repeatable findings of the pathology department are completely negated by the subjective condition of the patient. The patient's subjective interior sense of themself cancels the objective validity of medical knowledge.

49. In para. 38 Dr. Schechter begins the assertion that gender surgery "has been demonstrated to have other salutary effects, such as improving quality of life and reducing negative health outcomes". In support of this assertion he cites a 2019 publication by Miller et al. He summarizes the findings of the paper with a declaration of subjective satisfaction on the part of the patients (that 100% would do it again). Upon examination of Dr. Miller's paper we see that it is a report of a single surgeon retrospective review. It begins with a chart review of only 34 patients, only 12 of whom responded to the quality of life questionaire. This means 74% of the study patients dropped out (patient self-selection bias, with drop out rate greater than 20%). All of the data is based in subjective reporting by the patients, rather than objective findings (such as substance abuse rates, psychiatric hospitalization rates, suicide attempt etc.). Such reporting which is purely subjective (satisfaction survey, quality of life survey etc.) is characteristic of the cosmetic surgery literature, not the reconstructive surgery literature. He reports that "every patient surveyed at 1 year" reported that "their life had changed for the better". This statement is again reporting only subjective data, this time following a meaninglessly short follow-up of a very small group that has been biased by

self-selection. The overall study is little better from the standpoint of the duration of the study because the final follow-up was only 4 to 7 years. This paper presents level-IV and level-V (low to very low quality) evidence, and is therefore only useful in suggesting further research, particularly since it is authored and cited by subject matter experts. It is not useful for clinical decision making. Neither can it be presented as evidence for anything more than a cautiously worded practice guideline (as in the ES guideline concerning the use of cross-sex hormones presented above), and certainly can never be used in support of a "standard of care". It is important that this was the first paper Dr. Schechter cited in support of efficacy, given the weakness of its content.

50. In para. 40, Dr. Schechter continues his presentation of the scientific evidence that demonstrates the efficacy of gender surgery by citing a 2006 paper by Newfield et al. Dr. Schechter summarizes the paper's findings saying that mastectomy and chest masculinization in transgender biological females "increases self-esteem and improves body image" while providing the patient with "some security and safety for those who remove their shirts in public areas such as gyms or beaches". In reading the entirety of the paper I found that it did not demonstrate that at all. The passage Dr. Schechter quotes is a personal editorial opinion expressed by the authors in support of transgender surgery. It is found in the preamble to the paragraphs that describe their study of the self-identified, but never verified, post surgical patients.

This paper is a report of an anonymous survey. It claims to provide meaningful information about the effect of female to male transitioning medicine and surgery without even verifying that the subjects who responded to the survey have in fact undergone medical and surgical gender transition. Subjects were recruited **"via online promotion and printed materials, including flyers and postcards that were distributed to San Francisco Bay Area community centers, cafes, stores, and health clinics that serve the transgender community."** In terms of self-selection bias (patient determines who is followed by the study) it is hard to imagine a more problematic patient selection process. The researchers even admit that they were unable to determine how many surveys may have been submitted multiple times by the same study respondent. They write: "Although this procedure *helped* (italics mine) prevent duplicate submissions by the same participant, we could not employ more sophisticated computerized systems due to administrative and financial constraints".

All of the demographic information contained in the study was self-reported but not verified, including age, sex, health status, history of hormonal therapy, and history of gender surgery. The study uses a quality of life survey with 36 questions in 8 areas of interest, producing only self-reported subjective information. Even the claim of simple

benefit is poorly support, as is reflected in the conclusion to the paper. The authors write, **"The 376 US FTM transgender participants analyzed in this sample had diminished mental-health related QOL compared with the general US population, as measured by the SF36v2. These findings are consistent when compared against specific age and sex norms."** This statement demonstrates the lack of value in the study. The study participants demonstrated a quality of life that is statistically significantly lower than the age/ sex comparison cohort, and the authors can only speculate as to the cause. There is no way to tell if treatment helped, had no effect, or harmed the patients because there was no information available about the anonymous subjects. This is because the anonymous test subjects hadn't received pre-treatment evaluation using the same or comparable test instrument. This study, selected by Dr. Schechter to support the claim of efficacy is of the lowest evidentiary value, may be useful for suggesting future research, but is of no value in directing clinical decision making, or meaningful allocation of public resources in the service of health.

On the Safety of Transgender Surgery

51. A discussion of surgical safety must include anticipated losses which are either expected, or even remotely possible. In order to examine the comparable issues in transgender versus reconstructive surgery our effort is simplified by comparing identical operations.

On several occasions I have performed the reconstructive surgery called "Sensate radial- forearm microvascular free flap hypopharyngeal reconstruction". I operated in order to reconstruct the tongue and throat of patients who had suffered a grievous wound of the mouth and throat that resulted from removal of an aggressive cancer. The defects caused by that wounding needed to be replaced with thin, pliant, abrasion and lfluid resistant tissue. It needed to provide the patient with sensation in the reconstructed area so that they can feel the food and liquids in their mouth, and manipulate the food so as to swallow it. We selected an area of skin on the inside of the forearm that has regular and robust blood allow, is thin and durable, and has an easily dissected sensory nerve that can be attached to the nerves in the wound. The forearm flap satisfied all the requirements. An operation of this complexity, duration, and technical requirements has many issues, big and small, that can diminish or destroy the result.

That throat reconstruction operation is in almost every way identical to the second most commonly performed female to male (FtM) genital surgery, the "Sensate

radial forearm microvascular free flap phalloplasty", which I understand is performed by Dr. Schechter. In that operation, the identical flap is raised and transferred. It also must be resistant to abrasion, be water tight, pliant, sensate, and of correct volume. Through a process of incision, plication and suturing, a tubular phallus is constructed within which is a skin lined tube which will serve as the urethra. The suture closures in both flaps is where most things go wrong because the skin edges that define the suture line can lose sufficient blood supply. In the phalloplasty, when this happens, the patient suffers from delayed healing, urine leakage, varying degrees tissue death, and scarring. All of those problems can happen with either the throat flap, or the phallus flap. When the phallus flap fails, the patient suffers due to varying degrees of tissue loss, chronic urinary leakage, or urinary obstruction due to scarring that can cause kidney injury if left un-treated. When the throat flap fails, bacteria laden saliva will leak into the neck where it can cause fulminant infections, or erode into a major artery and cause the patient to bleed to death in a matter of moments. A singularly terrible event.

In the case of the throat operation, if the removal of the cancer had not been performed, there was a known and significant probability that the cancer would have eroded into the tissues of the neck and caused a fulminant infection, or eroded into a large blood vessel, as described above. In contrast, if the phallus flap operation, had not been performed, the patient would have remained fully functional in every human capacity, though suffering from an inner subjective disturbance called gender dysphoria, which has not yet been adequately addressed.

Both operations involve the use of a highly complex surgical techniques to remedy a wound. In the case of the cancer operation the wound was the result of a cancer that would have ended in a terrible death. In the case of the phallus operation the surgeon is creating multiple physical wounds (castration, loss of pelvic organs of reproduction, de-gloving injury of the forearm, skin graft donor site injury), with their associated risks of complications. The surgery is performed in attempt to remedy a subjective, patient-reported sense of their identity.

Clearly the pre-operative condition of the cancer patient is far more grievous than the condition of the young person who is suffering from gender dysphoria. The cancer patient would likely be more than willing to endure significant loss, such as voice, or teeth, or the sense of smell. And yet, if I were discussing surgical risk pre-operatively with my patient who has the throat cancer, and told him that there was a certainty that in the course of the operation he would lose all of his reproductive organs, he would be justified in asking why he was being subjected to such an unsafe operation. The patient wouldn't be even slightly interested in any discussion of infection risk, wound healing

problems, or scarring. The question of safety addresses itself to the question of potential loss. Transgender surgery of the genital apparatus predictably causes grievous loss that dwarfs such complications as infection, local tissue loss, urinary leakage or scarring.

52. Returning from safety to efficacy in para. 43, we have a reiteration of an expert, professional opinion, and referring to a "substantial body of peer reviewed research". This is the next issue we must address: the use of the phrase "peer reviewed". Peer review is the very important process by which highly educated and trained experts review scientific medical papers for publication. They are examined in order to ensure that the corpus of medical literature is protected from imprecise, substantively erroneous, or conceptually flawed publications. It is an essential part of the historic, magisterial process in medicine. In fact, it is so much a part of the life-long learning process of the doctor that any worthy training program will have a robust "journal club" in which doctors at every level of training take a turn at publicly "peer reviewing" an article and leading a lively discussion of its value. A good doctor is constantly peer reviewing. It is an essential element of good medical care.

Establishing that an article is peer-reviewed is a basic, and essential practice. You might read a medical paper with level-III evidence of high quality, or a paper that is level-V evidence of low or questionable quality, both of which undergo peer review, and are published. The level-III will likely drive decision making, and possibly a recommendation as high as "standard of care", while the poor-evidence paper drives research, or perhaps the consideration of an alternative approach, if that approach does not put the patient in any significant risk.

53. In para. 44 he presents another peer reviewed article from 2013 by Weigert et al. which he summarizes. He asserts that the article demonstrates a statistically significant improvement in "psychosocial well-being" following cosmetic breast augmentation in biological males who are presenting as women. This paper is very simple to analyze and classify as not meaningful for informing clinical-therapeutic decision making. At the bottom of the published abstract, and on the front page of the full article is written, "Clinical question/level of evidence: Therapeutic, IV." As was discussed above, this paper is at the same low level, because it is a single-center sampling of a small cohort of patients, that relies on subjective, self-reporting through questionnaire, over a short study duration. Patient collection was made between 2008-2012. The paper was published in 2013. If the peer review process followed the usual time-line, it is likely that there are a significant number of patients in the study who were followed for less than a year. The authors, in the abstract only claim the pre-surgery, and the 4th month post-surgery as assured time points. This is remarkably short follow

up even for a cosmetic breast augmentation cohort. The article is perhaps useful in suggesting inquiry into why their cohort reported no improvement in physical well-being, given the known association between emotional health and physical health. There is nothing in the article that would rise even to the level of a guardedly worded clinical guideline suggestion.

54. The next citation offered in support of gender surgery is another peer-reviewed study by Horbach et al. published in 2015. This is a review of transgender surgical literature published between 1995 and encompassing nearly 20 years. It yielded 26 papers that satisfied the search criteria, and includes 1,461 patients. As Dr. Schechter quoted, the paper claims that "transgender women (biological males presenting as women) who had vaginoplasty found that study participants' mean improvement in quality of life after surgery was 7.9 on a scale of one to ten". In the conclusion of the paper the authors write, ""Sexual function and patient satisfaction were overall acceptable, but many different outcome measures were used. QoL was only reported in one study. Comparison between techniques was difficult due to the lack of standardization."

Of the merely 26 studies out of a sampling that spanned 20 years, only one paper was found to have used a standardized metric, one that only measures subjective, patient reported information, and the rest could not even be compared to each other. The authors write, **"The available literature is heterogeneous in patient groups, surgical procedure, outcome measurement tools, and follow-up. Standardized protocols and prospective study designs are mandatory for correct interpretation and comparability of data."**

56. This result is startlingly reminiscent of a paper published by Tolstrup et al. published in 2020. It is a comprehensive literature review on the subject of breast surgery in transgender patients, including both male to female, and female to male presentation. It is a scoping review that yielded 849 papers of which 47 papers met the inclusion criteria based upon title, abstract, and full text. In the study results,the authors report that,

"The summary of outcome domains and classifications showed that there are large variations in outcome evaluation between studies. Although several studies reported on similar outcome categories, there was a high level of heterogeneity of domains and classifications of outcomes." The authors then conclude by explaining that **"Evaluation of outcomes in gender-confirming chest**

surgery showed large variations in reporting, and further streamlining of reporting is therefore required to be able to compare surgical outcomes between studies."

None of the articles examined rates of psychiatric hospitalization, substance abuse,

self-harm behaviors, or suicide. This tells us that the most compelling reason offered for performing these surgeries (psychological distress and suicide risk) isn't even evaluated with regard to efficacy in the world transgender surgery literature.

55. Professionally speaking, these are very disappointing findings from comprehensive examination of the transgender surgery literature. To have a surgical sub-specialty working diligently, and guided by professionals at the highest levels of academic expertise, that has only produced case-series reports, retrospective case collections, and fruitless 20 year literature reviews, and still only have level-IV and V evidence to show for it is alarming. It shows that the sub-specialty has not developed uniform descriptive language, standardized reporting nor test instruments that might raise the value of expert opinion to a level that could make reliable recommendations that might help in surgical decision making, rightly inform the consent process, or guide decision making by officials entrusted with the care of public and private medical resources. It would cause me to make a sober review of the medical and surgical principles that are guiding this work.

56. The next article cited by Dr. Schechter is one presented in support of masculinizing chest surgery in minors and young adults. This is the mastectomy and liposuctioning surgery discussed above. It is a 2017 paper, published in the peer reviewed journal JAMA Pediatrics. Dr. Schechter asserts that the paper demonstrates that "surgical intervention (mastectomy)positively affected both minors and adults". This paper is perhaps the most alarming of all the citations offered.

The principle author, Dr. Olson-Kennedy is also an academic expert in her capacity as Associate Professor of Clinical Pediatrics, Keck School of Medicine of USC, and Medical Director of The Center for Transyouth Health and Development in Los Angeles. She holds professional membership in The Society for Pediatric Research, the World Professional Association for Transgender Health(WPATH), and the Society for Adolescent Health and Medicine. If any expert would be in a position to offer high quality, evidence based publications, she would certainly be in contention.

In their summary of findings, the authors report that "chest dysphoria" is common

among “trans males” (natal females seeking to present as males), and that the dysphoria is decreased by surgery. They claim that regret for surgery is “rare”. The article reports breast removal surgery on at least one girl aged 13 years. The average age was 19. Children were entered into the study through recruitment from among patients visiting the clinic, and by telephone over a six month period. The authors found that patients recruited from among visitors to the clinic (convenience sampling) yielded an abundance of non-operated patients, so they were forced to reach out to all the post surgical patients by phone. 26% of the clinic’s post surgical patients could not be reached for various reasons including no working phone, or failure to respond to multiple messages. A 26% drop-out rate is never questioned by the authors. Were they lost to follow up because of dissatisfaction, psychiatric hospitalization, or suicide? This problem is called “self-selection bias”, and is evidence of careless study design. Of the remaining 74% of patients, only 72% of them (only 53% of the study patients) completed the survey. This is a second example of self-selection bias. Why would some post surgical patients who had been successfully contacted, not complete the survey? The authors do not ask the question.

In the study, dysphoria was measured using “a novel measure” (an unproven test instrument) which was a series of subjective questions about happiness. Among the designers of this novel test instrument were some of the adolescent patients themselves. Their flawed methodology included the use of an entirely unvalidated test instrument, with no known error rates, or proven predictive power, **that was in part designed by the minors and young adults who were the subject of the study.**.

Furthermore, the post surgical patients were given the survey at varying time intervals post surgery. The longest interval between surgery and the satisfaction survey was 5 years, but children less than a year post surgery were included in their flawed sample, and yet the authors claim evidence of “negligible regret.” This is a remarkable claim given that long term, longitudinal population studies show that there is a dramatic rise in post surgical problems such as depression, hospitalization, substance abuse, and suicide beginning at around year 7 post surgery(Dhejne). Surely Dr. Olson-Kennedy is familiar with the international literature on transgender outcomes?

Having promised in the introduction to her paper that “chest dysphoria” is reduced by surgery, at the conclusion they confess the fact that the study design and execution produced very low quality data that is not useful for patient selection, or prediction of outcomes. They even confess that the study does not address the efficacy of surgery in improving outcomes regarding the single most compelling reason for

performing the operation: mitigation of depression and suicide. The authors write: **" An additional limitation of the study was the small sample size. The nonsurgical cohort was a convenience sample, recruited from those with appointments during the data collection period. There could be unknown imbalances between the nonsurgical and postsurgical cohorts that could have confounded the study findings.**

Finally, the Chest Dysphoria Scale is not yet validated, and may not represent distress or correlate with validated measures of quality of life, depression, anxiety, or functioning."

This paper is a typical example of a publications which are used to support transgender medicine and surgery, written by board certified transgender expert physicians who practice in our nation's largest pediatric gender clinics, and was published in peer-reviewed medical journals. The article is essentially useless in making any clinical decisions regarding who should be offered surgery, what the likelihood is that they will benefit from it, or the likelihood that they will regret their decision. Most importantly, it can not even vaguely estimate if the risk of hospitalization, incarceration, or suicide will be reduced. For the same reason that the paper is not useful in clinical decision making, it is likewise not meaningful in decision- making for persons charged with the just management of public and private medical resources.

On the Experimental Nature of Transgender Surgery

57. In para. 47 Dr. Schechter brings into question the assertion that transgender surgery is experimental in nature. He begins this response with the claim that referring to transgender surgery as experimental is "unsupported by the professional medical consensus and prevailing standards of care for treating gender dysphoria, and is inconsistent with mainstream medical standards." We previously discussed the lack of intrinsic validity of consensus methodology when evidence to support the consensus is weak. We discussed the evidentiary requirements for claiming a "standard of care"; that one must present evidence that is high (III or better) and consistent over multiple studies (with obvious exceptions when the consequences of error are minor). We also reviewed the historic meaninglessness of the phrase "mainstream medical standards" when trying to resolve the issue of the validity of novel research finding.

It is to be remembered that whenever there is a breakthrough in medical-scientific knowledge, it is characteristic that academic experts are proven to have been

in error. This is in the nature of the scientific method. As will be recalled from earlier discussion, the greatest names in academic surgery for 100 years wrote papers, published books, trained residents, wrote board questions, and examined candidates for board certification fully convinced that ulcer disease of the stomach is a surgical disease that demanded some of the most advanced operations known at the time. They considered it not only necessary, but in fact lifesaving beyond a shadow of doubt. These were great, and well-intentioned surgeons laboring under a poverty of information for 70 years, then laboring under an abundance of confidence that they could not possibly be wrong about their condemnation of the infection theory of ulcer disease. Eventually, high quality evidence proved them wrong, and now surgery for gastric ulcer disease is rarely seen. Through the whole history of ulcer surgery, the principle of acid reduction through nerve sectioning and drainage was "mainstream". This test of mainstream acceptance in the medical community, which Dr. Schechter offers, is a test with no predictive value in making either clinical or medical executive decisions on the question of the validity of transgender surgery.

58. One of the important usages of the term "experimental" in the world of medical care is in the domain of insurance services, both public and private. Leadership in these agencies is charged with the responsibility of managing medical resources in a way that both preserves resources, while at the same time applying those resources to the patient as correctly as medical science and their own actuarial information will allow. Whenever a novel therapy is proposed for a given condition, insurance services will examine the medical and actuarial data to see if the proposed therapy is likely to yield a result that serves those two purposes (health of the patient, and financial soundness of the insurance process). Typically, in the early years of a new treatment there is resistance on the part of the payors because early on (as discussed in detail above) all that the proponents are able to present is low-level scientific papers that present anecdotal case collections without controls, or multiple studies that can not be compared due to methodological variation, or are methodologically questionable due to unvalidated test instruments. We surgeons are inclined to think uncharitable thoughts when reading letters from insurance plan managers. But history has shown, and the fact remains, that good surgery demands good evidence, particularly when permanent damage to the client is a possible result.

Nonetheless, if the reviewer see evidence that a new approach may be helpful, they prudently insist that therapies of known value be tried to their reasonable limit , and that they be found to fail in solving the patient's condition, before considering the new treatment.

This dynamic process between the patient, the physicians, and the insurance industry has many problems, but good, well validated scientific evidence is not one of those problems. In fact well validated science is typically the best remedy for those problems. Sometime the good science is from the doctors, and sometimes the good science comes from the actuaries. In both cases the patient benefits.

59. From the perspective of the case in question, this sense of the term "experimental surgery" may be the most important. How did the affirmation care scientific model and its associated social, medical and surgical treatments enter into the mainstream of the medical community. Did it follow this same process of gradual acceptance in both the medical and insurance communities through a process of steadily improving evidence levels? Was it used on a careful trial basis after having exhausted treatment by established methods? The answer is, "in a way, yes it did".

60. The historically validated treatment model for what is today called gender dysphoria is what is called "watchful waiting". On hearing the name one is tempted to think of this as a resignation to inaction. It is not. It is a psychotherapeutic process that is rooted first in an examination of the cognitive processes of the child, and seeing how the child has responded to the reality of their life. For this reason, in order to be effective, it must include family therapy. The goal is to keep the anxious and confused child in loving contact with reality, while seeking to understand and remedy the dynamic that is provoking the condition of distress. Occasionally, short courses of anxiety medications may be used to manage the intensity of obsessive thinking that has become centered on their physical appearance. It is essentially the same process used in helping persons who suffer other obsessive- compulsive issues, like eating disorders. Psychological research, having high level evidence, has shown that over the course of time this approach results in over 80% resolution of the cross-sex self identification during adolescence, and nearly 92% by young adulthood.[9]

61. This watchful-waiting approach is likely the reason why transgenderism used to be a rare diagnosis. The vast majority of people with the condition resolved the issues, and went on to live their lives without the need for life-long medications, without destructive surgeries, without the loss of their sexual faculties, and without the loss of fertility. What has happened, however, is that the dynamic between patient, physician,

[9] Zucker, K. J. (2018). The myth of persistence: response to "A critical commentary on follow-up studies and 'desistance' theories about transgender and gender nonconforming children" by Temple Newhook et al. International Journal of Transgenderism, 19(2), 231–245. Published online May 29, 2018. http://doi.org/10.1080/15532739.2018.1468293

and insurance services has been severely disrupted. The science based medical and actuarial management of this condition has been separated from the evidence, and now rests entirely on the opinions of academic experts who have managed to influence the decision makers in their favor. In large part, they have accomplished this by never speaking about watchful waiting except to dismiss it as folly. This process of silence and dismissal is exactly what ulcer surgeons did to the proponents of the scientifically correct infection model of ulcer disease.

62. Sadly, silence and dismissal about watchful waiting is not the only reason for the 5,000% increase in the diagnosis of transgender over the past decade. Surgeons who were seeking to achieve the best results for their transgender patients came to realize that most of the difficulty with good cosmetic results was that young men seeking to present as women looked too masculine, and young women seeking to present as men looked to feminine. If their masculine or feminine development had been arrested early, the surgeons theorized that they would achieve better results. It was reasonable, in light of their treatment model, to think that a better cosmetic result would mean a better resolution of the gender incongruence. Thus the idea was born that the earlier the child was transitioned, the better the cosmetic surgical result, and thus the better psychological result, which was the goal.

This theoretical improvement in outcomes for transgender persons through early transition was certainly an idea worth investigating. Because the lifelong effects of the approach might include some really bad outcomes for the children, and because the actual outcomes were unknown at the time, it would have been prudent, and scientifically consistent to categorize this from the above described insurance industry perspective, as experimental. It would have required that the patients exhaust the fully established and proven treatment model of watchful waiting. If that treatment failed to resolve the issue, then on a trial basis, and supervised under very strenuous human experimentation oversight, the affirmation model could be tried.

In order for this highly supervised experimental approach to pass ethical standards in human experimentation there would have to have been a previously established diagnostic and patient selection process of very high specificity. If the proven and established method of watchful waiting is yielding 92% resolution, then what the ethically minded surgeon is really supposed to be doing is trying to find that 8% of children who would have failed watchful waiting, and select them out for surgery earlier in their life. Then studying the result on a very long-term and comprehensive basis, he would have been able to provide high-value evidence that his hypothesis about the

successful early management of transgenderism is a safe and valid option for his patient. This was not done. Instead, the routine social and medical transitioning of children began, which includes puberty blockade, and cross-sex hormones in children and youth.

Instead of seeking the historic, and small cohort of patients who would have carried the condition into adulthood and treating them, physicians and surgeons are treating all of those children now. Instead of seeking the scientific methodology with which to make a correct diagnosis so as to increase the likelihood that you are operating on the right person, the transgender treatment model is essentially turning all affected children into "the right person". By the time the youth or young adult person arrives in the surgeon's office the process has been locked into place.

63. It would seem that the best course of action for those who serve the insurance industry is to return this process to the time tested dynamic model of patient, physician, and insurance plan discussed above. Because the affirmation model rests upon such low quality evidence, it seems justifiable to suspend financial support until such time as testing and patient selection processes are improved to acceptable levels of reliability. Given the serious, life long consequences of mis-diagnosis, and the misapplication of surgery, levels of patient selection reliability would have to be quite high.

64. There is the additional issue of liability for insurance providers, including the state. The massive surge of patient numbers over the past 10 years would predict that large numbers of patients are reaching the point where affirmation interventions will have been exhausted, and the numbers of treatment failures will start to rise dramatically. We are beginning to see this in the increasing numbers of "regretters" whose support groups and legal representatives are sounding the alarm. This may represent a serious liability to insurers in addition to the physicians and hospital systems that have taken such an active role in promoting this unproven treatment model.

65. A review of the European literature on this topic forms the basis for this anticipation of liability and merits review here. As we have seen in this review of Dr. Schechter's expert declaration, the American literature used in support of the claim of benefit is of low reliability. We make this assertion based on the expectation the Dr. Schechter has provided the court with the best evidence available. One of the features of all those papers taken in aggregate is that they report studies of short duration. Follow up durations of less than 3 years are common. Some, as we have seen are as

short as 4 months. This fact helps us to understand why proponents of the affirmation model are enthusiastic. We see in the European literature that there is a trend line that looks favorable for up to 7 or 8 years, after which result decline precipitously.

66. As described in my previous report, the Swedish medical establishment maintains an excellent and centralized data base of all episodes of care for beneficiaries. It uses uniform language, and captures treatment events at all levels, from school clinics, to psychiatric hospitals, to prison infirmaries, to public clinics. The database can be analyzed for such things as emergency room visits, drug addiction treatment, hospitalization for suicide, psychiatric admissions for self-harming event etc.

In 2011, Dhejne et al.,published a population based, longitudinal cohort study of the database that sought to examine the lifetime hazard ratio of such things as substance abuse, incarceration for violent behavior, psychiatric hospitalization, and completed suicide.[10] This is level-III evidence of high order given the methodology employed and the proven reliability of the database. It examined persons who have fully completed transition and compared them to age and sex matched controls in the Swedish population. It did not use anonymous surveys, or other faulty convenience sampling. It found the post-transition patients by finding the associated episodes of care, such as i hormone therapy prescriptions began, or admission for gender surgery occurred. The data set spans 30 years. What it shows is that fully transitioned subjects showed a relative risk of suicide roughly equal to the age/ sex matched controls, but the effect appears to last for just a few years. The trend line for death from any cause begins a sharp drop at approximately 10 years and continues to drop massively over the subsequent 15 years. When the researchers looked at the aggregate life-time relative risk of suicide, persons who fully transitioned were 19.1 times more likely to have killed themselves when compared to age and sex matched controls. If you only look at the subgroup of biological females who transitioned to male-presentation, the risk of suicide is 40 times higher than the control group. Results such as these, because they are obtained using tested and reliable methodology, are able to help meaningfully in clinical and administrative decision making, and in several European countries it has.

67. Over the past several years, the medical systems in Great Britain, Sweden, Finland, and France have stepped away from early medical and surgical

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[10] Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in SwedenPLoS One. 2011; 6(2): e16885.
Published online 2011 Feb 22. doi: 10.1371/journal.pone.0016885

transitioning of the young. The Tavistock-Portman Institute in London, which was the sole provider of these services to children in Great Britain was closed recently following the public declaration by a review committee that the Institute was "unsafe for children".[11] Similarly, the Karolinska Institute in Stockholm reversed its policy by suspending the medical and surgical transitioning of the young in favor or psychological support and treatment.[12] Similar changes in treatment guidelines for self-identified transgender youth have been published in Finland. Based upon these developments in Europe, it is very troubling to read assessments or declarations by leaders in the field of transgender surgery which assert that these treatments are mainstream and beyond controversy, or that they are part of a core curriculum of surgical training, or that an oral board examiner might fail a candidate surgeon if their answers reveal a reticence to join the mainstream that Dr. Schechter has described. The world literature demonstrates emphatically that early medical and surgical transitioning is in fact so controversial that medical leadership in multiple countries has put a stop to it.

68. In summary, transgender surgery is based in a treatment model of affirmation that lacks scientific support based in quality evidence. The scientific support offered by the leaders in the field is entirely composed of small studies, single provider /single center studies that are lacking in control cohorts, and are often rendered uninterpretable due to haphazard case-collections such as the solicitation of study participants without methodology to confirm that the patient is a treatment subject. All of the studies cited have short follow-up, and most studies suffer from massive self-selection bias and high drop-out rates. The studies often employ untested assessment methodologies, and all of the literature cited by experts report only subjective data, which is typical of papers that address outcomes in cosmetic surgery. Transgender surgery is, by definition, cosmetic surgery. The move towards surgery begins in the subjective life of the patient, is conducted with the aim of improving the subjective life of the patient, and outcomes are measured in subjective terms based in satisfaction surveys. Transgender surgery violates fundamental principle of cosmetic surgery, because it predictably destroys essential functions of the human person. It is not reconstructive surgery because the patient is physically healthy before the surgery, and has no definable deficit that can be objectively characterized to be the cause of the presenting complaint. There is no objective test to confirm the diagnosis of transgender, and no way to correctly select patients for surgery from among the young. The enterprise of gender affirmation medicine and surgery is based entirely in a consensus

[11] NHS to close Tavistock child gender identity clinic https://www.bbc.com/news/uk-62335665

[12] rSweden's Karolinska Ends All Use of Puberty Blockers and Cross-Sex Hormones for Minors Outside of Clinical Studies https://segm.org/Sweden_ends_use_of_Dutch_protocol

of expert opinion of low reliability because it is supported by unreliable scientific evidence.

69. Based upon all of the above examined findings, it is my professional opinion that leaders in the medical community must stop the application of the affirmation care model to the young. The earlier model of watchful waiting, which gender affirmation unjustly replaced, must be restored as the tested and proven basis for care until such time as better, scientifically proven methods are found. Leaders in medical administration have a duty to the patients, and to their healthcare systems, to stop the financial support of this untested, demonstrably harmful treatment model, and to direct practitioners to the fullest use of the proven treatment model of watchful waiting. American physicians who care for persons who experience gender discordance likewise have a duty to follow evidence that has been offered by our European colleagues, and to seriously consider the fact that long term evidence now shows that gender transitioning medicine and surgery do not reduce lifetime risk of self-harm. Physicians must instead seek more effective ways to treat this community of persons who are suffering greatly, and who deserve care based in the objective truths that are revealed by good science.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 2nd day of October, 2022.

//s//Patrick W. Lappert, MD
Patrick W. Lappert, MD

EXHIBIT "A"

Curriculum Vitae- Patrick W. Lappert, MD

Education and Training :

— Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. Research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump.

— M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md.

— General Surgery Residency at the Naval Hospital Oakland/ UC Davis East Bay Consortium, 1987-1991

— Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991.

— Plastic Surgery Residency at the University of Tennessee- Memphis, 1992-1994.

Board Certifications in Medicine :

— Board Certified in Surgery — American Board of Surgery, 1992-2002

— Board Certified in Plastic Surgery — American Board of Plastic Surgery, 1997-2018

Medical Staff Appointments :

— Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992

— Associate Professor of Surgery, UC Davis-East Bay, 1991-1992.

— Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, VA 1994-2002

— Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, VA 1996-2002.

— Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002

— Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, VA 1996-20002

— Founding Director, Wound Care Center, Naval Hospital Portsmouth, VA 1995-2002.

— Staff Plastic Surgeon in Nebraska, and Alabama.

U.S.N. Surgeon General Service:

— Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002

Faculty Appointments:

— Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery, 1995-2002

Military Service :

— Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978

— Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983 .

— Designated Naval Flight Surgeon, Naval Aerospace Medical Institute, 1985

— Flight Surgeon, Marine Fighter/ Attack Squadron-451

— Radar Intercept Officer in the Marine F-4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor.

— Deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines.

— Service in the US Navy for 24 years

— Service in the US Marine Corp. for 3 years.

— Retired with the rank of Captain, USN in 2002

Military Awards:

— Navy Commendation Medal - For service with Marine Fighter/Attack Squadron - 451

— Meritorious Unit Citation- 3rd award

— Humanitarian Service Medal - For service in the aftermath of the Loma Prieta earthquake.

Publications - Peer Reviewed Medical Journals :

— Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. Surgery. 1987 Sep;102(3):553-4

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Publications - Medical Textbooks:

— Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. Plastic Surgery: Indications, Operations, and Outcomes, Vol. 1; 53-63. Mosby. St. Louis, MO 2000

Operations and Clinical Experience - Consultations and Discussions : As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transitioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as "LGBTQ friendly" on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.

EXHIBIT "B"

Florida Medicaid Project: Surgical Procedures and Gender Dysphoria

Patrick Lappert, M.D.

May 17, 2022

Florida Medicaid Project: Surgical Procedures and Gender Dysphoria

Patrick Lappert, M.D.

Overview

The "Gender Affirmation" care model for children who suffer from gender identity issues is experimental in nature because it is based in low to very low-quality scientific evidence. There is no body of quality scientific evidence to support the hypothesis that gender dysphoria with its associated problems of self-harm and suicide, is improved long-term by gender affirmation surgical procedures.

The best evidence available today demonstrates that transgender is not a single condition that can be explained by any single factor. There are vast differences in age of presentation, predominant sex, persistence into adulthood, and resolution during adolescent development. Moreover, there are numerous and common co-morbid conditions such as autism-spectrum disorder, major anxiety disorders, and clinical depression that severely affect any sense of certainty about the true cause of the child's dysphoria, as well as their capacity to understand and give assent to irreversible medical and surgical procedures that lead to permanent sterility, sexual impotence, and a lifetime of medical problems associated with affirmation care.

The process of obtaining medical informed consent as part of gender affirming surgery is morally indefensible, and likely legally indefensible as well. Parents of suffering children are led by medical professionals to believe that there is only one valid option of care (affirmation medicine and surgery), utterly concealing the historic reality that greater than 92% of children desist in their cross-sex self-identification when treated using the "watchful waiting" therapeutic strategy. Parents are told that if they do not consent to affirmation care, there is a high likelihood that their child will die from suicide. This is not informed consent, but rather consent under duress.

Gender identity is being presented as a fixed and unchanging, biologically determined, personal characteristic. It is not. The medical literature has consistently shown over many years that the vast majority of children with cross-sex gender identity resolve the issue during adolescence and adopt a gender identity that is congruent with their biological sex.

Because surgeons who perform gender affirmation surgeries have no diagnostic test to predict who among the self-identified transgender minors would have persisted in their cross-sex self-identification into adulthood, and who among those children would have desisted, they have no way to know, in any particular case if the irreversible surgery is being performed on a person who would have continued to self-identify in the cross-sex persona into adulthood. Given the historically well-known desistance rate, it is possible that as many as 90% of children are undergoing surgery based upon an incorrect diagnosis.

"Gender Affirming" breast surgery for self-identifying transgender minors is not medically and ethically equivalent to similar procedures performed for objectively identifiable medical conditions. Transgender breast surgery is always cosmetic (aesthetic) in nature because the indication is a hoped-for improvement in the interior emotional life of the patient. Transgender surgery is not based in any medical diagnosis and does not seek to restore any form or function that may have been lost due to trauma, disease, or developmental accident. It begins with normal structures and changes their appearance in order to achieve a subjective improvement and is therefore cosmetic surgery.

Because gender affirming surgery is cosmetic (aesthetic) in nature, such surgeries must never be offered if they are known to predictably produce an irreversible loss of function. To knowingly sacrifice a human capacity (breast feeding, capacity for sexual intimacy, fertility) in the pursuit of a cosmetic result in a minor who is incapable of giving informed consent, is morally indefensible. The hoped-for subjective improvement that is sought in transgender surgery is a short-lived improvement and is only supported by low to very low-quality scientific evidence. Long term longitudinal cohort studies that are based in level III evidence show that affirmation surgical care is of no benefit in reducing self-harm including suicide.

Problems with Informed Consent

The protection of children in situations requiring informed consent is a crucial problem that the state has a historic and abiding interest in. In the particular situation of self-identified transgender children, it becomes a most significant problem, given that they are being submitted for permanently life-altering interventions. In my opinion as a plastic and reconstructive surgeon, the life-altering nature of hormonal and surgical interventions needs to be addressed from the moment of the child's entry into the gender-transition system, given the fact that the overwhelming majority of children who first begin puberty blockade, go onto the physically altering and permanent changes produced by cross sex hormones, and many ultimately also pursue surgery, as is attested to by multiple papers, the content of which is examined below. Informed consent has several requirement that need to be met if such consent is to be deemed valid. These requirements include a thorough discussion of the details of the proposed procedure including risks, known complications, and some measure of the likelihood of a favorable outcome. The discussion must include alternative treatments, and their risks, known complications and their likelihood of a favorable outcome. In the case of the interventions associated with gender-transition medicine and surgery, the favorable outcomes should be evident over the lifetime of the patient, given that they are permanently sacrificing structures and capacities (breasts and breast-feeding, or genitals and fertility).

Because the commonly cited medical literature used in support of these surgeries is of low to very low quality, it must be recognized that such surgeries must be considered experimental in nature given the unknown long-term effects of treatment, and the vast uncertainty in the patient selection and diagnostic processes. Yet the experts who provide opinion in support of these surgeries speak with absolute certainty of their efficacy, and the absence of any alternative treatment. Considering these factors severally and together it becomes difficult to imagine a

more flawed consent process. It also becomes understandable how parents can be drawn into uninformed participation given the simultaneous presentation of dire consequences if gender dysphoria is left untreated, and the insistence that affirmation care including surgery is the only way to bring lasting happiness to the child.

Chest Masculinization" in Natal Females is Not Ethically Equivalent to Mastectomies for Breast Cancer

When mastectomy is performed for the management of breast cancer, or to mitigate the proven risk of developing breast cancer in women, it is done on the basis of objective diagnoses either by pathological examination of biopsy tissue, or as in the case of prophylactic mastectomy, on the basis of genetic analysis that shows known markers of increased risk of developing breast cancer. These tests (microscopic examination of tissue specimens, detection of cell surface markers with proven association with malignancy, and genetic screening of at-risk patients) have known positive predictive value for the diagnosis of breast cancer, and these tests have known error rates that can be used when obtaining informed consent for mastectomy. The validity of these tests has been proven using scientific methodologies that produce high quality evidence in longitudinal population studies with control populations, and very long follow up. As the result, when a woman gives consent for mastectomy to control or prevent the potentially lethal disease, it is with a clear and proven evaluation of the risks and benefits that consent is obtained. Mastectomy is being performed based upon an objective diagnosis of a potentially lethal condition, and the surgical procedure has proven benefit in management of that condition.

In stark contrast, this is not the case when mastectomy is performed to "masculinize" the chest of girls and women who self-identify as transgender or who self-report symptoms of dysphoria. In the self-identified transgender adolescent, breasts are being removed on the basis of a diagnosis that is made by the patient since there are no tests with known error rates that can be used to predict who will benefit from this disfiguring and irreversible surgery. The claim is made that chest masculinization has proven benefit in reducing dysphoria and the associated risk of suicide. But published studies that make this claim of benefit offer evidence that is low to very low quality, typically small case collections with self-selection bias, very short follow up, and no case controls.

The best data presently available on the long-term effects of medical and surgical transitioning are long-term, longitudinal, population-based studies. For example, Dehjne, et al., examined the putative long-term benefit of full transitioning (including hormonal and surgical treatments) found in the Swedish medical database. (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOSOne February 22, 2011 https://doi.org/10.1371/journal.pone.0016885). That database includes all persons in the Swedish medical system, from pre-natal to death. It reports all episodes of care and all demographic information in a uniform vocabulary. Furthermore, Sweden has been on the forefront of "gender affirmation" long before the American medical

system seriously considered its claims. Because of the nature of Sweden's database, it is possible to study a cohort of patients that very closely matches the inquiry group with regards to age, sex, economic status, etc. It is possible to ask with great precision such questions as, "What is the likelihood that a fully transitioned transgender male will be hospitalized for psychiatric illness when compared to the age/sex matched control group?" Even more, one could urgently ask, "What is the relative risk of suicide in transgender persons, when compared to age/sex matched controls?"

Why are such longitudinal, population-based studies superior to the case-collection/case series methodology? Because confounding variables such as age, sex, and self-selection biases are removed. In the flawed case-collection methodology, the reported cases are typically only those who return for follow up. You have no way of knowing if the patient had a good outcome or didn't return for follow up because they were in a psychiatric hospital, were incarcerated, or committed suicide. In the Swedish longitudinal study, the suicide is in the same database, as are the other issues of hospitalization, incarceration, and addiction treatment, among other rates of comorbidity. Thus the longitudinal population study can give us what is called a "hazard ratio" for a particular study population (patients who have completed transgender transition in this case).

What this Swedish study shows us that the risk of completed suicide in all transgender persons is 19.1 times higher than in the control cohort. If you look only at patients who have transitioned — patients after "treatment" — from female to "male presentation," the risk of completed suicide is 40 times higher than in the general population. (Note: this finding is consistent with the historic Branstrom 10-year follow up study, which found no benefits to "transitioning treatments" but did note an increased risk of serious suicide attempts and anxiety disorders AFTER "treatment.") (Correction to Bränström and Pachankis, Am J Psychiatry 177:8, August 2020; see detailed citations in the "Notes" section of this report below).

Another cautionary note was added to the literature by the reputed Cochrane Review, a UK based international association of researchers who examine the quality of scientific evidence used in medical decision making. The Cochrane Review recently published findings concerning the medical evidence used to support the decision to give young women cross sex hormones as part of the transition process. The authors summarize the world literature review thus: "We found insufficient evidence to determine the efficacy or safety of hormonal treatment approaches for transgender women in transition. This lack of studies shows a gap between current clinical practice and clinical research." (Does hormone therapy help transgender women undergoing gender reassignment to transition? See, Haupt C, Henke M, Kutschmar A, Hauser B, Baldinger S, Saenz SR, Schreiber G., Cochrane Review, 28 Nov 2020).

Similar issues of very poor, low quality scientific support for chest masculinization surgery can be seen in a recent article by Tolstrup et al. published in the journal Aesthetic Plastic Surgery (See Anders Tolstrup, Dennis Zetner, Jacob Rosenberg, Outcome Measures in Gender-Confirming Chest Surgery: A Systematic Scoping Review, Aesthetic Plast Surg 2020 Feb;44(1):219-228. doi: 10.1007/s00266-019-01523-1. Epub 2019 Oct 29). The article reports a

comprehensive review of the world literature concerning the efficacy of "gender confirming" chest surgery in transgender patients. The authors found 849 articles on the subject, published in peer reviewed medical journals. Of these 849 articles, only 47 could be included in the review. This means that only 5.5% of all the published, peer-reviewed transgender surgery articles demonstrated even rudimentary scientific rigor. Of those 47 articles, the authors report that only 29 of the articles addressed mental health outcomes (3.4% of all the articles). What is startling is that the mental health outcomes were judged only on the basis of uncorroborated, untested, and unassessed patient subjective reporting with descriptors that varied so widely from article to article that results could not even be compared. The authors summarize by saying, "Evaluation of outcomes in gender-confirming chest surgery showed large variations in reporting, and further streamlining of reporting is therefore required to be able to compare surgical outcomes between studies." None of these negligent articles even bothered to examine rates of psychiatric hospitalization, substance abuse, self-harm behaviors, and suicide. This tells us that the main reason for performing these surgeries (psychological distress and suicide risk) isn't even evaluated with regard to efficacy.

An example of an article with very low-quality data, reckless (now banned practices), and methodology, published in a "leading journal," and promoted as evidence for the efficacy of "chest masculinization" surgery makes this fact very clear. The lead author (Olson-Kennedy, a leading national advocate for the transgender treatment enterprise) is a board-certified pediatrician who leads the gender clinic for the Los Angeles Children's Hospital. The article appeared in 2018 (See J. Olson-Kennedy, J. Warus, MD1, et al., Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults; Comparisons of Nonsurgical and Postsurgical Cohorts., JAMA Pediatr. 2018;172(5):431-436. doi:10.1001/jamapediatrics. 2017.5440. In their summary of findings, the authors reported that "chest dysphoria" is common among "trans males" (natal females seeking to present as males) and claimed that dysphoria is "decreased by surgery." They claim that regret for surgery is "rare." The article reports breast removal surgery on at least one girl aged 13 years. (Note that this reckless, experimental practice has now apparently been abandoned as unethical/experimentation on children by England, Sweden, and Finland. The average age of patients in the study was 19. Children were entered into the study through recruitment from among patients visiting the clinic and by telephone over a six-month period. The authors found that, of the patients recruited from among visitors to the clinic (convenience sampling), there was an over-representation of non-operated patients, so the authors were forced to reach out to all the post-surgical patients by phone. Twenty-six percent of the clinic's post-surgical patients could not be reached for various reasons including no working phone, or failure to respond to multiple messages. The 26% drop-out rate is never even questioned by these authors. Were surgical patients lost to follow up because of dissatisfaction, psychiatric hospitalization, or suicide? This problem is called "self-selection bias," and it is evidence of careless study design. Of the remaining 74% of patients, only 72% completed the survey. This is a second example of self-selection bias. Why would some post-surgical patients who had been successfully contacted, not complete the survey? The authors — demonstrating multiple levels of confirmation bias — do not even ask such essential questions. (See detailed citations in the "Notes" section of this report below).

In the study, dysphoria was evaluated using what the author called "a novel measure," which amounted to a series of subjective questions about happiness that was in part designed by the adolescent test subjects themselves. Essentially, the methodology used an entirely unvalidated ("junk science") test instrument, with no known error rates and no proven predictive power. Furthermore, the post-surgical patients were administered the survey at widely varying time intervals post-surgery. The longest interval between surgery and the satisfaction survey was 5 years, but children less than a year post-surgery were included in this obviously flawed sample, and yet the authors claim evidence of "negligible regret." This is a remarkable, misleading, and deceptive claim given that long-term, longitudinal population studies show that there is a dramatic rise in post-surgical problems such as depression, hospitalization, substance abuse, and suicide beginning at around seven years post-surgery (Ibid). Surely the authors are familiar with the world literature on transgender outcomes?

Having deceptively or negligently promised in the introduction to their paper that "chest dysphoria" is reduced by surgery, at the conclusion the authors confessed to the fact that the study design and execution produced very low-quality data that is not useful for patient selection, or prediction of outcomes. They even confessed that the study does not address the efficacy of surgery in improving outcomes regarding the single most compelling reason for performing the operation: mitigation of depression and suicide. The authors write, "An additional limitation of the study was the small sample size. The nonsurgical cohort was a convenience sample, recruited from those with appointments during the data collection period. There could be unknown imbalances between the nonsurgical and postsurgical cohorts that could have confounded the study findings."

Finally, the authors did not even bother to validate their "Chest Dysphoria Scale." Such a "made-up" scale is unlikely to accurately represent distress or correlate with properly validated measures of quality of life, depression, anxiety, or functioning. Their own analysis at the conclusion or the paper directly contradicts the deceptive claim made in their introduction.

This is the kind of "junk science" that is used to support transgender medicine and surgery. The paper is only a few years old. It was written by board certified physicians who practice in one of the nation's largest pediatric gender clinics and was published in a peer-reviewed medical journal. It is essentially useless in making any clinical decisions regarding who should be offered surgery, what is the likelihood they will benefit from it, and what is the likelihood they will regret their decision. Most importantly, it does not even measure the effect of therapy on suicide risk. The very morbidity (the risk of suicide) that they claim is improved by surgery is not even measured in their low-quality study.

Because of the very low-quality scientific support for mastectomy in the management of gender dysphoria, valid consent would demand that these procedures be described as experimental, would need the approval of ethics panels to monitor human experimentation, and would require the use of valid controls found in long-term, longitudinal population-based study models. These are the kinds of patient protections now endorsed in England, Sweden and Finland but still

ignored in the US environment where proper scientific critiques of such studies can get faculty "cancelled."

Even though the transgender treatment industry has been performing these surgeries for over 50 years, gender treatment centers continue to publish the same low quality, methodologically defective studies based upon collected cases that are degraded in value by self-selection bias, confirmation bias, and short-term follow-up, while continuing to deceptively claim that such defective research provides a sufficient scientific basis for performing irreversible, disfiguring, and ultimately sterilizing hormonal treatments and surgeries on children.

"Chest Masculinization" in Natal Females is Not Ethically Equivalent to Gynecomastectomy

Gynecomastectomy is the surgical treatment of gynecomastia, a fairly common condition in which males develop female-type breast gland tissue. Proponents of "masculinization" mastectomy in natal females erroneously equate the ethics of removing healthy breast tissue from gender dysphoric children with the removal of abnormal breast tissue in men (gynecomastia). In the case of gynecomastectomy in male patients, the operation is performed to remove the objectively diagnosed presence of female type glandular breast tissue present in a male patient. Physical examination demonstrates the presence of a dense retro-areolar mass which is tender and sometimes disfiguring. Pathological examination of the removed tissue will demonstrate the presence of female-type fibroglandular tissue in a male patient. This is an objectively abnormal condition. It should further be noted that the absence of such abnormal, female-type fibroglandular tissue in the submitted surgical specimen places the chest recontouring in the category of cosmetic surgery and is therefore not typically paid for by third-party payors.

A comprehensive literature review on the subject of gynecomastectomy and suicidal behavior conducted by Sollie in 2018 (Management of gynecomastia—changes in psychological aspects after surgery—a systematic review: Gland Surg. 2018 Aug; 7(Suppl 1): S70–76.doi: 10.21037/gs.2018.03.09) did not produce a single paper claiming improvement in suicide rate in patients who underwent this surgery. There were many reports concerning improvement in the pain that men with this objective condition suffer with. The remainder of the reported data was in the category of subjective "satisfaction survey". This tells us that the author did not distinguish between medically indicated and aesthetic surgeries. Nonetheless, no claim is made of decreased suicide rates in a suicidal population of male patients. This is because any male patient seeking removal of abnormal, female-type, breast tissue who reported suicidal ideation would be considered incompetent to give consent and would require a psychiatric evaluation and treatment to manage suicidal thinking before being considered for surgery. This kind of decision in favor of psychiatric support does not appear to be at work in the transgender affirmation world. There, and there alone, is suicidal thinking considered a qualification for a surgery.

"Chest Masculinization" in Natal Females is Not Ethically Equivalent to Breast Reduction

It should be obvious that "Chest Masculinization" surgery in natal females is not ethically equivalent to breast reduction surgery in non-transgender females. In the case of breast reduction for females with excessively large breasts (macromastia, or gigantomastia), the operation is performed to relieve a debilitating orthopedic complaint of neck, back, and shoulder pain associated with the postural/mechanical effects of the weight of the breasts. These patients experience significant activity restriction and chronic pain that is not relieved by medical management or physical therapy. Furthermore, there is voluminous actuarial data, based upon many years of longitudinal population-based study by medical insurance agencies that is used to predict who will benefit from surgery, and who will not. These physical, objective tests, based upon the actual measurement of the breasts, and the patient's overall body habitus, have known error rates that can be used to predict the likelihood that a breast reduction will relieve the orthopedic complaints of neck, back, and shoulder pain. When the tissue specimens are submitted to pathology, they are weighed in order to ensure that enough tissue has been removed so that there will be a very high likelihood that the surgery will relieve the orthopedic condition of neck, back, and shoulder pain (Accuracy of Predicted Resection Weights in Breast Reduction Surgery, Theodore A. Kung, MD, Raouf Ahmed, MBBS1 Christine O. Kang, MPH,1 Paul S. Cederna, MD, and Jeffrey H. Kozlow, MD; Plast Reconstr Surg Glob Open. 2018 Jun; 6(6): e1830.

Based upon that, adequate pre-operative consent can be obtained. The supporting data is based in very high-quality methodology. There is no quality research data, no pre-operative test or study, and no known error rates that can be used to predict the likelihood that any child suffering from gender dysphoria will benefit from the experimental procedures of mastectomy and chest "masculinization." As noted above, because of the very low quality data, transgender chest masculinization is at best experimental and at worst, should be viewed as a form of medical child abuse — it is important to note that Finland, Sweden, and the UK apparently now all agree with this analysis, as they have all retreated from such reckless surgical procedures for (See detailed citations in the "Notes" section of this report below).

It is crucial to remember that "chest masculinization-affirmation surgery" of healthy breast tissue results in a complete loss of function, that this loss is two-fold (breast feeding and erotic sensibility), and the cause of the loss is two-fold (gland removal and severing of the intercostal nerve). (See Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; Aesthetic Surgery Journal, (Breast Reduction with Use of the Free Nipple Graft Technique; Stephen R. Colen, MD; Aesthetic Surgery Journal, Volume 21, Issue 3, May 2001, Pages 261–271, https://doi.org/10.1067/maj.2001.116439).

If a patient who undergoes "chest masculinization" should regret the surgery, they do have the option of breast reconstruction. However, all that will be produced is a counterfeit of a breast. The patient will have lost the function of breast feeding. Additionally, the most commonly performed "masculinization" surgery involves the removal of the nipples, and subsequent re-

attachment in the form of a nipple graft. Those nipples will have lost their native nerve connections that provoke erotic sensibility. All that can be hoped for is the eventual random ingrowth of local skin sensation, but there will never be erotic sensation because the particular branch of the fourth intercostal nerve which communicates with particular centers in the brain responsible for oxytocin release and erotic provocation will have been permanently severed. This means that breast function has been completely and irreversibly sacrificed for the sake of producing a cosmetic result (a masculine appearing chest). This is the exact opposite of the goals of any reconstructive surgery. It must therefore be understood that "chest masculinization" is a cosmetic procedure that has violated the most essential principle of cosmetic surgery: never sacrifice function for the sake of a cosmetic result.

Erroneous use of the word "Reconstructive" to describe Gender Affirmation Surgeries

The transgender treatment enterprise uses the word "reconstructive" to characterize a group of surgical treatments that seek to alter the sexed appearance of the person. It is important to understand that these procedures, because of the indications for surgery, the motivations for surgery, and the outcomes of surgery, are not reconstructive, but are to be properly understood to be cosmetic in nature.

Reconstructive surgeries are procedures that seek to establish or restore structures and their functioning that have been lost due to trauma, disease, in-utero developmental abnormalities, or surgical treatment for disease. Such reconstructive surgeries must begin with the objective characterization of the defect, including abnormalities of form, and associated loss of function. This process of defining the defect begins with a thorough understanding of normal human form and function and seeks to select, develop, and execute procedures that will restore both. In some cases function may be emphasized more than form, as when the mangled hand of a man is reconstructed. In other cases, reconstruction of form is all that is possible because as yet there are no techniques to restore function. An example of this is seen in the reconstruction of a woman's breast following cancer care. All that can be offered is the appearance of a breast; she will never be able to feed an infant through the reconstructed part.

This is to be contrasted with cosmetic, or aesthetic surgery in which the appearance of a structure is modified in order to produce a subjective (aesthetic) result for the patient. No functional restoration is addressed because no functional or structural loss exists. The object of the surgery is aesthetic. There is no lost form or function that needs to be reconstructed. It is aesthetic surgery because the motivation is aesthetic (subjective feelings about appearance). Further evidence for this is the fact that nearly the entirety of the outcome studies cited in support of these surgeries use subjective questionnaires which the patient fills out. The questions used are typical of those used to evaluate any aesthetic surgery. They are called "satisfaction surveys". Such surveys are prone to suffer from self-selection bias, confirmation bias, and high drop-out rates.

One of the key problems that the transgender treatment enterprise faces on a daily basis is the issue of third-party payment for services. No health insurance provider, including federal and state agencies will pay for cosmetic surgery. For this reason, it is necessary, in order for the business model to succeed, that providers characterize their services as reconstructive. This is doubly difficult given the intense political pressure that has been exerted upon the medical community to "de-pathologize" the condition of transgender. This is seen in the abandoning of the diagnostic nomenclature of "body dysmorphic disorder", and "gender identity disorder" in favor of the more recent DSM manual using the term "gender dysphoria". This leads transgender treatment providers into the difficult situation of claiming that transgender is not a pathology, while at the same time insisting that the services are medically necessary and describing the procedures as reconstructive without characterizing any physical/ functional defect.

As we consider the specific "gender affirming" surgical procedures we will see that comparison to medically indicated surgeries on both men and women actually serves to reinforce the evidence that these surgeries are essentially and fundamentally cosmetic.

Masculinizing and Feminizing Chest Surgeries are Not "Medically Necessary"

Supporters of "transitioning" treatments justify surgical treatment based upon "medical necessity." They claim that gender dysphoria can lead to debilitating anxiety and depression, as well as serious incidents of self-harm, including self-mutilation, suicide attempts, and suicide. Yet with only a single exception, in the studies they cite no measures are made of the effects of surgery on what is claimed to constitute the "medical necessity" for these procedures. In contrast, the Branstrom study[1] documented no reliable benefits for transgender surgery/hormonal treatments and no reduction in suicide and even an increase in serious suicide attempts requiring hospitalization in patients receiving surgery. These recent, long-term, published, peer reviewed, credible research findings are quite contrary to the claims of supporters of "transitioning treatments" — as are the National Science Reviews in this area from England-NICE, Sweden, and Finland. (See detailed citations in the Notes section in this declaration).

Scientific rigor would demand an examination of objective outcomes such as: rates of substance abuse, psychiatric hospitalization, self-harm, or suicide, and how they were changed by surgery. One paper does ask these crucial questions concerning efficacy is a very comprehensive, long term, longitudinal population cohort study which actually shows the opposite of what experts claim for these patient outcomes. When followed beyond eight years post operatively, this paper shows that patients receiving these treatments have the same alarmingly high rates of hospitalization, substance abuse, self-harm, and completed suicide as persons who have had no medical or surgical intervention.

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[1] *Correction of a key study: No evidence of "gender-affirming" surgeries improving mental health.* Home. (2020, August 30). Retrieved May 17, 2022, from https://segm.org/ajp_correction_2020

In summary, on the issue of the efficacy of these surgeries, the scientific support is very weak, while the scientific evidence rejecting the hypothesis of efficacy is remarkably strong (See Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden; Cecilia Dhejne, Paul Lichtenstein, Marcus Boman, Anna L. V. Johansson, Niklas Långström, Mikael Landén; PLOS One February 22, 2011 https://doi.org/10.1371/journal.pone.0016885).

The surgical removal of the breasts, and the re-contouring of the chest through liposuction is a common procedure for women who seek to present as men. These operations are performed in both men and women, for a variety of reasons. They are generally very safe, and typically performed in the outpatient setting. It is important to understand that the only way of distinguishing cosmetic breast surgery from "medically necessary" surgery is based upon the diagnosis of underlying pathology. For example, breast reduction may be cosmetic, or it may be medically indicated. In both cases, the patient presents with a complaint that her breasts are too big. The distinction between cosmetic breast reduction and medically indicated breast reduction is based upon the presenting symptoms of orthopedic problems when working, such as chronic neck back and shoulder pain caused by the weight of the breasts. But even then, the weight of the removed tissue is factored into the objective verification that the surgery was "medically necessary." There is a vast body of medical and actuarial data that demonstrates the relationship between the weight of the breast tissue removed and the probability that back pain will be cured by performing a breast reduction.

The same issues are at stake in breast enhancement for men seeking to present as women. Cross-sex hormones will have caused varying degrees of gynecomastia (breast enlargement in men). Surgical enhancement procedures are exactly the same in both men and women.

Medically necessary surgery in women is based upon the diagnosis of an objective medical condition, such as Poland's syndrome (congenital absence of a breast), surgical absence of the breast following cancer care. In men, the objective diagnosis of gynecomastia might warrant surgery based upon medical necessity, but it would be the removal of tissue that has objective pathological features (breast gland proliferation in a man). A rare diagnosis of breast cancer in a man might warrant chest wall reconstruction after cancer care. On the other hand, cosmetic surgery of the breast is entirely about the subjective feelings of the patient, and that is all that we find in the case of the self-identified transgender patient.

In the case of transgender chest surgery, the diagnosis is based on the patient's subjective report of dysphoria, but the medical necessity is based on the expectation that surgery will relieve the patient of the risk of, among other things, major depression, self-harm behaviors, and suicide. None among the many papers typically cited by supporters of "transitioning treatments" address themselves to the question of medical necessity for either masculinizing surgery, or feminizing surgery. They only address technical issues, management of complications, and subjective outcomes that employ precisely the same language that is used to assess every

other cosmetic surgery of the breast. Such papers often begin with standard language about the suffering of self-identified transgender adolescents, and their risk of self-harm. They will claim that the reported surgeries somehow reduce the risk of suicide, or the frequency or severity of self-harm, but they never report actual results of improvement in the risk of suicide, or substance abuse, or cutting, or sexual risk taking. The claim of benefit is unsupported in the scientific literature.

In summary, the medical necessity of transgender chest surgery is not supported by scientific evidence and appears to be firmly in the category of cosmetic surgery. What is more, the surgeries when performed on natal females causes a life-long loss of function, placing those surgeries in the category of malpractice. No other cosmetic procedure is expected to produce major functional loss. Such a result would only be the result of a complication, or other surgical misadventure. To actually have a 100% certainty of loss when surgical consent is being obtained constitutes a complete neglect of one of the foundational principles in plastic surgery: Never sacrifice function for the sake of a cosmetic result.

About the Author

Education and Training: I received my Bachelor of Arts in Biological Sciences at the University of California, Santa Barbara, 1979. There I was engaged in research in cell membrane physiology with Dr. Philip C. Laris, studying stoichiometry of the sodium: potassium ATPase pump. I received my M.D., Doctor of Medicine degree at the Uniformed Services University of the Health Sciences, 1983 at Bethesda, Md. I served my General Surgery Residency at the Naval Hospital Oakland/UC Davis East Bay Consortium, 1987-1991 and served as Chief Resident, Department of Surgery, Naval Hospital Oakland, 1990-1991. I also served a Plastic Surgery Residency at the University of Tennessee-Memphis, 1992-1994. My professional background, experience, and publications are described in more detail in my curriculum vitae, which is attached as Exhibit A to this declaration.

Board Certifications in Medicine: I have been Board Certified in Surgery (American Board of Surgery, 1992), in Plastic Surgery (American Board of Plastic Surgery, 1997; American Board of Plastic Surgery, 2008).

Medical Staff Appointments: I served as the Staff General Surgeon at the Naval Hospital Oakland, CA 1991-1992 and as Associate Professor of Surgery, UC Davis-East Bay, 1991-1992. I also served as a Plastic and Reconstructive Surgeon, Naval Medical Center, Portsmouth, Virginia, 1994-2002 and as Chairman, Department of Plastic and Reconstructive Surgery, Naval Hospital Portsmouth, Virginia, 1996-2002. I later served as Clinical Assistant Professor, Department of Surgery, Uniformed Services University of the Health Sciences, 1995-2002 and as Founding Director, Pediatric Cleft Palate and Craniofacial Deformities Clinic, Naval Hospital Portsmouth, Virginia, 1996-2002 also as the Founding Director, Wound Care Center, Naval Hospital Portsmouth, Virginia, 1995-2002. I have also served as a Staff Plastic Surgeon in Nebraska and Alabama.

U.S. Surgeon General Service: I served as a Specialty Leader, Plastic and Reconstructive Surgery, Office of the Surgeon General-USN, 1997-2002.

Faculty Appointments: I served as Teaching Faculty at Eastern Virginia Medical School, Division of Plastic Surgery, 1995-2002. I also served on the teaching faculty of the Via College of Osteopathic Medicine, 2017-2020.

Military Service: I served as an Aviation Officer Candidate, Naval Aviation Schools Command, NAS Pensacola, 1978 and was Commissioned an Ensign, MC, USNR 1979 and Commissioned as a Lieutenant, MC, USN 1983. I served as a Designated Naval Flight Surgeon, Naval Aerospace Medical Institute, 1985, and I was Assigned Marine Fighter/Attack Squadron-451, serving as Flight Surgeon, and serving as Radar Intercept Officer in the Marine F4S Phantom, accumulating 235 flight hours, and trained for qualification as an Air Combat Tactics Instructor. I was deployed to the Western Pacific as UDP forward deployed fighter squadron in Korea, Japan, and the Philippines. I served in the US Navy for 24 years, and I served in the USMC for 3 years. I retired with the rank of Captain, USN in 2002.

Publications - Peer Reviewed Medical Journals: Lappert PW. Peritoneal Fluid in Human Acute Pancreatitis. Surgery. 1987 Sep; 102(3):553-4; Toth B, Lappert P. Modified Skin Incisions for Mastectomy: The Need for Plastic Surgical Input in Preoperative Planning. J Plastic and Reconstructive Surgery. 1991; 87 (6): 1048-53; Lappert P. Patch Esophagoplasty. J Plastic and Reconstructive Surgery. 1993; 91 (5): 967-8; Smoot E C III, Bowen D G, Lappert P, Ruiz J A. Delayed development of an ectopic frontal sinus mucocele after pediatric cranial trauma. J Craniofacial Surg. 1995;6(4):327–331; Lappert PW. Scarless Fetal Skin Repair: "Unborn Patients" and "Fetal Material". J Plastic and Reconstructive Surgery. 1996 Nov; 98(6): 1125; Lappert PW, Lee JW. Treatment of an isolated outer table frontal sinus fracture using endoscopic reduction and fixation. Plastic and Reconstructive Surgery 1998; 102(5): 1642-5.

Publications - Medical Textbooks: Wound Management in the Military. Lappert PW, Weiss DD, Eriksson E. Plastic Surgery: Indications, Operations, and Outcomes, Vol. 1; 53-63. Mosby. St. Louis, MO 2000.

Operations and Clinical Experience: Consultations and Discussions: As a physician and surgeon, I have treated many thousands of patients in 7 states and 4 foreign nations. My practice has included Primary Care, Family Medicine, Aerospace Medicine, General Surgery, Reconstructive Surgery for combat injured, cancer reconstructive surgeries including extensive experience with microvascular surgery, Pediatric Congenital Deformity, and the care of chronic wounds. I have practiced in rural medicine, urban trauma centers, military field hospitals, university teaching hospitals, and as a solo private practitioner. In my private practice I have had occasion to treat many self-identified transgender patients for skin pathologies related to their use of high dose sex steroids, laser therapies for management of facial hair both in transitioners and detransitioners. I have performed breast reversal surgeries for detransitioning patients. My practice is rated as "LGBTQ friendly" on social media. I have consulted with families with children who are experiencing gender discordance. I have given many presentations to professional meetings of educators and counselors on the subject of transgender, and the present state of the science and treatment. I have discussed the scientific issues relevant to the case with many physicians and experts over a number of years and also discussed related issues with parents and others.

Appendix Attachment

8

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, et al.,
Plaintiffs,

V. **Case No. 4:22-cv-00325-RH-MAF**

SIMONE MARSTILLER, et al.,
Defendants.

EXPERT DECLARATION OF

GEETA NANGIA, MD

I, Geeta Nangia, MD, have been retained by counsel for Defendants in connection with the above captioned litigation.

1. I have been asked by counsel for the Defendants to provide my expert opinion on the treatment and diagnosis of gender dysphoria in minors; the Florida Medicaid Generally Accepted Professional Medical Standards (GAPMS) Determination on the Treatment of Gender Dysphoria published by Florida's Agency for Health Care Administration (AHCA) in June 2022, along with its attachments; and Fla. Admin. Code. R. 59G-1.050 which prohibits Medicaid coverage of puberty blockers, hormone and hormone antagonists, sex reassignment surgeries, and any other procedures that alter primary or secondary sexual characteristics.
2. I am over the age of 18. I have actual knowledge of the matters stated herein. If called to testify in this matter, I would testify truthfully and based on my expert opinion.

BACKGROUND AND QUALIFICATIONS

3. I am a Board Certified Child and Adolescent Psychiatrist and Adult Psychiatrist. I obtained my B.A. in Biochemistry and Molecular Biology from Boston University and my M.D. from Boston University School of Medicine. My training in Psychiatry and Child and Adolescent Psychiatry was at The Medical University of South Carolina, where I completed my fellowship training in 2007. I have been active in teaching medical students and residents throughout my career.

4. I have worked in the field of Child and Adolescent Psychiatry as a community psychiatrist in a wide range of settings over the last fifteen years, providing comprehensive psychiatric services for children and families. I chose to work as a community psychiatrist because I desired to evaluate and treat a wide range of mental health disorders, and wanted to see young people in the context of their families and their community systems (i.e. schools, extracurriculars, local supports). I have worked in both rural, urban, and suburban areas, in outpatient and inpatient settings, as well as in residential care. I have been very active in school consultations and advocating on a community level for mental health accommodations for youth in school. I have worked toward providing access to mental health care for youth who are underfunded, and who lack services due to barriers of access and cost. I have always provided psychiatric evaluations and psychotherapy and medication management for children and youth, as well as providing family therapy. I have been a part of multiple interdisciplinary teams.

5. Much of my career has been spent focusing on educating, equipping, and supporting families of children who struggle with depression, anxiety, and other mental health issues

by stressing the importance of attachment between parents and children, helping children to find their homes as a safe place to connect, where they feel nurtured, supported, and loved. It is connection and attachment to secure caregivers that form the foundation for healthy childhood development, allowing a child to progress through the developmental trajectory, and onward toward establishing a healthy identity.

6. Most recently, after working in the primary care setting with one of the area's largest pediatric providers to provide behavioral health services for more complex pediatric mental health cases, I am working as the CEO of an organization called Known and Loved, while continuing community mental health care through my private practice. Known and Loved exists to provide educational support for children and families, with a focus on children who have been in foster or adoptive care. Our Board is a group of physicians in multiple fields who desire to make a difference in the broader community for children and families.

7. Over the course of my career seeing a broad range of psychiatric disorders in children and adolescents, I have treated over a thousand patients with gender dysphoria. Given the nature of being a community psychiatrist, I have the benefit of being involved with childrens' care not just in my office, but also with their families, schools, and outside support systems. This provides me with the ability to have a more complete perspective on their development and the interventions that produce the best outcomes for their overall well being. My medical opinion below is based upon my extensive broad based clinical experience as a community based Child and Adolescent Psychiatrist, my training, developmental and neurodevelopmental theory and data, and review of the literature presented on this subject.

8. My previous expert witness testimony has been in family court regarding abuse, custody, and recommended interventions for the mental health of minors.

9. I have reviewed the Florida Medicaid Generally Accepted Professional Medical Standards (GAPMS) Determination on the Treatment of Gender Dysphoria published by Florida's Agency for Health Care Administration (AHCA) in June 2022, along with its attachments; and Fla. Admin. Code. R. 59G-1.050(7) which prohibits Medicaid coverage of puberty blockers, hormone and hormone antagonists, sex reassignment surgeries, and any other procedures that alter primary or secondary sexual characteristics.

10. I am being compensated at an hourly rate of 350.00 for documentation and review, and 550.00 for deposition or trial testimony. My compensation does not depend on the outcome of this litigation, my opinions, nor the testimony that I provide.

OBSERVING THE RISING PREVALENCE OF GENDER DYSPHORIC YOUTH AND EVALUATING PRESENT TREATMENT MODELS

11. Escalating Prevalence of Youth Presenting with Gender Dysphoria or as Transgender: I have been a physician since 2002. Over the last decade, there has been a dramatic increase in the number of children and adolescents who experience gender dysphoria or who identify as transgender in my practice. In my early years of practice from 2007-2010, the overall prevalence of transgender youth was less than one percent of my outpatient patient population in a traditional community setting in Pennsylvania. Between 2019-2022, the number of youth presenting with gender dypshoria or as transgender increased to thirty percent in a similar outpatient community setting in South Carolina. A

study published by UCLA School of Law in June 2022 cites that the prevalence of transgender youth and young adults, ages 13-24 has doubled in the last five years. (1)

IMPORTANCE OF ANALYZING CHANGES IN PATIENT PRESENTING CONCERNS

12. When the prevalence of a particular presentation increases, regardless of what presentation that is, physicians must ask themselves several important questions in order to provide the best quality care to patients. Important questions regarding the increased prevalence of gender dysphoria or transgenderism among youth must be raised.

13. One question that must be asked is regarding confounding factors: Is the prevalence rate impacted by factors that make the data unreliable? (i.e. data can be affected by changes in the regions where measures are taken, or by differences in referral base, culture, faith, time period, social and physical environments, or concurrent medical/psychological presentations)?

A. Comparing my own patient populations during the two time periods above, my area of practice has remained rural or suburban,, my referral base has consistently been pediatric primary care, and my clinic community setting has been outpatient, However, there have been changes over time in the social culture that my patients have encountered, and there has been a dramatic increase in psychiatric disorders amongst the general patient population that I see. Additionally, children have reported a heightened feeling of distance and lack of connection with their parents in recent years when presenting initially for care.

B. One explanation for social culture changing has been the advent and expansion of social media. Ways in which this may be affecting the prevalence of transgender youth are plentiful. Social media enables the spread of information pertaining to many issues, including those related to sexual development, sexual orientation, and gender. There has been a dramatic increase in the global public discourse surrounding LGBTQA issues amongst youth. There has been widespread content circulating on transgenderism, accompanied by passionate advocacy that is highly regarded by all ages. Celebrities have highlighted LGBTQA issues, and have used various forms of media to promote and glamorize transgenderism. On a local level, information sharing has led to the popularity of LGBTQA clubs at schools, community groups dedicated to raising awareness and acceptance, and enthusiastic support networks for those who identify as LGBTQ. Support for transgenderism is now the new social norm. Whereas children and youth used to feel more isolated if they identified as LGBTQ and face adverse social consequences for being open about their identity, they now are often embraced, cared for, and even praised for their courage and confidence in many settings.

C. Families have also shifted their response over time. Parents in my patient population today more readily embrace their children with gender dysphoria today in comparison to a decade ago due to heightened awareness of the issue. While harmful prejudice does still exist and members of the LGBTQA community still face discrimination, the change in response on every level from government, to schools, and to families, has been dramatic. Colleagues of mine, as well as the

present literature, reflect this increasing acceptance and support of transgender and gender dysphoric youth.

D. While such changes can be viewed as positive by many, due to improvements in social justice and equity, the concern when analyzing the data becomes that the remarkable increase in youth reporting gender dysphoria or transgenderism, may not be completely accurate. Rather, the data may reflect youth who are seeking to be part of a community, who are seeking connection and engagement, who want to be affirmed and advocated for, and who are wanting to be part of a passionate and supportive social group.

14. A second question that must be asked pertains to screening and assessments: Are screening tools or evaluations for gender dysphoria different now than they were previously?

A. With regard to screening tools, assessments, and evaluations in my own practice, I have always sought to provide comprehensive care that is non-discriminatory. I have always asked my clients how they identify, and have created a welcoming environment for LGBTQA patients. I am up to date on my awareness of the recommendations made by major medical organizations, ask open ended questions, and I understand and reflect appropriate terminology. The breadth of information in the medical community has grown exponentially, and I am aware of and have read the literature in my field and much of it in primary care.

B. Most of my colleagues would also acknowledge that while screening tools have been modified or refined in recent years, they have provided safe and supportive environments for LGBTQA youth.

C. For this reason, I believe evaluations and screening tools to be mostly consistent and comprehensive, and less of a contributor to the increased prevalence of transgenderism or gender dysphoria.

15. A third question that must be asked is regarding under or over reporting: Are patients more likely to report the presentation now versus in the past? If so, then what has led to further reporting?

A. Based on widespread information, advocacy, dialogue, acceptance, and approval today for transgender youth in comparison to a decade ago, it is likely that youth are more likely to report gender dysphoria openly. Stigma reduction has likely also contributed to this, and has been a benefit to those youth who had previously struggled silently with this issue in fear of social consequences.

B. However, there may also be a problemsome large amount of overreporting based on youth participating in what is called the "bandwagon effect". What I have seen in my clinical work is that many adolescents who previously never had gender dysphoria, but who have been struggling with peer acceptance, suddenly describe feelings of belonging to a group when identifying as transgender. They are often embraced by LGBTQA peers rather instantly and find support that they hadn't experienced before, including from online communities. Their former feelings of being unsure about fitting in seem to be absolved by their membership in a larger movement that is gaining a lot of international traction and attention. Such observation of my patients makes me weary of increasing numbers of youth becoming vulnerable to adopting a movement's ideologies, principles, and

behaviors merely in an effort to attain the reward of widespread affirmation and approval that the movement provides.

C. This "bandwagon effect", defined more specifically as the inclination of individuals to join in their preferences or behaviors with what they perceive to be emerging majorities or dominant positions in society, likely affects the prevalence of reporting that we are seeing. Indeed, with numbers doubling in the last five years, the present trajectory would also lead us to believe that gender dysphoria may be on target to reach much higher numbers.

D. As written cited in the GAPMS, the French National Academy of Medicine wrote: "Parents addressing their children's questions about transgender identity or associated distress should remain vigilant regarding the addictive role of excessive engagement with social media, which is both harmful to the psychological development of young people and is responsible for a very significant part of the growing sense of gender incongruence."(17)

EVALUATING PSYCHOSOCIAL DEVELOPMENTAL THEORY AND NEUROLOGIC DEVELOPMENT DATA

16. Do the well founded theories of psychosocial development and current neurologic data help explain the increased prevalence of gender dysphoria in youth? For this, physicians must consider theories of psychosocial development and pediatric neurological development data for children and adolescents.

17. Fundamental Theory of Psychosocial Development:

A. Childhood and "Industry vs Inferiority": According to the widely accepted theories of Erik Erikson, children are developing human beings. Children go

through several stages of psychosocial development. They enter the stage of "industry vs. inferiority" between ages 5-12, wherein their major milestone is attaining the virtue of competence. During this stage, a child's peer group becomes more important. The child views his or her peers as being highly significant. The child's self concept begins to form more closely around peer approval or disapproval. Children's reactions of feeling confident or proud, rejected and incapable, often form around their accomplishments and the responses of their peers. If their efforts are reinforced by praise and reward, they feel industrious ("competent"). They exude a readiness to move past this stage and further along the developmental trajectory. If, however, they feel rejected, or disapproved of, they feel inferior ("Incompetent"), causing a halt in development and an inability to move forward along the developmental trajectory. [2]

B. Adolescence and "Identity vs Role Confusion": According to Erikson, adolescents ages 12-18 who successfully moved forward from the former phase of development, enter the stage of "Identity vs Role Confusion". During this stage, they are searching for a sense of self and identity. They experience intense exploration of personal values, beliefs, and goals. Adolescents begin to analyze and think more deeply about their own morality and ethics, and determine their individual identities based upon their life experiences.

C. Body image is critical in this stage of development, and Erikson suggests that two identities are forming- "sexual" and "occupational". Erikson says that adolescents may feel uncomfortable about their bodies for some period of time until they can adapt and grow into the changes. Additionally, he says success in this stage leads

to the virtue of "fidelity", which he defines as the ability to commit oneself to others on the basis of accepting others even where there are differences. Adolescents have a desire to belong to society and to be productive. During this period, those adolescents who fail to form a sense of identity experience role confusion, feeling unsure where they fit into society in the long term.

D. Based on Erikson's model of the psychosocial stages, the idea that increased reporting of gender dysphoria may be due to adolescents finding identity, approval, and acceptance among the LGBTQ community becomes more plausible, particularly during a season of vulnerability, psychosexual identity formation, and a need for fidelity.

18. Neurologic Development of Children and Adolescents:

A. Adolescent Brain More Vulnerable to Decision Making in Emotionally Laden Situations and with Peer Involvement: The following are excerpts taken from "Brain Development During Adolescence" [3] *"One of the more influential neurobiological models to explain typical adolescent behavior was developed by the group of BJ Casey in New York.* [4] *The main premise of this model, based on neuroanatomical findings and data from functional imaging studies* [5, 6, 7, 8]*, is that adolescence is a period of neural imbalance caused by the relatively early maturation of subcortical brain areas and the relatively delayed maturation of prefrontal control areas, with the result that, in emotional situations, the more mature limbic and reward systems gain the upper hand, so to speak, over the still relatively immature prefrontal control system. This should not be taken to imply that adolescents are by nature unable to make rational decisions. Rather, in*

situations that are particularly emotionally laden (e.g., in the presence of other adolescents or when there is the prospect of a reward), the probability rises that rewards and emotions will affect behavior more strongly than rational decision-making processes[5,6,9]*. This model has been tested in a series of experimental studies. Recent findings show, however, that the continuing psychological and biological changes of adolescence exert a powerful influence on cerebral structure and function. The brain of the adolescent goes through a new phase of plasticity in which environmental factors can have major, lasting effects on cortical circuitry. This opens up new opportunities for education. For example, for the very reason that adolescents are so readily influenced by emotions, they stand to profit from learning experiences taking place in a positive emotional context that are intentionally designed to train emotional regulation. Given that risky behavior in adolescence has a neurobiological basis, attempts to suppress such behavior completely seem bound to fail. It would be more reasonable to enable adolescents to have emotional experiences in a safe environment, and to increase the social rewards associated with non-risky behaviors through regulatory legislation (e.g., prohibition of certain kinds of advertising) and the provision of emotionally positive models. For instance, the teenage lead character in a television soap opera might decide to opt out of a hard-drinking contest organized by friends. Moreover, the protracted period of neural plasticity in adolescence also makes adolescents more vulnerable to harmful environmental influences* [10]*."*

B. Also in 2013, Casey presented a lecture on *"The Teen Brain: Legal Responsibility"* [11]. Taking from her presentation, Casey's data shows that the prefrontal cortex (involved in decision making and planning) develops at a rate slower than the portions of the brain involved in actions and movement. Emotional systems that reside deep within the brain are still evolving well into adolescence and there is an imbalance between the deeper areas of the brain (ventral striatum and amygdala) and the prefrontal cortex which is more delayed in development. This incongruence is linked to difficulties with self regulation and impulse control in the adolescent brain. Further evidence of this is found when response time is studied by pairing stimuli with rewards and incentives. Without conscious awareness, people have quicker responses when they associate certain stimuli with positive outcomes or incentives. Individuals have slower responses to stimuli when there are fewer expected positive outcomes or rewards. Representation of rewards and incentives is found in the ventral striatum. Across development, studies show that adolescents activate this deeper region of the brain more than young children and adults. When greater activity is seen in the ventral striatum, it is correlated with a higher degree of risk taking behaviors or impulsivity. Another factor that influences response time and accuracy for the adolescent is the presence of peers. According to studies, when peers are present, adolescents make more errors in social cue interpretation and response time. They react more quickly to incentives, and are more drawn to danger and risk taking or impulsive behaviors. Their brain is activated in the areas of the ventral

striatum and their amygdalas show heightened activity relative to younger children and adults.

C. Casey concludes that adolescents show impairment in overriding impulses in emotionally charged situations. The imbalance appears to reflect an imbalance between earlier developing emotional centers in the brain and those involved in self control. Lastly, she states that diminished self control is transient and continues to develop in adulthood as these brain systems mature with experience.

D. Of note, Casey is seen as a leader in the field of neurodevelopment. While she has no opinion that I can find on matters of transgenderism in youth, and hence I make no statements linking her with this paper, I regard her work on the adolescent brain with a great deal of respect. Evaluating the data that she presents is critical to the discussion of the increased reporting of gender dysphoria.

E. Gender dysphoria is an emotionally charged subject that often presents at the precipice of adolescent development which is by its very nature an emotionally laden period. Hence, one can conclude that adolescents may show impairment in overriding impulses that result from the brain imbalances that Casey speaks of. In this case, the impulse may be to find acceptance and social affirmation of self.

F. Additionally, Casey's data calls into question the decision making capacity of adolescents, during an emotionally laden time, to make treatment decisions regarding gender transition that are well thought out and rational rather than impulse driven.

EVALUATING TREATMENT MODELS FOR GENDER DYSPHORIA

19. Evaluating Treatment Models: If the measures of increasing prevalence of transgenderism and gender dysphoria are indeed increasing, how should the medical community respond? Are present treatment models for youth who experience gender dysphoria helpful, and which areas require attention and modification for best clinical outcomes?

A. Safe Settings: Comprehensive treatment models for youth presenting as transgender have received a great deal of focus in recent years, due to the rise in awareness and advocacy. One such example includes the Fenway Community Health Model.[12] Models recommended by major medical organizations today often focus on providing an LGBTQA safe setting for youth to talk and have dialogue regarding their feelings, their beliefs, and the issues that they are dealing with. There is an abundance of literature and supportive evidence that creating safe settings for youth with gender dysphoria is critical to their health and well being.

B. Affirmative Care Model and Gender Transition Therapies for Youth: Some models, including those endorsed by the AAP, advise that physicians ask youth about their gender specific pronouns, make efforts to not assume genders, and "affirm" the gender that the youth prefers. "Affirming Care", as it is defined today by major medical organizations, means that youth are affirmed by therapists and medical providers to *be the gender they feel comfortable with.* There are four

major flaws in the affirmative care model when it is applied to practical outpatient care for gender dysphoric youth:

1) First, the affirmative model neglects the adolescent's core internal conflict during the "Identity vs Role Confusion" stage of psychosocial development, during which the adolescent seeks to find belonging and affirmation. By not taking into consideration that adolescents will be vulnerable to making decisions based on simply wanting to fit in, the affirmative care model assumes that adolescent decisions are to be deemed as sustaining, consistent, and evidentiary of the child's chosen gender for life.
2) Second, this model neglects the neurologic data that shows adolescents are likely to make more impulsive decisions to attain incentives or rewards during emotionally charged situations or when influenced by peers. In the case of gender dysphoria, reward could be social approval that the adolescent is already seeking. Therein, the affirmative model calls on physicians to hastily affirm adolescent gender when the adolescent's decisions may be impulse and reward driven rather than rooted in well thought out planning and rational processes.
3) Third, the affirmative model also does not take into consideration the fact that when confounding factors are dealt with in therapy, many adolescents change their minds regarding their gender preference. Often, in my own clinical experience, when issues such as family dynamics, trauma, gender role experiences, attachment, and peer struggles are explored in therapy,

adolescents no longer report gender dysphoria. If I were to prematurely "affirm" a child's preferred gender, I would risk causing irreparable harm by not exploring all of the other complex issues the adolescent faces that may be affecting gender preference. As my colleagues' experiences and much literature also emphasizes the role of therapeutic exploration [13] it is clear that adolescents with gender dysphoria require tremendous diligence in mental health care and considerable time is required by providers for thorough therapeutic exploration prior to any decision to affirm a gender choice.

4) The fourth and last flaw in the affirmative model is that it prompts the clinician to move past therapeutic exploration, to treatments such as hormones, chest binders, and surgeries that can potentially cause harm to a child or adolescent's mind, body, and self concept. Despite the voices in the medical community who state that such treatments are harmless and reversible, or even beneficial for mental health, the studies on long term outcomes and safety are lacking, and anecdotal data is growing that would point to such treatments as being potentially irreversible, highly impactful on reproductive ability, and life altering to the point of even causing suicidal thoughts due to shame and regret. The potential for harm is significant- both from a psychiatric standpoint and from a medical standpoint to the adolescent. [14]

20. The longest follow up study of sexual reassignment surgeries extended for 30 years in Sweden, where transgenderism is highly accepted and supported. Fifteen years into

the study, the suicide rate in those who had reassignment surgery was twenty times the rate in controls.[14] It cites, "The study identified increased mortality and psychiatric hospitalization compared to the matched controls. The mortality was primarily due to completed suicides (19.1-fold greater than in control Swedes), but death due to neoplasm and cardiovascular disease was increased 2 to 2.5 times as well. We note, mortality from this patient population did not become apparent until after 10 years. The risk for psychiatric hospitalization was 2.8 times greater than in controls even after adjustment for prior psychiatric disease (18 percent). The risk for attempted suicide was greater in male-to-female patients regardless of the gender of the control. Further, we cannot exclude therapeutic interventions as a cause of the observed excess morbidity and mortality." This study further demonstrates problems for the gender affirmative model. Additionally, it is necessary to consider this long term study in the discussion that arises regarding suggested higher suicide risk in those with gender dysphoria, and the assumption that is made stating that suicide rates will decline if gender affirming treatments are provided. Indeed, the results in this study after the ten year mark would contradict that assumption.

21. In 2014, Hayes, Inc. reviewed the scientific literature and found that evidence on long-term results of sex reassignment was too sparse to support meaningful conclusions and gave these studies its lowest rating for quality. It stated, "Statistically significant improvements have not been consistently demonstrated by multiple studies for most outcomes. … Evidence regarding quality of life and function in male-to-female adults was very sparse. Evidence for less comprehensive measures of well-being in adult recipients of cross-sex hormone therapy was directly applicable to [gender dysphoric]

patients but was sparse and/or conflicting. The study designs do not permit conclusions of causality and studies generally had weaknesses associated with study execution as well. There are potentially long-term safety risks associated with hormone therapy but none have been proven or conclusively ruled out."

22. In 2016, the Centers for Medicare and Medicaid Services addressed whether sex reassignment surgery would be covered under their plans. It stated that it lacked evidence that it benefits patients. [15] It cited, "Based on a thorough review of the clinical evidence available at this time, there is not enough evidence to determine whether gender reassignment surgery improves health outcomes for Medicare beneficiaries with gender dysphoria. There were conflicting (inconsistent) study results—of the best designed studies, some reported benefits while others reported harms. The quality and strength of evidence were low due to the mostly observational study designs with no comparison groups, potential confounding, and small sample sizes. Many studies that reported positive outcomes were exploratory type studies (case-series and case-control) with no confirmatory follow-up."

A follow up memo [16] stated, "Overall, the quality and strength of evidence were low due to mostly observational study designs with no comparison groups, subjective endpoints, potential confounding (a situation where the association between the intervention and outcome is influenced by another factor such as a co-intervention), small sample sizes, lack of validated assessment tools, and considerable lost to follow-up."

23. My own clinical experience with youth who undergo hormone treatment for blocking pubertal development, or who utilize chest binders, is that many experience immense regret after bodily changes occur. This regret sadly often translates into shame when adolescents decide to transition back to their biological sex, and this creates an entirely new layer of issues that then require therapeutic intervention.

CONCLUSION

24. As a physician, my concern is that we must, as a medical community, acknowledge that the rise in the prevalence of gender dysphoria is correlated with the rise of social LGBTQA advocacy and awareness movements. Developmental theory supports that adolescence is a critical period of identity formation and wanting to belong, and a period of vulnerability. Neurodevelopmental models show us that youth are susceptible to impulse driven decisions, particularly in the presence of peers. While advocacy and awareness are critical to building a stronger society, it must be understood that the vulnerability of the developing brain leads it to be drawn toward impulsive choices, and ideologies that gain quick traction and lead to social approval, connection, and affirmation are alluring during this period. To provide children with the ability to make very serious medical choices that affect their overall health and self concept for the rest of their lives, including their reproductive capability, during a season of such tremendous neurodevelopmental growth and susceptibility is risky, at best.

I conclude that I am in agreement with the Florida Medicaid Generally Accepted Professional Medical Standards (GAPMS) Determination on the Treatment of Gender Dysphoria published by Florida's Agency for Health Care Administration (AHCA) in June 2022 [18], along with its

attachments; and Fla. Admin. Code. R. 59G-1.050 which prohibits Medicaid coverage of puberty blockers, hormone and hormone antagonists, and sex reassignment surgeries. In my opinion, children under the age of eighteen should not receive these aforementioned treatments or any other medical interventions that hinder or change their natural development.

We must not let our desire to help youth with gender dypshoria cloud our clinical judgment and cause us to make hasty decisions about treatments that carry profound risk and for which our only reliable long term study is a 30 year follow up showing an increase in suicide and suicidal thoughts ten years post treatment [14].

We must simultaneously take steps to protect youth and treat them with respect by providing them with non-discriminatory care that focuses on kindness, respect, and safe settings for communication and therapeutic exploration, all while taking into consideration the complexity of the factors that influence them, and the risks of treatments for which we don't have the long term scientific data to support.

Pursuant to 28 U.S.C. 1746, I declare under the penalty of perjury that the foregoing is true and correct.

Geeta Nangia, MD

Geeta Nangia MD

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[15] June 2016 *Proposed Decision Memo for Gender Dysphoria and Gender Reassignment Surgery* Centers for Medicaid and Medicare Services

[16] June 2016 *Memo for Gender Dysphoria and Gender Reassignment* Centers for Medicaid and Medicare Services

[17] Feb 2022 *Medicine and Gender Transidentity in Children and Adolescents* French National Academy of Medicine

[18] June 2022 *Florida Medicaid Generally Accepted Professional Medical Standards (GAPMS) Determination on the Treatment of Gender Dysphoria* Florida's Agency for Health Care Administration (AHCA)

Geeta Nangia, M.D.

Board Certified in Adult Psychiatry and Child & Adolescent Psychiatry

Phone (864) 318-9930• drnangia@jothgreenville.com

EDUCATION

Boston University School of Medicine — **Boston, MA**
Doctor of Medicine — May 2002

Boston University — **Boston, MA**
Bachelor of Arts Biochemistry, Molecular Biology — May 1998

INTERNSHIP AND RESIDENCY

Medical University of South Carolina — **Charleston, SC**
Child and Adolescent Psychiatry Fellow — June 2007

Medical University of South Carolina — **Charleston, SC**
General Psychiatry Resident — June 2006

EXPERIENCE

KNOWN AND LOVED — **Greenville, SC**
CEO — **2021-present**
Educating, equipping, and supporting the growth of healthy families in our region. Providing mental health education and support to parents, with a special focus on foster and adoptive families. Helping parents to establish secure and healthy attachments with children, thereby improving their mental health outcomes.

Journey of the Heart, LLC — **Piedmont, SC**
Child and Adolescent Psychiatrist — **2022-present**
Providing behavioral health care for children and families, specializing in complex cases and trauma.

Parkside Pediatrics Behavioral Health — **Greenville, SC**
Child & Adolescent Psychiatrist — **2018-2022**
Providing behavioral health care for children and families. Consulting with pediatricians in primary care.

Edward Via College of Osteopathic Medicine — **Spartanburg, SC**
Community Clinical Faculty and Lecturer — **2015-2020**
Taught medical students about the principles of childhood development and clinical psychiatry.

Carolina Center for Behavioral Health **Greer, SC**
Staff Psychiatrist **2015-2016**
Staffed inpatient unit for children and adults of all ages who were in need of acute crisis stabilization and mental health services.

The Well Planted Child, LLC **Bellefonte, PA**
Private Practice Consulting Psychiatrist **2014- 2015**
Provided school based consultation services for children with behavioral and/or academic difficulties. Assisted teachers in developing effective classroom management strategies and in creating accommodations for children with special needs.

Centre County Christian Academy **Bellefonte, PA**
Kindergarten Teacher **2014-2015**
Volunteered to be a primary teacher for morning academics at a private Christian school for an academic year. Tested classroom modifications and strategies typically recommended by clinical mental health professionals to assess their efficacy. Provided consulting services for children with special needs or behavioral issues.

Diversified Treatment Alternatives **Lewisburg, PA**
Child and Adolescent Psychiatrist **2012- 2015**
Provided evaluation and treatment for children in two residential care facilities. Provided care for a high risk youth population with a special focus on sexual abuse, sexual perpetration, and addiction. Supervised treatment teams who were providing trauma focused treatment for children. Provided care for a partial hospitalization program. Led educational parenting groups on development and attachment.

Sunpointe Health **State College, PA**
Child and Adolescent Psychiatrist **2011-2012**
Adult Psychiatry Inpatient Attending Psychiatrist
Provided inpatient adult psychiatric evaluation and treatment in an acute care setting at Mount Nittany Medical Center. Provided psychiatric consultation for children and for the BLAST Intermediate Unit which serves multiple school districts in the region. Taught medical students during their psychiatry rotation.

Palmetto Christian Psychiatry **Charleston, SC**
Private Practice Psychiatrist **2010-2011**
Provided psychiatric evaluation and treatment for individuals of all ages. Provided individual and family psychotherapy.

Susquehanna Health Medical Group **Williamsport, PA**
Child and Adolescent Psychiatrist **2007-2010**
Adult Psychiatry Inpatient Attending Psychiatrist
Spearheaded The Department of Child Psychiatry at a local community hospital with a mission to serve children who otherwise did not have access to mental health care. Performed evaluations and treatment for children and adults with a

broad spectrum of mental health and developmental disorders. Actively conducted family therapy, psychodynamic therapy, cognitive behavioral therapy, play therapy, as well as group therapy. Provided medication management. Worked with outlying community agencies in all arenas, consulting with and for schools, social services, court systems, pediatricians and primary care physicians, wrap around services, and partial hospitalization programs to coordinate care for children. Taught in the family medicine residency program weekly. Supervised staff therapist and psychiatric nurse. Provided courtroom testimony in custody and abuse cases. Performed on call duties on the adult inpatient unit.

Carolina Center for Behavioral Health **Greer, SC**
Staff Psychiatrist **2006-2007**
Served in a weekend moonlighting position servicing an adult inpatient population while in fellowship training. Managed crisis calls, multiple levels of acuity, and geriatric patients on weekends during my fellowship.

HONORS

Susquehanna Physician Appreciation Award, 2008
Family Medicine Residency Teaching Certificate 2008
Circle of Excellence in Teaching 2003
Ruth Hunter Johnson Prize in Psychiatry 2002

LICENSURES

Pennsylvania Medical License MD 431126 inactive
South Carolina Medical License MD 26215 active

CERTIFICATIONS

American Board of Psychiatry and Neurology, General Psychiatry
American Board of Psychiatry and Neurology, Child and Adolescent Psychiatry

Appendix Attachment

9

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

Expert Declaration of G. Kevin Donovan, M.D., M.A.

I, G. Kevin Donovan, M.D., M.A., hereby declare and state as follows:

.

1. I am over the age of 18. I have actual knowledge of the matters stated herein. If called to testify in this matter, I would testify truthfully and based on my expert opinion.

2. I have been retained by counsel for defendants as an expert in connection with the above captioned litigation. The purpose of this report is to summarize a report that I prepared in support of the Agency for Healthcare Administration's Generally Accepted Professional Medical Standards on the Treatment of Gender Dysphoria. A copy of my report is attached and incorporated by reference as Exhibit "A" to this declaration. I also respond to criticisms of my report made by Dan H. Karasic, M.D.

I. Background and Qualifications

Qualifications

3. The information provided regarding my professional background, experiences, publications, and presentations are detailed in my curriculum vitae (CV). A true and correct copy of my most up-to-date CV is attached.

4. I am a Professor Emeritus of Pediatrics at Georgetown University School of Medicine, and Director emeritus of the Pellegrino Center for Clinical Bioethics at Georgetown University. I have been on the Georgetown Medical School faculty since 2012. Prior to that, I was on the faculty at the University of Oklahoma medical school and Baylor College of Medicine, for over 30 years combined.

5. I received my medical training at the University of Oklahoma, and Baylor College of Medicine, and further training in medical research at the National Institutes of Health in Bethesda Maryland.

6. I trained in medical ethics at Georgetown University, Kennedy Institute of Ethics and completed my Masters in bioethics at the University of Oklahoma. I was the founding director of the Oklahoma Bioethics Center.

7. I have chaired the Institutional Research Ethics Board (IRB) for 17 years, at SFH. This is the designated organization that oversees the safety of human subjects participating in medical research.

8. My professional interests in bioethics include informed consent, shared decision-making, beginning of life issues, end-of-life issues, brain death, as well as medical research.

9. I have studied and been consulted on issues surrounding transgender patients, both minors and adults, locally and nationally.

10. For ethical as well as medical reasons, I have neither prescribed medications nor referred for surgery any patients that consider themselves transgender.

11. Subsequently, none of my opinions are biased by professional income being generated by these activities nor by my professional reputation relying primarily on these diagnoses.

Compensation

12. I am being compensated for my work on this matter at a rate of $350 per hour for my expert opinion and support services. My compensation in no way depends on the outcome of the litigation, the opinions I express, or testimony that I may provide.

Basis for Opinions

13. In preparing my report, I have relied on by years of experience as a physician and medical ethicist, my review of the literature as documented in my report, and established principles of medical ethics.

14. My perspective is valuable as an unbiased observer. It is analogous to our work on the evaluation of the issues surrounding the diagnosis of brain death: when questions have arisen about the diagnosis and practice in brain death, which is the primary pathway towards organ donation, it has been seen as preferable to have these issues examined and evaluated by unbiased observers more than by transplant surgeons or organ recipients.

15. Likewise, it is difficult for one whose professional reputation and financial compensation has depended heavily on a single diagnosis to maintain sufficient distance to render a completely unbiased opinion about it.

The Status of the Question

16. The biggest problem with a diagnosis of transgenderism is the conceptual one. When a biological male presents himself, declaring that he is in fact a woman, (or the reverse) the commonsense response is not to take this at face value. This would be true for any similar aberration. Our first response would not be to immediately clothe him in a dress, any more than we would attempt to clothe him in feathers if he believed he were a chicken. This would represent a misplaced and false compassion.

17. Nevertheless, this is the approach now being taken by many psychiatrists and surgeons and endorsed by medical societies. Perhaps as a result,

the number of young Americans describing themselves as "transgender" has exploded over the past decade, increasing by a factor of 20 to 40, based on surveys by the Centers for Disease Control and Prevention.

18. Concomitantly, there has also been a shift from a predominance of young males presenting early, 80% of whom would historically revert in their self-perception by the time they had completed puberty. We are now seeing much larger number of females. The two leading explanations for this unexplained phenomenon are greater social acceptance, or social contagion.

19. Beyond a patient's self-perception, there is no biochemical, hormonal, radiological, or genetic basis for confirming or differentiating these individuals.

20. The terminology applied to these patients has been changed from "transsexual" to gender identity disorder, to gender dysphoria, and now the term transgender is commonly favored. It is far broader, and can encompass any nonconformity with rigid traditional sex roles.

21. The treatment approach is to provide puberty blockers for young prepubertal patients, followed by cross sex hormones, followed by various levels of surgical reconstruction as determined by the patient, including castration, penectomy, mastectomy, and hysterectomy.

22. The enthusiasm for these interventions has progressed to the point where an initial psychological evaluation of the patient has often become minimal or almost nonexistent. Planned Parenthood clinics, which have become widely advertised providers of these hormonal interventions, have promised a prescription for patients after a single visit, sometimes within the same day.

23. One justification for the willingness to initiate this process with such alacrity is the claimed expectation of great benefit with minimal harm. This is particularly true in the provision of puberty blockers for the youngest patients, who are told that the effects will be completely reversible. However, with further study it has come to light that complications such as arrested maturation, physiological changes, fertility challenges, hematological changes, and osteoporosis can all result from treatment with these puberty blockers and may be irreversible.

RESPONSE TO DR. KARASIC

24. My discussion of the ethics of providing transgender care has been criticized by Dr. Dan Karasic. He views Florida's actions in terminating Medicaid coverage of gender affirming care as problematic for those who were previously approved for that same coverage. He states "Florida's actions amount to forced detransition" and goes on to admit "there has been little research on those forced to detransition". He fails to see that those pathways upon which he has set patients for "gender affirming care" should have included protocols for the "detransitioning" that patients are already voluntarily seeking in increasing numbers. To place patients on such a one-way conveyor belt of treatment is to fail to account for all their needs, an ethical as well as a medical failure on their part. It would be analogous in the present opioid epidemic to treating a patient's pain with opioids but not knowing how to wean them off successfully. Were such an exit strategy in place, it could be used for all who needed it. This would include not just patients who lose their insurance coverage, but could also extend to patients who develop neurologic injury significant enough to cause a loss of "gender identity". Would a patient in an ICU or a nursing home situation continue to receive these treatments? To begin treatment of such patients without knowing how to successfully discontinue such treatment, and to not warn patients of this issue in advance, again reflects unfavorably on the issue of informed consent for the treatment of patients identifying as transgender.

CONCLUSION

25. The nature of true medical science is to form a hypothesis, test the proposed interventions, and evaluate the results both positive and negative, and to continue to be open to questioning the process going forward. In the present climate, this does not appear to be possible for the approach to patients claiming to be transgender. Questioning any part of the diagnosis or treatment approach has triggered a massive and vituperative response. Even those wanting to use only a psychotherapeutic approach without progressing to other stages have been condemned as attempting "conversion therapy". In extreme cases, this has been declared illegal.

26. There is no obvious explanation for this lopsided state of affairs. There is unfortunately some precedent. In a previous generation, it was proposed and accepted for a time that serious mental illness could be treated by frontal lobotomy, i.e., drilling into the front of the brain. This was in fact done to the sister of Pres. John F. Kennedy, and she subsequently was rendered permanently mentally deficient. Enthusiasm for this approach waned, and it is rarely discussed today. Our responsibility is to ensure that we are not living in an analogous time, triggered by medical hubris.

27. The greatest safeguard against this type of medical misadventure is to be completely open about what we know, and what we do not yet know. When certainty is lacking about the potential benefits and harms of a therapeutic approach, treatment should be conducted with fully informed consent and within the context of clinical trials. This should have been done before the widespread employment of hormonal and surgical interventions for what appears to be a primarily psychological problem. The greatest difficulty occurs when you find that you have your cart before the horse. You are not making progress when you are moving rapidly, but in the wrong direction.

I declare under penalty of perjury under the laws of the United States of America and the Florida that the foregoing is true and correct. Executed this 2d day of October, 2022.

//s/G. Kevin Donovan, M.D., M.A.

G. Kevin Donovan, M.D., M.A.

GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE

CURRICULUM VITAE

Gerard Kevin Donovan, MD, MA

PERSONAL INFORMATION:

Home Address:
32 Westwind Dr.
Sand Springs, OK 74063

202-507-3825

Office Address:
Center for Clinical Bioethics
Georgetown University Medical Center
4000 Reservoir Road, NW, #D236
Washington, DC 20007
202-687-1122 (office)
202-687-8955 (fax)

LICENSURE:

State: District of Columbia
License No: CS1200608
Issue date: 01/01/2013

State of Oklahoma
License No: 10680
Initial date: June 1975

CERTIFICATION

Board of Certification: American Board of Pediatrics
Date of Certification: 1980 (Diplomate) Permanent

Sub-Specialty Board: Pediatric Gastroenterology
Date of Certification: 1990
Date of re-certification: 1997, 2005

EDUCATION:

Undergraduate:
University of Notre Dame
South Bend, IN
1966-1970
BA

Medical Education:
University of Oklahoma
Oklahoma City, OK
1970-1974
MD

Graduate Education:
University of Oklahoma
Norman, OK
1994
MA in Bioethics

Internship

	& Residency:	Baylor College of Medicine Pediatrics Houston, TX 1974-1977 Russell Blattner, M.D.
	Fellowship:	University of Oklahoma Pediatric Gastroenterology Oklahoma City, OK 1977-1979 Owen Rennert, M.D.
	Fellowship:	National Institutes of Health Developmental Gastroenterology and Nutrition, Neonatal and Pediatric Medicine Branch, National Institute of Child Health and Human Development Bethesda, MD 1979-1980 Norman Kretchmer, M.D.
PROFESSIONL EXPERIENCE	Title:	Director, Pellegrino Center for Clinical Bioethics Georgetown University Medical Center Professor, Department of Pediatrics
	Address:	4000 Reservoir Rd NW Washington, DC 20007
	Dates of Service:	2012-2020
	Title: Institution:	Senior Clinical Scholar Kennedy Institute of Ethics Georgetown University Washington, D.C.
	Dates of Service:	2015-2021
	Title: Institution:	Director, Oklahoma Bioethics Center The University of Oklahoma College of Medicine, Tulsa
	Address: Date(s) of Service:	4502 East 41st St; Tulsa, OK 74135 1990 to 2012
	Title:	Professor and (Interim)Chair Department of Pediatrics The University of Oklahoma College of Medicine, Tulsa, 2009-2011

	Professor and Vice-Chair
Institution:	The University of Oklahoma College of Medicine, Tulsa
Address:	4502 East 41st St; Tulsa, OK 74135
Date(s) of Service:	1996 to 2012
Title:	Chief, Division of Pediatric Gastroenterology and Nutrition
Institution:	The University of Oklahoma College of Medicine, Tulsa
Address:	4502 East 41st St; Tulsa, OK 74135
Date(s) of Service:	2007 to 2012
Title:	Chief, Division of Pediatric Gastroenterology Department of Pediatrics
Institution:	The University of Oklahoma College of Medicine, Tulsa
Address:	4502 East 41st St; Tulsa, OK 74135
Date(s) of Service:	1982-2003
Title:	Associate Professor (Tenured) Department of Pediatrics
Institution:	The University of Oklahoma College of Medicine, Tulsa
Address:	4502 East 41st St; Tulsa, OK 74135
Date(s) of Service:	1988-1996
Title:	Assistant Professor Department of Pediatrics
Institution:	The University of Oklahoma College of Medicine, Tulsa
Address:	4502 East 41st St; Tulsa, OK 74135
Date(s) of Service:	1982-1988
Title:	Assistant Professor Department of Pediatrics
Institution:	Baylor College of Medicine
Address:	Houston, TX
Date(s) of Service:	1980-1982
Title:	Clinical Associate
Institution:	National Institute of Child Health and Human Development, NIH
Address:	Bethesda, MD
Date(s) of Service:	1979-1980

HONORS and AWARDS	Award:	Gold Lifetime Humanism Honor Society Award for Exemplary Demonstration of Respect for Human Beings through the Practice and Teaching of Medicine
	Institution/Organization:	The Gold Foundation
	Date:	August 2005
	Award:	Honored Member
	Institution/Organization:	American Registry of Outstanding Professionals
	Date:	2005
	Award:	Humanism in Medicine Award: Recognizing the Integration of Humanism in the Delivery of Health Care to Patients and Their Families
	Institution/Organization:	Healthcare Foundation of New Jersey/ Gold Humanism Society
	Date:	2000
	Award:	**Knighthood:** Knight Grand Cross Vatican
	Institution/Organization:	Equestrian Order of the Holy Sepulcher of Jerusalem
	Date:	1994
	Award:	Listed
	Institution/Organization:	Best Doctors in America Database
	Date:	2005
	Award:	Listed
	Institution/Organization:	Who's Who in the Southwest
	Date:	1994 to Present
	Award:	Listed
	Institution/Organization:	Who's Who Worldwide
	Date:	1992 to Present
	Award:	Founder's Award for Outstanding Contributions to Research and Medicine
	Institution/Organization:	University of Tulsa, 1992

PROFESSIONAL SOCIETY MEMBERSHIP:

Society Name: American Academy of Pediatrics
Leadership Role (if appropriate): Fellow
Date(s) of Membership: 1980

Society Name: American Academy of Pediatrics
Leadership Role: Section on Gastroenterology
Date(s) of Membership: 1990-present

Society Name: American Academy of Pediatrics
Leadership Role (if appropriate): Section on Bioethics
Date(s) of Membership: 1989-2005

Society Name: American Academy of Pediatrics
Leadership Role: Bioethics Executive Committee
Date(s) of Membership: 1993-1996

Society Name: American Academy of Pediatrics
Leadership Role : Executive Committee Chair, Section of Bioethics
Date(s) of Membership: 1996-1998

Society Name: American Academy of Pediatrics
Leadership Role : Committee on Bioethics
Date(s) of Membership: 1999-2005

Society Name: American Medical Association
Dates of Membership: 1980-2011

Society Name: American Society for Law, Medicine & Ethics
Dates of Membership: 1995-2010

Society Name: American Society for Bioethics and Humanities
Dates of Membership: 1997- 2019

Society Name: Gold Humanism Honor Society
Dates of Membership: 2005 -

Society Name: Hastings Center, Associate Member
Dates of Membership: 1992 - present

Society Name: Kennedy Institute of Ethics, Lifetime Member
Dates of Membership: 1995 to present

Society Name: North American Society for Pediatric Gastroenterology Hepatology and Nutrition Ethics Committee
Leadership Role (if appropriate):
Dates of Membership: 2004-2007

Society Name: Oklahoma Association for Healthcare Ethics
Leadership Role : First Vice President
Dates of Membership: 1999

Society Name: Oklahoma Genetics Advisory Council
Dates of Membership: 2008-2010

Society Name: Oklahoma Genetics Advisory Council
Leadership Role: Newborn Screening Programs & Pediatrics Committee
Dates of Membership: 2002

Society Name: Oklahoma State Medical Association
Leadership Role : Bioethics Committee 1988-2004
Dates of Membership: 1982-2012

Society Name: Oklahoma State Medical Association
Leadership Role : Council on Medical Services
Dates of Membership: 1984

Society Name: Oklahoma State Medical Association
Leadership Role : Geriatrics Task Force
Dates of Membership: 1998-2000

Society Name: Medical Ethics and Competency Committee
Leadership Role:
Dates of Membership: 1988-2004

Society Name: St. Luke Society Physician's Guild
Leadership Role : Member
Dates of Membership: 1988-92

Society Name: St. Luke Society Physician's Guild
Leadership Role:President
Dates of Membership: 1988-90

Society Name: Tulsa County Medical Society
Dates of Membership: 1988-2012

Society Name: Tulsa County Medical Society
Leadership Role : Chairman, Committee on Ethics
Dates of Membership: 2005

Society Name: Tulsa County Medical Society
Leadership Role : Member, Planning & Development Committee
Dates of Membership: 2005

Society Name: Tulsa County Medical Society

Leadership Role : Chair, Ethics Committee
Dates of Membership: 1998-2002

Society Name: Tulsa County Medical Society
Leadership Role : Member, Council on Medical Education
Dates of Membership: 1986-1988

Society Name: Tulsa County Medical Society
Leadership Role : Member ,Council on Medical Services
Dates of Membership: 1984-1985

Society Name: Tulsa County Medical Society
Leadership Role : Member, Planning and Development Committee
Dates of Membership: 2001-2003

Society Name: Tulsa County Medical Society
Leadership Role: Member, Scholarship Fund Board of Trustees
Dates of Membership: 1997-2004

Society Name: Tulsa County Medical Society
Leadership Role : Delegate
Dates of Membership: 2007-present

Society Name: Tulsa County Medical Society
Leadership Role : Alternate Delegate to OSMA
Dates of Membership: 1994, 2005-2006

PUBLIC SERVICE

Name of Editorial Board: Academic Medicine
Role/Status: Consulting Editor
Date(s) of Service: 1995-2000

Name of Editorial Board: AAP Grand Rounds
Role/Status: Consulting Editor
Date(s) of Service: 1996-2001

Name of Editorial Board: American Journal of Diseases of Children
Role/Status: Reviewer
Date(s) of Service: 1994-1999

Name of Editorial Board: Journal of Pediatric Gastroenterology and Nutrition
Role/Status: Reviewer
Date(s) of Service: 1994-2000

Name of Organization: American Academy of Pediatrics
Role/Status: Executive Committee- Bioethics Section
Date(s) of Service: 1992-2002

Name of Community Organization: American Academy of Pediatrics
Role/Status: Chair, Bioethics Section
Date(s) of Service: 1995-1998

Name of Organization: American Academy of Pediatrics
Role/Status: Liaison, Committee on Bioethics
Date(s) of Service: 1999-2010

Name of Organization: American Academy of Pediatrics
Role/Status: Nominations Committee
Date(s) of Service: 2006-2007

Name of Organization: American Liver Foundation
Role/Status: Scientific Advisory Board—Oklahoma Chapter
Date(s) of Service: 1984-1990

Name Community Organization: Crohn's and Colitis Foundation of America
Role/Status: Board of Trustees—Oklahoma Chapter
Date(s) of Service: 1992-2010

Name of Community Organization: Crohn's and Colitis Foundation of America
Role/Status: Chairman, Medical Advisory Committee
Date(s) of Service: 1990-94

Name of Community Organization: National Foundation for Ileitis and Colitis
Role/Status: Scientific Advisory Board—Oklahoma Chapter
Date(s) of Service: 1982-88

Name of Organization: North American Society for Pediatric Gastroenterology
Role/Status: Hepatology and Nutrition, Ethics Committee
Date(s) of Service: 2004-2007

Name of Community Organization: Oklahoma Chapter of AAP
Role/Status: Chair, Bioethics Committee
Date(s) of Service: 1999

Name of Community Organization: Oklahoma Chapter of AAP
Role/Status: Executive Committee
Date(s) of Service: 1988-1990

Name of Community Organization: Oklahoma Chapter of AAC
Role/Status: Co-chairman for Membership
Date(s) of Service: 1984-1986

Name of Community Organization: PEW National Roundtable—Campus Education
Role/Status: Invited participant—Clinical Education Forum
Date(s) of Service: 1997

Name of Editorial Board/Study Section/Community Organization: Southern Society for Pediatric Research
Role/Status: Chair: GI Section Meeting, New Orleans, LA
Date(s) of Service: January 1987

Name of Editorial Board/Study Section/Community Organization: Southern Society for Pediatric Research
Role/Status: Research Paper Judge
Date(s) of Service: 1986

Name of Editorial Board/Study Section/Community Organization: United Organ Sharing Network (Lifeshare Transplant Donor Services of Oklahoma)
Role/Status: Board of Directors--Oklahoma
Date(s) of Service: 1992-2006

Name of Editorial Board/Study Section/Community Organization: Attorney General of Oklahoma Task Force on EOL Issues
Role/Status: member
Date(s) of Service: 2004-present

Name of Editorial Board/Study Section/Community Organization: Birthright Inc of Tulsa
Role/Status: Chairman, Board of Directors
Date(s) of Service: 1999-present

Name of Editorial Board/Study Section/Community Organization: Catholic Diocese of Tulsa
Role/Status: Medical Ethics Consultant
Date(s) of Service: 2005-present

Name of Editorial Board/Study Section/Community Organization: Catholic Diocese of Tulsa
Role/Status: Director of Healthcare Issues
Date(s) of Service: 2004-present

Name of Editorial Board/Study Section/Community Organization: Hillcrest HealthCare System
Role/Status: Member, Medical Staff Committee
Date(s) of Service:2006-2007

Name of Editorial Board/Study Section/Community Organization: LifeShare Transplant Donor Services of Oklahoma
Role/Status: Board of Directors
Date(s) of Service: 2004-2006

Name of Editorial Board/Study Section/Community Organization: LifeShare Transplant Donor Services of Oklahoma
Role/Status: Advisory Board

Date(s) of Service: 2007

Name of Editorial Board/Study Section/Community Organization: Oklahoma Health Research Committee
Role/Status: Member
Date(s) of Service: 1997-98

Name of Editorial Board/Study Section/Community Organization: Oklahoma Association for Healthcare Ethics, Inc.
Role/Status: Charter Member and Second Vice President
Date(s) of Service: 1996-98

Name of Editorial Board/Study Section/Community Organization: Oklahoma Association for Healthcare Ethics, Inc.
Role/Status: First Vice President
Date(s) of Service: 1999

Name of Editorial Board/Study Section/Community Organization: Neighbor for Neighbor Free Clinic
Role/Status: Volunteer
Date(s) of Service: 1982-2006

Name of Editorial Board/Study Section/Community Organization: Indian National Council, Boy Scouts of America
Role/Status: Executive Council, Troop 173
Date(s) of Service: 1974-1990

Name of Editorial Board/Study Section/Community Organization: Indian National Council, Boy Scouts of America
Role/Status: Board of Review, Eagle District
Date(s) of Service: 1994

Name of Editorial Board/Study Section/Community Organization: St. Luke's Society Catholic Physicians Guild
Role/Status: President
Date(s) of Service: 1990-1995

Name of Editorial Board/Study Section/Community Organization: St. Mary's Elementary School
Role/Status: Sex education instructor
Date(s) of Service: 1986-1994

Name of Editorial Board/Study Section/Community Organization: TCMS Committee on Ethics
Role/Status: Chairman
Date(s) of Service:2005-present

Name of Editorial Board/Study Section/Community Organization: TCMS
Role/Status: Delegates to the OSMA House of Delegates
Date(s) of Service: 2006-2009

Name of Editorial Board/Study Section/Community Organization: TCMS Planning & Development Committee
Role/Status: Member
Date(s) of Service: 2005

Name of Editorial Board/Study Section/Community Organization: U.S. Immigration & Naturalization Service
Role/Status: Civil Surgeon for Resident Alien Exams
Date(s) of Service: 1988-90

Name of Editorial Board/Study Section/Community Organization: Metropolitan Tulsa Chamber of Commerce
Role/Status: Medical Ethics Seminar Planning Committee
Date(s) of Service: 1991

Name of Editorial Board/Study Section/Community Organization: University of Tulsa Board of Visitors
Role/Status: Department of Philosophy
Date(s) of Service: 1994

INVITED LECTURES:

Lectures and Workshops – National Pediatrics:

Title of Presentation: "Ethical Issues in Pediatric Patient Management"
Institution/Society Name: Specialty Pediatrics for the Primary Care Physician Symposium, North Texas Hospital for Children at Medical City Dallas; Dallas TX
Date of Presentation:2004 May 22

Title of Presentation: "Managing IBD: It's Treatment and Complications"
Institution/Society Name: Foundation for Clinical Research in Inflammatory Bowel Disease, Symposium, Tulsa, OK
Date of Presentation: 2003 April 1

Title of Presentation: "Ethical Issues in Drug Use and Research in Children"
Institution/Society Name: American Academy of Pediatrics, Annual Meeting, San Francisco
Date of Presentation: 2001 October 22

Title of Presentation: "Ethics in Resuscitation and Critical Care"
Institution/Society Name: Saint Francis Health System, 22nd Annual Adult & Pediatric Trauma Symposium,
Saint Francis Hospital, Tulsa, OK

Date of Presentation: 2001 September 26

Title of Presentation: "Feeding the Brain-Injured: Medical & Ethical Issues"
Institution/Society Name: Brain Injury Association of Oklahoma & The Department of Pediatrics, University of Oklahoma, College of Medicine, Tulsa, OK
Date of Presentation: 2001 September 14

Title of Presentation: "Care of Children Who Die and Their Families"
Institution/Society Name: Institute of Medicine, National Academy of Sciences, Washington, DC
Date of Presentation: 2001 September 8

Title of Presentation: "What Goes Down Must Come Up: But Is It Reflux?"
Institution/Society Name: Oklahoma Chapter, American Academy of Pediatrics, Tulsa, OK
Date of Presentation: 2001 May 3

Title of Presentation: "Reflux: Diagnosis & Treatment"
Institution/Society Name: Southern Medical Association Symposium, Kiawah, SC
Date of Presentation: 2000 July 11-15

Title of Presentation:
Institution/Society Name: Southern Medical Association Symposium, Kiawah, SC
Date of Presentation: 2000 July 11-15

Title of Presentation: "Hot Topics in Pediatric GI for the Year 2000"
Institution/Society Name: Southern Medical Association Symposium, Kiawah, SC
Date of Presentation: 2000 July 11-15

Title of Presentation: "Pediatric Nutrition: Update 2000"
Institution/Society Name: Southern Medical Association Symposium, Kiawah, SC
Date of Presentation: 2000 July 11-15

Title of Presentation: "Pediatric Ethics"
Institution/Society Name: Southern Medical Association Symposium, Kiawah, SC
Date of Presentation: 2000 July 11-15

Title of Presentation: "Acute and Chronic Abdominal Pain,"
Institution/Society Name: Osler Institute Pediatric Review Course, Dallas, TX
Date of Presentation: 1996 May 27

Title of Presentation: "Jaundice in Children"
Institution/Society Name: Osler Institute Pediatric Review Course, Dallas, TX
Date of Presentation: 1996 May 27

Title of Presentation: "Diarrhea and Vomiting"
Institution/Society Name: Osler Institute Pediatric Review Course, Dallas, TX
Date of Presentation: 1996 May 27

Title of Presentation: "Gastrointestinal Problems in Childhood"
Institution/Society Name: Osler Institute Pediatric Review Course, Dallas, TX
Date of Presentation: 1996 May 27

Title of Presentation: "Cost Effective Approaches to Management of Pediatric GI Problems"
Institution/Society Name: Oklahoma State Medical Association Annual Meeting, Tulsa, OK
Date of Presentation: 1996 April 26

Title of Presentation: "Chronic Recurrent Abdominal Pain in Childhood"
Institution/Society Name: Oklahoma State Medical Association Annual Meeting, Tulsa, OK
Date of Presentation: 1996 April 26

Title of Presentation: "Constipation and Encopresis in Infants and Children"
Institution/Society Name: Oklahoma State Medical Association Annual Meeting, Tulsa, OK
Date of Presentation: 1996 April 26

Title of Presentation: "Outpatient Diarrhea in Infants and Children"
Institution/Society Name: Oklahoma State Medical Association Annual Meeting, Tulsa, OK
Date of Presentation: 1996 April 26

Title of Presentation: "Grand Rounds on Incontinence"
Institution/Society Name: Southern Medical Association Assembly, Kansas City, MO
Date of Presentation: 1995 November 16

Title of Presentation: "Cases Studies in Pediatric Emergency"
Institution/Society Name: Southern Medical Association Assembly, Kansas City, MO
Date of Presentation: 1995 November 16

Title of Presentation: "Multispecialty Grand Rounds"
Institution/Society Name: Southern Medical Association Assembly, Kansas City, MO
Date of Presentation: 1995 November 16

Title of Presentation: "Cholesterol and Infant Nutrition"
Institution/Society Name: Southern Medical Association Symposium, Destin, FL
Date of Presentation: 1993 June 4

Title of Presentation: "Jaundice in Infancy" (with Dr. Daniel Plunket)
Institution/Society Name: Southern Medical Association Symposium, Destin, FL
Date of Presentation: 1993 June 4

Title of Presentation: "Office Management of Diarrhea"
Institution/Society Name: Southern Medical Association Symposium, Hot Springs, VA
Date of Presentation: 1992 May 1

Title of Presentation: "GER-Evaluation and Treatment"
Institution/Society Name: Southern Medical Association Symposium, Hot Springs, VA
Date of Presentation: 1992 May 1

Title of Presentation: "Nutrition and Lipids in the Pediatric Patient"
Institution/Society Name: Southern Medical Association Symposium, Hot Springs, VA
Date of Presentation: 1992 May 1

Title of Presentation: "Gastrostomy Tubes: Medical and Ethical Aspects"
Institution/Society Name: Current Problems in Pediatric Therapy: Pediatric Postgraduate Course XVIII, Fountainhead Lodge, Checotah, OK
Date of Presentation: 1992 April 11-12

Title of Presentation: "Medical and Ethical Considerations in Enteral Therapy"
Institution/Society Name: Current Problems in Pediatric Therapy: Pediatric Postgraduate Course XVIII, Fountainhead Lodge, Checotah, OK
Date of Presentation: 1992 April 11-12

Title of Presentation: "Office Management of Chronic Liver Disease in Children"
Institution/Society Name: Current Problems in Pediatric Therapy: Pediatric Postgraduate Course XVIII, Fountainhead Lodge, Checotah, OK
Date of Presentation: 1992 April 11-12

Title of Presentation: Moderator: "Inflammatory Bowel Disease: Contributory and Legal Factors, Diagnosis and Patient Management"
Institution/Society Name: CCFA Chapter Medical Symposium
Date of Presentation: 1992 February 22

Title of Presentation: "Feeding the Impaired Infant: Gastroenterology and Ethics Interface"
Institution/Society Name: American Academy of Pediatrics Seminar: Caring for Children in the 90s, Oklahoma City, OK
Date of Presentation: 1991 November 9

Title of Presentation: "Formula Intolerance in Infancy"
Institution/Society Name: Pediatric Society of Puerto Rico, San Juan
Date of Presentation: February 1991
Title of Presentation: "New Treatment for Inflammatory Bowel Disease"
Institution/Society Name: Pediatric Society of Puerto Rico, San Juan
Date of Presentation: February 1991

Title of Presentation: "Feeding the Impaired Infant: Gastroenterology and Ethics

Interface"
Institution/Society Name: Pediatric Society of Puerto Rico, San Juan
Date of Presentation: February 1991

Title of Presentation: "Chronic Diarrhea in Childhood"
Institution/Society Name: University of Arkansas, Family Practice Seminar, Ft. Smith, AR
Date of Presentation: 1988 November 16

Title of Presentation: "Peptic Ulcers in Childhood"
Institution/Society Name: University of Arkansas, Family Practice Seminar, Ft. Smith, AR
Date of Presentation: 1988 November 16

Title of Presentation: "Avoiding Litigation: the GI Patient"
Institution/Society Name: Current Problems in Pediatric Therapy: Pediatric Postgraduate Course XIII, Fountainhead Lodge, Checotah, OK
Date of Presentation: 1987 April 26

Title of Presentation: "NEC: Old and New Aspects"
Institution/Society Name: Horizons in Perinatology Seminar, Tulsa, OK
Date of Presentation: 1986 April 16

Title of Presentation: "IBD: Its Effect on the Family"
Institution/Society Name: National Foundation for Ileitis/Colitis-Oklahoma Chapter, Tulsa, OK
Date of Presentation: 1986 January 14

Title of Presentation: "Hepatitis: New Aspects of an Old Disease"
Institution/Society Name: AAP, APG, & SAM Regional Meeting: Adolescent and Ambulatory Pediatric Advances, Tulsa, OK
Date of Presentation: 1985 September

Title of Presentation: "Chronic Diarrhea and Reflux"
Institution/Society Name: American Academy of Family Physicians: Annual Oklahoma Meeting, Tulsa, OK,
Date of Presentation: 1984 April

Title of Presentation: "GI Problems in Infants and Children"
Institution/Society Name: Public Health Service: Indian Hospital Educational Seminars, Tulsa and Oklahoma City, OK
Date of Presentation: 1984 March

Title of Presentation: "Medical Writers Workshop"
Institution/Society Name: SSPR, New Orleans, LA
Date of Presentation: 1984 January

Title of Presentation: "Inflammatory Bowel Disease in Childhood"
Institution/Society Name: National Foundation for Ileitis and Colitis, Oklahoma

Chapter
Date of Presentation: 1983 May 16

Title of Presentation: "Shwachman Syndrome" with V.V. Michaels
Institution/Society Name: Birth Defects Annual Meeting, San Diego, CA
Date of Presentation: 1980 June 5

Title of Presentation: "Effect of D-Galactose on Fluid Loss in SBP Intolerance"
Institution/Society Name: Society for Pediatric Research Symposium, New York, NY
Date of Presentation: 1978 April

Lectures and Workshops: Regional (Oklahoma) Pediatrics:

Title of Presentation: "C. Difficile—Nor More Dangerous Than We Thought"
Institution/Society Name: Pediatric Grand Rounds
Date of Presentation: November 18, 2008

Title of Presentation: "Eosinophilic Esophagitis" (It's not just Reflux any more)
Institution/Society Name: Oklahoma Allergy & Asthma Society. Philbrook Museum of Art
Date of Presentation: April 26, 2008

Title of Presentation: "Vomiting and GETD"
Institution/Society Name: Pediatric Residents Academic Afternoon, SFH, Education Center
Date of Presentation: April 23, 2008

Title of Presentation: "GI Bleeds"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: March 26, 2008

Title of Presentation: "Is it ever justified to withdraw nutrition and hydration in pediatrics?"
Institution/Society Name: Pediatric Grand Rounds, Hillcrest HealthCare System, Tulsa
Date of Presentation: March 26, 2008

Title of Presentation: "Eosinophilic Esophagitis" (It's not just Reflux anymore)
Institution/Society Name: Pediatric Grand Rounds, Hillcrest HealthCare System, Tulsa
Date of Presentation: January 23, 2008

Title of Presentation: "Informed Consent"
Institution/Society Name: Pediatric Resident Academic Afternoon. Schusterman Center
Date of Presentation: September 12, 2007

Title of Presentation: "Pillow Angel" Ethics: Surgery and Hormonal Treatment for Growth Attenuation : presented with James Coldwell, MD and David Jelley, MD
Institution/Society Name: Pediatric Grand Rounds
Date of Presentation: September 11, 2007

Title of Presentation: "IBS Lecture"
Institution/Society Name: Pediatric Residents Afternoon, SFH Education Center
Date of Presentation: September 5, 2007

Title of Presentation: "Colon and EGD"
Institution/Society Name: Pediatric Residents Academic Afternoon, SFH Education Center
Date of Presentation: June 20, 2007

Title of Presentation: "Pediatric Gastroenterology Board Recertification Prep"
Institution/Society Name: Oklahoma Chapter American Academy of Pediatrics (OKAAP)
Date of Presentation: June 1, 2007

Title of Presentation: "Celiac Disease"
Institution/Society Name: Pediatric Residents Academic Afternoon, SFH Education Center
Date of Presentation: May 23, 2007

Title of Presentation: "Ethical Dimensions of Routine Clinical Encounters"
Institution/Society Name: Pediatric Residents Academic Afternoon, SFH Heart Center-B
Date of Presentation: April 18, 2007

Title of Presentation: "IBS in Childhood" and "Case Studies re: Abdominal Pain"
Institution/Society Name: Family Practice Academic Afternoon, OU Family Practice
Date of Presentation: February 2007

Title of Presentation: "TPN"
Institution/Society Name: Pediatric Residents Academic Afternoon, SFU Education Center
Date of Presentation: February 28, 2007

Title of Presentation: "What's New in IBS in Kids"
Institution/Society Name: Pediatric Grand Rounds
Date of Presentation: October 24, 2006

Title of Presentation: "Fluids and Electrolytes" and "Dehydration" (2 hours)
Institution/Society Name: Pediatric Residents Academic Afternoon, SFH Education Center

Date of Presentation: July 5, 2006

Title of Presentation: "Truthfulness with the Patient"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: May 24, 2006

Title of Presentation: "Futility and Withdrawal of Care"
Institution/Society Name: Pediatric Residents Academic Afternoon, SFH Education Center
Date of Presentation: April 26, 2006

Title of Presentation: "Accessing Healthcare: The Obligation to Treat"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: February 22, 2006

Title of Presentation: "Sterilization of Minors with Mental Disabilities"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: December 16, 2005

Title of Presentation: "Medical Learning Curves and Issue of Consent"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: October 26, 2005

Title of Presentation: "Witnessing Incompetent OR Inappropriate Behavior, Medical Misconduct"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: August 24, 2005

Title of Presentation: "Fluids & Electrolytes in the Pediatric Patient"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: August 24, 2005

Title of Presentation: "Consent Issues: The Need for Assent by Minors"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: April 27, 2005

Title of Presentation: "The Schiavo Case—Three Aras of Ethical Concern"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: March 20, 2005

Title of Presentation: "Truthfulness in the Physician-Patient Relationship"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: August 25, 2004

Title of Presentation: "Nutrition and Hydration for Infants and Children" and "Fluids and Electrolytes Practice"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: July 21, 2004

Title of Presentation: "Children as Research Subjects"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: May 26, 2004

Title of Presentation: "Barfology (GERD and Vomiting)
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: April 14, 2004

Title of Presentation: "Celiac Disease"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: December 10, 2003

Title of Presentation: "Withdrawing Care: The Adolescent Decision Maker"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: November, 12, 2003

Title of Presentation: "Total Parenteral Nutrition"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: September 17, 2003

Title of Presentation: "Fluids and Electrolytes in Pediatric Practice" and "Nutrition and Hydration for Infants and Children"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: July 9, 2003

Title of Presentation: "Problems in Diagnoses of Abdominal Pain"
Institution/Society Name: : Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: February 12, 2003

Title of Presentation: ""Nutrition & Hydration/Fluids & Electrolytes for Children"
Institution/Society Name: : Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: September 26, 2002

Title of Presentation: "Diet, Nutrition & Overweight Children"
Institution/Society Name: Mini-Med School for the Public, Schusterman Health Sciences Center
Date of Presentation: September 10, 2002

Title of Presentation: "Nutrition & Hydration for Children" and "Fluids & Electrolytes for Children"
Institution/Society Name: : Pediatric Residents Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: July 3, 2002

Title of Presentation: "GERD"
Institution/Society Name: Student Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: June 26, 2002

Title of Presentation: "Issues in Genetics"
Institution/Society Name: Student Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: May 2, 2002

Title of Presentation: "Refusal of Consent by Minors"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: April 24, 2002

Title of Presentation: "Witnessing Incompetent or Inappropriate Behavior"
Institution/Society Name: Pediatric Grand Rounds, Schusterman Health Sciences Center
Date of Presentation: February 27, 2002

Title of Presentation: ""Obligation to Treat"
Institution/Society Name: Pediatric Grand Rounds, Schusterman Health Sciences Center
Date of Presentation: January 30, 2002

Title of Presentation: "Religious-Cultural Issues in Treatment"
Institution/Society Name: Pediatric Grand Rounds, Schusterman Health Sciences Center
Date of Presentation: October 24, 2001

Title of Presentation: "Childhood Leukemia: Medical and Ethical Issues"
Institution/Society Name: Pediatric Grand Rounds, Schusterman Health Sciences

Center
Date of Presentation: October 2, 2001

Title of Presentation: "Lying for Patient: Ethical Issues"
Institution/Society Name: Student Academic Afternoon Schusterman Health Sciences Center
Date of Presentation: September 27, 2001

Title of Presentation: "Nutrition and Hydration in Pediatric Care" and "Fluids and Electrolytes in Pediatric Care"
Institution/Society Name: Student Academic Afternoon. Schusterman Health Sciences Center
Date of Presentation: September 13, 2001

Title of Presentation: "Confidentiality and the Mature Minor"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon
Date of Presentation: April 25, 2000

Title of Presentation: "Palliative Care in Pediatric Practice"
Institution/Society Name: Grand Rounds, St. Francis Hospital
Date of Presentation: April 17, 2000

Title of Presentation: "Withdrawal of Support from Impaired Newborns
Institution/Society Name: Neonatal Conference, St. Francis Hospital
Date of Presentation: April 17, 2000

Title of Presentation: "Fluids &Electrolytes in Nutrition for Children"
Institution/Society Name: Student Academic Afternoon, Schusterman Health Sciences Center, Tulsa
Date of Presentation: November 16, 2000

Title of Presentation: "Fluids & Electrolytes in Nutrition for Children"
Institution/Society Name: Academic Afternoon—Students, OU Health Sciences Center, Tulsa
Date of Presentation: September 8, 1999

Title of Presentation: "Formula Intolerance"
Institution/Society Name: Academic Afternoon-Family Medicine, OU Health Sciences Center
Date of Presentation: May 25, 1999

Title of Presentation: "Pediatric Gastritis"
Institution/Society Name: Hillcrest HealthCare System, Tulsa, Pediatric Conference

Date of Presentation: April 30, 1999

Title of Presentation: "Gastro-esophageal Reflux"
Institution/Society Name: Clinic Conference, OU Health Sciences Center, Tulsa
Date of Presentation: February 25, 1999

Title of Presentation: "Pancreatitis in Children"
Institution/Society Name: Grand Rounds, OU Health Sciences Center, Tulsa
Date of Presentation: January 27, 1999

Title of Presentation: "Fluids and Electrolytes"
Institution/Society Name: Grand Rounds, OU Health Sciences Center, Tulsa
Date of Presentation: September 24, 1998

Title of Presentation: "Wilson's Disease: Hepato-lenticular Degeneration"
Institution/Society Name: Grand Rounds, Children's Medical Center
Date of Presentation: February 3, 1998

Title of Presentation: Grand Rounds
Institution/Society Name: St. Francis Hospital
Date of Presentation: December 17, 1997

Title of Presentation: "Treatment of GI Problems in Children"
Institution/Society Name: Grand Rounds Tulsa Regional Medical Center
Date of Presentation: November 23, 1997

Title of Presentation: "Anatomic Lesions in the Liver"
Institution/Society Name: Grand Rounds, St. Francis Hospital
Date of Presentation: November 8, 1995

Title of Presentation: "Gastroenterology Potpourri"
Institution/Society Name: Grand Rounds, Hillcrest Medical Center
Date of Presentation: May 23, 1995

Title of Presentation: "The Pediatrician and the Child with Serious Chronic Illness"
Institution/Society Name: Grand Rounds—Panelist, St. John 's Medical Center
Date of Presentation: November 9, 1993

Title of Presentation: "Gastrointestinal Problems of Pediatric Clients in Primary Care"
Institution/Society Name: OUHSC and UCAT Family Nurse Practitioners, Tulsa (& Oklahoma City by Video)
Date of Presentation: October 25, 1993

Title of Presentation: "Hepato Lenticular Degeneration (Wilson's Disease): Presenting as Chronic Fatigue Syndrome" with Dr Coldwell
Institution/Society Name: Pediatric Grand Rounds, Children's Medical Center

Date of Presentation: September 7, 1993

Title of Presentation: "Pediatric Gastroenterology for Nurses"
Institution/Society Name: University of Tulsa Nursing Students
Date of Presentation: May 11, 1993

Title of Presentation: "The Many Faces of E-B Virus Infection: with Drs. Sharma & Plunkett
Institution/Society Name: Grand Rounds, St. Francis Hospital
Date of Presentation: February 15, 1993

Title of Presentation: "IBD in Children and Adolescents"
Institution/Society Name: CCFA Guest Speaker, Tulsa Regional Medical Center
Date of Presentation: December 10, 1991

Title of Presentation: "Hepatitis ABCDs"
Institution/Society Name: Hillcrest Medical Center
Date of Presentation: August 27, 1991

Title of Presentation: "Pediatric Hyperalimentation"
Institution/Society Name: Hillcrest Burn Unit
Date of Presentation: September 14, 1988

Title of Presentation: "Childhood Peptic Disease"
Institution/Society Name: Surgery Grand Rounds
Date of Presentation: March 3, 1988

Title of Presentation: "Nutrition in Childhood and Adolescence"
Institution/Society Name: Oklahoma City, OK
Date of Presentation: February 25, 1988

Title of Presentation: "Adolescent Nutrition"
Institution/Society Name: Family Practice Research Grant Program
Date of Presentation: June 30, 1987

Title of Presentation: "Failure to Thrive"
Institution/Society Name: Dietetic Intern's Program, St. Francis Hospital
Date of Presentation: May 21, 1987

Title of Presentation: "Symptomatic Chilaiditi's Syndrome"
Institution/Society Name: Research Day, OU College of Medicine, Tulsa
Date of Presentation: May 15, 1987

Title of Presentation: "Management of Diarrhea/Constipation:
Institution/Society Name: Family Practice Lecture Series
Date of Presentation: December 16, 1986

Title of Presentation: "Organ Transplantation"
Institution/Society Name: Grand Rounds, Hillcrest Medical Center

Date of Presentation: November 25, 1986

Title of Presentation: "CPC"
Institution/Society Name: Grand Rounds, St. Francis Hospital
Date of Presentation: July 15, 1986

Title of Presentation: "Nutritional Aspects of Liver Disease"
Institution/Society Name: St. Francis Hospital
Date of Presentation: March 18, 1986

Title of Presentation: "Early Diagnosis of Inflammatory Bowel Disease"
Institution/Society Name: Family Practice Continuing Education Seminar, Tulsa
Date of Presentation: March 1986

Title of Presentation: "Short Gut Syndrome"
Institution/Society Name: Intensive Care Lecture Series, St. Francis Hospital
Date of Presentation: January 9, 1986

Title of Presentation: "Hirschsprung's Disease"
Institution/Society Name: Grand Rounds
Date of Presentation: November 26, 1985

Title of Presentation: "Tyrosinemia in Tulsa" (Donovan and Mayes)
Institution/Society Name: Grand Rounds
Date of Presentation: September 10, 1985

Title of Presentation: "Gastroesophageal Reflux"
Institution/Society Name: Respiratory Diagnostic Services
Date of Presentation: June 1985

Title of Presentation: "Liver Transplantation"
Institution/Society Name: American Liver Foundation, Tulsa Chapter
Date of Presentation: May 16, 1985

Title of Presentation: "The Gastroenterology Patient"
Institution/Society Name: Staff Dietitian Internship Lecture
Date of Presentation: December 1984

Title of Presentation: "Problems in Infant Nutrition"
Institution/Society Name: University of Oklahoma Reunion Seminar, OUHSC
Date of Presentation: November 1, 1984

Title of Presentation: "Failure to Thrive"
Institution/Society Name: Grand Rounds (Donovan, Barber and Jones)
Date of Presentation: September 4, 1984

Title of Presentation: "Infant Feeding"
Institution/Society Name: WIC Nurses Program
Date of Presentation: August 31, 1984

Title of Presentation: "Crohn's Disease"
Institution/Society Name: Grand Rounds
Date of Presentation: July 10, 1984

Title of Presentation: "Development of the GI Tract"
Institution/Society Name: Tulsa District Dietetic Association
Date of Presentation: May 1984

Title of Presentation: "Encopresis"
Institution/Society Name: Grand Rounds
Date of Presentation: March 6, 1984

Title of Presentation: "Dietary Aspects of GI Disease"
Institution/Society Name: Tulsa Dietetics Internship Lecture Series
Date of Presentation: November 15, 1983

Title of Presentation: "Pancreatitis"
Institution/Society Name: Grand Rounds
Date of Presentation: August 23, 1983

Title of Presentation: "Cholestatic Jaundice"
Institution/Society Name: Grand Rounds
Date of Presentation: March 15, 1983

Title of Presentation: "Pediatric Hyperalimentation"
Institution/Society Name: Grand Rounds "Donovan and Newmark"
Date of Presentation: November 16, 1982

Title of Presentation: "Chronic Inflammatory Bowel Disease and Growth Failure"
Institution/Society Name: Grand Rounds
Date of Presentation: August 24, 1982

Title of Presentation: "Wilson's Disease"
Institution/Society Name: Children's Medical Center Genetics Seminar
Date of Presentation: April 1, 1982

Lectures and Workshops: National and Regional Bioethics:

Title of Presentation: "The Role of Bioethics Committees"
Institution/Society Name: Oklahoma Bioethics Conference, OU College of Nursing, Oklahoma City, OK
Date of Presentation: November 7, 2008

Title of Presentation: "Is It Ever Justified to Withdraw Nutrition and Hydration in Pediatrics?"

Institution/Society Name: Pediatric Academic Societies: Bioethics Interest Group, Toronto, Canada
Date of Presentation: May 7, 2007

Title of Presentation: "Ethical Theories and Decision-Making"
Institution/Society Name: Oklahoma Bioethics Conference, OU College of Nursing, Oklahoma City, OK
Date of Presentation: November 9,2007

Title of Presentation: "Early Onset Alzheimer's: Ethical Issues"
Institution/Society Name: The New Face of Alzheimer's Symposium, Renaissance Convention Center, Tulsa, OK
Date of Presentation: June 12, 2007

Title of Presentation: "Recertification Review Made Easy"
Institution/Society Name: Oklahoma AAP, Tulsa, OK
Date of Presentation: June 1, 2007

Title of Presentation: "End-of-Life vs. Ending Life: A Transatlantic Perspective"
Institution/Society Name: European Association of Centres of Medical Ethics (EACME), Leuven, Belgium
Date of Presentation: September 29, 2006

Title of Presentation: "End of Life Decisions in Oklahoma—Ethics and the Law"
Institution/Society Name: Norman Regional Hospital, Education Center, Norman, OK
Date of Presentation: August 24, 2006

Title of Presentation: "Truthfulness with the Patient"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: May 24, 2006

Title of Presentation: "Co-Chair: Ethical Dilemmas in Pediatric Research are Universal: But the Perspectives Vary Between Cultures and Countries
Institution/Society Name: 2nd World Congress of Pediatric Gastroenterology, Hepatology and Nutrition, Paris, France
Date of Presentation: July 2, 2004

Title of Presentation: "Ethical Issues in Pediatric Patient Management"
Institution/Society Name: Specialty Pediatrics for the Primary Care Physician Symposium, North Texas Hospital for Children at Medical City, Dallas TX
Date of Presentation: May 22, 2004

Title of Presentation: "An Introduction to Bioethics & Hospital Ethics

Committees"
Institution/Society Name: Physicians CME, Norman Regional Hospital, Norman, OK
Date of Presentation: May 7, 2004

Title of Presentation: "Ethics 101: An Introduction to Bioethics"
Institution/Society Name: Oklahoma Association for Healthcare Ethics Annual Symposium, Oklahoma City, OK
Date of Presentation: November 21, 2003

Title of Presentation: "Clergy Participation in End-of-Life Decision Making?
Institution/Society Name: St. John Medical Center Clergy Educational Symposium, Tulsa, OK
Date of Presentation: September 18, 2003

Title of Presentation: "Informed Consent in Research"
Institution/Society Name: Oklahoma Chapter, ACRP, Schusterman Center
Date of Presentation: September 9, 2003

Title of Presentation: "Withholding Care: Futility & Quality of Life"
Institution/Society Name: Medical City Dallas Lonestar Hospital, Dallas TX CME Ethics Lecture
Date of Presentation: April 29,2003

Title of Presentation: Robert M. Bird Society and Friends of the Bird Library Annual Guest Lecture Commentator: "Human Cloning for Therapeutic Purposes: Why Not?"
Institution/Society Name: Robert M. Bird Library, Oklahoma City, OK
Date of Presentation: March 15, 2003

Title of Presentation: "Should Everyone be Above Average?"
Institution/Society Name: Ethics Center of Oklahoma State University and VA Employee Education System, Tulsa, OK
Date of Presentation: February 21, 2003
Title of Presentation: "Ethical Issues in Drug Use and Research in Children"
Institution/Society Name: American Academy of Pediatrics, Annual Meeting, San Francisco, CA
Date of Presentation: October 22, 2001

Title of Presentation: "Ethics in Resuscitation and Critical Care"
Institution/Society Name: St. Francis Health System, 22nd Annual Adult & Pediatric Trauma Symposium, St. Francis Hospital, Tulsa, OK
Date of Presentation: September 26, 2001

Title of Presentation: "Feeding the Brain-injured: Medical and Ethical Issues"
Institution/Society Name: Brain Injury Association of Oklahoma & the Dept of Pediatrics, University of Oklahoma College of Medicine, Tulsa, OK
Date of Presentation: September 14, 2001

Title of Presentation: "Care of Children Who Die and their Families"
Institution/Society Name: Institute of Medicine, National Academy of Sciences, Washington, DC
Date of Presentation: September 8, 2001

Title of Presentation: "Competency in Ethics" and "Complex Issues at the End-of-Life"
Institution/Society Name: Medical City Dallas Hospital, Dallas, TX, CME Ethics Conference and Staff Lectures
Date of Presentation: April 30, 2001

Title of Presentation: Orientation for New Ethics Committee Members
Institution/Society Name: Oklahoma Alliance for Better Care of the Dying, Oklahoma City, Annual Conference
Date of Presentation: December 1, 2000

Title of Presentation: "Pediatric Ethics"
Institution/Society Name: Southern Medical Association, Annual Meeting, Kiawah, SC
Date of Presentation: July 11-15, 2000

Title of Presentation: "Conflicts in Care: When Families & Physicians Disagree"
Institution/Society Name: Medical City Dallas Hospital, Dallas, TX CME Ethics Conference and Staff Lectures
Date of Presentation: May 16, 2000

Title of Presentation: "Ethical Concerns in Prolonging versus Withdrawing Medical Support from a Terminally Ill Neonate" and "Diabetes in Pregnancy: the Perinatal Impact"
Institution/Society Name: St. John Medical Center, Tulsa, 20th Annual Regional Perinatal Seminar
Date of Presentation: April 14, 2000

Title of Presentation: "Ethical Challenges of the Genetic Revolution"
Institution/Society Name: The Power of Ideas: A weekly television interview, Norman OK, Program Consultant
Date of Presentation: February 3, 2000

Title of Presentation: "Educating Physician on End-of-Life"
Institution/Society Name: OSMA Headquarters EPEC Seminar, Oklahoma City, OK
Date of Presentation: June 18, 1999

Title of Presentation: "Ethical Issues in the Care of the Disabled Child"
Institution/Society Name: Cook Children' Hospital, Pediatric Grand Rounds, Ft. Worth, TX
Date of Presentation: June 1, 1999

Title of Presentation: "Medical Decisions for Minors: When Should Children Make the Call?"
Institution/Society Name: Medical City Dallas Hospital, Pediatric Grand Rounds, Dallas, TX
Date of Presentation: February 9, 1999

Title of Presentation: "Implications of Oklahoma's New DNR Law"
Institution/Society Name: Stillwater Medical Center, Physicians' Grand Rounds & CME, Stillwater, OK
Date of Presentation: June 10, 1998

Title of Presentation: "Ethics un End-of-Life Decision Making"
Institution/Society Name: Presbyterian Hospital, Physician-Assisted Suicide Conference, Oklahoma City, OK
Date of Presentation: May 7, 1998

Title of Presentation: "Ethical Issues in the Care of the Disabled Child"
Institution/Society Name: Columbia Hospital at Medical City Dallas, Pediatric Grand Grounds, Dallas, TX
Date of Presentation: April 28,1998

Title of Presentation: "Ethical Dilemmas in Neonatal/Pediatric Nursing"
Institution/Society Name: St. Francis Health System, Second Annual Neonatal/Pediatric Nursing Symposium, Tulsa, OK
Date of Presentation: March 18, 1998

Title of Presentation: "Ethical and Public Interest Issues in Public Health Care Institutions"
Institution/Society Name: Leadership Oklahoma, Health Care/Arts and Humanities, Tulsa, OK
Date of Presentation: March 6, 1998

Title of Presentation: "Ethical Care at the End-of-Life"
Institution/Society Name: Panelist: "Developing a Community Policy on Futile Care" Oklahoma Association for Healthcare Ethics Annual Fall Program, Oklahoma City, OK
Date of Presentation: November 14, 1997

Title of Presentation: "Physician Assisted Suicide"
Institution/Society Name: Oklahoma Association for Healthcare Ethics Regional Forum, Tulsa, OK Panelist
Date of Presentation: June 17, 1997

Title of Presentation: "Physician Assisted Suicide"
Institution/Society Name: Oklahoma Association for Healthcare Ethics Regional Forum, Enid, OK
Date of Presentation: June 24, 1997

Title of Presentation: "Professional Ethics and Professionalism"
Institution/Society Name: IME, AAMC Group on Educational Affairs, San Francisco, CA Abstract Presented
Date of Presentation: November 6-12, 1996

Title of Presentation: Panel: Ethical Issues I Genetics: Therapy and Information Management
Institution/Society Name: American Academy of Pediatrics Annual Meeting, Boston, MA
Date of Presentation: October 27, 1996

Title of Presentation: "Living Wills" (Moderator)
Institution/Society Name: Oklahoma Association for Home Care Symposium on Changing Times: Future Trends in Homer Health Social Work, Tulsa, OK
Date of Presentation: May 14, 1996

Title of Presentation: Moderator: "Bedside Bioethical Decision-making"
Institution/Society Name: American Academy of Pediatrics Spring Meeting, Chicago, IL
Date of Presentation: April 13, 1996

Title of Presentation: "Last Acts: Care and Caring at the End-of-Life"
Institution/Society Name: Robert Wood Johnson Foundation Conference, Washington, DC
Date of Presentation: March 12, 1996

Title of Presentation: "Conflict at the Cribside: Ethical Dilemmas in the Newborn"(Moderator)
Institution/Society Name: American Academy of Pediatrics Annual Meeting, San Francisco, CA
Date of Presentation: October 14, 1995

Title of Presentation: "Ethics in Pediatrics"
Institution/Society Name: Regional Symposium of Care of the Seriously Ill Child, St. Francis Medical Center, Tulsa, OK
Date of Presentation: May 20,1995

Title of Presentation: "Interfaith Leadership in Bioethics" (presenter and moderator)
Institution/Society Name: 14th National Workshop on Christian-Jewish Relations, Tulsa, OK
Date of Presentation: November 9, 1994

Title of Presentation: "Honoring the Patient's Best Interest"
Institution/Society Name: Oklahoma State University, State Conference on Aging: Ethical Issues of Health Care, St. Francis Medical Center, Tulsa, OK
Date of Presentation: October 22, 1994

Title of Presentation: "Ethical Issues in Pediatric Neurogastroenterology"
Institution/Society Name: Symposium on Pediatric Neurogastroenterology, Baptist Medical Center, Oklahoma City, OK
Date of Presentation: August 20, 1994

Title of Presentation: "Bioethics: the Challenge of Today"
Institution/Society Name: OU Health Sciences Center, Alumni Days Program, Oklahoma City, OK
Date of Presentation: May 1, 1993

Title of Presentation: "Allocation of Care"
Institution/Society Name: Ethics Conference, Hastings Indian Hospital, Tahlequah, OK
Date of Presentation: March 30, 1993

Title of Presentation: "Baby Doe Revisited"
Institution/Society Name: SMA Symposium, Destin, FL
Date of Presentation: June 4, 1993

Title of Presentation: "The Micropreemie: How Small is Too Small? And "21st Century Neonatology: Will Bioscience Outstrip Bioethics"
Institution/Society Name: Texas Perinatal Association Conference, Corpus Christi, TX
Date of Presentation: September 24-26, 1992

Title of Presentation: "Gastrostomy Tubes: Medical and Ethical Aspects" and "Medical and Ethical Considerations in Enteral Therapy"
Institution/Society Name: Current Problems in Pediatrics: Pediatric Postgraduate Course XVIII, Fountainhead Lodge, Checotah, OK
Date of Presentation: April 11, 1992

Title of Presentation: "Feeding the Impaired Infant, Gastroenterology and Ethics Interface"
Institution/Society Name: American Academy of Pediatrics Forum Caring for Children in the 90s,Oklahoma City, OK
Date of Presentation: November 9, 1990

Title of Presentation: "Living Willis and Advance Directives"
Institution/Society Name: St Joseph's Hospital Conference, Ponca City, OK
Date of Presentation: November 1991

Title of Presentation: "Bioethics and Critical Care" (workshop participants)
Institution/Society Name: American Academy of Pediatrics, New Orleans, LA
Date of Presentation: October 28, 1991

Title of Presentation: "American Way of Dying" (participant)
Institution/Society Name: CHA Fifth Annual CHA Colloquium, St. Louis MO.
Date of Presentation: May 1991

Title of Presentation: Kennedy Institute of Ethics, Visiting Scholar
Institution/Society Name: Georgetown University, Washington, DC
Date of Presentation: 1988-89

Title of Presentation: Kennedy Institute of Ethics, XIV Intensive Bioethics Course, participant
Institution/Society Name: Georgetown University, Washington, DC
Date of Presentation: June 1988

Title of Presentation: Ethical Issues in Medicine Symposium (contributing participant)
Institution/Society Name: Notre Dame IN
Date of Presentation: March 1988

Title of Presentation: "Ethical and Social Concerns"
Institution/Society Name: New Horizons in Perinatology Regional Meeting
Date of Presentation: October 1987

Title of Presentation: "Ethical Issues in Medical Practice"
Institution/Society Name: Notre Dame, IN
Date of Presentation: March 1987

Title of Presentation: "Organ Transplantation"
Institution/Society Name: CBS National Television Program
Date of Presentation: December 17, 1986

Local (Oklahoma) Invited Presentations: Bioethics

Title of Presentation: "Suicide by Advance Directive"
Institution/Society Name: OU Emergency Medicine Academic Session
Date of Presentation: Nov. 19, 2009

Title of Presentation: "Sound Ethical Arguments in Medicine"
Institution/Society Name: OU Peds Academic Session
Date of Presentation: Sept. 30, 2009

Title of Presentation: "South Ethical Arguments in Medicine"
Institution/Society Name: OU Surgery Academic Session
Date of Presentation: Sept. 16, 2009

Title of Presentation: "Sound Ethical Arguments in Medicine
Institution/Society Name: University of Oklahoma Family Medicine Academic Session, Tulsa, OK
Date of Presentation: Sept. 15, 2009

Title of Presentation: "The Physician and the Right of Conscience"
Institution/Society Name: University of Oklahoma OB/GYN AA, Schusterman

Learning Center
Date of Presentation: June 4, 2009

Title of Presentation: "Sterilization of Minors with Mental Disabilities"
Institution/Society Name: University of Oklahoma OB/GYN AA, Schusterman Campus
Date of Presentation: February 5, 2009

Title of Presentation: "The Faith Factor: How Does Religion or Spirituality Affect Medical Care?" (Meixel primary/Donovan secondary)
Institution/Society Name: Bioethics Dean's Conference, Schusterman Learning Center
Date of Presentation: January 29, 2009

Title of Presentation: "Ethical Decision-Making"
Institution/Society Name: Clinical Ethics Course (Norman) Spring Semester: Ethical Decision-Making, Basic Sciences Ed Bldg. West Lecture Hall
Date of Presentation: January 21, 2009

Title of Presentation: "Sterilization of Minors with Developmental Disabilities"
Institution/Society Name: Bioethics Dean's Conference, Schusterman Learning Center
Date of Presentation: January 14, 2009

Title of Presentation: "When is a Patient Dead? And Why Does it Matter? (Brain Death)
Institution/Society Name: Bioethics Dean's Conference, Schusterman Learning Center
Date of Presentation: November 20, 2008

Title of Presentation: "When is a Patient Dead? And Why does it Matter?" (Brain Death)
Institution/Society Name: OU Peds Academic Session, SFH Heart Center
Date of Presentation: November 19, 2008

Title of Presentation: "Ethics & Psychiatry—Confidentiality"
Institution/Society Name: OU Psych Academic Afternoon, Schusterman Center
Date of Presentation: November 12, 2008

Title of Presentation: "Autonomy"
Institution/Society Name: OU Psych Academic Afternoon, Schusterman Center
Date of Presentation: November 5, 2008

Title of Presentation: "End-of-Life Decisions—Ethics and the Law"
Institution/Society Name: OU Surgery Grand Rounds, Schusterman Center
Date of Presentation: October 29, 2008

Title of Presentation: "Introduction to Bioethics—Ethics 101"
Institution/Society Name: OU Psych Academic Afternoon, Schusterman Center
Date of Presentation: October 29, 2008

Title of Presentation: "The Maternal-Fetal Relationship"
Institution/Society Name: University of Oklahoma OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: October 29, 2008

Title of Presentation: "End of Life Decisions—Ethics and the Law"
Institution/Society Name: University of Oklahoma Family Medicine AA, Family Medicine, Tulsa
Date of Presentation: August 19, 2008

Title of Presentation: "End of Life Decisions—Ethics and the Law"
Institution/Society Name: University of Oklahoma OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: August 7, 2008

Title of Presentation: "Communicating Bad News: For Physicians and Healthcare Professionals"
Institution/Society Name: St. Francis Hospital, EPEC Project, SFH Education Center
Date of Presentation: July 16, 2008

Title of Presentation: "Subtle and Not-so-Subtle Breaches in Confidentiality"
Institution/Society Name: University of Oklahoma OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: June 12, 2008

Title of Presentation: "Subtle and Not-so-Subtle Breaches in Confidentiality"
Institution/Society Name: University of Oklahoma Family Medicine AA, Family Medicine, Tulsa
Date of Presentation: May 27, 2008

Title of Presentation: "Physician-Industry Relationships: Will you Respect me in the Morning?"
Institution/Society Name: University of Oklahoma Internal Medicine Grand Rounds
Date of Presentation: April 30, 2008

Title of Presentation: "Surrogate Decision-Making in Pediatrics" John's Story
Institution/Society Name: OU Peds Academic Session, SFH Heart Center
Date of Presentation: April 23, 2008

Title of Presentation: "Accessing Healthcare: The Obligation to Treat"
Institution/Society Name: University of Oklahoma OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: April 17, 2008

Title of Presentation: "Informed Consent"
Institution/Society Name: University of Oklahoma Surgery Lecture
Date of Presentation: April 16, 2008

Title of Presentation: "Nutrition, Hydration and the Catholic Patient—Terri Schiavo in Perspective"
Institution/Society Name: Diocese of Tulsa, Sts. Peter and Paul Parish
Date of Presentation: March 31, 2008

Title of Presentation: "Is is ever justified to withdraw nutrition & hydration in pediatrics?"
Institution/Society Name: University of Oklahoma Pediatrics Academic Afternoon, SFH
Date of Presentation: March 26, 2008

Title of Presentation: "Physician Assisted Suicide and Euthanasia"
Institution/Society Name: OSU/CHS Medical Ethics Grand Rounds
Date of Presentation: January 29, 2008

Title of Presentation: "Ethical Theories and Decision-Making"
Institution/Society Name: University of Oklahoma, Norman, Patients, Physicians and Society: Clinical Ethics
Date of Presentation: January 23, 2008

Title of Presentation: "Witnessing Incompetent, Inappropriate or Unethical Behavior"
Institution/Society Name: OU OB/BYN Academic Session, Hillcrest
Date of Presentation: December 6, 2007

Title of Presentation: "Ethical Theories and Decision-Making"
Institution/Society Name: University of Oklahoma, Tulsa College of Nursing
Date of Presentation: November 9, 2007

Title of Presentation: "Informed Consent"
Institution/Society Name: OU OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: October 18, 2007

Title of Presentation: "Informed Consent"
Institution/Society Name: OU Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: September 12, 2007

Title of Presentation: "Pillow Angel" Surgery & Hormonal Treatment for Growth Attenuation
Institution/Society Name: OU Pediatric Grand Rounds, SJMC
Date of Presentation: Sept. 11, 2007

Title of Presentation: "Re-Introduction to Ethics"
Institution/Society Name: Bioethics Dean's Conference, Schusterman Center
Date of Presentation: August 30, 2007

Title of Presentation: "Communicating Bad News"
Institution/Society Name: OU Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: June 27, 2007

Title of Presentation: "Introduction to Bioethics"
Institution/Society Name: OU Resident Orientation
Date of Presentation: June 26, 2007

Title of Presentation: "Introduction to Bioethics"
Institution/Society Name: OU Resident Orientation
Date of Presentation: June 26, 2007

Title of Presentation: "Professionalism and Gifts to Physicians from Pharmaceutical Industry"
Institution/Society Name: OU OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: May 3, 2007

Title of Presentation: "Ethical Dimension of Routine Clinical Encounters"
Institution/Society Name: OU Peds Academic Afternoon, SFH Heart Center
Date of Presentation: April 18, 2007

Title of Presentation: "Ethics Part II, Case Discussions"
Institution/Society Name: OU Internal Medicine Grand Rounds, SJMC
Date of Presentation: April 11, 2007

Title of Presentation: "What if…? Re: Sex Selection
Institution/Society Name: Bioethics Dean's Conference, Schusterman Center
Date of Presentation: March 29, 2007

Title of Presentation: "Organ Transplantation in Obstetrics and Gynecology"
Institution/Society Name: OU OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: March 22, 2007

Title of Presentation: "ACOG New Recommendations for Down Syndrome Call for Screening of All Pregnant Women"
Institution/Society Name: OU OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: March 1, 2007

Title of Presentation: "Feeding the Brain Injured"
Institution/Society Name: OU Peds Academic Afternoon, SFH
Date of Presentation: February 21, 2007

Title of Presentation: "Refusal of Treatment vs. Assisted Suicide—A Valid Distinction?"
Institution/Society Name: Oklahoma State University College of Medicine, OSUCOM, Tulsa
Date of Presentation: February 9, 2007

Title of Presentation: "Ethics 101 – Introduction to Bioethics"
Institution/Society Name: OU Family Practice Academic Afternoon, Family Medicine
Date of Presentation: February 6, 2007

Title of Presentation: "Ethical Issues in Family Medicine"
Institution/Society Name: Bioethics Dean's Conference, Schusterman Center
Date of Presentation: January 25, 2007

Title of Presentation: "Ethics of Maternal-Fetal Interventions"
Institution/Society Name: OU OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: January 18, 2007
Title of Presentation: "Confidentiality"
Institution/Society Name: OU Psych Academic Afternoon, Schusterman Center
Date of Presentation: Nov. 8, 2006

Title of Presentation: "Autonomy"
Institution/Society Name: OU Psych Academic Afternoon, Schusterman Center
Date of Presentation: Nov. 1, 2006

Title of Presentation: "The Good Doctor"
Institution/Society Name: OU OB/GYN Academic Afternoon, Hillcrest
Date of Presentation: October 27, 2006

Title of Presentation: "Refusal of Treatment vs. Assisted Suicide—A Valid Distinction?"
Institution/Society Name: Bioethics Dean's Conference, Schusterman Center
Date of Presentation: Oct. 26, 2006

Title of Presentation: "The Question: If she/he were your child, what would you do?"
Institution/Society Name: OU Peds Academic Afternoon, SFH
Date of Presentation: Oct. 25, 2006

Title of Presentation: "Ethics 101: An Introduction to Bioethics"
Institution/Society Name: OU Psych Academic Afternoon, Schusterman Center
Date of Presentation: Oct. 18, 2006

Title of Presentation: "End-of-Life Decisions in Oklahoma—Ethics and the Law"
Institution/Society Name: Norman Regional Hospital, Education Center, Norman, OK
Date of Presentation: August 24, 2006

Title of Presentation: "Re-Introduction to Ethics" and "The Good Doctor"
Institution/Society Name: Bioethics Dean's Conference, Schusterman Center
Date of Presentation: August 3, 2006

Title of Presentation: "Truthfulness with the Patient"
Institution/Society Name: OU Peds Academic Afternoon, SFH
Date of Presentation: May 24, 2006

Title of Presentation: "Assessing Healthcare: The Obligation to Treat"
Institution/Society Name: OU Peds Academic Afternoon, SFH
Date of Presentation: Feb. 22, 2006

Title of Presentation: "End-of-Life Decision-Making"
Institution/Society Name: OU OB'GYN Academic Afternoon, Hillcrest
Date of Presentation: Feb. 17, 2006

Title of Presentation: "Sterilization of Minors with Mental Disabilities"
Institution/Society Name: Peds Academic Afternoon, SFH
Date of Presentation: Dec. 16, 2005

Title of Presentation: "Confidentiality & Professional Obligation of Students"
Institution/Society Name: Residents/Students, Schusterman Center
Date of Presentation: Oct. 27, 2005

Title of Presentation: "Medical Learning Curves and Issue of Consent"
Institution/Society Name: Peds Academic Afternoon, SFH
Date of Presentation: Oct. 26, 2005

Title of Presentation: "Surrogate Decision-Making" and "Intro to Ethics"
Institution/Society Name: Residents/Students, Schusterman Center
Date of Presentation: Sept. 29, 2005

Title of Presentation: "End-of-Life Decision-Making"
Institution/Society Name: St. John Medical Center Symposium, ST. John Medical Center
Date of Presentation: Sept. 22, 2005

Title of Presentation: "Witnessing Incompetence OR Inappropriate Behavior"
Institution/Society Name: Peds Academic Afternoon, SFH
Date of Presentation: Aug. 24, 2005

Title of Presentation: "Sterilization of Women with Mental Disabilities"
Institution/Society Name: OB/GN Academic Afternoon, Hillcrest Hospital
Date of Presentation: May 20, 2005

Title of Presentation: "Consent Issues: the Need for Assent by Minors"
Institution/Society Name: Residents/Students, Schusterman Center
Date of Presentation: April 27, 2005

Title of Presentation: "Futility and Goals of Treatment"

Institution/Society Name: OB/GYN Academic Afternoon, Hillcrest Hospital
Date of Presentation: April 22, 2005

Title of Presentation: "The Schiavo Case: Three Areas of Ethical Concern"
Institution/Society Name: Residents/Students, Schusterman Center
Date of Presentation: March 20, 2005

Title of Presentation: "End of Life Decision"
Institution/Society Name: Tulsa County Medical Society, Invited Physicians/TCMS Members
Date of Presentation: March 16, 2005

Title of Presentation: "Ethical Decision Making"
Institution/Society Name: OB/GYN Academic Afternoon, Hillcrest Hospital
Date of Presentation: February 17, 2005

Title of Presentation: "Religious/Cultural Conflicts in Treatment Decisions"
Institution/Society Name: Residents/Students, Schusterman Center
Date of Presentation: October 27, 2004

Title of Presentation: "Confidentiality in Psychiatric Practice"
Institution/Society Name: Psychiatry Residents Schusterman Center
Date of Presentation: October 27, 2004

Title of Presentation: "Autonomy in Psychiatric Practice"
Institution/Society Name: Psychiatry Residents, Schusterman Center
Date of Presentation: October 20, 2004

Title of Presentation: End-of-Life Decision Making with Church Family Members"
Institution/Society Name: St. John 2nd Annual Clergy Symposium, St. John Medical Center
Date of Presentation: Sept. 30, 2004

Title of Presentation: "Introduction to Medical Ethics in Psychiatric Practice"
Institution/Society Name: Psychiatric Residents, Schusterman Center
Date of Presentation: Sept. 23, 2004

Title of Presentation: "Truthfulness in the Physician-Patient Relationship"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center
Date of Presentation: August 25, 2004

Title of Presentation: "Children as Research Subjects"
Institution/Society Name: Pediatric Residents Academic Afternoon, Schusterman Center

Date of Presentation: May 26, 2004

Title of Presentation: "Ethical and Religious Aspects of Suicide"
Institution/Society Name: Seger Seminar on Depression, Schusterman Center
Date of Presentation: May 14, 2004

Title of Presentation: "Ethical Issues in Organ Transplantation and Allocation"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: April 22, 2004

Title of Presentation: "Ethical Decision Making in Obstetrics and Gynecology"
Institution/Society Name: OB/GYN Residents, Hillcrest Medical Center
Date of Presentation: April 16, 2004

Title of Presentation: "Sticky Situations"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: March 25, 2004

Title of Presentation: "Professional Ethics and Professionalism"
Institution/Society Name: Department of Radiation Technology, Health Sciences Center, Oklahoma City, OK
Date of Presentation: March 3, 2004

Title of Presentation: "Reproductive Rights—The Unconscious Patient"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: February 19, 2004

Title of Presentation: "Maternal-Fetal Conflict—The Unconscious Patient"
Institution/Society Name: OB/GYN Residents, Hillcrest Medical Center
Date of Presentation: February13, 2004

Title of Presentation: "Confidentiality" (panelist)
Institution/Society Name: Medical Students II, Oklahoma City College of Medicine
Date of Presentation: January 28, 2004

Title of Presentation: "Dealing with Difficult Patients"
Institution/Society Name: Pediatric Residents Academic Afternoon
Date of Presentation: January 28, 2004

Title of Presentation: "Ethical Issues in Pediatric Practice"
Institution/Society Name: Family Practice Residents Academic Afternoon
Date of Presentation: January 20, 2004

Title of Presentation: "Pain Management in Geriatrics" (moderator)
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: January 15, 2004

Title of Presentation: "Ethical Issues in Genetics"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: January 8, 2004

Title of Presentation: "Professional Issues and Professionalism"
Institution/Society Name: Medical Students II, Oklahoma City College of Medicine
Date of Presentation : January 7, 2004

Title of Presentation: "The Case of Terri Schiavo: Who Makes the Decision"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: November 20, 2003

Title of Presentation: "Gifts to Physicians from Industry"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: Oct. 2, 2003

Title of Presentation: "Clergy Participation in End-of-Life Decision Making with Church Family Members"
Institution/Society Name: Local Clergy/Ministerial Seminar, St. John Medical Center
Date of Presentation: Sept. 18, 2003

Title of Presentation: "Ethical Issues in Withholding Care: Futility and Quality of Life"
Institution/Society Name: Surgery Resident Conference, St. John Medical Center
Date of Presentation: Sept. 17, 2003

Title of Presentation: "Gifts to Physicians from Industry"
Institution/Society Name: Pediatric Residents Conference, Schusterman Center
Date of Presentation: Sept. 17, 2003

Title of Presentation: "Gifts to Physicians from Industry"
Institution/Society Name: All Resident Conference, Schusterman Center
Date of Presentation: Sept. 9, 2003

Title of Presentation: "Gifts to Physicians from Industry"
Institution/Society Name: All Resident Conference, Schusterman Center
Date of Presentation: August 27, 2003

Title of Presentation: "Parental Request for Inappropriate Treatment"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: August 13, 2003

Title of Presentation: "Ethics of Parental Refusal of Immunization"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: June 25, 2003

Title of Presentation: "Withholding Care: Futility and Quality of Life"
Institution/Society Name: IM Grand Rounds, St. John Medical Center, Tulsa
Date of Presentation: May 7, 2003

Title of Presentation: "Futility Issues in Pediatric Care"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: April 30, 2003

Title of Presentation: "DNR in the Endoscopy Suite"
Institution/Society Name: NEOS GI Nurses & Associates, St. Francis Health System, Tulsa, OK
Date of Presentation: April 26, 2003

Title of Presentation: "Abortion: Safe, Legal and Rare?"
Institution/Society Name: Students Academic Afternoon, Schusterman Center
Date of Presentation: March 13, 2003

Title of Presentation: "Ethical, Legal & Social Implications of Genetics"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: February 20, 2003

Title of Presentation: "Ethical Issues in Confidentiality"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: January 30, 2003

Title of Presentation: "Introduction to Ethical Decision Making"
Institution/Society Name: Cascia Hall High School Students, Schusterman Center
Date of Presentation: January 9, 2003

Title of Presentation: "Ethical Decision Making"
Institution/Society Name: Medical Students, HSC Oklahoma City
Date of Presentation: January 8, 2003

Title of Presentation: "Subtle Breaches of Confidentiality"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: December 18, 2002

Title of Presentation: "Obtaining Truly Informed Consent"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: December 12, 3002

Title of Presentation: "Conflicts Between Clinicians: Student Abuse"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: November 14, 2002

Title of Presentation: "The Ethics of Deinstitutionalism"
Institution/Society Name: Psychiatry Academic Afternoon, Schusterman Center
Date of Presentation: November 6, 2002

Title of Presentation: "Training Issues/Learning Procedures"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: October 30, 2002

Title of Presentation: "Patient Autonomy & Competency"
Institution/Society Name: Psychiatry Academic Afternoon, Schusterman Center
Date of Presentation: October 23, 2002

Title of Presentation: "Ethical Dimensions of Informed Consent"
Institution/Society Name: OB/GYN Academic Morning, Schusterman Center
Date of Presentation: October 17, 2002

Title of Presentation: "End-of-Life Issues"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: October 27, 2002

Title of Presentation: "Professional Boundaries"
Institution/Society Name: Psychiatry Academic Afternoon, Schusterman Center
Date of Presentation: October 16, 2002

Title of Presentation: "Responsibility to the Non-Compliant Patient"
Institution/Society Name: Internal Medicine Grand Rounds, St. John Medical Center
Date of Presentation: October 1, 2002

Title of Presentation: "Advance Directives"
Institution/Society Name: OB/GYN Academic Morning, Schusterman Center
Date of Presentation: September 19, 2002

Title of Presentation: "When Parents Refuse Consent"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: August 28, 2002

Title of Presentation: "Doctor-Patient Relationship: The Noncompliant Patient"
Institution/Society Name: Surgery Grand Rounds, Schusterman Center
Date of Presentation: August 27, 2002

Title of Presentation: "The Role of Ethics Committees"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: July 24, 2002

Title of Presentation: "Confidentiality with Adolescents"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: June 26, 2002

Title of Presentation: "Refusal of Consent by Minors"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: April 24, 2002

Title of Presentation: "Medical-Legal Issues in Health Care"
Institution/Society Name: Medical Students, HSC Oklahoma City
Date of Presentation: March 6, 2002

Title of Presentation: "Witnessing Incompetent or Inappropriate Behavior"
Institution/Society Name: Pediatric Academic Afternoon, Schusterman Center
Date of Presentation: February 27, 2002

Title of Presentation: Economic Issues in Healthcare"
Institution/Society Name: Medical Students, HSC Oklahoma City
Date of Presentation: February 27, 2002

Title of Presentation: "End-of-Life Issues in Cancer Care"
Institution/Society Name: Mini-Med School, Schusterman Center
Date of Presentation: February 26, 2002

Title of Presentation: "Boundaries in Physician-Patient Relations"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: February 14, 2002

Title of Presentation: "Palliative Care Ethics"
Institution/Society Name: Medical Students, HSC Oklahoma City
Date of Presentation: January 23, 2002

Title of Presentation: "Brain Death, Pregnancy and Post-Motherhood"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: January 17, 2002

Title of Presentation: "Introduction to Professional Ethics"
Institution/Society Name: Medical Students, HSC Oklahoma City
Date of Presentation: January 9, 2002

Title of Presentation: "Stem Cell Research: What's Involved?"
Institution/Society Name: Congregational Meeting, Hope Unitarian Church
Date of Presentation: December 9, 2001

Title of Presentation: "The Ethics of Effective Pain Management"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: December 6, 2001

Title of Presentation: "Ethical Issues in Death & Dying"
Institution/Society Name: Student Body, Bishop Kelley High School
Date of Presentation: November 27, 2001

Title of Presentation: "Should Organs be Sold"
Institution/Society Name: Surgery Grand Rounds, St. Kohn's Medical Center
Date of Presentation: November 8, 2001

Title of Presentation: "Religious and Cultural Issues in Pediatric Treatment"
Institution/Society Name: Pediatric Grand Rounds, Schusterman Center
Date of Presentation: October 24, 2001

Title of Presentation: "Lying for Patient: Ethical Issues"
Institution/Society Name: Student Academic Afternoon, Schusterman Health Sciences Center
Date of Presentation: September 27, 2001

Title of Presentation: "Childhood Leukemia: Medical and Ethical Issues"
Institution/Society Name: Pediatric Grand Rounds, Schusterman Health Sciences Center
Date of Presentation: October 2, 2001

Title of Presentation: "Lying for Patients"
Institution/Society Name: Student Academic Afternoon, Schusterman Center
Date of Presentation: September 27, 2001

Title of Presentation: "Health Care Reform and Physician Gatekeepers"
Institution/Society Name: St. John Medical Center, Tulsa, Surgery Grand Rounds
Date of Presentation: September 24, 2001

Title of Presentation: "Confidentiality and the Mature Minor"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon
Date of Presentation: April 25, 2001

Title of Presentation: "Palliative Care in Pediatric Practice"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Grand Rounds
Date of Presentation: April 17, 2001

Title of Presentation: "Withdrawal of Support from Impaired Newborns"
Institution/Society Name: St. Francis Hospital, Tulsa, Neonatal Lecture
Date of Presentation: April 17, 2001

Title of Presentation: "Ethical Issues in Organ Transplantation"
Institution/Society Name: St. John Medical Center, Tulsa, Surgery Grand Rounds
Date of Presentation: April 9, 2001

Title of Presentation: "Maternal-Fetal Conflict"
Institution/Society Name: Health Sciences Center, Tulsa, Student Academic Afternoon
Date of Presentation: March 22, 2001

Title of Presentation: "Medical Errors: Be Perfect or Be Punished"
Institution/Society Name: St. John Medical Center, Tulsa, Surgery Grand Rounds
Date of Presentation: March 12, 2001

Title of Presentation: "Resolving Conflicts Between Parents and Children's Best Interests"
Institution/Society Name: St. Francis Hospital, Tulsa Pediatric Academic Afternoon
Date of Presentation: February 28, 2001

Title of Presentation: "Ethical Issues Surrounding the Care of the Elderly"
Institution/Society name: St. John Medical Center, Tulsa, Living a Long Life-Dying a Good Death: A Symposium
Date of Presentation: February 21, 2000

Title of Presentation: "Autonomy and the Mature Minor"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon
Date of Presentation: October 25, 2000

Title of Presentation: "End-of-Life Decision Making"
Institution/Society Name: OU Health Sciences Center, Tulsa, Student Bioethics Conference
Date of Presentation: October 5, 2000

Title of Presentation: "On Our Own Terms: Moyers on Dying: (panelist)
Institution/Society Name: Spann Conference Center, Doctor's Hospital, Tulsa
Date of Presentation: September 21, 2000

Title of Presentation: "Baby K: Parent's Request for Futile Treatment"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon
Date of Presentation: August 23, 2000

Title of Presentation: "Justice: Individual vs. Public Needs"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon
Date of Presentation: May 24, 2000

Title of Presentation: "Maternal-Fetal Conflict"
Institution/Society Name: OU Health Sciences Center, Tulsa, Student Bioethics Conference
Date of Presentation: May 4, 2000

Title of Presentation: "Physician-Assisted Suicide"
Institution/Society Name: OU Health Sciences Center, Tulsa, Students Bioethics Conference
Date of Presentation: April 6, 2000

Title of Presentation: "Withholding Care: Futility and Quality of Life"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon

Date of Presentation: March 22, 2000

Title of Presentation: "Ethical Issues in Social Work"
Institution/Society Name: St. Francis Hospital, Tulsa, Medical Social Workers
Date of Presentation: March 21, 2000

Title of Presentation: "End-of-Life Issues"
Institution/Society Name: OU Health Sciences Center, Tulsa, Family Practice Academic Afternoon
Date of Presentation: February 29, 2000

Title of Presentation: "Do-Not-Resuscitate Decisions"
Institution/Society Name: Hillcrest HealthCare System, Tulsa, Community Symposium
Date of Presentation: February 26, 2000

Title of Presentation: "Decisions at the End of Life"
Institution/Society Name: St. Mary's Catholic Church, Tulsa, Family Life Seminar
Date of Presentation: February 24, 2000

Title of Presentation: "Ethical Issues in Organ Transplantation"
Institution/Society Name: OU Health Sciences Center, Tulsa, Student Bioethics Conference
Date of Presentation: February 10, 2000

Title of Presentation: "Truthfulness in the Physician-Patient Relationship"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon
Date of Presentation: January 26, 2000

Title of Presentation: "Lying to Patients"
Institution/Society Name: OU Health Sciences Center, Tulsa, Student Bioethics Conference
Date of Presentation: December 2, 1999

Title of Presentation: "Confidentiality in the Health System"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon
Date of Presentation: November 24, 1999

Title of Presentation: "Pain Management"
Institution/Society Name: OU Health Sciences Center, Tulsa, Student Bioethics Conference
Date of Presentation: October 7, 1999

Title of Presentation: "Training Issues: Learning Procedures"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Academic Afternoon

Date of Presentation: September 22, 1999

Title of Presentation: "Genetics and Genetic Testing"
Institution/Society Name: St. John Hospital, Tulsa, Surgery Grand Rounds
Date of Presentation: September 13, 1999

Title of Presentation: "Physician-Assisted Suicide" and "Withholding, Withdrawing Therapy and Medical Futility"
Institution/Society Name: OU Health Sciences Center, Tulsa, EPEC Seminar
Date of Presentation: September 10-11, 1999

Title of Presentation: "Understanding Oklahoma Law Concerning Advance Directives, Living Wills and DNR"
Institution/Society Name: Bartlett memorial Medical Center, Sapulpa, Ethics Conference
Date of Presentation: August 17, 1999

Title of Presentation: "Parental Refusal of Care"
Institution/Society Name: OU Health Sciences Center, Tulsa, Pediatric Academic Afternoon
Date of Presentation: July 28, 1999

Title of Presentation: "Advanced Care Planning and Legal Issues" and "Physician-Assisted Suicide"
Institution/Society Name: OU Health Sciences Center, Oklahoma City, EPEC Seminar
Date of Presentation: June 18, 1999

Title of Presentation: "End-of-Life Decision Making"
Institution/Society Name: OU Health Sciences Center, Oklahoma City, Student Summer Institute
Date of Presentation: May 27, 1999

Title of Presentation: "Issues in Informed Consent"
Institution/Society Name: OU Health Sciences Center, Tulsa, Surgery Grand Rounds
Date of Presentation: May 20, 1999

Title of Presentation: "Ethical Dilemmas in Neonatal/Perinatal Care"
Institution/Society Name: St. Francis Hospital, Tulsa, Neonatal/Pediatric Care Symposium
Date of Presentation: May 14, 1999

Title of Presentation: "Decision Making in the Neonatal Setting"
Institution/Society Name: St. Francis Hospital, Tulsa, EOPC Grand Rounds
Date of Presentation: March 10, 1999

Title of Presentation: "Medical Decisions for Minors: When Should Children Make the Call?"

Institution/Society Name: St. John Medical Center, Tulsa, Pediatric Grand Rounds
Date of Presentation: March 9, 1999

Title of Presentation: "Communication with Patients: Empathetic Models Delivering Bad News"
Institution/Society Name: St. John Medical Center, Tulsa, Surgery Grand Rounds
Date of Presentation: March 9, 1999

Title of Presentation: "Suffering and End-of-Life Care"
Institution/Society Name: University of Tulsa, Newman Center, Tulsa, Faculty-Student Symposium
Date of Presentation: January 20, 1999

Title of Presentation: "Ethical Considerations in Alzheimer's Disease"
Institution/Society Name: Alzheimer's Association Oklahoma Chapter, Tulsa, Symposium
Date of Presentation: November 5, 1998

Title of Presentation: "Ethical Decision Making in the Catholic Health System"
Institution/Society Name: St. Francis Hospital, Tulsa EOPC Ethics Rounds
Date of Presentation: September 2, 1998

Title of Presentation: "Oklahoma's New DNR Law"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Grand Rounds
Date of Presentation: October 29, 1997

Title of Presentation: "Ethical Issues in Pediatric Nursing"
Institution/Society Name: St. Francis Hospital, Tulsa, Nursing Rounds
Date of Presentation: July 9, 1997

Title of Presentation: "Ethical Issues in Death and Dying"
Institution/Society Name: Children's Medical Center, Tulsa, Ethics Conference
Date of Presentation: June 26, 1997

Title of Presentation: "Life and Death Issues: the Catholic Perspective"
Institution/Society Name: St. Mary's Church, Tulsa, Family Life Seminar
Date of Presentation: April 26, 1997

Title of Presentation: "Medical/Surgical Ethics"
Institution/Society Name: St. Francis Hospital, Tulsa, Grand Rounds
Date of Presentation: March 6, 1997

Title of Presentation: "Assisted Suicide Roundtable"
Institution/Society Name: St. Francis Hospital, Tulsa, IEC
Date of Presentation: November 6, 1996

Title of Presentation: "Introduction and Overview of Medical Ethics: Doctor-Patient Relationship and Obligations of Professionals"

Institution/Society Name: OU College of Medicine, Tulsa, Grand Rounds
Date of Presentation: September 27, 1996

Title of Presentation: "Communicating With Families of Patients in High Risk Situations"
Institution/Society Name: St. Francis Hospital, Tulsa, Ethics Rounds
Date of Presentation: July 25, 1996

Title of Presentation: "Organ Transplantation—the Child as Donor" (Panelist)
Institution/Society Name: Children's Medical Center, Tulsa, Pediatric Grand Rounds
Date of Presentation: July 25, 1996

Title of Presentation: "Ethics in the Medical Field"
Institution/Society Name: OU Pre-Medical Professions Club, Norman, OK
Date of Presentation: February 28, 1996

Title of Presentation: "Business Ethics in Health Care"
Institution/Society Name: St. John Medical Center, Tulsa, Goodman Symposium
Date of Presentation: February 9, 1996

Title of Presentation: "Ethical Issues in Liver Transplantation"
Institution/Society Name: St. Francis Hospital, Tulsa
Date of Presentation: November 8, 1995

Title of Presentation: "Ethical Issues in Organ Transplantation"
Institution/Society Name: American Red Cross, Tulsa Chapter
Date of Presentation: May 24, 1995

Title of Presentation: "Sexual Ethics and Family Life"
Institution/Society Name: St. Mary's Church, Tulsa, Benziger Family Life Program
Date of Presentation: April 4, 1995

Title of Presentation: "Human Genetics: Issues and Concerns"
Institution/Society Name: St. Francis Hospital, Tulsa Panel Discussion
Date of Presentation: September 16, 1994

Title of Presentation: "Acting on Health Care: Catholic Views on Health Care Reform"
Institution/Society Name: Christ the King Church, Tulsa
Date of Presentation: April 17, 1994

Title of Presentation: "The Problem of Futility"
Institution/Society Name: St. Francis Hospital, Tulsa, Ethics Rounds
Date of Presentation: April 6, 1994

Title of Presentation: "Ethical Concerns of Nutritional Life Support"
Institution/Society Name: St. Francis Hospital, Tulsa Ethics Rounds

Date of Presentation: February 23, 1994

Title of Presentation: "Health Care: Worried Sick about the System?"
Institution/Society Name: Helmerich Center, Tulsa, Leadership Tulsa Seminar
Date of Presentation: December 7, 1993

Title of Presentation: "Ethical Issues in Perinatal Nursing"
Institution/Society Name: St. Francis Hospital, Tulsa, Regional Nursing Conference
Date of Presentation: November 12, 1993

Title of Presentation: "Catholic Morality"
Institution/Society Name: St. Mary's Church, Tulsa
Date of Presentation: October 17, 1993

Title of Presentation: "Ethical Issues in the NICU"
Institution/Society Name: St. Francis Hospital, Tulsa, EOPC Ethics Rounds
Date of Presentation: October 6, 1993

Title of Presentation: "Ethics and Economics: Can Medical Ethics Survive Health Care Reforms?"
Institution/Society Name: Hope Unitarian Church, Tulsa
Date of Presentation: September 9, 1993

Title of Presentation: "Ethics in Medical Practice"
Institution/Society Name: St. Francis Hospital, Tulsa
Date of Presentation: September 2, 1993

Title of Presentation: "Ectopic Pregnancy—Current Treatment Options/Ethical Considerations"
Institution/Society Name: St. Francis Hospital, Tulsa
Date of Presentation: September 1, 1993

Title of Presentation: "Baby Doe Revisited"
Institution/Society Name: St John Medical Center, Tulsa, Pediatric Grand Rounds
Date of Presentation: August 10, 1993

Title of Presentation: "Biomedical Ethics"
Institution/Society Name: OU College of Medicine, Tulsa
Date of Presentation: July 27, 1993

Title of Presentation: "Termination of Treatment"
Institution/Society Name: Temple Israel, Tulsa, Facing Tough Medical Decisions Series
Date of Presentation: July 12, 1993

Title of Presentation: "Bioethics—The Challenge of Today"
Institution/Society Name: OU Medical Alumni Association, Oklahoma City, OK

Date of Presentation: May 1, 1993

Title of Presentation: "Emergency Room Ethics"
Institution/Society Name: St. Francis Hospital, Tulsa, Ethics Rounds
Date of Presentation: April 4, 1993

Title of Presentation: "The Family's Role in Refusal of Care"
Institution/Society Name: St. Francis Hospital, Tulsa, Ethics Rounds
Date of Presentation: March 17, 1993

Title of Presentation: "Sexual Mores and Morality"
Institution/Society Name: St. Mary's Church, Tulsa, Benziger Life Series
Date of Presentation: March 8, 1993

Title of Presentation: "Advance Directives: Ethical Issues for Physicians"
Institution/Society Name: Broken Arrow Medical Center, Broken Arrow, OK
Date of Presentation: January 12, 1993

Title of Presentation: "Ethical Considerations in Perinatology-VLBW"
Institution/Society Name: St. Francis Hospital, Tulsa, New Horizons in Perinatology Regional Conference
Date of Presentation: November 5, 1992

Title of Presentation: "The Norms of Catholic Morality for Adults"
Institution/Society Name: St. Mary's Church, Tulsa
Date of Presentation: October 16, 1992

Title of Presentation: "Life and Dignity of the Human Person"
Institution/Society Name: Beckerle Center, Tulsa, Catholic Social Teaching Series
Date of Presentation: October 16, 1992

Title of Presentation: "Miss Evan's Boys"
Institution/Society Name: University of Tulsa, Panel Discussion-Ethics in Research
Date of Presentation: September 10, 1992

Title of Presentation: "Function of the Hospital Ethics Committee"
Institution/Society Name: St. Francis Hospital, Tulsa, All Physicians Conference
Date of Presentation: September 2, 1992

Title of Presentation: "Ethical Considerations in Neonatal Care"
Institution/Society Name: University of Tulsa Nursing School
Date of Presentation: April 22, 1992

Title of Presentation: "Surgery in a Jehovah's Witness Infant"
Institution/Society Name: St. Francis Hospital, Tulsa, Pediatric Grand Rounds
Date of Presentation: April 15, 1992

Title of Presentation: "Whose Life Is It, Anyway?"
Institution/Society Name: St. Francis Hospital, Tulsa, Critical Care Ethics Rounds
Date of Presentation: March 18, 1992

Title of Presentation: "Ethical Issues in Dying and the PSDA"
Institution/Society Name: American Association of Critical Care Nurses Seminar, Tulsa
Date of Presentation: February 21, 1992

Title of Presentation: "Death and Dying: Moral and Religious Issues"
Institution/Society Name: St. Antony's Orthodox Church, Tulsa, St. Anne Institute
Date of Presentation: February 20. 1992

Title of Presentation: "Food and Hydration Law: Implications for the Clinical Setting"
Institution/Society Name: St. Francis Hospital, Tulsa, Nursing Ethics Rounds
Date of Presentation: February 19, 1992

Title of Presentation: "Principles of Medical Ethics"
Institution/Society Name: St. John Medical Center, Tulsa, Goodman Symposium
Date of Presentation: February 12, 1992

Title of Presentation: "Withholding Nutrition and Hydration"
Institution/Society Name: Tulsa District Dietetic Association
Date of Presentation: February 11, 1992

Title of Presentation: "Euthanasia and Physician-Assisted Suicide"
Institution/Society Name: Oral Roberts University, Alpha Epsilon Delta Lecture
Date of Presentation: February 6, 1992

Title of Presentation: "Hospice Care: Ethical Issues"
Institution/Society Name: St. Francis Hospice, Tulsa
Date of Presentation: January 16, 1992

Title of Presentation: "Assisted Suicide and the Physician"
Institution/Society Name: OUCOM Tulsa
Date of Presentation: December 11, 1991

Title of Presentation: "Ethical Conflicts in Medicine" and "Bioethical Dilemmas in Religious Traditions"
Institution/Society Name: OUCOM, Tulsa Mini course
Date of Presentation: December 2-6, 1991

Title of Presentation: "Ethical Aspects of Placebo Therapy: Patient's Right to Know"
Institution/Society Name: St. Francis Hospital, Tulsa, Grand Rounds

Date of Presentation: November 21, 1991

Title of Presentation: "HIV Testing"
Institution/Society Name: OUCOM Tulsa
Date of Presentation: November 13, 1991

Title of Presentation: "Ethics Consultations: How and When?"
Institution/Society Name: St. Francis Hospital, Tulsa Grand Rounds
Date of Presentation: October 31, 1991

Title of Presentation: "Is Anti-Abortion Pro-Life?"
Institution/Society Name: St. Pius Church, Tulsa, Knights of Columbus
Date of Presentation: October 20, 1991

Title of Presentation: "The Dignity of Persons: Ethical Requirements"
Institution/Society Name: St. Pius Church, Tulsa, Catholic Social Teaching Panel
Date of Presentation: October 16, 1991

Title of Presentation: "Bioethics and You"
Institution/Society Name: St. Mary's Catholic School, Tulsa
Date of Presentation: October 16, 1991

Title of Presentation: "Needlestick Exposures to HIV: Ethical Implications"
Institution/Society Name: OUCOM Tulsa, Dean's Conference
Date of Presentation: September 20, 1991

Title of Presentation: "Perinatal Ethics"
Institution/Society Name: St. Francis Hospital, Tulsa
Date of Presentation: August 7, 1991

Title of Presentation: "Ethical Aspects of Decision Making for Neonates"
Institution/Society Name: St. Francis Hospital, Tulsa
Date of Presentation: June 1991

Title of Presentation: "Patients with AIDS"
Institution/Society Name: St. Francis Hospital, Tulsa
Date of Presentation: June 1991

Title of Presentation: "Ethical Dilemmas in Critical Care"
Institution/Society Name: St. Francis Hospital, Tulsa, Continuing Education Course for Critical Care Nurses
Date of Presentation: May 8-9, 1991

Title of Presentation: "Ethics in Health Care Administration"
Institution/Society Name: University Center at Tulsa, Colloquium for Master of Public Health Students
Date of Presentation: April 20, 1991

Title of Presentation: "Genetic Engineering"

Institution/Society Name: OSU College of Osteopathic Medicine, Tulsa
Date of Presentation: April 4, 1991

Title of Presentation: "Cystinosis: Ethical Aspects of Management"
Institution/Society Name: Children's Medical Center, Tulsa
Date of Presentation: April 2, 1991

Title of Presentation: "How You Got to be You"
Institution/Society Name: St. Mary's Catholic Church, Benzinger Family Life Class
Date of Presentation: March 18, 1991

Title of Presentation: "Doctors, Dollars and Decisions"
Institution/Society Name: St. Francis Hospital, Tulsa, Symposium
Date of Presentation: February 20, 1991

Title of Presentation: "Is There a Christian Medical Ethic?"
Institution/Society Name: Oral Roberts University, Tulsa, Alpha Epsilon Delta Pre-Medical Honor Society
Date of Presentation: February 6, 1991

Title of Presentation: "Medicine and Christian Service"
Institution/Society Name: St. Mary's Catholic Church, Tulsa
Date of Presentation: January 30, 1991

Title of Presentation: "Impact of Medical Advances Affecting the Length of Life"
Institution/Society Name: University of Tulsa Conference The Impact of Cruzan and OK HB 1482 on Medical Decision Making in Oklahoma
Date of Presentation: October 5, 1990

Title of Presentation: "Withholding and Withdrawing Care"
Institution/Society Name: St. Francis Hospital, Tulsa Grand Rounds
Date of Presentation: October 1990

Title of Presentation: "Brain Death Controversies"
Institution/Society Name: Tulsa Regional Medical Center
Date of Presentation: October 1990

Title of Presentation: "Brain Death in Children: Ethical Aspects"
Institution/Society Name: OUCOM Tulsa, Pediatric Grand Rounds
Date of Presentation: September 1990

Title of Presentation: "Medical Ethics and the Catholic Physician"
Institution/Society Name: St. John Medical Center, Tulsa
Date of Presentation: September 1990

Title of Presentation: "The Right to Die: Do We have a Choice?"
Institution/Society Name: Doctor's Hospital, Tulsa Panel Discussion
Date of Presentation: May 16, 1990

Title of Presentation: "Life or Death: Who Decides?"
Institution/Society Name: PUCM Tulsa, Ethics Conference for Health Care Professionals
Date of Presentation: March 14, 1990

UNIVERSITY, MEDICAL COLLEGE & HOSPITAL SERVICE:

Department/School/University: Oklahoma University Health Sciences Center
Role/Function: Member
Committee Name: Palliative Care Committee
Date(s) of Service: 1999-2012

Department/School/University: The University of Oklahoma College of Medicine-Tulsa
Role/Function: Member
Committee Name: Admissions Board
Date(s) of Service: 2003-2012

Department/School/University: The University of Oklahoma College of Medicine-Tulsa
Role/Function: Member
Committee Name: Committee of Inquiry
Date(s) of Service: 2005-2012

Department/School/University: The University of Oklahoma College of Medicine-Tulsa
Role/Function: Member
Committee Name: Promotion and Tenure Committee
Date(s) of Service: 2005-2009

Department/School/University: The University of Oklahoma College of Medicine-Tulsa, Department of Pediatrics
Role/Function: Member
Committee Name: Faculty Evaluation/Promotion Committee
Date(s) of Service: 1984-2012

Department/School/University: The University of Oklahoma College of Medicine-Tulsa, Office of the Dean
Role/Function: Chairman
Committee Name:, Dean's Conference Committee on Medical Ethics,
Date(s) of Service: 1987-2012

Department/School/University: The University of Oklahoma College of Medicine-Tulsa

Role/Function: Member
Committee Name: Educational Focus Group
Date(s) of Service: 1993-2012

Department/School/University: The University of Oklahoma College of Medicine-Tulsa
Role/Function: Member
Committee Name: Institutional Review Board
Date(s) of Service: 1994 -2000

Department/School/University: The University of Oklahoma College of Medicine-Tulsa, Dean's Office
Role/Function: Member
Committee Name: Institutional Study Group-Administration
Date(s) of Service: 1995

Department/School/University: The University of Oklahoma College of Medicine-Tulsa, Department of Psychiatry
Role/Function: Member
Committee Name: Search Committee-Chair of the Department of Psychiatry,
Date(s) of Service: 1995-1996

Department/School/University: The University of Oklahoma College of Medicine-Tulsa
Role/Function: Member
Committee Name: Dean's Search Committee
Date(s) of Service: 2001

Department/School/University: St. Francis Health System, Tulsa, OK
Role/Function: Co-Director
Committee Name: CME Online Tutorials Program
Date(s) of Service: 2005-2012

Department/School/University: St. Francis Health System, Tulsa, OK
Role/Function: Co-Chair
Committee Name: Institutional Ethics Committee
Date(s) of Service: 1995-2012

Department/School/University: St. Francis Health System, Tulsa, OK
Role/Function: Chair
Committee Name: Institutional Review Board
Date(s) of Service: 1991-2008

Department/School/University: St. Francis Health System, Tulsa, OK
Role/Function: Member
Committee Name: Nutritional Support Committee
Date(s) of Service: 1998-2012

Department/School/University: St. Francis Health System, Tulsa, OK – Eating Disorders Unit
Role/Function: Member
Committee Name: Patient Care Committee
Date(s) of Service: 1985-2012

Department/School/University: St. Francis Health System, Tulsa, OK
Role/Function: Member
Committee Name: Endoscopy Committee
Date(s) of Service:1983-2012

Department/School/University: St. Francis Health System, Tulsa, OK
Role/Function: Member
Committee Name: Endoscopy Credentialing Committee
Date(s) of Service: 1990-2012

Department/School/University: Hillcrest Medical Center, Tulsa, OK
Role/Function: Member
Committee Name: Medical Ethics Committee
Date(s) of Service: 1990-2012

TEACHING ACTIVITIES:

Medical School Courses
Name and Course Number: Bioethics
Role: Course Director/Professor
Number of Direct Contact Hours:
Medical Students: 24 hours annually
Residents: 35 hours annually
Year Taught: 1992-2012
Number of Students: 50-60 per year
Overall Evaluation Score: 4/5 (above average)

Name and Course Number: PEDS GI
Role: Course Director/Professor
Number of Direct Contact Hours:
Medical Students (Lecture): 12 hours annually
Residents: 6 months annually
Year Taught: 1982-2012
Number of Students: 30 per year
Overall Evaluation Score: 4/5 (above average)

Medical School Clerkships
Name of Clerkship: MSIII
Role: Clerkship Director

Number of Direct Contact Hours: 6 weeks
Year Taught: 1982-2012
Number of Students/Fellows: 30 annually
Overall Evaluation Score: 4/5 (above average)

Average number of Clinical Fellows you train per year = 0
Average number of Residents you train per year = 30
Average number of Medical Students you train per year = 50-60

Teaching Recognition/Awards – include both nominations and awards

Award Name: Gold Foundation Lifetime Humanism Honor Award for Exemplary Demonstration of Respect for Human Beings through Practice and Teaching of Medicine
Year: 2005

Award Name: Healthcare Foundation of New Jersey: Humanism in Medicine
Award: Recognizing the Integration of Humanism in the Delivery of Health Care to Patients and Their Families
Date: 2000

COLLABORATIVE ACTIVITIES:

Joint Grants

Agency: Wyeth Research (Kendle International)
Identifying Number: N/A
Title of Project: "A Multicenter, Randomized, Double-Blind Study of the Safety, Tolerability, and Clinical Outcomes of 2 Doses (20 and 40mg) of Oral Pantoprazole in Children (12 to 16 years old) with Symptomatic GERD"
Dates of Project Period: June 2003
Role on Project: Investigator
Percent Effort: 5%
Total Dollar Amount: $36,800

Agency: Glaxo-Wellcome
Identifying Number: N/A
Title of Project: "Alosetron in Childhood IBS"
Dates of Project Period: 1999-2000
Role on Project: Investigator
Percent Effort: 5%
Total Dollar Amount: $21,980.00

SCHOLARSHIP AND RESEARCH:

RESEARCH GRANTS

Agency: Tulsa Medical Education Annual Grant
Identifying Number: N/A
Title of Project: Oklahoma Bioethics Center
Dates of Project Period: 1994-2012
Role on Project: Director/Principal Investigator

Percent Effort: 25%
Total Dollar Amount: $67,500

Agency: Carnation/Nestle
Identifying Number: N/A
Title of Project: "Formula Intolerance in Acute Gastroenteritis"
Dates of Project Period: 1995
Role on Project: Principal Investigator
Percent Effort: 10%
Total Dollar Amount: $55,000

PUBLICATIONS

Original Papers in Refereed Journals

Bioethics:

1. **Donovan, GK**: "The Disabled and Their Lives of Purpose." The Linacre Quarterly, Vol. 74, No.3:263-267 AUGUST 2007 Online: JANUARY 2008
2. Fallat, M and **Donovan, GK**: **UPDATE** "Ethical and Legal Considerations in Pediatric Surgery", ***e*medicine**.medscape.com (from WebMD), April 24, 2006
3. Fallat ME, Glover J and AAP Committee on Bioethics. "Professionalism in Pediatrics" Pediatrics, 2007; 120:e1123-e1133.
4. Seaman, Rachel M.H., **Donovan, GK** {mentoring co-author} "The Ethics and Economics of Consuming Canadian Drugs" JOKLA State Med Assoc., Vol. 98, No. 1 JAN 2005 [mentored paper]
5. Diekema DS and AAP Committee on Bioethics. "Responding to Parental Refusals of Immunization of Children", Pediatrics, 2005; 115: 1428-1431.
6. Schneiderjan Stephanie and **Donovan, GK**. "Ethics *versus* Education: Pelvic Exams on Anesthetized Women." Journal Oklahoma State Medical Association, (8):386-8, AUG 2005
7. Fallat, Mary E., Deshpande, Jayant K; **Donovan, GK**. "Do Not Resuscitate Orders for Pediatric Patients Who Require Anesthesia and Surgery." American Academy of Pediatrics. (Clinical Report) 114 No. 6:1686-1692, Dec 2004.
8. Nelson RM and AAP Committee on Bioethics. "Ethical Issues with Genetic Testing in Pediatrics." Pediatrics, 107:1451-1455. 2001.
9. Committee on Bioethics. "Institutional Ethics Committees", Pediatrics, 2001; 107: 205-209
10. Committee on Child Abuse and Neglect and Committee on Bioethics. "Forgoing Life-Sustaining Medical Treatment in Abused Children", Pediatrics, 2000; 106:1151-1153.
11. Committee on Bioethics and Committee on Hospital Care. "Palliative Care for Children", Pediatrics, 2000; 106: 351-357.
12. Committee on School Health and Committee on Bioethics. "Do Not Resuscitate Orders in School", Pediatrics, 2000; 105: 878-879.
13. Committee on Bioethics. "Sterilization of Minors with Developmental Disabilities", Pediatrics, 1999, 104: 337-340.

14. Committee on Bioethics. "Appropriate Boundaries in the Pediatrician-Family-Patient Relationship, Pediatrics, 1999, 104: 334-336 (Revised)
15. **Donovan, GK**: "Decisions at the End of Life: Catholic Tradition." Christian Bioethics, 3:188-203, 1997.
16. **Donovan, GK**: "Does Shooting Abortionists Reveal a Lack of Faith?" Linacre Quarterly, 61:1, 1994.
17. **Donovan, GK**: "Anencephalic Organ Donation in Oklahoma: Right Problem, Wrong Answer." Journal Oklahoma State Medical Association, 86:128-130, 1993.

Pediatrics/GI:

18. Dahshan A., Donovan KG. "Bougienage versus Endoscopy for Esophageal Coin Removal in Children" Journal of Clinical Gastroenterology. 41(5):454-6, MAY 2007
19. Dahshan A., Donovan KG, "Severe Methemoglobinemia complicating topical benzocaine use during endoscopy in a toddler: a case report and review of the literature." Pediatrics.(4):e806-9 APRIL 2006
20. Dahshan A., Donovan GK. Halabi IM. Ranne R. Li M. Illig WP. "Helicobacter pylori and infantile hypertrophic pyloric stenosis: is there a possible relationship?" Journal of Pediatric Gastroenterology & Nutrition. 42(3):262-4, MAR 2006
21. Dahshan Ahmed and **Donovan, GK**. "Isolated Superior Mesenteric Artery Thrombosis." Journal of Clinical Gastroenterology, 34:554-556, 2002.
22. Dahshan Ahmed and **Donovan, GK**. "Auto-Brewery Syndrome in a Child with Short Gut Syndrome": Case Report and Review of the Literature. Journal of Pediatric Gastroenterology and Nutrition, 33:214-215, 2001.
23. **Donovan, GK**: "Constipation and Encopresis in Children." Dial Access Article, Southern Medical Association, 1999.
24. **Donovan, GK** and Yazdi AJ: "Endoscopic Diagnosis of Pylorus Stenosis." Journal Oklahoma State Medical Association, 89:58-9, 1996.
25. **Donovan, GK**, Plunket DC and Block R: "Management of Pediatric Encopresis." Practical Reviews in Pediatrics, (Audio Cassette Series) 18:10, 1995.
26. **Donovan, GK**: "Formula Intolerance in Infancy." Buen Salud Journal, Puerto Rico, 1990.
27. **Donovan, GK**: "Hirschsprung's Disease: Diagnostic Pitfalls." Practical Reviews in Pediatrics, (Audiocassette Series) 10:7, 1987.
28. **Donovan, GK** and Torres-Pinedo R: "Chronic Diarrhea and Soy Formulas-Inhibition of Diarrhea by Lactose." American Journal of Diseases of Children, 141:1069-1071, 1987.
29. **Donovan, GK** and Torres-Pinedo R: "Diarrhee Chronique et Preparations a Base de Soja." American Journal of Diseases of Children. Edition Francaise, 6:426-429, 1987.
30. Sharma BB, **Donovan, GK**, et al: "CNS Infections Following Esophageal Dilation in Children." Journal of Pediatrics, 110:572-574, 1987.
31. **Donovan, GK**: Guest Review. Practical Reviews in Pediatrics, (Audiocassette Series) 1985.
32. **Donovan, GK**: Guest Review. Practical Reviews in Pediatrics, (Audiocassette Series) 1984.

33. **Donovan, GK**: "Diagnosis of Atypical Hirschsprung's Disease." Journal Oklahoma State Medical Association, 81:731-32, 1980.
34. Michaels VV and **Donovan, GK**: "Shwachman Syndrome-Unusual Presentation as Asphyxiating Thoracic Dystrophy." Birth Defects, Original Article Series, 1982; 18(3B):129-34.
35.

Reviews or Editorials in Refereed Journals

36. **Donovan, GK**: "Does Withdrawal of Nutrition and Hydration Cause Death in Children?" PEDIATRICS **Online:** August 11, 2009 eLetter
37. Abstract Reviewer for Pediatric Academic Societies, February 2005
38. **Donovan, GK**.: Review: "Ethical Issues with Genetic Testing in Pediatrics." AAP Grand Rounds, February 2003.
39. Fallat, M and **Donovan, GK**: "Ethical and Legal Considerations in Pediatric Surgery." ***e*medicine Journal**, 3:1, January 23, 2002.
40. **Donovan, GK**: "The New DNR Law: a Disaster for Oklahomans?" (Editorial Letter) Tulsa Word, Dec. 7, 1997.
41. **Donovan, GK**: "Assisted Suicide: a Health Care Benefit?" (Editorial Letter) JAMA, 274:1911, 1996.

Books or Chapters in books, and publications in other journals

42. **Donovan, GK** and Pellegrino, Edmund D.: Chapter, "Virtue and Goals in Pediatrics," Pediatric Bioethics, Edited by Geoffrey Miller, Cambridge University Press, Chapter 1, pp.. 3-10, 2009
43. **Donovan, GK**: "The Physician-Patient Relationship." Chapter Five in The Healthcare Professional as Friend and Healer: Building on the Work of Edmund D. Pellegrino. Washington, DC: Georgetown University Press, 2000.
44. **Donovan, GK**: Nutrition/Hydration and P.V.S.: Ethical Considerations: A Thesis. Norman: University of Oklahoma, 1994.

Abstracts

45. **Donovan, GK**: ""End-of-Life vs. Ending Life: A Transatlantic Perspective" International Conference: European Association of Centres of Medical Ethics (EACME), Sept. 28-30, 2006, Leuven, Belgium
46. Ahmed Dahshan, M.D., FAAP and G. Kevin Donovan, M.D., FAAP: "Severe Methemoglobinemia Complicating Topical Benzocaine Use During Endoscopy in a Toddler: A Case Report and Review of Literature" Pediatrics, 117:4 April 2006, pp. e806-e809.

47. **Donovan, GK**: "Bougienage Versus Endoscopy for Esophageal Coin Removal in Children", presented ASGE Digestive Disease Week, Chicago, Illinois May 18, 2005

48. Fox MD, Jones CM, **Donovan, GK**, and McNulty M. The Impact of Changes in allocation Policy on Pediatric Heart Transplantation in the United States. Pediatric Academic Societies-Society for Pediatric Research Annual Meeting, May 2003.
49. Fox MD, Jones CM, **Donovan, GK**, and McNulty M. The Impact of Changes in Allocation Policy on Pediatric Heart Transplantation in the United States. Second Congress of the International Pediatric Transplant Association. April 2003
50. Fox MD, Jones CM, **Donovan, GK**, and McNulty M. An Ethical Analysis of the Prioritization of Pediatric Patients in Organ Allocation Policy. Second Congress of the International Pediatric Transplant Association. April 2003.
51. **Donovan, GK** and Kidwell M: "Benign Recurrent Intrahepatic Cholestasis: Relief of Pruritis with Carbamazepine." Gastroenterology, 94:5, 1988.
52. **Donovan, GK** and Torres-Pinedo R: "Effect of D-Galactose on Fluid Loss in Soybean Protein Intolerance." Pediatric Research, 12:433, 1978.

Videos and Websites

53. Donovan, G.K. Consultant and Contributor: Website: Preventive Ethics **http://www.ouhsc.edu/geriatricmedicine/Education/preventive_ethics/ethic**
54. A Self-Instructional Module in Geriatric Medicine
55. **Donovan, GK**: Consultant, The Power of Ideas: a Video Interview with Allen Buchanan, 2000.
56. **Donovan, GK**: The PSDA and the Ethics Committee, A Video. Tulsa: St. Francis Hospital, 1992.

Georgetown University
2012-present
Director, Pellegrino Center for Clinical Bioethics and
Professor, Department of Pediatrics

Presentations:

2012 Presentations

Title of Presentation: Bioethics Class
Institution/Society Name: Howard University
Date of Presentation: September 5, 2012

Title of Presentation: Ethics Session for Plastic Surgery Residents
Institution/Society Name: Medstar Georgetown University Hospital
Date of Presentation: August 23, 2012

Title of Presentation: Clinical Ethics
Institution/Society Name: Undergrad Bioethics Society Georgetown University
Date of Presentation: November 29, 2012

2013 Presentations

Title of Presentation: CPE on Health Care Ethics
Institution/Society Name: Medstar Georgetown University Hospital
Date of Presentation: January 8, 2013

Title of Presentation: Taping for NBC Today Show re Prenatal Testing
Institution/Society Name: NBC
Date of Presentation: January 16, 2013

Title of Presentation: Ethics Session
Institution/Society Name: Dept of Infectious Diseases Medstar Georgetown Hospital
Date of Presentation: January 17, 2013

Title of Presentation: "Killing or Allowing to Die?"
Institution/Society Name: Medical Grand Rounds Medstar Georgetown Univ Hospital
Date of Presentation: January 14, 2013

Title of Presentation: "Cookie Friday" Bioethics Talk
Institution/Society Name: Bioethics Research Library, Georgetown University
Date of Presentation: March 22, 2013

Title of Presentation: Telephone Interview on Case of NICU Babies and Oxygen Research
Institution/Society Name: Miami Herald Newspaper
Date of Presentation: April 2013

Title of Presentation: "Doctors Speak Out" Advance Directives etc.
Institution/Society Name: Georgetown University Medical Center

Date of Presentation: April 16, 2013

Title of Presentation: Research on Babies in ICU -- Oxygen
Institution/Society Name: Diane Rehm Radio Show
Date of Presentation: April 17, 2013

Title of Presentation: "The Last of Life, for Which the First Was Made"
Institution/Society Name: Hal Israel Memorial Lecture, Temple B'Nai Israel Easton, MD
Date of Presentation: Monday, April 29, 2013 7:30 p.m.

Title of Presentation: Interview for USA Today – "With Down Syndrome Diagnoses Comes a Wrenching Choice"
Institution/Society Name: USA Today
Date of Presentation: May 1, 2013 issue

Title of Presentation: Doctors Speak Out Follow Up for GUMC Advance Directives
Institution/Society Name: Somerset House, Bethesda, Maryland
Date of Presentation: May 14, 2013

Title of Presentation: Clinical Ethics Lecture
Institution/Society Name: KIE Intensive Bioethics Course, Georgetown University
Date of Presentation: June 9, 2013

Title of Presentation: Leader for Small Group
Institution/Society Name: KIE Intensive Bioethics Course, Georgetown University
Date of Presentation: June 2013

Title of Presentation: Interview: "Ethicists debate girls' second lung transplant"
Institution/Society Name: USA Today
Date of Presentation: July 1, 2013

Title of Presentation: Quoted for transplant case in PA
Institution/Society Name: Fox News Channel, Patti Ann Brown
Date of Presentation: July 2, 2013

Title of Presentation: Ethics Lecture
Institution/Society Name: Plastic and Reconstructive Surgery, Medstar GU Hospital
Date of Presentation: July 11, 2013

Title of Presentation: Ethics Lecture for Hospitalists
Institution/Society Name: Medstar Georgetown University Hospital
Date of Presentation: July 17, 2013

Title of Presentation: Professionalism Panel for First Year Orientation
Institution/Society Name: Georgetown University School of Medicine
Date of Presentation: August 9, 2013

Title of Presentation: Our Aging Brain and Living and Leaving with Dignity
Institution/Society Name: Chevy Chase Trust
Date of Presentation: September 12, 2013

Title of Presentation: Panel (submitted by Mark Kuczewski) on Admitting Illegal Students to Medical School
(Moderator)Institution/Society Name: ASBH
Date of Presentation: October 2013

Title of Presentation: Injured Hunters Choice – the Tim Bowers Case – End of Life
Institution/Society Name: Interview for WUSA Channel 9 TV in DC
Date of Presentation: November 7 2013

Title of Presentation: Interview for End of Life Wishes aren't Always Met
Institution/Society Name: Publication – Medical Ethics Advisor
Date of Presentation: May 2013

Title of Presentation: Interview for article on "Ethics of Minors' Access to Emergency Contraception"
Institution/Society Name: Medical Ethics Advisor
Date of Presentation: November 2013: Vol. 29, No. 11, Pages 121-132.

2014 Presentations

Title of Presentation: "Was Pellegrino a Closet Principlist?"
Institution/Society Name: First Annual Pellegrino Seminar, Georgetown University
Date of Presentation: March 21, 2014

Title of Presentation: "A Parent Fights to Speed FDA Approval I Hopes of Saving Son's Life" Interview for WTOP Radio
Institution/Society Name: WTOP Radio News Interview
Date of Presentation: March 26, 2014

Title of Presentation: "Cast a Wide Net when Obtaining Feedback on Clinical Ethics Consults"
Institution/Society Name: Medical Ethics Advisor, April 2014: Vol. 30, No. 4, Pages 37-48 – Interview
Date of Presentation: April 2014

Title of Presentation: Grand Rounds: End of Life Decision-Making
Institution/Society Name: St. Barnabas Hospital and Medical Center, New Jersey
Date of Presentation: April 16, 2014

Title of Presentation: "Saving Lives and Stamping Out Disease: The Virtuous Physician in the Future of Healthcare"
Institution/Society Name: 11th Annual Pellegrino Ethics Lectureship in Surgery, GU
Date of Presentation: May 6, 2014

Title of Presentation: " Pros and Cons of Doctors Sharing Notes"
Institution/Society Name: Diane Rehm Radio Show
Date of Presentation: May 22, 2014

Title of Presentation: SUPPORT Study Panel
Institution/Society Name: Clinical Research Network
Date of Presentation: May 22, 2014

Title of Presentation: Panel on Alzheimer's Research and Discovery
Institution/Society Name: Alumnae Reunion Weekend Georgetown Medical School
Date of Presentation: May 30, 2014

Title of Presentation: Clinical Bioethics, Pre-IBC Workshop
Institution/Society Name: Kennedy Institute of Ethics Annual Intensive Bioethics Course
Date of Presentation: June 2, 2014

Title of Presentation: Pro-Life to the very end….interview
Institution/Society Name: Our Sunday Visitor Newsweekly
Date of Presentation: July 2014

Title of Presentation: Patients' Wishes for End of Life Care Often Not Followed: Here are reasons why…interview
Institution/Society Name: Medical Ethics Advisor
Date of presentation: September 2014, Vol. 30 No 9 Pages 97-108

Title of Presentation: O'Neill Institute Colloquium: The West African Ebola Epidemic: How can it be Contained and How can we Prevent the Next One?
Institution/Society Name: O'Neill Institute Georgetown University School of Law
Date of Presentation: September 3, 2014

Title of Presentation: "Is the Church on the Wrong Side of History: Bioethical Issues"
Institution/Society Name: Blessed Sacrament Church Sunday Morning Lecture Series, Washington, DC
Date of Presentation: Sunday, September 14, 2014

Interviews and Presentations on Ebola – beginning August 2014:

USA Today
AP News
Diane Rehm Show
Paula Wolfson – WTOP
Andrew Pollack – NY Times
Helen Braswell – Canadian Press
Barry Bagnolo – CBS radio
CTV interview
Georgetown/O'Neill Center Conference on Ebola
Katherine Elliott – EWTV
Bloomberg News
Al Jazeera National
Al Jazeera International

Reuters—interview October 6, 2014 U.S. Ebola patient receives experimental drug from Chimerix
Reuters News Service
ETWN Interview

Title of Presentation: "Doctors, Documentation and the Professional Obligation: Has Everything Changed?"
Institution/Society Name: White Mass Program for Catholic Medical Association Arlington, VA
Date of Presentation: October 19, 2014

Title of Presentation: "Saving Memories: The Fight Against Alzheimer's and Dementia"
Institution/Society Name: Georgetown University School of Medicine Reunion
Date of Presentation: October 24, 2014

Title of Presentation: "Ebola, epidemics and ethics – what we have learned"
Institution/Society Name: Cookie Friday, Kennedy Institute of Ethics, Georgetown University
Date of Presentation: October 24, 2014

Title of Presentation: "Ethical Concerns When a Baby Dies: Making Difficult Decisions"
Institution/Society Name: Bereavement Certification Training for Healthcare Providers in Maternal-child Health, MedStar Georgetown University Hospital, NICU Parents Advisory Board/Division of Neonatal-Perinatal Medicine
Date of presentation: Monday, December 15, 2014

Presentations 2015

Title of Presentation: "Ethical Issues from the Ebola Epidemic: Learning our Lessons"
Institution/Society Name: National Institutes of Health: Inter-Institute Bioethics Interest Group
Date of Presentation: January 5, 2015.

Title of Presentation: Interview: "The CEO Who Save a Life and Lost His Job"
Institution/Society Name: Businessweek – publication
Date of Presentation: January 22, 2015

Title of Presentation: Interview re Measles Vaccines – Ethical Issues
Institution/Society Name: EWTN network
Date of Presentation: February 4, 2015

Title of Presentation: "Ask the Professor: Questions Re Measles Vaccine"
Institution/Society Name: Georgetown University
Date of Presentation: February 10, 2015

Title of Presentation: "End of Life"
Institution/Society Name: Held at St. Francis of Assisi Church, Derwood, MD, for Archdiocese Of Washington DC
Date of Presentation: February 21, 2015

Title of Presentation: Small Group Leader
Institution/Society Name: 30th Annual Medical Ethics Conference in Rome for the Center for Ethics and Culture. University of Notre Dame
Date of Presentation: March 8-12, 2015

Title of Presentation: Panelist for Alzheimer's and Dementia Panel
Institution/Society Name: Georgetown University's John Carroll Alumni Weekend, Los Angeles, California
Date of Presentation: April 16, 2015

Title of Presentations: University of Valparaiso, Chile
Date of Presentations: April 18-24, 2015
Presentations given:

April 21, 2015 Ethics and Medicine Discussion for Dept of Philosophy

April 22, 2015 Lecture for Opening of Academic Year in Medical School: "Ethics and Medicine, Is healthcare a right?"

April 23, 2015 Panel on Abortion and Malformations

Title of Presentation: "When is your Patient Dead?"
Institution/Society Name: Kennedy Institute of Ethics Intensive Bioethics Course (also small group instructor for the week)
Date of Presentation: Friday, June 5, 2015

Title of Presentation: Testimony on DC's Proposed Death with Dignity Law
Institution/Society Name: DC Council Hearing
Date of Presentation: July 10, 2015

Title of Presentation: Professionalism Panel
Institution/Society Name: First Year Orientation for Georgetown School of Medicine
Date of Presentation: August 7, 2015

Title of Presentation: Introduction to Bioethics Pediatric Ethics Rounds
Institution/Society Name: Georgetown University Medical Center
Date of Presentation: Sept 1, 2015

Title of Presentation: "From Hippocrates to Homicide; The Physician's Role in the Patients' Death"
Institution/Society Name: University of Oklahoma – Tulsa and Oklahoma City
Date of Presentation: September 14 and 15, 2015

Title of Presentation: Panelist: Film Screening – The Sum Total of our Memory: Facing Alzheimer's Together
Institution/Society Name: GUMC and the Kennedy Institute of Ethics
Date of Presentation: Thursday, October 1, 2015

Title of Presentation: Physician Assisted Suicide: Redefining the Role of the Physician"
Institution/Society Name: Georgetown ROMEOS
Date of Presentation: October 9, 2015

Title of Presentation: Off Label or On Target? The Ethics of Investigational and Compassionate Uses
Institution/Society Name: NASPGHAN (North American Society for Pediatric Gastroenterology
Date of Presentation: October 7-11, 2015

Presentations 2016

Title of Presentation: "Right to Die"
Institution/Society Name: PBS Religion and Ethics Newsweekly
Date of Presentation: Aired January 10, 2016

Title of Presentation: "Physician Assisted Suicide"
Institution/Society Name: Baltimore City Medical Society/Bon Secours Hospital
Date of Presentation: February 4, 2016.

Title of Presentation: Interview for a published article: "An Education by Faith"
Institution/Society Name: Georgetown University Medical Center Magazine
Date of Presentation: Fall/Winter Issue 2015

Title of Presentation: Interview: "OB Care in Catholic Hospitals"
Institution/Society Name: The Guardian
Date of Presentation: February 17, 2016

Title of Presentation: Testimony re Physician Assisted Suicide
Institution/Society Name: Maryland State Assembly Annapolis, MD
Date of Presentation: Friday, February 19, 2016

Media Reports:
The Washington Post Agonizing over the right to die with Kevin Donovan, Feb. 20, 2016.

ABC 2 Baltimore 'Right to die" legislation gets lengthy, emotional hearing In Annapolis with Kevin Donovan, Feb. 20, 2016.

Baltimore Sun Maryland lawmakers grapple with end-of-life bill with Kevin Donovan, Feb. 20, 2016.

WBAL TV Baltimore Hearing on End of Life Act draws crowd of supporters, Opponents, with Kevin Donovan Feb. 20, 2016

Fox News Radio (national) Physician Assisted Suicide with Kevin Donovan, Feb. 20, 2016

WBAL Radio Baltimore Physician Assisted Suicide with Kevin Donovan, Fb. 20, 2016

WUSA TV Physician Assisted Suicide with Kevin Donovan, Feb. 20, 2016.

The Daily Record (subscription) Md. House considers assisted-death provision for Terminally ill with Kevin Donovan, Feb. 20, 2016

Catholic Review Physician-assisted suicide sees first major public debate of 2016 With Kevin Donovan Feb. 20, 2016.

Title of Presentation: End of Life Presentation
Institution/Society Name: St. Francis Church, Derwood, Maryland
Date of Presentation: Saturday, Feb. 20, 2016

Title of Presentation: "Bioethics and Fetal Tissue" (testimony)
Institution/Society Name: US House of Representatives, Committee on Energy and Commerce
Date of Presentation: March 2, 2016

Title of Presentation: Medical Ethics
Institution/Society Name: 2016 Notre Dame Medical Ethics Conference
Date of Presentation: March 18-19, 2016

Title of Presentation: Physician Assisted Suicide
Institution/Society Name: MedStar Georgetown University Hospital Grand Rounds Dept. of Medicine
Date of Presentation: March 24, 2016

Title of Presentation: Panel Participant: Right to Life/End of Life
Institution/Society Name: Georgetown Right to Life
Date of Presentation: April 18, 2016

Title of Presentation: 'Red Flags' in Kenyan Vaccine Controversy
Institution/Society Name: Interview by French Journalist Anne Loussouarn
Date of Presentation: April 6, 2016

Title of Presentation: Limits of Intervention
Institution/Society Name: 2016 Richard A. Liebendorfer Ethics Symposium, St. John Medical Center, Tulsa, Oklahoma
Date of Presentation: April 28, 2016

Title of Presentation: Introduction to Decision-making and the Role of the Ethics Committee
Institution/Society Name: Pre-Intensive Bioethics Course (KIE) Clinical Session
Date of Presentation: June 7, 2016

Title of Presentation: Professionalism Panel
Institution/Society Name: Georgetown University School of Medicine for Incoming First Year students
Date of Presentation: August 4, 2016

Title of Presentation: Pediatric Ethics Rounds -- Introduction
Institution/Society Name: MGUH/Department of Pediatrics
Date of Presentation: August 16, 2016

Title of Presentation: Testimony to Yvette Alexander "Death with Dignity "Bill
Institution/Society Name: DC Council
Date of Presentation: August 18, 2016

Title of Presentation: Quoted in "From Epic Poet to Donald Trump's Doctor"
Institution/Society Name: STAT news
Date of Presentation: August 30, 2016

Title of Presentation: Quoted in "Clinton's Pneumonia Fuels Debate About Candidate Health Data"
Institution/Society Name: AP Washington
Date of Presentation: September 9, 2016

Title of Presentation: Testimony re PAS (Physician Assisted Suicide)
Institution/Society Name:
Date of Presentation: September 9, 2016

Title of Presentation: EOL or OLOL: End of Life Issues in the Catholic Tradition
Institution/Society Name: Our Lady of Lourdes Catholic Church, District of Columbia
Date of Presentation: September 13, 2016

Title of Presentation: Testimony on "Death with Dignity Bill" D.C. Congressman Grosso
Institution/Society Name: DC City Council
Date of Presentation: September 14, 2016

Title of Presentation: Presentation on Physician Assisted Suicide
Institution/Society Name: MedChi, The Maryland State Medical Society House of Delegates Meeting
Date of Presentation: September 22, 2016

Title of Presentation: Physician Assisted Suicide
Institution/Society Name: Kojo Nnambi Show in Washington, DC Public Radio
Date of Presentation: October 10, 2016

Title of Presentation: End of Life Panel
Institution/Society Name: Archdiocese of Washington DC (at St. Edward the Confessor Church)
Date of Presentation: October 24, 2016

Title of Presentation: Interview re Physician Assisted Suicide
Institution/Society Name: Miikaela Lefrak, American University Radio, WAMU, DC
Date of Presentation: November 17, 2016

Title of Presentation: "Aid in Dying: Physician Assisted Suicide? Compassion and Conscience." (panel)
Institution/Society Name; Prince George's County Medical Society
Date of Presentation: December 13, 2016

Presentations 2017

Title of Presentation: "Physician Assisted Suicide: Dangers for US Health Care"
Institution/Society Name; U S House of Representatives (Rep. Brad R.Wenstrup)
Date of Presentation: January 12, 2017

Title of Presentation: "Bioethics and the Church" (2 days of lectures)
Institution/Society Name; Winter Clergy Education Days 2017 Diocese of Tulsa, Oklahoma
Date of Presentation: January 30 – February 1, 2017

Title of Presentation: "Aid in Dying and the End-of-Live Act: Issues & Answers for the Policy Debate"
Institution/Society Name; University of Baltimore Center for Medicine and Law
Date of Presentation: February 6, 2017

Title of Presentation: "PAS"
Institution/Society Name; Maryland Congressional Hearing
Date of Presentation: February 16, 2017

Title of Presentation: PAS
Institution/Society Name; Heritage Foundation Washington DC
Date of Presentation: February 27, 2017

Title of Presentation: Grant Rounds – Decision-making in Clinical Ethics
Institution/Society Name; Medstar Montgomery Hospital, Olney, Maryland
Date of Presentation: March 2, 2017

Title of Presentation: "End of Life Care in the District: Campus Reacts to Death With Dignity Act -- Interview
Institution/Society Name; The Georgetown Voice
Date of Presentation: March 3, 2017

Title of Presentation: Surrogate Decision-makers Face Ethical Questions if Patient has Dementia-- Interview
Institution/Society Name; Medical Ethics Advisor
Date of Presentation: April 2017

Title of Presentation: Perinatal Ethics: Viability and Futility
Institution/Society Name; Virginia Hospital Center
Date of Presentation: May 16, 2017

Title of Presentation: Interview: Story by Aneri Pattani re Charlie Gard Case
Institution/Society Name: New York Times
Date of Presentation: July 3, 2017.

Title of Presentation: Radio Interview re Charlie Gard Case
Institution/Society Name: KCBS SF radio
Date of Presentation: July 4, 2017 8:30 a.m.

Title of Presentation: Interview: "Saving Charlie Gard: Fight for Terminally Ill British Child Goes on."
Institution/Society Name; USA Today article by Kim Hielmgaard
Date of Presentation: July 9, 2017

Title of Presentation: "Physician Assisted Death and Euthanasia II" – Moderator
Institution/Society: International Academy of Law and Mental Health, Prague
Date of Presentation: July 11, 2017

Title of Presentation: Death with dignity/physician assisted suicide
Institution/Society: Maryland Psychiatric Society
Date of Presentation: September 16, 2017

Title of Presentation: Ethics Committees
Institution/Society: Virginia Hospital Center
Date of Presentation: October 5, 2017

Title of Presentation: Interview re Program on Lives Worthy of Respect
Institution/Society: National Catholic Register
Date of Presentation: October 5, 2017

Title of Presentation: Grand Rounds: "Is it Killing or Allowing to Die?"
Institution/Society: Medstar Montgomery County Hospital
Date of Presentation: October 12, 2017

Title of Presentation: Interview for ETWN – Embryo Adoption
Institution/Society: ETWN – Eternal Word Network
Date of Presentation: October 16, 2017 (Aired on 11/9/2017)

Title of Presentation: Roundtable with GU Med School Class of 1962
Institution/Society: Reunion Weekend
Date of Presentation: Saturday, October 29, 2017

Title of Presentation: Reflection for Retreat – inspiration and encouragement for Catholic physicians
Institution/Society: DC CMA Guild (held at Franciscan Monastery)
Date of Presentation: November 18, 2017

Presentations 2018

Title of Presentation: Pro-Life at the End of Life
Institution/Society: 2018 Cardinal O'Connor Conference on Life Georgetown University
Date of Presentation: January 20, 2018

Title of Presentation: Pro-Life in Medicine (panel discussion)
Institution/Society: Chooselife Georgetown University
Date of Presentation: Feb. 20, 2018

Title of Presentation: Quoted in HOYA regarding the new PCCB MA in Clinical Bioethics
Institution/Society: The HOYA, Georgetown University
Date of Presentation: Feb. 22, 2018

Title of Presentation: Debate on Physician Assisted Suicide
Institution/Society: American Nurses Association, Silver Spring, Maryland
Date of Presentation: March 5, 2018

Title of Presentation: Braman Conference – panel discussion medicine and the Holocaust
Institution/Society: Center for Jewish Studies, Georgetown University
Date of Presentation: March 18, 2018

Title of Presentation: Interview: DC Assisted Suicide Law
Institution/ Society: Washington Post Newspaper
Date of Presentation: April 10, 2018

Title of Presentation: Ethical Issues in Cancer Care
Institution/Society: Georgetown School of Continuing Studies; Bayer Sponsorship
Date of Presentation: April 25, 2018

Title of Presentation: Introduction to the Field of Medicine
Institution/Society: Georgetown Summer Programs for High School Students; GU School of Continuing Studies
Date of Presentation: June 18, 2018

Title of Presentation: Controversies in Death & Dying
Institution/Society: Center for Bioethics & Human Dignity, Conference on Bioethics & Being Human
Date of Presentation: Thursday, June 21, 2018

Title of Presentation: Stem Cell Research
Institution/Society: Congressional Briefing
Date of Presentation: July 19, 2018

Title of Presentation: Interview – Catholic hospitals' moral and ethical restrictions on certain types of reproductive health care
Institution/Society: FiveThirtyEight news outlet
Date of Presentation: July 30, 2018

Title of Presentation: Keynote Lecture: Stem Cells, Patients and Medical Responsibility
Institution/Society: 6th Annual Midwest Conference on Cell Therapy and Regenerative Medicine
Date: Saturday, September 15, 2018

Title of Presentation: Annual Ethics Seminar – Caring for Life: Beginning and End of Life Issues
Institution/Society: St. John's Medical Center, Tulsa, Oklahoma
Date: October 8, 2018

Title of Presentation: Ethics
Institution/society: McCourt School of Georgetown University
Date of Presentation: November 8, 2018

Title of Presentation: AMA Testimony re PAS
Institution/Society: American Medical Association
Date of Presentation November 11, 2018

Presentations 2019

Title of Presentation: Reflections of a Christian Scholar
Institution/society: Georgetown University campus in Doha, Qatar, Conference on Muslim and Christian Perspectives on Palliative Care and End of Life
Date of Presentation: January 22-23, 2019

Title of Presentation: Testimony Maryland Legislature on PAS
Institution/Society: Maryland State Legislature
Date of Presentation: February 15, 2019

Title of Presentation: Affirming Ethical Options for the Terminally Ill
Institution/Society: Heritage Foundation, Washington, DC
Date of Presentation: March 11, 2019

Presentations 2020

Title of Presentation: DNR Orders and Reallocation of Ventilators
Institution/Society: CHA Webinar
Date of Presentation: April 16, 2020

Title of Presentation: Catholic Ethics and the Challenge of COVID-19
Institution/Society: CHA Webinar
Date of Presentation: April 23, 2020

Title of Presentation: Catholic Ethics and the Challenge of COVID-19
Institution/Society: CHA Webinar
Date of Presentation: April 30, 2020

Title of Presentation: Catholic Ethics and the Challenge of COVID-19

Institution/Society: CHA Webinar
Date of Presentation: April 30, 2020

Title of Presentation: Catholic Ethics and the Challenge of COVID-19
Institution/Society: CHA Webinar
Date of Presentation: May 7, 2020

Title of Presentation: Catholic Ethics and the Challenge of COVID-19
Institution/Society: CHA Webinar
Date of Presentation: May 14, 2020

Title of Presentation: Catholic Ethics and the Challenge of COVID-19
Institution/Society: CHA Webinar
Date of Presentation: May 21, 2020

Title of Presentation: Personal Contact Tracing of COVID Patients
Institution/Society: CHA Webinar
Date of Presentation: May 28, 2020

Title of Presentation: Catholic Ethics and the Challenge of COVID-19
Institution/Society: CHA Webinar
Date of Presentation: June 11, 2020 with Myles Sheehan,SJ,MD

Title of Presentation: Can we justify FH genetic testing prior to the age of consent?
Institution/Society: NLA
Date of Presentation: December 10,2020

PUBLICATIONS:

1. Donovan, GK. "Ethical Decision-Making in the Elderly," Chapter in Reichel's Care of the Elderly, 7th Edition, 2014, Cambridge University Press, ed. Jan Busy-Whitehead et al. 2016.

2. Donovan, GK. "Nutrition and Hydration in Children," in Italian Encyclopedia of Bioethics, edited by Fr. Giovanni Russo, 2018

3. Donovan, GK and Harvey, JC. "Geriatric Bioethics," in Italian Encyclopedia of Bioethics, edited by Fr. Giovanni Russo, 2018

4. Donovan, GK. "Ebola, Epidemics, and Ethics – What we have learned." *Philosophy, Ethics, Humanities and Medicine*. (on-line journal) September 2014m 9:15
   DOI: 10.1186/1747-5341-9-15
   URL: http://www.peh-,ed.com/content/9/1/15.

5. Donovan, GK. Editorial: "Doctors, Documentation, and the Professional Obligation: Has everything changed?" *The Linacre Quarterly*, Volume 82, Number 3, August 2015.

6. Donovan, GK. "Death with Dignity Legislation: Disgraceful for DC," The HOYA, Georgetown University, 2017 Published on-line December 7, 2016.

7. Conley, WK. McAdams, DC. Donovan, GK. FitzGerald, KT. "Beneficence *in Utero*. A Framework for Restricted Prenatal Whole-Genome Sequencing to Respect and Enhance the Well-Being of Children," *American Journal of Bioethics (AJOB),* Issue 1, 2017.

8. Donovan, GK. "Physician-Assisted Suicide and the Medical Profession." October 26, 2015. https://blogs.commons.georgetown.edu/pccb/2015/10/

9. Donovan, GK. "PAS: Unwise, Uncontrollable, and Unnecessary." February 23, 2016. https://blogs.commons.georgetown.edu/pccb/pas-unwise-uncontrollable-and-unnecessary/

10. Donovan, GK. "The Catholic Moral Tradition on Pain and Symptom Management." In Palliative Care and Catholic Health Care—Two Millennia of Caring for the Whole Person, edited by Peter Cataldo, 2018.

11. Donovan, GK. "PAS: How Should Catholic Healthcare Respond?" Healthcare Ethics USA, Spring 2017.

12. Donovan, GK. Book Review: Manuel of Catholic Medical Ethics. Editor, Willem Cardinal Ejk MD, PhD, STL, LM Hendriks, STD, JR Raymakers MD, PhD. Connor Court Publishing. ISBN 978-1-925138-16-). Linacre Quarterly 2017)

13. McAdams, DC, Conley, WK, FitzGerald KT, Donovan GK. "How We Should Conceive of Creation: Natural Birth as an Ethical guidepost for Neonatal Rescue." *The American Journal of Bioethics.* Vol. 17, Issue 8, 2017.

14. McAdams, DC, Conley, WK, Donovan, GK. "Cogitas Ergo Es? Metaphysical Humility in Disorders of Consciousness, *The American Journal of Bioethics.* July-September, Vol. 8, No. 3, 2017.

15. Donovan, GK, FitzGerald, KT, Sulmasy, DP. "The Role of Opportunistic Salpingectomy in Risk Reduction for Ovarian Cancer," The Catholic Health Association, 2018

16. Laidlaw, M, Cretella, M, Donovan, GK. "The Right to Best Care for Children Does Not Include the Right to Medical Transition," *The American Journal of Bioethics.* February Vol. 19, Number 2, 2019.

17. Nicolini, ME, Peteet, JR, Donovan GK, Kim, SYK. "Euthanasia and assisted suicide of persons with psychiatric disorders: the challenge of personality disorders," *Psychological Medicine,* Cambridge.org/psm, 04 Mar 2019 at 16:03:17.

18. Donovan, GK. "Reflections by a Christian Scholar." (IN PRESS – proceedings of the Conference at GU campus in Doha, Qatar – Muslim and Christian Scholars on Palliative Care and End of Life January 2019)

19. Moffit, RD, Curlin, FA, Donovan, GK and Anderdson, RT. "Affirming Ethical Options for the Terminally Ill." The Heritage Foundation, Delivered March 11, 2019. Published in LECTURE, The Heritage Foundation, No. 309, May 17, 2019.

20. Donovan, GK. "The deadly advocacy of doctor-assisted suicide." Analysis/Opinion. The Washington Times online. Wednesday, October 10, 2018.

21. Donovan, GK, Sotomayor, CS. "Strangers in a Strange Land—How our founding principles & a bitter pill undo the assimilation of U.S. Catholics." Linacre Q 2020 May;87(2):131-137

22. Donovan, GK, Wilson DP. "Ethical Dilemmas in Pediatric Lipidology. Endotext.

Pediatrics, Chapter 28, March 2020.

23. Donovan GK, Sheehan M. "Ethical Decision-making in the Elderly," Reichel's Care of the Elderly, 8th Edition, Cambridge University Press (IN PRESS – 2020)

24. Donovan GK, "CPR, DNR and the Patient's Good," Pellegrino's Clinical Compendium, (IN PRESS Catholic of University Press 2021)

25. Donovan, GK. "Ethical Issues in the Provision of Nutrition and Hydration," Pellegrino's Clinical Compendium, (IN PRESS Catholic University of America Press 2021)

26. Subramanian S, Donovan GK. "Chapter 101 Ethics in Prenatal/Neonatal Medicine," Handbook in Neonatology (IN PRESS India 2020)

TEACHING;

Health Care Ethics Required Course for First and Second Year Medical Students
Georgetown University Medical School – Director 2012-2013,Co-Director 2014-2020

Introduction to Health Care Selective—Spring 2013
Course Title: Medical, Ethics, and Spiritual Issues in End of Life Patient Care
Co-teaching with Abigail Rian Evans, PhD, M.Div.

"Patients, Population and Policy" Course for Dept. of Family Medicine
Georgetown University Medical Center
Small group instructor Oct. 2012-February 2013

Contraception/Population and Demography Class, School of Nursing and Health Sciences (Faculty: Dr. Hazel Denton), November 8, 2013

Central Nervous System 1 Module, Georgetown School of Medicine, "Determining Brain Death", January 14, 2014

Profession of Medicine Course for 1st and 2nd Year Medical Students, 2013, 2014, 2015, 2016, 2017, 2018 2019

Mentoring Visiting Scholars in the Pellegrino Center for Clinical Bioethics 2013, 2014, 2015, 2016, 2017, 2018

Mentoring 4th Year Medical Students in the Bioethics Clerkship, 2015, 2016, 2017, 2018, 2019

(Updated MedStar Georgetown Hospital Teaching—3rd and 4th yr students, residents and fellows -- list can be supplied upon request)

ON GOING ACTIVITIES:

Moderator Pediatric Ethics Rounds, MedStar Georgetown University Hospital
Monthly beginning 2012 -2020

Clinical Service in Pediatric GI – procedures, attending and seeing patients beginning January 2013-2019

Ethics Consult Service provided by the Pellegrino Center for Clinical Bioethics for MedStar Georgetown University Hospital beginning September 2012-2020

MGUH Ethics Committee

Student Humanities in Medicine Interest Group, Georgetown University Med School, 2012-2013

Moral Distress Conferences for nurses in MedStar Georgetown University Hospital

End-of-Life conferences with nurses in MedStar Georgetown University Hospital

Faculty advisor to:
Medical Students for Life
Gold Humanism Honor Society
Student Catholic Medical Association

2nd Opinion Clinic for Pediatric Gastroenterology and Nutrition, MedStar GU Hospital -2019

Transplant listing meetings

COMMITTEE ASSIGNMENTS AND BOARDS - GUMC

ACA – Affordable Care Act review committee – for GUMC 2012-13

Member Ethics Committee for MedStar Georgetown University Hospital 2012-present

Bioethics and Christian Theology Affinity Group, GU 2012-2013

Gold Humanism Committee, GU Med School 2012-2013,2014-2020

ERD Discussions GUMC 2012-2013

On-going discussions with Allen Roberts, MD and Thomas Fishbein, MD re uterine transplantation

Search Committee for MedStar Georgetown University Hospital Chaplain 2012-2013

Georgetown School of Medicine **Committee on Students** 2013-2019

Board of Advisors for Mission and Ministry 2013 -

Subcommittee , Transplant Ethics Committee 2013

Ruesch Center for the Cure of GI Cancers, Board of Advisors 2013-2019

Committee to Develop a Curriculum in Reflection, Formation, and Leadership
2024-present

LIFE MOOC, Advisory Board 2014-present

End of Life Committee 2014 - present

Service and Social Justice Working Group GUMC 2015-

Curricular Content Committee – 2016-2018

Global Health Initiative – 2017-

Ad Hoc Committee – MedStar/PCCB re PAS – 2017

LCME 2019 Co-Chair Self Study Committee 2017-2018

SERVICE OUTSIDE OF GEORGETOWN UNIVERSITY MEDICAL SCHOOL

MEDCAC – Medical Evidence Development and **Advisory Committee, Center for Medicare and Medicare Services 2017**

ASBH Clinical Ethics Consultation Affairs (CECA) Committee (one year term) Oct. 2017-2018

Center for Bioethics and Human Dignity Advisory Committee, , Deerfield, IL 2017-2021

MedStar system Ethics Committee 2018-2020

GUMC-MedStar Committee on Research Development 2018-

MedStar Committee Launching PGx 2018-

Uniform Law Commission: Study Committee on Disposition of Human Embryos and Gametes at Divorce, Separation and Death,– 2019 –

NIH Human Fetal Tissue Research Ethics Advisory Board 2019

SEARCH COMMITTEE, Kennedy Institute of Ethics, Director 2019-2020

OTHER ACTIVITIES/ASSIGNMENTS

Review of manuscript for the Kennedy Institute of Ethics Journal on "The Affordable Care Act and Community Benefit: A Mandate Catholic Health Care can Embrace" submitted November13, 2012

Named Editor-in-Chief **Philosophy, Ethics and Humanities in Medicine** – web journal 2016-2018

Grant on Advanced Directives, writer with Allen Roberts, MD ,Medstar Georgetown University Hospital 2013 (*not awarded)*

Participated in Meeting of Jesuit Center Leadership Feb. 24, 25, 26, 2013

Host Committee – Med Students for Life Speaking Tour 2013

Interview for Magnet Site Visit Oct. 15, 16, 17, 2013

Participate in MNE (Metabolism, Neurology, Endocrine) Middlesex discussion panel, September 30, 2013, Georgetown University Medical Center

Grant written to Scholl Foundation for $50,000 for fellowships – 2014

Professionalism Panel at First Year Orientation GU Med School, Aug. 8, 2014, 2015,2016,2017,2019

AWARDS AND COMMENDATIONS;

"*G. Kevin Donovan Award in Bioethics*" –named in 2012 in recognition of Dr. Donovan's contributions during his two decades of leadership of the Oklahoma Bioethics Center

Most-Cited Articles as of September 1, 2013 (MIND quarterly review of philosophy)
G. Kevin Donovan, "Decisions at the End of Life: Catholic Tradition"
Christian Bioethics (1997) 3 (3) 188-203 doi: 10.1093/cb/3.3.188

Best Doctors in America/Washington Post Magazine 2013

Best Doctors in America—named in 2013-2014

Nominated for:

Golden Apple Award – (teaching) Georgetown University Medical School - 2014

American's Best Physicians, 2016

Best Doctors in America 2017-2018

EXHIBIT "A"

Florida Medicaid Project: Treatment for Transgender Children

Medical Experimentation without Informed Consent:

An Ethicist's View of Transgender Treatment for Children

G. Kevin Donovan, MD, MA
5-12-2022

Florida Medicaid Project: Treatment for Transgender Children

Medical Experimentation without Informed Consent: An Ethicist's View of Transgender Treatment for Children

I. The Issue

Growing controversy attends the diagnosis and treatment of individuals identifying as transgender, particularly those who are still children or adolescents. As was recently pointed out, leading medical, mental health, and public health organizations support understanding gender-diverse youth and providing gender-affirming medical (hormonal) and other(surgical) care as the standard of care, including the American Academy of Pediatrics, American Psychological Association, Centers for Disease Control and Prevention, Society for Adolescent Health and Medicine, and the American Medical Association. Major nursing organizations—the American Nurses Association and the American Academy of Nursing— have made statements that young people's access to inclusive, safe, and competent health care is a human rights issue. (Wolfe, I., & Goepferd, A. "Child Abuse in Texas." *The Hastings Center*. 14 Mar. 2022) However, this widespread support is not going unchallenged, even by those who have been providing medical interventions for these children and adolescents.

Recently, questions have arisen about the appropriateness of both the diagnosis, and the safety and efficacy of these interventions that have been strongly encouraged up until now. Currently, less than half of state Medicaid programs provide gender affirming care. (Mallory, C., & Tentindo,W. "Medicaid coverage of gender-affirming care." Williams Institute, UCLA School of Law. Oct 2019). The Florida Surgeon General has said that minors should not undergo gender transition procedures, puberty blockers and hormone treatments. "Florida Department of Health Releases Guidance on Treatment of Gender Dysphoria for Children and Adolescents." 20220420-Gender-Dysphoria-Press-Release | Florida Department of Health.) In Texas, the state attorney general issued a decision that gender-affirming medical treatments such as puberty-suppressing hormones fall under the definition of child abuse in Texas state law. In fact, 34 states have introduced legislation to limit hormonal and surgical interventions for such transgender patients. This aligns with similar reassessments and limitations in the United Kingdom, Sweden, Finland, and France. A new position statement from the Royal Australian and New Zealand College of Psychiatrists (RANZCP) stresses the importance of a mental health evaluation for people with gender dysphoria — in particular for children and adolescents — before any firm decisions are made on whether to prescribe hormonal treatments to transition or to perform surgeries, often referred to as "gender-affirming care." "There is a paucity of quality evidence on the outcomes of those presenting with gender dysphoria. In particular, there is a need for better evidence in relation to outcomes for children and young people," the guidance states.

Given the legitimate concerns about the diagnosis, treatment, and the paucity of supportive, scientific studies in regard to the interventions being offered to minors who identify as transgender, I will offer a view of these from the perspective of an ethicist and pediatrician. This will be done in the face of strong and sometimes heated opposition to any variance from the currently prevailing recommendations. Each category of currently recommended or potential treatments will be briefly considered within this framework. The evidence base for these will be reviewed, and an overall argument made that such interventions must be considered as medical experimentation, subject to the requirements of research in childhood with informed consent. Finally, I will conclude with an examination of the fundamental flaw of the transgender project in childhood, and how it is leading to inevitable and controversial challenges.

In order to do this, we must review the ethical requirements for medical research in childhood and the elements of **informed consent**. Because of numerous abuses in the past, a strong system of regulations and oversight has been developed for the protection of human subjects in the United States. This began with the Belmont Report: (https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html) The report not only described the ethical principles listed below, but led to guidelines for research protections that are now codified in Federal regulations (Code of Federal Regulations, or 'CFR') and monitored by the U.S. Department of Health and Human Services (DHHS). These led to the establishment of IRBs (Institutional Review Boards) which are responsible for the protection of human subjects in federally funded research—IRBs are the Federally mandated committees that review research activities for the protection of human subjects. The Office for Human Research Protections (OHRP) provides leadership in the protection of the rights, welfare, and wellbeing of subjects involved in research conducted or supported by the DHHS. The OHRP helps ensure this by providing clarification and guidance, developing educational programs and materials, maintaining regulatory oversight, and providing advice on ethical and regulatory issues in biomedical and social-behavioral research. These measures have laid the ground rules for human research, in adults and children including the need for informed consent.

Although adults may be included in research, this should only be done with *fully informed consent*, and the requirements will differ for children and other vulnerable subjects. The bedrock of these protections lies in obtaining the informed consent from the participant. Informed consent to medical treatment and research involvement is fundamental to both ethics and law. The process requires that a *fully autonomous patient* have the ability to *understand relevant medical information* about the proposed interventions, including the *risks, benefits if any, and alternatives* (including doing nothing/non-participation). and consent *voluntarily* without *coercion*. This is rooted in respect for the **ethical principles** of **autonomy**, **beneficence**, and **justice**.

Autonomy is derived from respect for persons, which requires that we not only respect those who are fully autonomous but protect those individuals that are not fully autonomous. Vulnerable subjects such as children cannot legally or ethically participate in the consent process due to their age and maturity level. The rules for their involvement are set out by the Code of Federal Regulations (46 CFR 401-409). While consent cannot be given for another person, parents or guardians can give "permission" and children can give assent to the extent that they are able. The process of obtaining assent should be appropriate to the age, maturity, and psychological development of the child. The consent process must contain three ethically required components: *information*, *comprehension*, and *voluntariness*. Deficiencies in any of these categories would invalidate the process. The main contention here is that deficiencies in *all* these categories can be found in the current approach to minors who identify as transgender, and current attempts at treatment should not proceed as they are now practiced.

Beneficence is reflected in the complementary expressions of (1) do no harm and (2) maximize possible benefits and minimize possible harms. An assessment of risks and benefits will depend heavily on the delivery of accurate and complete information as described above. An assessment of risk will include both the probability and the severity of envisioned harms, both physical and psychological.

Finally, ***justice*** requires fairness in distribution of risks and benefits. It suggests that not only should like cases be treated alike, but different approaches are appropriate for different circumstances. This is highly relevant in the selection process for those being subjected to the various interventions while still minors.

Thus the process of informed consent must proceed with a correct diagnosis, the nature and purpose of recommended interventions, the known burdens and benefits of all options, including doing nothing or forgoing the intervention. While not able to do an exhaustive review of these elements as they apply to the main treatment approaches recommended for transgender minors, we can briefly examine each category to assess for obvious deficiencies. The issue of deficient information will be significant in each category, and questions of comprehension and voluntariness will be addressed at the end.

II. The Interventions

Surgery

A variety of surgeries have been performed on transgender adults. These range from removal of both breasts (bilateral mastectomy) and associated chest reconstruction, nipple repositioning, dermal implant and tattooing, to gender surgery for trans men which includes construction of a penis (phalloplasty or metoidioplasty), construction of a scrotum (scrotoplasty) and testicular implants, or a penile implant. Removal of the womb (hysterectomy) and the ovaries and fallopian tubes (salpingo-oophorectomy) may also be considered. Surgery for trans women includes removal of the testes (orchidectomy), removal of the penis (penectomy), construction of a vagina (vaginoplasty), construction of a vulva (vulvoplasty), construction of a clitoris (clitoroplasty), as well as breast implants for trans women, facial feminisation surgery and hair transplants. Certainly there are multiple known risks to this long list of surgeries. These used to be described as "sex-change" operations: they are now termed "gender affirming surgeries." The semantic shift is important, as we will see.

Most, but not all, practitioners would delay undertaking these permanent alterations in minor children and adolescents. This may be as much for legal reasons as for medical considerations. However, the lack of sexual maturity in younger patients, especially if previously delayed by puberty blocking agents, makes the sparse tissue more difficult to work with and outcomes less favorable, with problems such as wound rupture more likely. These are not challenges that are routinely described to minors at the beginning of their treatment progression with puberty blocking agents or hormones. This deficit of information would be a major failing.

Hormonal Treatment

Treatment with cross-sex hormones is a mainstay of gender affirming care. These result in the changes in body habitus, facies, voice tone, and hair development that transgender patients seek. They are described as "gender affirming", "life-saving" and "a human right" by their proponents. They have been prescribed by Planned Parenthood clinics and others after a first visit for gender dysphoria (https://www.plannedparenthood.org/planned-parenthood-greater-texas/patient-resources/transgender-healthcare). Surely no one would argue that such a precipitous practice has been accompanied by a full psychological evaluation, or disclosure of medical risks. Chief among these is the fact that the resulting bodily changes will not disappear, even if the initial desire for them changes. And this change is no unlikely development – upwards of 80% of minors who identify as transgender will reverse this identity by the time they reach their mid-20's if left untreated, and revert to their previous identification, albeit possibly with a same-sex attraction. It is more than simply changes in one's body that are at risk; sex hormones have an important and lasting effect on brain development and adolescent psychology. To not fully appreciate this fact, or to not have it delineated in the first place, is an egregious failure of informed consent.

Puberty Blockers

Perhaps the greatest failure of informed consent, and non-disclosure of human experimentation outcomes, is found in the supposedly benign use of puberty blocking agents in minors. They are routinely and widely prescribed with the thought that this will "buy time" for those questioning their gender as minors. Children and their supportive parents are assured that they are a benign intervention whose effects are easily reversible, just in case the child decides not to transition. Some potential effect on the development of bone density may be mentioned. The extent of this danger is just now being appreciated, with severe and disabling osteoporosis described in at least one child in Sweden. This led to new guidelines for gender-affirming care issued in February by the National Board of Health and Welfare. It stated that, based on current knowledge: "the risks of puberty suppressing treatment with GnRH-analogues and gender-affirming hormonal treatment currently outweigh the possible benefits, and that the treatments should be offered only in exceptional cases." However, the effect of puberty blocking agents (started in early adolescent development) on long-term sexual function seems to be largely unstudied. Current guidelines recommend starting puberty blockers at the earliest stage of sexual maturation in children (Tanner two). These will not only prevent the enlargement of penile tissue, it will desensitize the orgasmic potential for tissues later exposed to cross-sex hormones. Simply put, transgender adults treated in early adolescence with puberty blockers may never experience orgasm. When children with gender dysphoria are given these powerful hormones (around age 11) they are too young to appreciate the implications of what will happen.

It is not simply a matter of chronology. As children mature into adolescents and adults, their brains are also being formed and reformed under the influence of sex hormones. There is evidence for structural changes, and these are likely to be demonstrated in cognitive and behavioral changes. In fact, the development of the adolescent brain and the maturation of its rational and executive functions does not typically complete until one's early 20s. Although the deleterious effects on sexual development and function in adulthood from puberty blockers may be predicted, no one is entirely certain of the effects on other critical areas such as brain development and bone density. Carefully constructed and monitored studies have not been done. *Until they are, these off-label treatments with puberty blockers and cross sex hormones can only be considered experimental.* Experimental interventions should be done as carefully as any other research, and fully informed consent is the only ethical way to enter into such studies. Clearly, this is not the current practice.

III. The Fundamental Flaw

There appears to have been a headlong rush in the past decade towards the process of gender affirming care described above. After close scrutiny, it can only be seen as off label experimentation, despite the fact that informed consent practices do not conform to this reality. Given this, we must ask ourselves: how can experienced and ethical physicians so mislead others or be so misled themselves? In 2013, the American Psychiatric Association published their update of the Diagnostic and Statistical Manual of Mental Disorders, the DSM-5. In it the diagnosis of "gender identity disorder" was replaced with "gender dysphoria." This was done to "avoid stigma and ensure clinical care for individuals who see and feel themselves to be a different gender" other than the one to which they were born. The APA stated that "it is important to note the gender nonconformity is not in itself a mental disorder. The critical element of gender dysphoria is the presence of clinically significant distress associated with the condition." Dysphoria is a state of uneasiness, unhappiness, or dissatisfaction. With this change in terminology there was also a shift from seeking or correcting the underlying cause of the dysphoria, and a focus on transitioning to the preferred gender.

This revision has probably done more harm than good by accepting a self-diagnosis characterized by the belief that the patient (or their essence) is "trapped in the wrong body." This concept relies on the Cartesian duality, a body-self dichotomy. It reverts to the fallacious "ghost in the machine" concept. In reality, we cannot be trapped in the wrong body; we **are** our bodies, which are an integral and inseparable part of ourselves. To assert that there is a female self inside a male body (or the reverse), is to fail to achieve a full understanding that we are embodied persons, unified body and mind, if you will. A generation ago, sex and gender were taken to be synonyms for the same phenomena. Even now, a transgender female, no matter how much or how long of a hormonal therapeutic regimen they undergo, is still genetically male. Ignoring this fact has led to a contradiction, where sympathetic practitioners recommend "holistic care" while insisting on a fragmented concept of the self. This approach has been warmly embraced, even insisted upon, by many practitioners while viewed as nonsensical and even ludicrous by many laypersons.

Inevitably this has led to added difficulties. Even young patients are encouraged to begin puberty blockers and then hormones based on a self-diagnosis. Self-diagnosing psychiatric conditions is always fraught with the possibility of error. In this case, there can be no confirmatory lab tests, radiologic exams, or genetic findings. Moreover, the dysphoria can only be diagnosed and opened to treatment if it is causing significant trauma to the individual. The clinically significant distress manifests itself in underlying psychiatric diagnoses such as depression and suicidality. It is argued that embarking on affirmative treatment as early as possible is urgently needed to prevent further psychiatric complications, a contested assertion. Studies have shown that adult transgender persons continue to have evidence of depression and suicidality following treatment. The rate of suicide among post-operative transgender adults in a study from Sweden found an incidence 20 times greater than that of the general population. Such treatment may not be urgently needed to protect adolescents; it may not even be effective protection for their adult counterparts.

The claim of urgency coupled with an impulse toward nonjudgmental empathy for the disturbed patients has led to a frantic insistence on a single approach that may seem almost cult like in its insularity and opposition to outside challenges. Both parents (Trinko, K.(Nov. 19, 2018 "What It's Like to Lose Your Children to the 'Transgender Cult,' From a Mom Who Knows." *The Daily Signal*, 30 Oct. 2019) and teachers (Manning, M. for The Mail on Sunday. "Whistleblower Teacher Makes Shocking Claim That 'Most Are Autistic'." *Daily Mail Online*, Associated Newspapers, 19 Nov. 2018, https://www.dailymail.co.uk/news/article-6401593/Whistleblower-teacher-makes-shocking-claim-autistic.html.) report that their children or students are being wrongly encouraged at school to think of themselves as transgender. Sometimes this is the result of overenthusiastic acceptance or "love bombing". Sometimes it appears to influence the susceptible, as in autistic children. Sometimes transgender counseling is taking place even without the parents' knowledge, and this troubling approach has been supported in the literature with statements that adolescents should be legally empowered to obtain puberty-blocking without parental consent (Priest, M. Transgender Children and the Right to Transition: Medical Ethics When Parents Mean Well but Cause Harm. Am J Bioeth. 2019 Feb;19(2):45-59).

Inevitably, this has resulted in complications and conflicts. The media have been replete with reports of such things as contested accessibility of transgender females to such things as domestic abuse shelters, female prisons, and female sports competitions. Similar issues regarding bathroom accessibility in schools recently came to a boil in Virginia, when it came to light that a sexual assault by a self-described trans- female (with a penis) was repeated in another school after the perpetrator was transferred. (Poff, J. "Loudoun superintendent failed to inform state of school sexual assault." Washington Examiner, 4 May 2022.) These issues are far from any resolution by debate, discussion, or legislation. In fact, both sides of the debate have doubled down with insistence that the opposing viewpoint must not only be rejected but considered unethical and made illegal.

Some disturbing trends have developed resulting not only from this dichotomy of opinion about the proper treatment approach, but ultimately based in the acceptance of the mind-body dichotomy. There has been a change in the diagnosed population. As Abigail Schrier pointed out:

> For the nearly 100-year diagnostic history of gender dysphoria, it overwhelmingly afflicted boys and men, and it began in early childhood (ages two to four). According to the DSM-V, the latest edition of the historical rate of incidence was 0.01 percent of males (roughly one in 10,000).
>
> For decades, psychologists treated it with "watchful waiting" — that is, a method of psychotherapy that seeks to understand the source of a child's gender dysphoria, lessen its intensity, and ultimately help a child grow more comfortable in her own body. Now such an approach is disdained by the term "conversion therapy", and labelled as unethical, and even made illegal.

She continues:

> Since nearly seven in 10 children initially diagnosed with gender dysphoria eventually outgrew it, the conventional wisdom held that, with a little patience, most kids would come to accept their bodies. The underlying assumption was children didn't always know best. But in the last decade, watchful waiting has been supplanted by "affirmative care," which assumes children do know what's best. Affirmative care proponents urge doctors to corroborate their patients' belief that they are trapped in the wrong body. The family is pressured to help the child transition to a new gender identity — sometimes having been told by doctors or activists that, if they don't, their child may eventually commit suicide. From there, pressures build on parents to begin concrete medical steps to help children on their path to transitioning to the "right" body. That includes puberty blockers as a preliminary step. Typically, cross-sex hormones follow and then, if desired, gender surgery. (Shrier, A. "Top Trans Doctors Blow the Whistle on 'Sloppy' Care." Emmaus Road Ministries, 5 Oct. 2021)

These pressures apply not only to parents, but to the children themselves because of the strong emphasis on affirmative support for anyone declaring themselves transgender. As one mother described: "A lot of these kids have concurrent mental health issues, and they find a place to fit in because as soon as you say that you're trans, you get love-bombed," she reflects. "You get love-bombed online, you get love-bombed on at school … As soon as you say you're trans, you turn into a star. And kids are thirsty for that kind of affirmation." (Trinko, 2019)

Two phenomena may be associated with this. Strong affirmation for the diagnosis and hormonal treatment may be altering the natural course of the phenomenon in childhood. It may not only be easier to identify as transgender in today's environment; it may be more difficult to turn ones back on the diagnosis. This may help explain a recent report that found that an average of 5 years after their initial social transition, 7.3% of youth had retransitioned (changed gender identity) at least once. At the end of this period, most youth identified as binary transgender youth (94%), including 1.3% who retransitioned to another identity before returning to their binary transgender identity. 2.5% of youth identified as cisgender and 3.5% as nonbinary. Later cisgender identities were more common amongst youth whose initial social transition occurred before age 6 years; the retransition often occurred before age 10. Unlike previous studies of transgender youth, males were not predominant, but were outnumbered by 2 to 1. Moreover, this is a direct contradiction of previous data showing a high rate of reversion towards a sex/gender coherence in children as they mature. (Olson, Kristina R., Durwood, Lily, Horton, Rachel, Gallagher, Natalie M., & Devor, Aaron; Gender Identity 5 Years

After Social Transition. Pediatrics 2022; 10.1542/peds.2021-056082) We must ask if this represents a shift towards being trapped in a wrong diagnosis, rather than a child being trapped in a wrong body.

In fact, there has been another shift. Unlike in the past, we now see increased numbers of females identifying as transgender, and later in their adolescence. Sometimes this occurs in large cohorts within a single school or peer group, a phenomenon labelled "rapid onset gender dysphoria." Both these phenomena call into question the underlying cause for the concept of gender dysphoria. Rather than approaching it as an accurate self-diagnosis that must be affirmed and treated to change the outward sexual appearance, isn't there a better model? We may be making a fundamental mistake in approaching transgender phenomena, not as a disease or disorder, but at most a dysphoria that is a cause for affirmation. This contrasts with our approach to similar conditions claiming a mind- body divergence, such as anorexia nervosa or body integrity identity disorder. The former is familiar to most Americans. The latter is a rare mental disorder characterized by a desire to have a physical disability, claiming discomfort with being able-bodied and often resulting in a request for amputation of the body part that makes them uncomfortable. People with this condition may refer to themselves as "trans abled."

In all three of these conditions there is a claim for a mismatch between one's mental bodily image and physical body. All tend to find an onset in prepubescence and are frequently associated with other mental disturbances. "Affirmative care" is the only recommended standard for transgender patients. It is horribly disturbing to contemplate amputation of a healthy limb because of a mental disorder (although this has been done). No one would seriously consider surgery to limit caloric intake or weight gain for a patient with anorexia nervosa, in order to support and affirm her distorted body image. Nevertheless, sex change operations have been recast as "gender affirming surgeries". The change in language reflects the change in attitude that distorts the approach to treatment for a psychiatric, not medical/surgical, disorder.

Finally, what are we to make of this situation, as a medical profession, and as a society? This question cannot be answered until both the affected people and profession can overcome our collective hubris. It is not enough to admit we don't know all the answers. We must see that we are not yet certain of all the questions that must be answered. In such a situation, competing interests must not pretend to take the moral high ground when no one can be certain where it will be located. First and foremost, we must back off from our current approaches until questions can be answered with proper studies, done with sufficient patients, and sufficient controls, over a sufficient period of time. Any insistence on a single course of therapy without this information could prove to be the same type of morally unacceptable interventions that caused formal research protections to be created in the first place.

In the meantime, we must adopt a more respectful tone with those whom we disagree. As John Milton said, "Where there is much desire to learn, there of necessity will be much arguing, much writing, many opinions; for opinion in good men is but knowledge in the making." Most important of all, in order to protect the current and future well-being of these affected children, we must rely on the ancient principal of medical ethics "In the first place, do no harm." Until we can demonstrate the efficacy and safety of any proposed treatment or intervention, its usage must properly be considered a medical experimentation and require fully informed consent. Anything less is a betrayal of both our principles and our progeny.

About the author: *Dr. Donovan's observations flow from his professional experience. He has been a Board-certified pediatrician for over 40 years, as an academic physician who rose to Vice-chair of the Department of Pediatrics and ultimately interim Chair at the University of Oklahoma in Tulsa. His professional role and interests expanded in the 1990's after he took a sabbatical in medical ethics at*

Georgetown University under the world-famous Dr. Edmund Pellegrino, a founding father of modern bioethics. He subsequently went on to earn a master's degree in Bioethics and founded the first bioethics center in his home university, where he was responsible for ethics training and education for students and physicians. He also served as clinical ethics consultant for three teaching hospitals. He was chair of the Section on Bioethics for the American Academy of Pediatrics (AAP) for three years and then their first liaison member of the AAP Committee on Bioethics. He has also served as the chair for a hospital Intuitional Review Board for 17 years. Finally, he was asked to become Director for the Center for Clinical Bioethics at Georgetown University School of Medicine, where he served from 2012-2020. His duties included teaching, consultation, publishing papers and speaking on bioethics extensively at the local, national, and international level on four continents. He has been interviewed and quoted on National Broadcasting Company (NBC), National Public Radio (NPR), Eternal Word Television Network (EWTN), and Al Jazeera, as well as the New York Times and the Washington Post, among others. He was awarded the Humanism in Medicine award from the Gold Foundation, which recognizes physicians to have successfully integrated humanism into the delivery of care to their patients and families. He has also offered formal testimony on bioethical issues before state legislatures and the U.S. Congress.

Appendix Attachment

10

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

DECLARATION OF JOSEPH ZANGA, M.D.

I, Joseph Zanga, M.D., hereby declare and state as follows:

1. I am over the age of 18, of sound mind, and in all respects competent to testify. I have personal knowledge of the information contained in this declaration and would testify completely to those facts if called to do so.

2. While my curriculum vitae (attached) outlines my background and expertise, I here provide a few details as amplification.

3. After graduating from college with a major in Biology and a minor in Philosophy and Theology (Ethics), I matriculated to Medical School where I quickly determined that my career path would be to care for children in the context of their families.

4. After Medical School my Internship and Residency led me to an academic career beginning with a further year of education as a Fellow in Community Pediatrics. Though active in the direct care of children in the context of their families, my work in academic centers teaching premedical (college), medical, nursing and other students, pediatric and family medicine residents, as well as post-graduate physicians and others, made me a lifelong student of medicine in all its varied iterations. This is how I came to work with adolescents, work in and direct programs in Child

Abuse/Child Protective Services, build a Community Coalition to end human trafficking, and in all of these areas studied the physical, mental, and emotional development of children to young adulthood.

5. I continue, even in retirement, to do so, serving for a time as Health and Safety Chair for a 3 county Boys and Girls Club and as a member of my County Community Resilience Collaborative, among other activities where my education and experience might be useful.

6. I have been retained by the Defendants in the case to describe my experience with the American Academy of Pediatrics (AAP), to express my opinion regarding the AAP's decision-making process for positions taken by the AAP regarding gender dysphoria treatments, and to express my opinions about current, non-science-based approaches, to gender dysphoria in children and adolescents. If called to testify in this matter, I would testify truthfully based on my almost 50 years of pediatric study about, experience with, and knowledge of, the health and being of children and adolescents.

7. I am being compensated at an hourly rate of $400 per hour for my time preparing this declaration. My compensation does not depend on the outcome of this litigation, the opinions I express, or the testimony I may provide.

8. I have been a Fellow of the AAP for about 50 years having joined because of their role as a defender of the health and well-being of children. I joined because of the high regard in which it was held by my professors and colleagues. I joined to receive quality continuing education and become involved in the work it was doing on behalf of children. Over the years I've encouraged many pediatricians, and pediatricians-in-training to join. While still an AAP Fellow, and participant in AAP activities, I have become concerned about its direction in recent years.

9. During these 50 years the AAP has grown from 30,000 or so members to about 67,000 members. (Please note that **Fellows** are Board Certified Pediatricians while **members** include students, Residents, pediatric dentists, and others working with children. Members also include

pediatricians and others in Canada, Mexico, and other nations. There are more Board Certified Pediatricians in the USA than Fellows of the AAP. So the 67,000 members aren't all the US pediatricians.

10. The AAP has also grown from a small office in Evanston, to a new, quite large, building in Itasca, and a smaller office in Washington, DC, with a combined staff compliment in the hundreds. Member dues are the bedrock of support but there is increasing funding from government, foundations, and the pharmaceutical industry.

11. Distressing to me and other members is a bent towards what was termed "political correctness" in issues such as gender dysphoria.

12. When an issue of concern impacting children is brought to its attention, the AAP considers the development of Policy to address it. The process usually begins with the Board of Directors (BOD) which refers the issue to a standing Committee (usually), Council, or Section Executive Committee to develop a Statement for publication. Committees have 10 to 15 members, the majority of whom are Fellows chosen by the BOD from AAP Chapter recommendations. There are also non-Fellow members who may or may not be Pediatricians. When completed, the Statement is referred back to the BOD for discussion, perhaps review by other relevant Committees, etc. for their opinion, and then a BOD vote. If a majority approves, the Policy is published as a product of the AAP, referencing the Committee, etc. and the principal author.

13. The process is therefore internal and involves none of the other AAP Fellows/Members who are not Committee, etc. members. The voting Board is composed of 17 members with one elected by Fellows in each of the 10 AAP geographic Districts. There are 3 at-large members elected nationally and a 5 member Executive Committee, 4 elected nationally, and the employed CEO. There is no review or vote by the remainder of the AAP membership.

14. From the above (#12 &-#13) AAP Policy cannot be said to reflect opinions/beliefs of all, or even a large cross-section of, even AAP members. There is one potential exception to this and that is the Annual Leadership Forum (ALF). Occurring in the late Summer to early Autumn of each year, the ALF brings together Chapter officers, Committee (etc. Chairs, the BOD, and others to review Resolutions, submitted by AAP Fellows, Chapters, etc., requesting that the AAP take action on an issue. The Resolutions, if approved, are only advisory to the BOD but do call BOD attention to issues.

15. With respect to the Gender Dysphoria issue, Resolutions were submitted to the ALF in 2021 and 2022. In 2021, Resolution 33 asked the AAP to study further the science of this children's issue currently presented as AAP policy. It was written with abundant referenced science and an extensive bibliography. In the Reference Committee (B) to which this resolution was assigned, it received 50 yes votes, 12 no votes, and perhaps 10 abstentions. At 80.65% it had about the highest support of any resolution in Reference B, yet the Committee "Had No Recommendation" (neither for nor against it being presented to the entire ALF) and the resolution then disappeared, never apparently brought to the main voting session. A similar resolution in 2022, simply again asking the AAP to study the issue, was rejected on procedural grounds and never presented at the ALF.

16. Many wonder why this potential objection to the AAP position of transgender affirmation was treated so unscientifically and undemocratically. This is quite opposite my past experience with the AAP and the ALF (then called the ACF), as in the past there was always vigorous discussion of controversial issues. For the proposal on this issue, at least in 2021, there seemed to be little controversy. The Reference Committee members overwhelmingly wanted it presented to the ALF.

17. So why is the AAP so set in their defense of children/adolescents being allowed to begin transitioning at almost any age. Is this in the best interest of children? The simple answer is "no".

18. My first written statement on the issue, after much research, *First Do No Harm* (attached), was published in my local medical society newsletter in July of 2018 and was updated and republished in the Spring 2020 AAP Senior Bulletin. What was written then is still true today. In outline form here are the continuing/expanded reasons for my concern:

a) As I noted in #4 & #8 above, Pediatricians, guided by the AAP, have always provided care for children in the context of their families. Why is the AAP now not discouraging, or perhaps even encouraging, schools and others working with children to keep parents uninformed about transitioning ideation and actions?

b) From the start of my pediatric education, I was taught that parents are the decisions makers for their children as children/adolescents are too immature and inexperienced to make potentially life altering decisions.

c) In the 1990s, science verified what was long ago known and taught to pediatric trainees in the 1960s – 1980s, that the brains of children are incapable of making long term, life changing, decisions until their early to mid-20s.

d) The AAP as always held firmly to this position from its origins as an organization. We expected that it would do so even more with science documenting the rightness of this approach.

e) For the most part the AAP does teach that children need parental, and often pediatrician, guidance in important matters. We also articulate many "thou shalt nots" directly to youth. We tell them that they should not drink (alcohol), use tobacco products or other drugs, to avoid tanning beds, not operate or ride with

another on an ATV, and refrain from excessive media use, among other activities. We make clear that if a child, usually an adolescent, comes to us seeking diet advice or medication for a perceived body image problem (anorexia) our approach is to seek out the underlying problem and counsel, or refer for counseling, to correct the unreasonable thinking and "cure" the child. We do not "affirm" their body image problem and assist them in losing weight. We do not provide diet pills or weigh loss surgical procedures. There are other things we would not recommend no matter the request of the child or parents (growth hormone to improve sports performance, weight loss to wrestle in a lower weight category, are among these).

f) It is at least puzzling then that we do precisely that when a youth, incapable of making such a decision, requests to transition to the opposite sex. This is especially concerning when good studies have shown that the desire to do this disappears in most (80 – 90%) after passing through puberty or by late adolescence.

g) As this is our standard for care for almost all other issues it is distressing to me that the AAP recommends that we affirm a child's desire to transition, provide help to do so, and works to prohibit counseling to cure the desire at its root even to the extent of supporting the legal punishing of counselors who might provide that service. This despite knowing that appropriate counseling can work to dissipate gender dysphoria

h) In addition, the AAP seems to ignore the potential harms which might accrue, some of which may be impossible to know at present. We do know however:

   i. That puberty-delaying or gender-affirming hormone therapy, diminishes bone mineral density, at least in the short term.

ii. That many of the drugs used increase blood pressure, risk of obesity, cardiac disease, blood clots, strokes, diabetes, and cancers. They also have deleteriously effects on the (presently immature and malleable) brain. Unfortunately, for none of these do we have long term studies, though short term studies and projections from adult are not favorable. It is inappropriate medical care to experiment on youth in this fashion, waiting for years or decades to learn if we were right or wrong.

iii. That even the easily observable immediate ill effects seem to be irreversible.

iv. That the basic premise is scientifically impossible and dangerous. We are born with every cell of our body unmistakably male or female. That cannot be changed by drug or surgical manipulation, so no boy can ever be a girl or girl be a boy. Since we know that males and females respond to medications differently and present with illnesses in different ways (a heart attack, or Type 1 Diabetes where girls are more likely to have higher A1C levels than boys when first diagnosed and continued to have higher levels after treatment begins. Girls also need higher basal insulin and total insulin doses than boys, for instance), imitating the opposite sex can lead to improper treatment or a missed diagnosis

v. That increasing numbers of those who have transitioned are attempting to retransition.

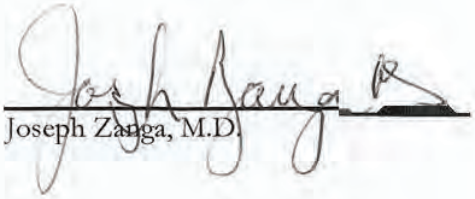
vi. That rates of suicide are twenty times greater among adults who've used cross-sex hormones and/or have undergone sex reassignment surgery, even in Sweden which is among the most transgender

affirming countries.

vii. That several "developed" nations, including the United Kingdom, Sweden, Finland, and France have all taken steps to pull back on transgender medical treatments for seemingly gender-dysphoric children.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 27th day of September, 2022.

Respectfully submitted,



Joseph Zanga, M.D.

CURRICULUM VITAE

Joseph Robert Zanga, MD, FAAP
Chief of Pediatrics – Columbus Regional Health (Retired - July 2015)
President, 1997–1998, American Academy of Pediatrics
President, 2002 - 2007, American College of Pediatricians

1. PERSONAL INFORMATION:

1.1 Business Address: 2031 Long Point Trail
Sanford, NC 27332
919 343 2003

1.2 Married to: Christine E. Zanga (1969)
Children: Catherine A. Zanga, JD (Deceased 2014)
Joseph R. Zanga, Jr., MD

2. LICENSURE:

2.1 Licensed in the State of Georgia #062014 (Inactive)
2.2 Licensed in the State of North Carolina #2003–00108
2.3 Licensed in the State of Illinois #036–101427 (Inactive)
2.4 Licensed in the State of Louisiana #12064R (Inactive)
2.5 Licensed in the Commonwealth of Virginia #2282 (Inactive)
2.6 Licensed in the State of New York #119949 (Inactive)
2.7 Diplomat of the National Board of Medical Examiners
2.8 American Board of Pediatrics, Certification #20986
2.9 Pediatric Advanced Life Support (PALS) Provider and Instructor Credentialed, 1989, Re-credentialed, 1992, 1995

3. EDUCATION:

3.1 Loyola University – Stritch School of Medicine, MD degree conferred June 1971
3.2 Fordham University – New York City B.S. Biology awarded June 1966

4. POSTDOCTORAL TRAINING:

4.1 Certificate in Health Care Management, Loyola University Chicago, June 20, 2001

4.2 MCH/APA National Faculty Scholars Development Program, 1999–2001

4.3 Ambulatory Pediatric Fellowship, 1974–75, Robert Haggerty, MD, Chair, and Evan Charney, MD, Program Director, at Strong Memorial Hospital of the University of Rochester, Rochester, New York

4.4 Chief Residency in Pediatrics, 1973–74, William Laupus, MD, Chair, at the Medical College of Virginia, Richmond, Virginia (Now VCU School of Medicine)

4.5 Pediatric Residency, 1972–73, William Laupus, MD, Chair, at the Medical College of Virginia, Richmond, Virginia (Now VCU School of Medicine)

4.6 Pediatric Internship, 1971–72, David Yi–Yung Hsia, MD, Chair, at the Loyola University Medical Center, Maywood, Illinois

5. PAST ACADEMIC APPOINTMENTS:

Chief of Pediatrics – Columbus Regional Health (Retired - July 2015)
Clinical Professor of Pediatrics – Medical College of Georgia
Clinical Professor of Pediatrics – Philadelphia College of Osteopathic Medicine
Clinical Professor of Pediatrics – Mercer University School of Medicine

5.1 Assistant Dean for Primary Care and Director, Office of Generalist Programs, East Carolina Brody School Of Medicine, Max and Catherine Joyner Endowed Professor in Primary Care, 2003(January)– Retired 2009 (December)

5.2 Chair, Department of Pediatrics, M. C. Clark Endowed Professor of Pediatrics, Loyola University, Stritch School of Medicine, 2000(January) –2002(December)

5.3 Vice Chair, Department of Pediatrics, Louisiana State University Medical Center 1997(January)–1999(December)

5.4 Professor of Pediatrics and Emergency Medicine with Tenure, LSUMC (Associate Appointment, Tulane Medical School) 1997–1999

5.5 Professor of Pediatrics and Emergency Medicine with Tenure, Virginia Commonwealth University/Medical College of Virginia, 1996

5.6 Professor of Pediatrics with Tenure, Medical College of Virginia, 1987–1996

5.7 Chair, Division General Pediatrics and Emergency Care, Medical College of Virginia, 1987–1996

5.8 Director, Virginia Injury Prevention Center, Medical College of Virginia, 1987–1996

5.9 Director, Developmental/Behavioral Fellowship, Medical College of Virginia, 1986–1993

5.10 Director, Community Pediatric Fellowship, Medical College of Virginia, 1979–1993

5.11 Associate Professor of Pediatrics, Medical College of Virginia, 1978–1987 (Tenure granted 1981)

5.12 Director, Section of Ambulatory and Emergency Care, Department of Pediatrics, Children's Medical Center, Medical College of Virginia, 1978–1987

5.13 Project Director, Health Underserved Rural Areas Program, Department of Pediatrics, University of Virginia Medical Center, 1976–1978

5.14 Assistant Professor of Pediatrics, University of Virginia, 1975–1978

5.15 Project Director, Children and Youth Project, Department of Pediatrics, University of Virginia Medical Center, 1975–1978

5.16 Coordinator, Ambulatory Pediatric Fellowship Program, University of Virginia School of Medicine, 1975–1978

5.17 Instructor in Pediatrics, University of Rochester, 1974–1975

6. MEMBERSHIPS:

6.1 Georgia Chapter of the American Academy of Pediatrics, 2009 - 2019
Board of Directors – Permanent Adviser
Fall CME Program Committee, 2009 – 2019
Chair – 2011, 2014

Honorary President (Elected by the Board) June 2016 – June 2017
Georgia Pediatric Health Improvement Coalition Board, 2011 – 2017
Co-Chair IT/Telemedicine Committee, 2012 - 2017

6,2 Medical Association of Georgia, 2009 – Present (Life Member)
Task Force on Health Insurance and Medicare (2018)
Muscogee County Medical Society
Executive Committee and Chair Program Committee, 2010 - 2013
Elected Delegate to Medical Association of Georgia, 2011 – 2019

6.3 Georgia Alliance of Community Hospitals 2010 - 2014

6.4 American College of Pediatricians (Board of Director – 2002 – 2014)
Member Founding Board (2002)
President 2002–2007 (Re Elected 2005)

6.5 North Carolina Pediatric Society/NC Chapter of the American Academy of Pediatrics, 2003–2010, 2019-Present

6.6 American Medical Association, 1995-Present

Section on Medical Schools – BSOM elected faculty representative, 2004-2009

At-Large member, 2009 - 2011

Region 4 (Southeast) Medical Student Section – Elected Faculty Advisor, 2008 - 2010

6.7 North Carolina Medical Society, 2003–2010, 2019 - Present
Pitt County Medical Society Delegate, 2004-2009

Family and Public Health Committee, 2005-2009

6.8 Medical Institute for Sexual Health, Board of Directors, 2001–2005

Advisory Board – 2019 - Present

6.9 Ambulatory Pediatric Association, 1978–2013

6.10 American Academy of Pediatrics (Life Fellow)

Past Presidents' Advisory Committee (Founding Chair), 1998 - Present
Chair, Committee on Board Compensation 2000–2001
Chair, Executive Committee, Section on Bioethics, 1999–2003,
Section on Bioethics Nominating Committee, 2003–2005
President 1997–1998
Vice President/President Elect 1996–1997
Board of Directors, 1989–1998
Advisory Committees to the Board on Membership and 5 others, 1989 - 1995
Chair, Advisory Committee on Research, 1992
Chair, Advisory Committee on Membership, 1993
Chair, Advisory Committee on Development, 1994
Advisory Committee to the Board on Strategic Planning, 1992–1994, 1997–1998
Chair, District IV (Southeast), 1989–1995
Alternate District Chair, District IV, 1988–1989
Chair, Founding Chair, Section on School Health, 1987–1989
Council on Sections, 1987–1989
Committee on School Health, 1981–1987; Chair, 1983–1987
Council on Child and Adolescent Health, 1983–1987

Sections on: Bioethics, School Health

6.11 Virginia Pediatric Society/Virginia Chapter of the American Academy of Pediatrics
Honorary Life Member – Voted 1997
Chair, Council on Child and Adolescent Health 1988–1990
Chapter President – 1985–1988
Chapter Vice President – 1982–1985, Secretary–Treasurer: 1979–1982

7. AWARDS/HONORS:

7.0 *Master of the College* - American College of Pediatricians – October, 2017

7.1 Honorary President (2016 – 2917) – Georgia Chapter AAP – June 10, 2016

7.2 The Outstanding Clerkship Director – Mercer University School of Medicine Class of 2016, March 18, 2016

7.3 Columbus Regional Health Physician Recognition Award 2015 – Nominee for Physician of the Year in Teaching

7.4 Certificate of Appreciation – Columbus State University Competitive Premedical Studies Program. March 19, 2015

7.5 The Outstanding Pediatric Faculty Award – Mercer University School of Medicine Class of 2014, May 1, 2014 and Mercer Class of 2015, March 20, 2015

7.6 Excellence in Medical Education Award – Georgia Campus - Philadelphia College of Osteopathic Medicine, April 9, 2010

7.7 Outstanding Contribution Award (Teaching) – Georgia Campus - Philadelphia College of Osteopathic Medicine, 2009, 2010/2011

7.8 Elected to Rotary International, Rotary Club of Columbus (GA), 2009

7.9 New Student Organization of the Year Award, ECU Student Leadership Awards Banquet, April 27, 2008, for the Rural Health Care Volunteer Society (Faculty Adviser)

7.10 Guest of Honor and Keynote Speaker, Alpha Epsilon Delta Pre-Health Honor Society, Induction Ceremony, April 19, 2008

7.11 Keynote Speaker, The Schweitzer Fellows Celebration of Service (Induction Luncheon), 2007 and 2008

7.12 Dedication Award (Highest Honor), BSOM M2 Class, April 10, 2008

7.13 Best Doctors in America 2000-2012, North Carolina Top Doctors (Pediatrician) 2021

7.14 AMA Physician's Recognition Award with Commendations in CME. 2004 – 2008.

7.15 National Health Services Corps "Spirit of the Corps" Award presented at the 2007 Ambassador's Conference: Training to Serve, July 27-28, 2007, Memphis, Tennessee.

7.16 Guide to America's Top Pediatricians, 2004 – 2008, 2014 Editions. Consumers' Research Council of America.

7.17 Title of Professor of Honour, Senate of the University of Medicine and Pharmacy of Targu Mures, Romania, September 12, 2005

7.18 Business North Carolina Magazine, Top Doctors, 2004, 2005

7.19 Award in Recognition – Brody (ECU) Rural Health Interest Group, April 7, 2003

7.20 Who's Who Among America's Teachers, 2002. 7th Edition

7.21 Visiting Professor, University of Hawaii Post Graduate Program at Chubu Hospital, Okinawa, Japan, January, 2002

7.22 Visiting Professor, University of Medicine and Pharmacy, Targu Mures, Romania Diploma of Honour, Awarded May 18, 2001

7.23 American Academy of Pediatrics, Section on School Health, Milton J.E. Senn Award, October, 2000

7.24 National Center for Missing and Exploited Children, Rainbow Award, February 27, 1999

7.25 APA National Pediatric Faculty Development Scholar Awards, 1999–2001

7.26 Community Service Award, School of Medicine, VCU/MCV, May 18, 1996

7.27 Virginia Governors School, Commonwealth of Virginia, Certificate of Commendation, August 4, 1995

7.28 Alpha Omega Alpha – Epsilon Chapter, 1991

7.29 Distinguished Service Award, Virginia Commonwealth University, 1988

7.30 Award for "Excellence in Medicine and Community Service," National Italian–American Foundation, October 11, 1987

7.31 Award in Appreciation – Human Growth Foundation, October, 1986

7.32 Annual Award for Outstanding Service to the Brain Injured, MCV–VCU, Williamsburg, VA, June, 1985

7.33 American Academy of Pediatrics, Outstanding Service Citation, 1985

7.34 American Academy of Family Practice Teaching Recognition Certificate, 1980

7.35 Outstanding Pediatric Resident Award, 1973–74, Medical College of Virginia

7.36 Senior Award for Scholastic Excellence, June, 1971, Stritch School of Medicine

8. COMMITTEES - Columbus Regional Health

8.1 Columbus Regional Medical Group AOC, 2014 - 2015

8.2 Family Advisory Council (Founding Chair), 2013 - 2015

8.3 Continuing Medical Education Committee, 2009 – 2015

8.4 Pediatric Executive Committee, 2009 – 2015

8.5 Pediatric Strategic Planning Committee, 2009 – 2015

8.6 Family Medicine Internal Review Committee, 2011- 2015

Chair – Transitional Year Internal Review Committee, 2012

9. COMMITTEES – ECU/BRODY/PCMH:

9.1 Academic Affairs, 2002–2007

9.2 Faculty Sponsor, Rural Health Interest Group, 2002–2008

9.3 Faculty Sponsor, American Medical Student Association, 2002–2009

9.4 Brody Council Committee, 2003-2008

9.5 M1, M2, M3, M4 Curriculum Committees, 2003–2008

9.6 Executive Curriculum Committee, 2003–2008

9.7 MD/7 Advisory Committee, 2004–2008

9.8 Chair, Family Medicine Chair Search Committee, 2004–2005

9.9 Delegate to Section on Medical Schools, AMA, Elected by BSOM Faculty, 2004–2009

9.10 Medical Ethics Committee, University Health Systems of Eastern North Carolina, PCMH, 2006–2008

9.10.1 Chair, Pediatrics Ethics Consultation Subcommittee, 2008

9.11 Board of Governor's Distinguished Professor for Teaching Awards Review Committee, 2007–2008

9.12 Promoting Healthful Eating to Prevent Weight Gain in Young Adults Advisory Board, 2007–2008

9.13 Search Committee for the Associate Vice Chancellor for International Affairs, 2008

10. COMMITTEES – LUMC:

10.1 Ronald McDonald Children's Hospital Committee of the Board, 1999; Chair, 2000–2002

10.2 Ronald McDonald House Board, 2000–2002

10.3 Medical Center Ethics Committee, 2000–2002

10.4 Medical Executive Committee, 1999–2002

10.5 Clinical Leadership Committee, 1999–2002

10.6 Marfan Syndrome Program Committee, Chair, 2000–2002

10.7 Committee on Academic Rank and Tenure, 2001–2002

11. COMMITTEES – MCV/VCU:

11.1 University Council, 1993–1996

11.2 Executive Committee, Virginia Center for the Advancement of Generalist Medicine (RWJ Generalist Grant), 1992–1996

11.3 Medical Director, Child Protection Committee, 1980–1992; Member, 1992–1996

11.4 University Tenure and Promotion Appeals Committee, 1990–1993

12. COMMITTEES – COMMUNITY:

12 Boys & Girls Clubs - Central Carolina – Board & Chair Safety Comm – 2020- 2022

12.1 Sanford, NC *Resilience Committee* – 7/2019 - Present

12.2 Sanford, NC, Crime Prevention and Youth Committee, 2019

12.2 Columbus Court Appointed Special Advocate (CASA) for Children, 2016 – 2019

12.3 Columbus Rotary *End Human Trafficking Now Coalition* 2015 - 2019
Chair - November 2016 - 2019

12.4 Right from the Start – Building Strong Marriages and Families, Pastoral Institute, 2015 -2017

12.5 Columbus State University Leadership Council, 2015 - 2019
College of Letters and Science – Strategic Planning Committee, 2017 - 2018

12.6 Columbus State University Competitive Pre-Med Advisory Group, 2015- 2019
Community Director (Founder) Primary Care Shadowing Program

12.7 Project Launch Committee, Georgia State and Local Health Dept, 2015 - 2019

12.8 Columbus Symphony Orchestra Board, 2015- 2019
Finance Committee – 2017 – 2019

12.9 Columbus Child Fatality Review Team, 2012 - 2013

12.10 Live Healthy Columbus/Strong 4 Life Obesity Project Convener. Founding Chair. Elected Chair, May 2011. Reelected, May 2012, Executive Committee 2013 – 2018

12.11 Georgia Pediatric Health Improvement Coalition Board (PHIC), Co-Chair IT/Telemedicine Committee 2011 - 2017

12.12 Georgia Children's Health Alliance – Executive Committee – Appointed by Lt. Governor Casey Cagle, 2010 - 2011

12.13 Family and Public Health Committee, North Carolina Medical Society, 2006–2009.

12.14 Member of the Board, Medical Institute, Austin, Texas, 2001-2006

12.15 Academic Advisory Board, Pfizer Scholars Grants for Faculty Development in Pediatric Health, 2000–2003

12.16 Chicago Rotary (Rotary One), Advisory Group on International Pediatric Health Services, 2000-2002

12.17 Reviewer, Center for Pediatric Emergency Medicine, National Child Protection Education Project, 2000–2003

12.18 Board of Directors, Vice President, Commonwealth Care of Virginia, Inc., 1995–1996

12.19 Board of Directors and Executive Committee, St. Joseph's Villa, 1993–1996
Chair–Medical Advisory Committee, 1995–1996

12.20 Managed Care (Medallion) Medicaid Advisory Board, State Department Medical Assistance Services, 1992–1996

12.21 Virginia Bar Association Commission on the Needs of Children, Founding Member, 1986–1992

12.22 State Emergency Medical Services Advisory Council, Appointed by Governor Robb, 1982–1986
Reappointed by Governor Baliles, 1986–1988

13. ADMINISTRATIVE EXPERIENCE:

13.1 Pediatric Clerkship Program Director, Mercer University School of Medicine, Columbus Campus, 2014 - 2015

13.2 Chief of Pediatrics, Columbus Regional Healthcare System, 2009 – 2015 (Retired)

13.3 Adjunct Professor in the Office of Interdisciplinary Health Sciences Education, Division of Health Sciences, Brody SOM, 2004–2008.

13.4 Director, Office of Generalist Programs, Brody SOM, 2002–2008

13.5 Faculty Mentor for Junior Faculty BSOM from: Pediatrics, IM, FM, 2003–2008

13.6 Medical Director, Ronald McDonald Children's Hospital, 1999–2002

13.7 Chair, Ambulatory Pediatric Division, LSUMC, and Director Pediatric Emergency Medicine at Charity Hospital for LSU and Tulane, New Orleans, LA, 1997–1999

13.8 Chair, Division of General Pediatrics and Emergency Care, Medical College of Virginia, 1987–1996

13.9 Director, Section of Ambulatory and Emergency Care, Children's Medical Center, Medical College of Virginia, 1978–1987

13.10 Medical Director – PruCare (MCO) of Richmond, 1987–1990
Chair, Physicians Advisory Committee
Chair, Quality Assurance Committee
Chair, Utilization Management Committee
Member, Executive Committee
Member, Pharmacy and Therapeutics Committee

13.11 Medical Coordinator, Richmond Juvenile Detention Home, 1986–1996

14. CONSULTANCIES:

14.1 Medical Advisory Board for the DiscoveryHealth.com Disease and Conditions Encyclopedia, DiscoveryHospital.com and HealthTeacher.com, 2007– 2009

14.2 National Advisory Child Health and Human Development Council, NIH/NICHD, 2006–2011

14.3 Chair, Lysosomal Storage Disorders (LSD) Education Initiative, 2004–2006
Chair, LSD Pediatric Education Development Project, 2004

14.4 National Advisory Council of the National Center for Primary Care, David Satcher, MD, PhD, Director, 2003–2010 (reappointed 3 times)

14.5 Johnson & Johnson Consumer Products Co. Pediatric Advisory Board, 2002–2005

14.6 Human Growth Foundation Medical Advisory Council, June, 1986–1991

15. BIBLIOGRAPHY:

15.1 Articles

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Vol.59 (4);14-15

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Linacre Quarterly, August 2010. Vol. 77(3); 245-246

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Collier DN, Zanga JR. Teaching residents and students to help patients and their families with obesity. *Virtual Mentor*. October 2006. 8:663-666. Available at: http://www.ama-assn.org/ama/pub/category/16856.html

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Zanga, J.R., "One Must Get Involved." (Invited Article) *AAPI Journal*, 2:5, 1998

Bar-on, M. and Zanga, J.R.: "Bronchiolitis." *Primary Care*, 23:4, 1996

Bar-on, M. and Zanga, J.R: "Child Abuse: A Model for the Use of Structured Clinical Forms" *Pediatrics*, 98:1996

Zanga, J.R., "Case in Point." *Bioethically Speaking*, 4:9, 1996

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Kroner, B.A.: Scott, R.B., Zanga, J.R.: "Poisoning in the Elderly: Characterization of Exposures Reported to a Poison Control Center." *J. Am. Ger. Soc.* 41:842, 1993

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Zanga, J.R.: "Hepatitis B: A Controversial Vaccine (or a Vaccine Controversy?)." *Pediatric Rounds: Growth Nutrition Development*, 1:6–8, 1992

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Ogren, J.M. and Zanga, J.R.: "Sexual Abuse: Incidence, Complications, Evaluation and Therapy." *Virginia Medical*, 110:488, 1983

Zanga, J.R.: "What is the Risk of a Second Child Having Seizures?" "Is There Any Medication to Prevent Convulsions?" "Is Surgery Needed for an Umbilical Hernia?." in *500 Questions New Parents Ask*, Dell, New York, 1982

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Cunningham, D. and Zanga, J. R.: "Myiasis of the External Auditory Meatus." *J. Peds.*, 84:857, 1974

15.2 Letters

Zanga, J.R.: "Shots Are Not Abusive," *Peds* 60:384,1977

Zanga, J.R.: "Alternatives to the Intermountain Regional Poison Control Center," *Veterinary and Human Toxicology*, 22:394,1980

Zanga, J.R.: "Incentives for Technology – Intensive Medicine," *NEJM* 304:1307–C,1981

Zanga, J.R. and Bar–on, M.: "Don't Compromise the Medical Home," *Arch Pediatr Adolesc Med*,152:714,1998

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Zanga, J.R.: "Increasing Awareness of Genetic Disorders," *Contemporary Pediatrics*, 3/9/04

McConnell M., et all, Zanga J.R.: "The Effects of Marriage, Civil Union, and Domestic Partnership Laws on the Health and Well-being of Children," Pediatrics, November 2006, Vol. 118(5): p 2259

15.3 American Academy of Pediatrics Publications:

Zanga, J.R.: "Ethics Code Inconsistent Concerning Executions and Abortions." (Letter), *AMNews*, 2/28/05

Zanga, J.R.: "The Hospitality Counterpoint." Invited Commentary, AAP News, 1/1999

Zanga, J.R.: "Are There Moral Absolutes?" *Bioethics Newsletter*, Invited Commentary, January, 1999

Zanga, J.R.: "Preventive Health Care: Why it Needs to Be Studied." Child Health Care – *AAP Research Update*, 8:1, 1992

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Zanga, J.R., et al: AAP Committee on School Health: "CPR Training in the School." *AAP News*, February, 1986

Zanga, J.R., et al: AAP Committee on School Health: "School Health Examinations." *AAP News*, February, 1986

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Zanga, J.R., et al: AAP Committee on School Health: "Education to Strengthen the Family." *AAP News*, January, 1985

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Zanga, J.R., et al: AAP Committee on School Health: "Administration of Medication in School." *Pediatrics* 74:433, 1984

15.4 Books, Chapters, Monographs:

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Zanga, J.R. (ed): *Manual of Pediatric Emergencies*. Churchill Livingstone, Inc., New York, 1987 (Authored five chapters)

Spencer, C., Walker, D., and Zanga, J.R.: "School and the Handicapped Child." *Pediatric Clinics of North America*, October, 1986, p. 1251–1264

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15.5 Abstracts:

Bissonnette-Pitre, L., et al (…Zanga, J.R.). To Protect and Prevent: The Sexual Abuse of Children and its Prevention. The Catholic Medical Association, 2006.

Zanga, J.R.: "Mobile Health Care: Bringing Medical Care Home." The 23rd International Congress of Pediatrics, September 10, 2001

Gautier, K.B., Peck, G.Q., Ferrand, C., Collier, E.A., Sgritto, J., Kaye R.E., Zanga, J.R.: "Aerobic/Cross Training Program Improves Baseline Asthma and Fitness in Children."

Southern Society for Pediatric Research, 1997

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Sanders, J.K. and Zanga, J.R.: "Child and Adolescent Drownings in Virginia: A Population Based Study." APHA Annual Meeting, November 1,1994

Sanders, J.K. and Zanga, J.R.: "Injuries to Children: A Statewide System for Injury Surveillance in the Pediatric Office Setting." Second World Conference on Injury Control, Atlanta, GA., May 23, 1993

Sanders, J.K. and Zanga, J.R.: "Playground Safety Workshop." Second World Conference on Injury Control, Atlanta, GA, May 20, 1993

Sanders, J.K., Waring, E., and Zanga, J.R.: "Finding The Missing Data – A Statewide System For Injury Surveillance in The Pediatric Office." *American Journal of Diseases of Children*, 145: 416, 1991

Zanga, J.R.: "The Short Statured Child." Assoc. for the Care of Children's Health, Cleveland, Ohio, June 12–15, 1988

Henderson, E.L., Zanga, J.R., et al. "Physician Bias and The Interpretation of Rapid Tests For Group A Streptococcal Pharyngitis." *Am Jour Diseases of Children*, 142:405–406, 1988.

15.6 Posters and Media:

Zanga, J.R. Champions for Children. Muscogee County Medical Society Bulletin, 55, 6, May, 2010

Forrow, L., O'Donnell, J., Irons, T., Zanga, J.R.: "Ideas in Action: The Schweitzer Fellows Program." Poster Presentation at AAMC, November 7-9, 2004

Zanga. J.R. (Work Group Chair): "Identifying Lysosomal Storage Disorders in Pediatric Practice – The Importance of Early Diagnosis." Speaker Slide Kit, Genzyme, Inc. 2004

Sy, B. and Zanga, J.R.: "Subarachnoid Hemorrhage Secondary to Bleeding Carotid Aneurysm." NC Pediatric Society Resident Poster Session, August 17-20, 2006

Cuellar, J.G., Zanga,J.R.: "Hearts-N-Parks: Salud para su Corazon." NHMA, Washington, DC, 2006

Kaplan SA, Merritt KB, Zanga JR, et al: "Healthy Smile, Healthy Child: A Pilot Study." North Carolina Pediatric Society, August 17-19, 2007

Fischer H, Zargham S, and Zanga JR: "Effects of Media Education on Children's Perceptions of Health Issues." BSOM/ECU Summer Scholars Research Day, August 18, 2008

Fischer H, Zargham S, and Zanga JR: "Effects of Media Education on Children's Perceptions of Health Issues." AMA Medical Student Section Research Poster Session, AMA Interim Meeting, Orlando, Florida, November 8, 2008

15.7

Journal Reviewer, 2014 - Present. *Linacre Quarterly*

Journal Reviewer, 2007– 2013 *American Journal of Medical Genetics*

Journal Reviewer, 2006– 2014 *Journal of Palliative Care*

Journal Reviewer, 2005– 2013 *Journal of Medical Ethics (BMJ)*

Reviewer. *Ambulatory Pediatric Association's Educational Guidelines for Pediatric Residency*. (Revision), 2003

Editorial Advisory Board: *Children's Health and Safety Magazine*, 2000–2002

Journal Reviewer, 2000–2011. *Ambulatory Pediatrics*

Editor–in–Chief: *Pediatric Rounds: Growth Nutrition Development*, SynerMed, 1991-1995

Journal Reviewer, 1984–2011. *Pediatrics*

15.8 ***Lectures: (****Invited* **– Selected Topics)**

"The New Sexual Revolution: Protecting Children from the Dangers of Comprehensive Sex Education" Mathew Bulfin Educational Conference. Nashville, TN. February 26. 2022

"ACEs & Resilience: Biology of Stress & The Science of Hope" US HHS ACYF & FYSB Conference. *Creating a 2020 Vision.* June 4, 2020

"Telemedicine and School Based Health Centers" Muscogee County Schools SBHC Advisory Committee, June 21, 2018

"Is this the Face of Human Trafficking: Modern Slavery". Resident/Medical Student Noon Conference. Midtown Medical Center. Columbus Ga. Ga, February 20, 2018

"Human Trafficking – How We Can End It". Pediatric Grand Rounds – Bon Secours (St. Mary's Hospital) – Richmond, VA, October 31, 2017

"End Human Trafficking Now – Rotary's Role". Grand Rounds, Columbus Children's Hospital, Columbus, Ga, May 18, 2017

"The Future of Pediatrics". Columbus Children's Hospital, Columbus, Ga, Grand Rounds, June 23, 2016

"The Newborn Examination". Philadelphia College of Osteopathic Medicine, Atlanta, Ga, (4 hours for M2 Class), June 7, 2016

"Pediatric Emergencies". Philadelphia College of Osteopathic Medicine, Atlanta, Ga, (2 hours each for M1 & M2 Classes), April 5, 2016

"Community Roundtable Training on Domestic Minor Sex Trafficking - The Medical Issues". Columbus State University, April 19, 2016

"Evidence Based Medicine". Medical Society/Mercer Preceptor Conference, Columbus Regional/MMC, August 22, 2015

"Columbus – A Live Healthy City: Addressing Obesity as a Community." Carl Patrick Multidisciplinary Symposium, St Francis Hospital. Columbus, Ga, February 2, 2013

"Childhood Obesity and Diabetes." Columbus Diabetes University 2011, Columbus, Ga,

October 29, 2011

"The Obesity Conundrum." Georgia Perianesthesia Nurses Association, Peachtree City, Ga, September 17, 2011

"Live Healthy Columbus – Obesity." Partners in Education Conference, Columbus, Ga, September 7, 2011

"Special Populations: Caring for Chronically Ill Children." Columbus Metro Medical Response System, Fundamental Disaster Management, Columbus, Ga, September 29, 2010

"Five Things Children Would Change about Emergency Medicine." Pediatric Grand Rounds, Columbus Regional Healthcare System, Columbus, Ga, September 9, 2010

"Adolescent Brain Development: Legal and Societal Issues." Catholic Medical Association, Baltimore, Md, October 10, 2008

"Making the Case for Primary Care." 4th Annual NHSC Ambassadors Conference, Keynote Address, Phoenix, Az, July 26, 2008

"The Role of the Ambassador." 4th Annual NHSC Ambassadors Conference, Phoenix, Az, July 25, 2008

"Legal and Societal Issues in Adolescent Health." 7th National Meeting of the Medical Institute, Austin, Texas, July 9, 2008

"Freedom of Conscience in Clinical Practice." 7th National Meeting of the Medical Institute, Austin, Texas, July 8, 2008

"The NIH/NICHD: An Overview." Critical Care Pediatric Research Network Committee, Bethesda, Md, March 26, 2008

"How you Gonna Keep 'em Down on the Farm?: Promoting Primary Care. AMA Section on Medical Schools, November 17, 2007

"Child Prostitution." National Advisory Council on Sexual Health, Sept 17, 2007

"Religion, Science, and Sexual Health." National Advisory Council on Sexual Health, Sept 17, 2007

"Internationalism in Medical Education." BSOM Medical Education Grand Rounds, January 11, 2007

"International Child Health: It's Not So Healthy." World Affairs Council of Eastern, NC. Great Decisions Program, 1/27/2007

"Encouraging Students to Primary Care Residencies: Bridging Supply to Meet Demand." SGSA, April 4, 2007, Little Rock, Arkansas

"Earth Day & 50th Anniversary Albert Schweitzer 'Declaration of Conscience.'" Town Commons Park, Greenville, NC. Sunday, April, 23, 2007

"Encouraging Students to Primary Care." National Health Services Corp Ambassador Conference, July 26-29, 2007, Memphis, Tennessee

"Vaccines and Sexual Health." National Advisory Council, National Center for Primary Care, Morehouse School of Medicine, May 8, 2007

"Five Things that Children Would Change about Emergency Medicine." BSOM, Peds

Emergency Grand Rounds. PCMH Auditorium, August 28, 2007

"Bringing International Health to Eastern North Carolina: Why Should Our Trainees Study Abroad?" World Affairs Councils of Eastern North Carolina, October 2006

"Sexuality and the Media." – National Advisory Council, National Center for Primary Care, Morehouse SOM, May 23, 2005

"Abstinence Education Programs." – Medical Institute Annual Conference, Moderator and Commentator, Washington, DC, May 27, 2005

"Why is This Child Coughing?" – 27th Annual MCU/VCU Pediatric Primary Care Conference, Virginia Beach, VA. July 23, 2005

"Evaluation of Chronic Abdominal Pain." Workshop – 27th Annual MCU/VCU Pediatric Primary Care Conference, Virginia Beach, VA, July 23, 2005

"Condom Integrity: Research Needs." – National Advisory Council, National Center for Primary Care, Morehouse SOM, July 26, 2005

"Why is this Child Coughing?" PRO BONO Course – Romania, American College of Chest Physicians and the University of Medicine and Pharmacy, Targu Mures, Romania, September 13, 2005

"Common Pediatric Illnesses Presenting as Rashes." PRO BONO Course – Romania, American College of Chest Physicians and the University of Medicine and Pharmacy, Targu Mures, Romania, September 13, 2005

"Evaluations of Fever in the Infant." PRO BONO Course – Romania, American College of Chest Physicians and the University of Medicine and Pharmacy, Targu Mures, Romania, September 13, 2005

"The Role of the General Physician in Child Care." PRO BONO Course – Romania, American College of Chest Physicians and the University of Medicine and Pharmacy, Targu Mures, Romania, September 13, 2005

"PICU Organization in the United States." PRO BONO Course – Romania, American College of Chest Physicians and the University of Medicine and Pharmacy, Targu Mures, Romania, September 13, 2005

"Adolescent Brain: Implications of Sexuality Education." – Catholic Medical Association, 74th Annual Conference, Portland, OR, October 21, 2005

"The Declining Number of Generalists – Challenges in Medical Education." (with Bruce Johnson, MD), Workshop – Generalists in Medical Education Meeting, Washington, DC, November 5–6, 2005

"Health Disparities and the Uninsured." – AMSA Region 5 Conference, Durham, NC, March 6, 2004

"The Diagnosis of ADHD Pediatrician's Role." – International Pediatric Congress, Cancun, Mexico, August 17, 2004

"Primary Care of Infants." – International Pediatric Congress, Cancun, Mexico, 8/20/2004

"The Developing World is Close to Home." – UNCC AMSA Chapter, Charlotte, NC, September 10, 2004

"A Medical Practice Initiative." – National Advisory Council, National Center for

Primary Care, Morehouse SOM, September 21, 2004

"Lysosomal Storage Disorders." – The LSD Education Initiative, San Francisco, CA, October 9, 2004

"Sexuality Education in the Schools." – Section on School Health Symposium, AAP NCE, San Francisco, CA, October 10, 2004

"It Takes a Village: The Importance of Family in the Rearing of Children." – Annual Conference, Virginia Chapter, American Academy of Pediatrics, and the Children's Hospital of the King's Daughters, Williamsburg, VA, October 3–5, 2003

"The Telephone in Pediatric Practice." – Pediatric Grand Rounds, University of Illinois Medical School at Rockford, Rockford, IL, February 15, 2002

"Child Abuse." – Pediatric Grand Rounds, Alexian Brothers Medical Center, March 16, 2001

"The Future of Pediatrics." – Slovenian Pediatric Association, via Teleconference, March, 2001

"Child Abuse." – Annual Convocation, University of Medicine and Pharmacy, Targu–Mures, Romania, May 18–21, 2001

"The Role of the Department Chair." – International Pediatric Chairs Association Meeting, Beijing, China, September 8–9, 2001

"Pediatrics in the New Millennium." – Pediatric Grand Rounds, Jersey Shore Medical Center, Neptune, NJ, October 5, 2001

"Problems in the Practice of Pediatrics." – Department of Pediatrics Meeting, Elmhurst Hospital, Elmhurst, Illinois, March 28, 2000

"Child Abuse." – Pediatric Grand Rounds, Rush Medical School, 8/13, 2000

"Child Abuse." – Pediatric Grand Rounds, Lutheran General Children's Hospital, 8/22/2000

"Children of the World – An Underrepresented Minority" – The Shantilal C. Sheth Oration, 35th National Conference of The Indian Academy of Pediatrics, Kochi, India, January 8–11, 1998

"Development of Emergency Services in Pediatrics." – 35th National Conference of Indian Academy of Pediatrics, Kochi, India, January 8–11, 1998

"Child Abuse: The Pediatrician Role.", "Telephone in Pediatric Practice." and "Cervical Spine Trauma – A Rational Approach to Diagnosis." – 45th Annual Meeting of the Pediatric Section, Puerto Rico Medical Association, San Juan, Puerto Rico, February 13–16, 1998

"The Plight of Children and the Role of National Pediatric Organizations." – 18th Pan American Pediatric Congress, Santiago, Chile, April 27,1998

"Title XXI – What is the AAP Doing." – Pediatric Academic Societies' Annual Meeting, New Orleans, LA, May 4, 1998

"Presentation on the 10th Anniversary of the CHIP Program." Keynote Speaker. – Child Health Investment Partnership (CHIP) 10th Anniversary, Roanoke, Virginia, June

4,1998

"Child Abuse." – Louisiana Association of Nationally Registered Emergency Medical Technicians Educational Conference, Kenner, Louisiana, June 12–14, 1998.

"Minorities, Media and the AAP." – National Medical Association, Annual Meeting, New Orleans, Louisiana, August 1–5, 1998

"Pediatric AIDS, The Role of Pediatric Societies in Policy Making." – XX Congress of the Federation of Pediatric Associations of Central America and the Caribbean, Panama City, Panama, November 16-18, 1998

"The Interconnectedness of Risky Behaviors." – Right Choices for Youth Conference, sponsored by Gov. George Bush, Austin, Texas – March 31, 1998

"Pediatrics Now and in the 21st Century." Visiting Professor – University of South Florida, February 6, 1997

"Pediatric Emergency Medicine in the USA." and "The Changing World of Academic Pediatrics." – Italian Pediatric Society, Bologna, Italy, June 13–16,1997

"AAP Update.", "Telephone in Pediatric Practice.", "Child Abuse." and "Guns and Children." – Seventh Annual Pediatric Symposium, Joe DiMaggio Children's Hospital, Fort Lauderdale, Florida, November 8–9, 1997

"Guns and Children: A Pediatric Epidemic." – Grand Rounds, All Children's Hospital, St. Petersburg, Florida, December 12, 1997

"Health Care Reform." "Violence and Children – The Gun Epidemic." "Child Abuse – The Physician's Role." – Medical College of Georgia Annual Pediatric CME Conference, St. Simon Island, GA, July 18–20, 1994

"Adolescent Health: Strategies for Improving Health Status." speaker and panel moderator – Children's Defense Fund National Conference, Washington, DC, March 11, 1988

"Meeting the Health Care Needs of Children in Schools." Keynote Address – National Association of School Nurses, Anaheim, CA, June 28, 1988

"School Based Clinics, Another View." – American Academy of Pediatrics Annual Meeting, New Orleans, LA, November 1–3, 1987

"Tort Reform." – American Academy of Pediatrics Annual Meeting, New Orleans, LA, November 1–3, 1987

"School Based Health Clinics – Problems For the Future" and Panel Commentator for Research Papers on School Health Clinics – American Public Health Association Annual Meeting – Las Vegas, NV, September 29–30, 1986

"School Health" – Keynote address, Annual Conference on School Health, Yale University School of Medicine, New Haven, CT, March 20,1985

"Health Care for the School–Aged Child in the Next Decade." – National Conference on Health of the School Aged Child, April 12–14, 1984, Denver, CO

"Health Care of the School Aged Child" – National Maternal and Child Health Conference, Tyson's Corner, Virginia, March 17, 1982

"Health Education Process and Methodology: What It Is and How It's Done." – First National Conference on Rural Health Education, May 2–4, 1978, St. Louis, Missouri

Zanga, J.R. and Martinez, J.: "Pathologic Analysis on Werdnig–Hoffman Disease Presenting as Diaphragmatic Paralysis: Report of a Case." – Cuban Medical Association Congress, Miami, Florida, 1975

15.9 Other: (Selected Items)

CBS This Morning, August 23, 1994 Video Parenting Magazine, Nationally syndicated, 15 segments, 2001–2003

"House Call" – Monthly segment of *Noon News*, WWBT–TV Channel 12, 1991–1996

Volunteer Medical Director, Camp Easter Seal East, 1985–1996

Consultant – Pediatric Program Organization, St. Joseph's Hospital, Phoenix, AZ, March 23–25,1994

Good Morning America, September, 1990

Consultant – National Institutes for Mental Health – To develop AIDS Publication for Primary Care Physician, 1986–1987

"A Visit With the Pediatrician" – Weekly segment of *Good Morning Virginia*, WXEX–TV, Channel 8. 1980–1985

Regular Pediatric Columnist – *Woman's World Magazine*, 1980–1984

16. GRANTS AS PRINCIPAL INVESTIGATOR

"Caring for the Elderly: House Calls." Pitt Memorial Hospital Foundation, 2008-2009

$15,770

"Office of Generalist Programs." PCMH, Pitt County Memorial Hospital, 2002– 2008, $78,000 per year

"Childhood Injury Prevention for Family Daycare." DHHS, Maternal and Child Health Bureau, 1992–1993, $19,872

"Residency Training in General Internal Medicine and/or General Pediatrics." DHHS, U.S.

"Injury Prevention Grant." Virginia Department of Health, DMCH, 1987–1996, $185,000 per year

"Child Development Services." Virginia Department of Health, DMCH, 1988–1993, $165,000 per year

"Behavioral Pediatric Training Program." DHHS, Maternal and Child Health Services, 1986–1992, $630,000

"Virginia Auto Safety Alliance. Traffic Safety Now." 1986 and 1987, $300,000,

"Community Grant" US Public Health Service, 1985–1988, $475,000 plus indirect costs)

Appendix Attachment

11

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

Expert Declaration of Michael K. Laidlaw, MD

I, Michael K. Laidlaw, M.D., hereby declare as follows:

1. I am over the age of eighteen and submit this expert declaration based on my personal knowledge and experience.

2. I am a board-certified endocrinologist. I received my medical degree from the University of Southern California in 2001. I completed my residency in internal medicine at Los Angeles County/University of Southern California Medical Center in 2004. I also completed a fellowship in endocrinology, diabetes and metabolism at Los Angeles County/University of Southern California Medical Center in 2006.

3. The information provided regarding my professional background and publications are detailed in my curriculum vitae. A true and correct copy of my curriculum vitae is attached as Exhibit A.

4. In my clinical practice as an endocrinologist, I evaluate and treat patients with hormonal and/or gland disorders. Hormone and gland disorders can cause or be associated with psychiatric symptoms, such as depression, anxiety, and other psychiatric symptoms. Therefore, I frequently assess and treat patients demonstrating psychiatric symptoms and determine whether their psychiatric symptoms are being caused by a hormonal issue, gland issue, or something else.

5. I have been retained by Defendants in the above-captioned lawsuit to provide an expert opinion on the efficacy and safety of sex reassignment treatment.

6. If called to testify in this matter, I would testify truthfully and based on my expert opinion. The opinions and conclusions I express herein are based on a reasonable degree of scientific certainty.

7. I am being compensated at an hourly rate of $450 per hour plus expenses for my time spent preparing this declaration, and to prepare for and provide testimony in this matter. I am being compensated at an hourly rate of $650 for testimony at depositions or trial. My compensation does not depend on the outcome of this litigation, the opinions I express, or the testimony I may provide.

8. My opinions contained in this report are based on: (1) my clinical experience as an endocrinologist; (2) my clinical experience evaluating individuals who have or have had gender incongruence including a detransitioner; (3) my knowledge of research and studies regarding the treatment of gender dysphoria, including for minors and adults; and (4) my review of the various declarations submitted by Plaintiffs

9. I was provided with and reviewed the following case-specific materials: The Florida Medicaid's "Generally Accepted Professional Medical Standards Determination on the Treatment of Gender Dysphoria"; the expert declaration of Johanna Olson-Kennedy; the expert declaration of Loren Schechter; the expert declaration of Dan H. Karasic; the expert declaration of Armand H. Matheny Antommaria; the declaration of Brit Rothstein; the declaration of August Dekker; the declaration of Jane Doe; the declaration of Jade Ladue; files from Florida Medicaid.

10. In my professional opinion, treatment interventions on behalf of children and adults diagnosed with gender dysphoria must be held to the same scientific standards as other medical treatments. These interventions must be optimal, efficacious, and safe. Any treatment which alters biological development in children should be used with extreme caution. Except in the case of a fatal injury or disease, the minor will become an adult and present to the adult physician. The adult physician must be able to have a thorough understanding of any condition which alters the biological development of children and, in the case of the endocrinologist, be knowledgeable about the long term effects of hormones

on the human body, particularly when the hormones are being used in ways that alter development.

11. The following expresses my expert opinion regarding minors and adults who present with a disparity between their biological sex and internal feeling about their gender, specifically with regard to the use of social transition, medications which block normal pubertal development, the applications of hormones of the opposite sex, and surgical procedures that alter the genitalia and/or breasts for those individuals.

I. Background

A. Endocrine Disorders

Before discussing gender dysphoria and gender affirmative therapy from the perspective of an endocrinologist, it is helpful to discuss the background of endocrine diseases. This background demonstrates the difference in gender dysphoria, which is a psychological diagnosis, and other conditions treated by endocrinologists, which are physical diagnoses.

Endocrinology is the study of glands and hormones. Endocrine disorders can be divided into three main types: those that involve hormone excess, those that involve hormone deficiency, and those that involve structural abnormalities of the glands such as cancers.

It is important for the endocrinologist to determine the cause of hormone gland excess or deficiency in order to devise an appropriate treatment plan. The plan will generally be to help bring the hormones back into balance and thus bring the patient back to health.

To give an example of hormone excess, hyperthyroidism is a term which means overactivity of the thyroid gland. In this condition excess thyroid hormone is produced by the thyroid gland. This results in various physical and psychological changes for the afflicted patient. Examples of physical changes can include tachycardia or fast heart rate, hand tremors, and weight loss. Examples of psychological symptoms include anxiety, panic attacks, and sometimes even psychosis.

An endocrinologist can recognize thyroid hormone excess in part by signs and symptoms, but can also confirm the diagnosis with laboratory testing that shows the thyroid hormones to be out of balance. Once this is determined and the degree of excess is known, then

treatments can be given to bring these levels back into balance to benefit the patient's health and to prevent other disease effects caused by excess hormone.

To give another example, consider a deficiency of insulin. Insulin is a hormone which regulates blood glucose levels. If there is damage to the pancreas such that insulin levels are very low, then blood glucose levels will rise. If the glucose levels rise to a certain abnormally high level, then this is considered diabetes. In the case of type 1 diabetes, insulin levels are abnormally low and therefore blood glucose levels are abnormally high leading to a variety of signs and symptoms. For example, the patient may have extreme thirst, frequent urination, muscle wasting, and weight loss. They may often experience lethargy and weakness.

In this case laboratory tests of glucose and insulin levels can confirm the diagnosis. Once diabetes is confirmed, the patient is then treated with insulin to help restore glucose balance in the body and prevent long-term complications of diabetes.

To give an example of a structural abnormality, a patient may have a lump on the thyroid gland in the neck. This may be further examined by an imaging test such as an ultrasound. A needle biopsy can be performed so that the cells can be examined under a microscope. A trained medical professional such as a pathologist can then examine the cells to determine if they are benign or cancerous. In the case of a thyroid cancer, a surgical procedure known as a thyroidectomy may be performed to remove the diseased thyroid gland in order to treat the cancer.

Noteworthy in the preceding three examples is that all three disease conditions are diagnosed by physical observations. In other words, a laboratory test of a hormone, an imaging test of an organ, an examination of cells under a microscope, or all three may be employed in the diagnosis of endocrine disease.

B. Gender Dysphoria is a Psychological Diagnosis

Gender dysphoria, on the other hand, is not an endocrine diagnosis, it is in fact a psychological diagnosis. It is diagnosed purely by psychological methods of behavioral observation and questioning.

Likewise what is termed gender identity is a psychological concept. It has no correlate in the human body. In the letter to the editor I wrote with my colleagues, discussed above, we

wrote in our critique of the Endocrine Society Guidelines that "There are no laboratory, imaging, or other objective tests to diagnose a 'true transgender' child" (Laidlaw et al., 2019).

For example, one cannot do imaging of the human brain to find the gender identity. Likewise, there is no other imaging, laboratory tests, biopsy of tissue, autopsy of the brain, genetic testing, or other biological markers that can identify the gender identity. There is no known gene that maps to gender identity or to gender dysphoria. In other words, there is no objective physical measure to identify either gender identity or gender dysphoria.

This is in contrast to all other endocrine disorders which have a measurable physical change in either hormone levels or gland structure which can be confirmed by physical testing. Therefore, gender dysphoria is a purely psychological phenomenon and not an endocrine disorder. But as my colleagues and I wrote in our letter to the editor, it becomes an endocrine condition through gender affirmative therapy: "Childhood gender dysphoria (GD) is not an endocrine condition, but it becomes one through iatrogenic puberty blockade (PB) and high-dose cross-sex (HDCS) hormones. The consequences of this gender-affirmative therapy (GAT) are not trivial and include potential sterility, sexual dysfunction, thromboembolic and cardiovascular disease, and malignancy" (Laidlaw et al. 2019).

As a practicing endocrinologist and scientist, I have made a study of GD and its treatment for two reasons: 1) I want to be sure that my colleagues and I understand the science before we treat any patients with GD; and 2) I am concerned that the medical society that claims to speak for me and other endocrinologists has abandoned scientific principles in endorsing treatments for GD that have questionable scientific support. The opinions expressed in this report are the result of my own experience, studies, education, and review of the scientific literature related to GD.

C. Gender Dysphoria and Desistance

GD is a persistent state of distress that stems from the feeling that one's gender identity does not align with their physical sex (American Psychiatric Association, 2013). It has been a relatively rare condition in children and adolescents. However there have been very significant increases in referrals for this condition noted around the globe.

For example, in the UK, "The number of referrals to GIDS [Gender Identity Development Service] has increased very significantly in recent years. In 2009, 97 children and young

people were referred. In 2018 that number was 2519" (Bell v Tavistock Judgment, 2020). There is evidence that this increase may be in part due to social contagion and fueled by social media/internet use (Littman, 2018).

The French National Academy of Medicine wrote recently: "Parents addressing their children's questions about transgender identity or associated distress should remain vigilant regarding the addictive role of excessive engagement with social media, which is both harmful to the psychological development of young people and is responsible for a very significant part of the growing sense of gender incongruence" (SEGM, 2022).

In "a study of the Finnish gender identity service, '75% of adolescents [assessed] had been or were currently undergoing child and adolescent psychiatric treatment for reasons other than gender dysphoria' (Kaltiala-Heino, 2015). In fact, '68% had their first contact with psychiatric services due to other reasons than gender identity issues.' The same study also showed that 26% percent had an autistic spectrum disorder and that a disproportionate number of females (87%) were presenting to the gender clinics compared to the past" (Laidlaw in gdworkinggroup.org, 2018).

Desistance is a term indicating that the child, adolescent, or adult who initially presented with gender incongruence has come to experience a realignment of their internal sense of gender and their physical body. "Children with [gender dysphoria] will outgrow this condition in 61% to 98% of cases by adulthood. There is currently no way to predict who will desist and who will remain dysphoric" (Laidlaw et al., 2019; Ristori & Steensma, 2016).

Because there is no physical marker to diagnose gender identity, and because it is not possible to predict which child or adolescent will desist, it is not possible to know which young person will remain transgender identified as adults. Also, because the rate of desistance is so high, gender affirmative therapy will necessarily cause serious and irreversible harm to many children and adolescents who would naturally outgrow the condition if not affirmed.

Dr. Olson-Kennedy states that "[t]he studies pertaining to desistance upon which the GAPMS Memo relies pertain to prepubertal youth, not adolescents. In fact, contrary to the GAPMS Memo's assertion, studies show that if gender dysphoria is present in adolescence, it usually persists (DeVries, et al., 2011)." (Oslon-Kennedy decl, p. 22).

Dr. Olson-Kennedy confuses prepubertal (a medical term) with preadolescence (a psychological designation). Puberty which pertains to the phsyical development of the reproductive tract, breasts and associated secondary sex characterestics can begin as early as age 8 in girls and age 9 in boys. The studies which have examined desistance involved children aged twelve and under. For example table 1 in Ristori and Steensma 2016 shows multiple studies involving children. For the three most recent - Singh (2012), Wallien & Cohen-Kettenis (2008), and Drummond et al. (2008) - these involved age ranges from 3 to nearly 13 years old.[1] The desistance rate varied from 61 to 88%. Since the upper age was twelve (or slightly higher), this would include children in the age range of 8-12 years old many of whom were going through puberty based on their age and were therefore not Tanner stage 1 (pre-pubertal).[2] Therefore Dr. Olson-Kennedy's statement that "[t]he studies pertaining to desistance upon which the GAPMS Memo relies pertain to prepubertal youth" is incorrect.

D. Biological Sex in Contrast to Gender Identity

A recognition and understanding of biological sex is critical to my practice as an endocrinologist because the endocrine physiology of men and women, boys and girls, differ.

Biological sex is the objective physical condition of having organs and body parts which correspond to a binary sex. There are only two physical sexes, male and female. The male is identified as having organs and tissues such as the penis, testicles and scrotum. The female sex is identified by having organs and tissues such as the labia, vagina, uterus, and ovaries. Biological sex is easily identified by physical observation such that adults and even young children can identify the biological sex of a newborn baby.

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[1] "This study provided information on the natural histories of 25 girls with gender identity disorder (GID). Standardized assessment data in childhood (mean age, 8.88 years; range, 3-12 years)" (Drummond et al., 2008).
"The mean age of the participating gender-referred children was 10.47 years (SD = 1.27; range, 8.11–12.77)" (Wallien et al., 2009).
" Standardized assessment data in childhood (mean age, 7.49 years; range, 3–12 years) and at follow-up (mean age, 20.58 years; range, 13–39 years) were used to evaluate gender identity and sexual orientation outcome. At follow-up, 17 participants (12.2%) were judged to have persistent gender dysphoria." (Singh, 2012).

[2] To my knowledge the desistance literature does not examine Tanner stages of puberty as part of their studies. However one can infer based on the ages that many children had at least begun puberty (Tanner stage 2) or were at a more advanced stage of puberty.

This is in contrast to gender identity, which does not exist in any physical sense. It is a subjective identification known only once a patient makes it known. It cannot be identified by any physical means, cannot be confirmed by any outside observer, and can change over time.

It is also noteworthy that the physical organs described above as representing biological sex have a physical genetic correlate. In other words, it is a well-established scientific fact that two X chromosomes identify the cells correlating to a female person, and an X and a Y chromosome correlate to a male person.

Sex is clearly identified in 99.98% of cases by chromosomal analysis (Sax, 2002). Sex is also clearly recognized at birth in 99.98% of cases (Id.). Therefore, sex is a clear provable objective reality that can be identified through advanced testing such as karyotyping, or simple genital identification at birth by any layperson. The other 0.02% of cases have some disorder of sexual development (DSD). DSDs do not represent an additional sex or sexes, but simply a disorder on the way to binary sex development (Chan et al., 2021).

E. Human Sexual Development

1. Embryologic development

Another confirmation that there are only two biological sexes comes from what is known about embryologic development and fertilization. The biologic development of the human person begins with a gamete from a female termed an ovum or egg and a gamete from a biological male which is termed sperm. The fertilization of the egg by the sperm begins the process of human biological development. The cells of the fertilized ovum then multiply and the person undergoes the incredible changes of embryologic development.

It is noteworthy that the male sperm comes from the biological male and the female egg comes from the biological female. There is no other third or fourth or fifth type of gamete that exists to begin the development of the human person. This is consistent with the binary nature of human sex (Alberts et al., 2002).

The sex binary of the human embryo is further developed between roughly weeks 8 to 12 of human development. There are two primitive structures present within the developing embryo called the Wolffian duct and Mullerian ducts (Larsen et al., 2003). The Wolffian ducts develop into substructures of the genitalia including the vas deferens and epididymis

which belong exclusively to the male sex. For the female, the Mullerian ducts go on to form the uterus, fallopian tubes, cervix and upper one third of the vagina which belong exclusively to the female sex (Id.)

Significantly once the male structures are developed from Wolffian ducts, the Mullerian ducts are obliterated. This means that throughout the rest of embryological development the Mullerian ducts will not form into biological female structures. Likewise, in the female, the Wolffian ducts are destroyed by week 12 and will not form male structures at any point in the future (Id.).

Thus we can see in very early development that the sex binary is imprinted physically not only in the chromosomes, but also on the very organs that the body produces. Additionally, the potential to develop organs of the opposite sex is eliminated. Thus, in the human being there are only two physical tracts that one may progress along, the one being male and the other being female (Wilson and Bruno, 2022).

2. Pubertal Development

As mentioned previously, at the time of birth an infant's sex is easily identified through observation of the genitalia. Corresponding internal structures could also be confirmed through imaging if needed.

In early childhood, some low level of sex hormones are produced by the sex glands. The male testes produce testosterone. The female ovaries produce primarily the hormone estrogen. These sex glands remain quiescent for the most part, producing low levels of sex hormones until the time of pubertal development.

Puberty is a time of development of the sex organs, body, brain and mind. There are well known changes in physical characteristics of the male such as growth of facial hair, deepening of the voice, and increasing size of the testicles and penis. Importantly the testicles will develop sperm under the influence of testosterone and become capable of ejaculation. Because of these changes, the male will become capable of fertilizing an egg. The inability to produce sperm sufficient to fertilize an egg is termed infertility.

For the female, pubertal development includes changes such as breast development, widening of the pelvis, and menstruation. The female will also begin the process of ovulation which is a part of the menstrual cycle and involves the release of an egg or eggs

from the ovary. Once the eggs are released in a manner in which they can become fertilized by human sperm then the female is termed fertile. The inability to release ovum that can be fertilized is infertility (Kuohong and Hornstein, 2021).

3. Tanner stages of development

From a medical perspective it is important to know the stage of pubertal development of the developing adolescent. This can be determined through a physical examination of the body. The female will have changes in breast characteristics and pubic hair development. Similarly, the male will have changes in testicular size and pubic hair development. These findings can be compared to the Tanner staging system which will allow the stage of puberty to be known.

Tanner stages are divided into five. Stage 1 is the pre-pubertal state before pubertal development of the child begins. Stage 5 is full adult sexual maturity. Stages 2 through 4 are various phases of pubertal development (Greenspan and Gardner, 2004).

Awareness of the Tanner stage of the developing adolescent is also useful to assess for maturation of sex organ development leading to fertility. For girls, the first menstruation (menarche) occurs about two years after Tanner stage 2 and will typically be at Tanner stage 4 or possibly 3 (Emmanuel and Boker, 2022). The first appearance of sperm (spermarche) will typically be Tanner stages 4 (Id.). If puberty is blocked or disrupted before reaching these critical stages, the sex glands will be locked in a premature state and incapable of fertility.

4. Biological Sex Cannot Be Changed

It is not possible for a person to change from one biological sex to the other, and there is no technology that allows a biological male to become a biological female or vice-versa. It is not technologically possible at this time to change sex chromosomes; these will remain in every cell throughout life. It is not technologically possible to transform sex glands from one to the other. In other words, there are no hormones or other means currently known to change an ovary into a testicle or a testicle into an ovary.

Furthermore, as noted earlier, several of the sex specific structures (such as the epidymis of the male or uterus of the female) are produced early in embryological development from around weeks 8 to 12. The primitive ducts which lead to these organs of the opposite sex

are obliterated. There is no known way to resuscitate these ducts and continue development of opposite sex structures.

It is also not possible to produce gametes of the opposite sex. In other words, there is not any known way to induce the testicles to produce eggs. Nor is there any known way to induce the ovaries to produce sperm. Therefore, creating conditions for a biological female to create sperm capable of fertilizing another ovum is impossible. The induction of opposite sex fertility is impossible.

In fact, as I will discuss, gender affirming therapy actually leads to infertility and potential sterilization.

F. Iatrogenic Harms

The term iatrogenic is used in medicine to describe harms or newly created medical conditions that are the result of medications, surgeries, or even psychological treatments. In this section I will discuss the iatrogenic harms of "gender affirmative treatment," for females. Each of the four interventions which I will describe (social transition, blocking normal puberty, opposite sex hormones, and surgery) lead to iatrogenic harms to the patient. These harms will be described in detail below. I speak of these harms because it is important to understand that once a patient begins GAT it is more likely the patient will continue on to surgery (de Vries et al., 2014). Thus, GAT interrupts the natural desistence process and instead places the patient on a lifetime regimen of hormonal and surgical care. A good understanding of these harms is also critical to my practice as an endocrinologist, because if I did not understand these harms, I could not advise patients of the risks associated with GAT.

G. Gender Affirmative Therapy

The approaches to gender dysphoria in minors may be divided into three main types. (Zucker, 2020). One is psychosocial treatment that helps the young person align their internal sense of gender with their physical sex. Another would be to "watch and wait" and allow time and maturity to help the young person align sex and gender through natural desistance. The third option, which is the focus of that which follows, is referred to as gender affirmative therapy.

Gender affirmative therapy (GAT) of adults and minors consists of psychosocial, medical, and surgical interventions that attempt to psychologically and medically alter the patient so that they come to believe they may become similar to the physical sex which aligns with their gender identity (but not their biological sex) and thereby reduce gender dysphoria. GAT consists of four main parts: 1) social transition, 2) blocking normal puberty or menstruation, 3) high dose opposite sex hormones, and 4) surgery of the genitalia and breasts.

The application of this medical therapy to minors is a fairly new intervention and is associated with a number of harms both known and unknown. GAT suffers from a lack of a quality evidence-base, poorly performed studies, and ongoing unethical human experimentation.

1. Social transition

The first stage of gender affirmative therapy is termed social transition. Social transition is a psychological intervention. The child may be encouraged to adopt the type of clothing and mannerisms or behaviors which are stereotypical of the opposite sex within a culture. For example, in the United States a boy might wear his hair long and wear dresses in order to socially transition. A girl may cut her hair short and wear clothes from the boys' section of a department store.

Social transition of the child has been noted by expert researcher in the field of child gender dysphoria, Ken Zucker, to itself be a form of iatrogenic harm (Zucker, 2020). This is because the social transition process may solidify the young person's belief that they are in fact the sex opposite of their biological sex.

From an endocrine point of view, it is understandable that a child having the outward appearance of the opposite sex, would believe that he or she is destined to go through puberty of the opposite sex as they have only a poor understanding of the internal structures of the body, the function of the sex glands, the role of the sex glands in fertility and so forth.

Therefore, it would be quite frightening for a boy who believes he is a girl to be turning into a man with all of the adult features that accompany manhood. Vice versa, the girl who has become convinced that she is a boy will be frightened by the physical changes brought on by womanhood.

In fact, it would appear that in the minds of the children and adolescents that they are anticipating a sort of disease state in the future by the hormone changes that will occur as a normal and natural part of human development. Until relatively recently in human history, it has not been possible to interfere with puberty through pharmaceutical means.

2. Medications which Block Pubertal Development

a. Background

A second stage of gender affirmative therapy may involve blocking normal pubertal development. This may be done with puberty blocking medications that act directly on the pituitary.

In order to understand what is occurring in this process, it is helpful to be aware of normal hormone function during pubertal development.

There is a small pea-sized gland in the brain called the pituitary. It is sometimes referred to as the "master gland" as it controls the function of several other glands. One key function for our purposes is the control of the sex glands. There are two specific hormones produced by the pituitary referred to as luteinizing hormone (LH) and follicle stimulating hormone (FSH). These are responsible for sex hormone production and fertility. The LH and FSH act as signals to tell the sex glands begin or continue their function.

In the adult male, the production of LH will cause adult levels of testosterone to be produced by the testicles. In the adult female, the production of LH will cause adult levels of estrogen to be produced by the ovaries.

In early childhood, prior to the beginning of puberty, the pituitary function with respect to the sex glands is quiescent. However, during pubertal development LH will signal the testicle to increase testosterone production and this carries the boy through the stages of pubertal development into manhood. Likewise for the female, the interaction of LH with the ovaries increases estrogen production and carries the girl through the stages of development into womanhood.

There are conditions diagnosed by endocrinologists which involve a disruption of this normal communication between the pituitary and the sex glands. There is a medical condition called hypogonadotropic hypogonadism. The meaning of this term is that the pituitary is not sending the hormonal signals (LH and FSH) to the sex glands and therefore the sex glands are unable to make their sex hormones. The result is hormonal deficiencies of LH, FSH, and either testosterone or estrogen.

If this condition occurs during puberty, the effect will be to stop pubertal development. This is a disease state which is diagnosed and treated by the endocrinologist.

Medications such as GnRH agonists act on the pituitary gland to lower the pituitary release of LH and FSH levels dramatically. The result is a blockage of the signaling of the pituitary to the testicles or ovaries and therefore underproduction of the sex hormones. This will stop normal menstrual function for the female and halt further pubertal development. For the male this will halt further pubertal development. If the male had already reached spermarche, then production of new sperm will stop.

b. GnRH Agonist Medication Effects Vary by Use Case

There are a variety of uses for GnRH agonists. The use and outcome can be very different for different applications.

For example, the initial development of the medication called Lupron was for the treatment of prostate cancer. The idea being that blocking pituitary hormones will block the adult male's release of testosterone from the testicles. Since testosterone will promote the growth of prostate cancer, the idea is to lower testosterone levels to a very low amount and therefore prevent the growth and spread of prostate cancer. This is a labeled use of the medication. In other words, there is FDA approval for this use.

Another labeled use of GnRH agonist medication is for the treatment of central precocious puberty. In the disease state of central precocious puberty, pituitary signaling is activated at an abnormally young age, say age four, to begin pubertal development. In order to halt puberty which has begun at an abnormally early time, a GnRH agonist may be used. Here the action of the medication on the pituitary will disrupt the signaling to the sex glands, stop early sex hormone production, and therefore stop abnormal pubertal development.

Then, at a more normal time of pubertal development, say age 11, the medication is stopped and puberty is allowed to proceed. The end result is to restore normal sex gland function and timing of puberty. This is a labeled use for a GnRH agonist medication.

What about the use of puberty blockers such as Lupron in gender affirmative therapy? In these cases, we have physiologically normal children who are just beginning puberty or are somewhere in the process of pubertal development. They have healthy pituitary glands and sex organs. However, a puberty blocking medication is administered to stop normal pubertal development.

In this case the condition of hypogonadotropic hypogonadism described above (a medical disease) is induced by medication and is an iatrogenic effect of treating the psychological condition of gender dysphoria. GnRH agonist medications have not been FDA approved for this use.

c. Adverse Health Consequences of Blocking Normal Puberty

There are a number of serious health consequences that occur as the result of blocking normal puberty. The first problem is infertility. The Endocrine Society Guidelines recommend beginning puberty blockers as early as Tanner stage 2. As discussed earlier, this is the very beginning of puberty. Fertility development happens later generally in Tanner stage 4. One can see that if the developing person is blocked at Tanner stage 2 or 3 as advocated by the guidelines, this is prior to becoming fertile. The gonads will remain in an immature, undeveloped state.

Dr. Antommaria writes that "The [Endocrine Society] guideline recommends that informed consent for pubertal blockers and gender-affirming hormones include a discussion of the implications for fertility and options for fertility preservation (Antommaria decl, p.23). However, even though procedures to preserve fertility are available, studies show that less than 5% of adolescents receiving GAT even attempt fertility preservation (FP) (Nahata, 2017). Moreover, "ovarian tissue cryopreservation is still considered experimental in most centers and testicular tissue cryopreservation remains entirely experimental. These experimental forms of FP would be the only options in children [with puberty] blocked prior to spermarche and menarche and are high in cost and limited to specialized centers. Even with FP there is no guarantee of having a child" (Laidlaw, Cretella, et al., 2019).

Naturally, these children are at a developmental age where they are not thinking about adult related concepts such as having children as they are children themselves. This is only natural and to be expected. The medical problem imposed on them is that if they remain blocked in an early pubertal stage then even the addition of opposite sex hormones will not allow for the development of fertility. In fact, high dose opposite sex hormones may permanently damage the immature sex organs leading to sterilization. Certainly the removal of the gonads, which will be discussed later, will ensure sterilization.

Another problem with blocking puberty at an early stage is sexual dysfunction. The child will continue their chronological age progression toward adulthood and yet remain with undeveloped genitalia. This will lead to sexual dysfunction including potential erectile dysfunction and inability to ejaculate and orgasm for of the male. For the female with undeveloped genitalia potential sexual dysfunction may include painful intercourse and impairment of orgasm.

The impairment of sexual function was evident in the TLC reality show "I am Jazz". In the show Jazz who was identified male at birth has been given puberty blockers at an early pubertal stage. In an episode where Jazz visits a surgeon and has a discussion about sexual function, Jazz states: "I haven't experienced any sexual sensation." Regarding orgasm, Jazz says: "I don't know, I haven't experienced it"[3] (TLC, accessed 2022).

In addition to direct effects on the developing genitalia and fertility there are other important aspects of puberty that are negatively affected. For example, puberty is a time of rapid bone development. This time of development is critical in attaining what we call peak bone density or the maximum bone density that one will acquire in their lifetime (Elhakeem, 2019).

Any abnormal lowering of sex hormones occurring during this critical time will stop the rapid accumulation of bone and therefore lower ultimate adult bone density. If a person does not achieve peak bone density, they would be expected to be at future risk for osteoporosis and the potential for debilitating spine and hip fractures as adults. Hip fractures for the older patient very significantly increase the risk of major morbidity and death (Bentler, 2009). Allowing a "pause" in puberty for any period of time leads to an inability to attain peak bone density.

[3] Jazz's age is somewhere in the mid-teens during this episode.

Another consideration is maturation of the human brain. Much of what happens is actually unknown. However, "sex hormones including estrogen, progesterone, and testosterone can influence the development and maturation of the adolescent brain" (Arain, 2013). Therefore there are unknown, but likely negative consequences to blocking normal puberty with respect to brain development.

A third major problem with blocking normal puberty involves psychosocial development. Adolescence is a critical time of physical, mental, and emotional changes for the adolescent. It is important that they develop socially in conjunction with their peers. This is well recognized in the psychological literature: "For decades, scholars have pointed to peer relationships as one of the most important features of adolescence." (Brown, 2009). If one is left behind for several years under the impression that they are awaiting opposite sex puberty, they will miss important opportunities for socialization and psychological development. Psychosocial development will be necessarily stunted as they are not developing with their peers. This is a permanent harm as the time cannot be regained.

Aside from the multiple serious problems that are iatrogenically acquired by blocking normal puberty, there appear to be independent risks of the puberty blocking medication themselves. For example, one can read the labeling of a common puberty blocking medication called Lupron Depot-Ped and find under psychiatric disorders: "emotional lability, such as crying, irritability, impatience, anger, and aggression. Depression, including rare reports of suicidal ideation and attempt. Many, but not all, of these patients had a history of psychiatric illness or other comorbidities with an increased risk of depression" (Lupron, 2022). This is particularly concerning given the high rate of psychiatric comorbidity with gender dysphoria discussed previously.

d. The Effect of Puberty Blockers on Desistance

As stated earlier a very high proportion of minors diagnosed with gender dysphoria will eventually desist or come to accept their physical sex. Puberty blockers have been shown to dramatically alter natural desistance.

In a Dutch study that included seventy adolescents who took puberty blockers, all seventy decided to go on to hormones of the opposite sex (de Vries, et al. 2011). In a follow-up study, the overwhelming majority went on to have sex reassignment surgery by either vaginoplasty for males or hysterectomy with ovariectomy for females (de Vries, et al. 2014). These surgeries resulted in sterilization. This is why puberty blockers, rather than

being a "pause" to consider aspects of mental health, are instead a pathway towards future sterilizing surgeries. The surgeries were consequential in another important way. One person who had a vaginoplasty died of post-surgical complications of necrotizing fasciitis which is a rapidly progressive and very severe infection of the soft tissues beneath the skin and which has a high mortality (Id.).

e. Infertility as a result of Puberty Blockers in GAT

Dr. Antommaria states that "Florida Medicaid provides coverage for the use of puberty blockers to treat central precocious puberty, but now prohibits coverage for the use of puberty blockers to treat gender dysphoria, even though the use of puberty blockers to treat both conditions has comparable risks and is supported by comparable types of evidence" (Antommaria decl, p. 24). These statements fail to recognize the very different effects of PB medication in early childhood versus during adolescence.

Giving puberty blockers to a four year old with central precocious puberty will obviously not impair fertility, as the four year old has not yet become fertile. The child will at a later time have the puberty blocker discontinued and then normal pubertal development can proceed. Therefore when they are no longer taking the medication, they will gain natural fertility.

In contrast, puberty blocking medication given to minors in GAT occurs at precisely the time that the child will gain reproductive function. This will stop sperm production in the male and ovulation in the female (if these have already occurred, otherwise the functions will not even begin) which produces the infertile condition. Importantly, so long as the minor continues PB they will remain infertile. Should they continue on to opposite sex hormones as part of GAT then they will remain infertile. There is the additional possibility that cytotoxic effects of high dose opposite sex hormones will damage the immature gonads leading to permanent sterility.

3. Opposite Sex Hormones

The third stage of gender affirmative therapy involves using hormones of the opposite sex at high doses to attempt to create secondary sex characteristics in the person's body.

a. Testosterone

Testosterone is an anabolic steroid of high potency. It is classified as a Schedule 3 controlled substance by the DEA: "Substances in this schedule have a potential for abuse less than substances in Schedules I or II and abuse may lead to moderate or low physical dependence or high psychological dependence" (DEA, 2022). A licensed physician with a valid DEA registration is required to prescribe testosterone.

I prescribe testosterone to men for testosterone deficiency. The state of testosterone deficiency can cause various problems including problems of mood, sexual function, libido, and bone density. Prescription testosterone is given to correct the abnormally low levels and bring them back into balance. The dose of testosterone must be carefully considered and monitored to avoid excess levels in the male as there are a number of serious concerns when prescribing testosterone.

Regarding the potential for abuse, the labeling reads "Testosterone has been subject to abuse, typically at doses higher than recommended for the approved indication...Anabolic androgenic steroid abuse can lead to serious cardiovascular and psychiatric adverse reactions...Abuse and misuse of testosterone are seen in male and female adults and adolescents...There have been reports of misuse by men taking higher doses of legally obtained testosterone than prescribed and continuing testosterone despite adverse events or against medical advice." (Actavis Pharma, 2018)

Adverse events with respect to the nervous system include: "Increased or decreased libido, headache, anxiety, depression, and generalized paresthesia." (Actavis Pharm, 2018)

With regard to ultimate height, "[t]he following adverse reactions have been reported in male and female adolescents: premature closure of bony epiphyses with termination of growth" (Actavis Pharma, Inc., 2018). What this means is that testosterone applied to the adolescent will cause premature closure of the growth plates, stopping further gains in height in the growing individual, and ultimately making the person shorter than they otherwise would have been.

With respect to the cardiovascular system of men using ordinary doses, "Long-term clinical safety trials have not been conducted to assess the cardiovascular outcomes of testosterone

replacement therapy in men" (Actavis Pharma, 2018). No clinical safety trials have been performed for women or adolescent girls to my knowledge.

"There have been postmarketing reports of venous thromboembolic events [blood clots], including deep vein thrombosis (DVT) [blood clot of the extremity such as the lef] and pulmonary embolism (PE) [blood clot of the lung which may be deadly], in patients using testosterone products, such as testosterone cypionate" (Actavis Pharma, 2018).

A very recently published study of adverse drug reactions (ADRs) as part of gender affirming hormone therapies in France states that "[o]ur data show a previously unreported, non-negligible proportion of cases indicating cardiovascular ADRs in transgender men younger than 40 years… In transgender men taking testosterone enanthate, all reported ADRs were cardiovascular events, with pulmonary embolism in 50% of cases" (Yelehe et al., 2022).

There are also serious concerns regarding liver dysfunction: "Prolonged use of high doses of androgens ... has been associated with development of hepatic adenomas [benign tumors], hepatocellular carcinoma [cancer], and peliosis hepatis [generation of blood-filled cavities in the liver that may rupture] —all potentially life-threatening complications" (Actavis Pharma, 2018).

In GAT, what is termed "cross sex hormones" is the use of hormones of the opposite sex to attempt to create secondary sex characteristics. To do so, very high doses of these hormones are administered. When hormone levels climb above normal levels they are termed supraphysiologic.

b. Opposite Sex Hormones - Supraphysiologic Doses of Testosterone for Females

The female person does produce some smaller amount of testosterone relative to the male. The normal reference range for adult females depending on the lab is about 10 to 50 ng/dL. However, in female disease conditions these levels can be much higher. For example, in polycystic ovarian syndrome levels may range from 50 to 150 ng/dL. PCOS has been associated with insulin resistance (Dunaif, 1989), metabolic syndrome (Apridonidze, 2005) and diabetes (Joham, 2014).

In certain endocrine tumors such as adrenal carcinoma these levels may be substantially higher in the 300 to 1000 ng/dl range. Adrenal carcinoma is a serious medical condition and may be treated by surgery and potent endocrine medications.

Recommendations from the Endocrine Society's clinical guidelines related to GAT are to ultimately raise female levels of testosterone to 320 to 1000 ng/dL[4] which is on the same order as dangerous endocrine tumors for women as described above (Hembree, 2017). A simple calculation shows this level for the adult may be anywhere from 6 to 100 times higher than native female testosterone levels. In doing so they are creating a hormone imbalance known as hyperandrogenism. These extraordinarily high levels of testosterone are associated with multiple risks to the physical and mental health of the patient.

“"Studies of transgender males taking testosterone have shown up to a nearly 5-fold increased risk of myocardial infarction relative to females not receiving testosterone” (Laidlaw et al.,2021; Alzahrani et al., 2019). A female can also develop unhealthy, high levels of red blood cells referred to as erythrocytosis. These high red blood cell counts in young women have been shown to be an independent risk factor for cardiovascular disease, coronary heart disease and death due to both (Gagnon, 1994).

Other permanent effects of testosterone therapy involve irreversible changes to the vocal cords. Abnormal amounts of hair growth which may occur on the face, chest, abdomen, back and other areas is known as hirsutism. Should the female eventually regret her decision to take testosterone, this body hair can be very difficult to remove. Male pattern balding of the scalp may also occur. Common sense suggests that changes of voice and hair growth could be psychologically troubling should the patient attempt to reintegrate into society as a female.

Changes to the genitourinary system include polycystic ovaries and atrophy of the lining of the uterus. The breasts have been shown to have an increase in fibrous breast tissue and a decrease in normal glandular tissue (Grynberg et al., 2010). Potential cancer risks from high dose testosterone include ovarian and breast cancer (Hembree, 2017).

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[4] In the Endocrine Society's Guidelines there is no grading of evidence for the rationale of using such high supraphysiologic doses of opposite sex hormones for the female or male. There seems to be an underlying assumption that because the person believes to be the opposite sex then they acquire the sex specific laboratory ranges of the opposite sex. "The root cause of this flaw in thinking about diagnostic ranges was exemplified in a response letter by Rosenthal et al claiming that gender identity determines the ideal physiologic range of cross-sex hormone levels (5). Thus, a psychological construct, the ‘gender identity’, is imagined to affect physical reality and change a person’s sex-specific laboratory reference ranges. This is clearly not the case, otherwise there would be no serious complications of high-dose androgen treatment in transgender males" (Laidlaw et al., 2021).

According to research regarding testosterone abuse, high doses of testosterone have been shown to predispose individuals towards mood disorders, psychosis, and psychiatric disorders. The "most prominent psychiatric features associated with AAS [anabolic androgenic steroids, i.e. testosterone] abuse are manic-like presentations defined by irritability, aggressiveness, euphoria, grandiose beliefs, hyperactivity, and reckless or dangerous behavior. Other psychiatric presentations include the development of acute psychoses, exacerbation of tics and depression, and the development of acute confusional/delirious states" (Hall, 2005). Moreover, "[s]tudies... of medium steroid use (between 300 and 1000 mg/week of any AAS) and high use (more than 1000 mg/week of any AAS) have demonstrated that 23% of subjects using these doses of steroids met the DSM-III-R criteria for a major mood syndrome (mania, hypomania, and major depression) and that 3.4% — 12% developed psychotic symptoms" (Hall, 2005).

c. Estrogen

Estrogen is the primary sex hormone of the female. Prescription estrogen may be used if a woman has low estrogen levels due to premature failure of her ovaries. Estrogen is prescribed to bring these levels back into a normal range for the patient's age. Another labeled use of estrogen is to treat menopausal symptoms.

d. Opposite Sex Hormones - Supraphysiologic Estrogen for Males

For the male, estrogen is being used at supraphysiologic doses. The high doses are used in an attempt to primarily affect an increase of male breast tissue development known as gynecomastia. Gynecomastia is the abnormal growth of breast tissue in the male. The occurrence of gynecomastia in the male is sometimes corrected by medication or more commonly by surgery if needed. Other changes of secondary sex characteristics may develop such as softening of the skin and changes in fat deposition and muscle development.

The doses of estrogen given to males for GAT are high and may vary from two to eight or more times higher than normal adult male levels. This produces the endocrine condition called hyperestrogenemia. Long-term consequences include increased risk of myocardial infarction and death due to cardiovascular disease (Irwig, 2018). Also "[t]here is strong

evidence that estrogen therapy for trans women increases their risk for venous thromboembolism[5] over 5 fold" (Irwig, 2018).

Breast cancer is a relatively uncommon problem of the male. However the risk of a male developing breast cancer has been shown to be 46 times higher with high dose estrogen (Christel et al., 2019).

It is clear that supraphysiologic doses of either testosterone for the female or estrogen for the male can have detrimental health consequences. This is only now being borne out in the literature for adults. However as more children and adolescents are put on these medications one would expect these consequences to become more frequent and to occur earlier in their lives.

4. Surgeries

The fourth stage of gender affirmative therapy is surgical alterations of the body of various kinds in an attempt to somehow mimic features of the opposite sex.

Individual surgical procedures can be a complex topic. It is helpful to first step back and consider conceptually what any surgery can and cannot accomplish.

In its basic form surgery is subtractive. In other words, a portion of tissue, an organ or organs are removed in order to restore health. For example, a diseased gallbladder may be surgically removed to help the patient get back to wellness. An infected appendix may be surgically removed to prevent worsening infection or even death. In both of these cases an unhealthy body part is surgically removed in order to restore health.

In some cases a diseased tissue or organ is removed so that a foreign replacement part may be substituted for an unhealthy organ or tissue. For example, a diseased heart valve may be replaced with a pig valve or a prosthetic heart valve. Another example is a failed liver may be replaced by liver transplant.

Though modern surgical techniques and procedures are astounding, there are very noteworthy limitations. Importantly, surgery cannot de novo create new organs. If a person's kidneys fail, the surgeon has no scientific method for creating a new set of kidneys

[5] Venous thromboembolism is a blood clot that develops in a deep vein and "can cause serious illness, disability, and in some cases, death" (CDC, 2022).

that can be implanted or grown within the patient. This conceptual background is helpful when considering various gender affirming surgeries.

There are a variety of gender affirming surgeries for females. These may include mastectomies, metoidioplasty, and phalloplasty.

a. Mastectomy

Mastectomies are the surgical removal of the breasts. The procedure is used in GAT in an attempt to make the chest appear more masculine. The surgery results in a permanent loss of the ability to breastfeed and significant scarring of 7 to 10 inches. The scars are prone to widening and thickening due to the stresses of breathing and arm movement. Other potential complications include the loss of normal nipple sensation and difficulties with wound healing (American Cancer Society, 2022).

It is important to note that this operation cannot be reversed. The female will never regain healthy breasts capable of producing milk to feed a child (Mayo Clinic, Top Surgery, 2022).

Another important consideration is that compared to the removal of an unhealthy gallbladder or appendix, in the case of gender dysphoria the breasts are perfectly healthy and there is no organic disease process such as a cancer warranting their removal. The future woman who later desists is left with regret about what happened to her at an age before she could provide true informed consent. Functioning breasts cannot be created by a surgeon and restored to a patient in case of regret. She is left with permanent injury and loss of function with respect to her breasts.

b. GAT Surgeries on the Male

GAT surgeries for the male include removal of the testicles alone to permanently lower testosterone levels. This is by nature a sterilizing procedure. Further surgeries may be done in an attempt to create a pseudo-vagina which is called vaginoplasty. In this procedure, the penis is surgically opened and the erectile tissue is removed. The skin is then closed and inverted into a newly created cavity in order to simulate a vagina. A dilator must be placed in the new cavity for some time so that it does not naturally close.

Potential surgical complications may include urethral strictures, infection, prolapse, fistulas and injury to the sensory nerves with partial or complete loss of erotic sensation (Mayo Clinic, Feminizing Surgery, 2022).

c. GAT Surgeries of the Female Pelvis and Genitalia

Other types of surgery for females include those of the genitalia and reproductive tract. For example, the ovaries, uterus, fallopian tubes, cervix and the vagina may be surgically removed. Removal of the ovaries results in sterilization.

Importantly, removing female body parts does not produce a male. Rather, the female has had sex specific organs permanently destroyed with no hope of replacement, while remaining biologically female.

There have also been attempts to create a pseudo-penis. This procedure is known as phalloplasty. It is not possible to de novo create a new human penis. Instead, a roll of skin and subcutaneous tissue is removed from one area of the body, say the thigh or the forearm, and transplanted to the pelvis. An attempt is made to extend the urethra or urinary tract for urination through the structure. This transplanted tissue lacks the structures inherent in the male penis which allow for erection, therefore erectile devices such as rods or inflatable devices are placed within the tube of transplanted tissue in order to simulate erection (Hembree, 2017). The labia may also be expanded to create a simulated scrotum containing prosthetic objects to provide the appearance of testicles.

Complications may include urinary stricture, problems with blood supply to the transplanted roll of tissue, large scarring to the forearm or thigh, infections including peritonitis, and possible injury to the sensory nerve of the clitoris (Mayo Clinic, Masculinizing Surgery, 2022). A recent systematic review and meta-analysis of 1731 patients who underwent phalloplasty found very high rates of complications (76.5%) including a urethral fistula rate of 34.1% and urethral stricture rate of 25.4% (Wang, 2022).

H. Life Threatening Physical Medical Conditions Versus Suicidal Ideation

Any child or adolescent who has suicidal ideation or has attempted suicide should receive immediate, appropriate psychiatric care. Psychologists and psychiatrists are trained in the recognition and treatment of suicidal ideation and prevention of suicide. A child or adolescent with gender dysphoria who also has suicidal ideation should not be treated any

differently. They require compassionate care and a full psychological evaluation of comorbidities such as depression, anxiety, and self-harming behaviors.

However, suicidal ideation or attempts are categorically different than other life-threatening situations, such as a rapidly expanding brain tumor or a severe infection. In these situations, a medication or a surgery is used to stop the progression of an organic physical condition. In contrast, the danger to the self with suicidal ideation relates to a condition of the mind.

Gender affirmative therapy does not treat any life-threatening physical condition. In fact, it creates a number of new medical conditions as described above. It is also not an appropriate treatment for suicidal ideation. Neither puberty blocking medications, nor testosterone, nor estrogen have been FDA approved for suicide prevention. Moreover, as noted above, the hormone imbalances generated by the medications used in GAT actually increase psychological conditions that lead to suicidal ideation and completed suicide.

I. Informed Consent

Any person who is to take a medication, undergo a surgical procedure, or have a psychological intervention should understand the risks and benefits before proceeding. A discussion of these risks and benefits should be provided by medical professionals and then the person of sufficient intellectual capacity and maturity can consent to the treatment.

Naturally difficulties arise when a minor is involved in the process of medical decision-making. Their intellect, emotions, and judgment are not fully developed and they are not capable of fully appreciating permanent, life altering changes such as described above. Therefore, they cannot provide informed consent. They may sometimes "assent" to a procedure or medication with a parent or guardian making the final decision.

With respect to GAT, in my opinion, it is not possible for the parent or guardian to make a true informed consent decision for the child because of the poor quality of evidence of benefit, the known risks of harm, and the many unknown long-term risks of harm which could only truly be known after years and decades of gender affirmative therapy. A parent or guardian cannot consent to dubious treatments which result in irreversible changes to their child's body, infertility, sexual dysfunction, and in many cases eventual sterilization.

Because this age group is still undergoing brain development and they are immature with respect to intellect, emotion, judgment, and self-control, in my professional opinion there is a significant chance a young person may later regret the irreversible bodily changes that result from hormones or from removing an organ or organs that will no longer function and cannot be replaced.

I would also note that adolescents are more prone to high-risk behavior and less likely to fathom the risks and consequences of these decisions (Steinberg, 2008).

J. The WPATH and The Endocrine Society

According to their declarations, the experts Dr. Johanna Olson-Kennedy, Dr. Loren Schechter, and Dr. Dan H. Karasic are members of WPATH. Dr. Schechter was "co-lead author of the surgical and postoperative care chapter" for SOC 8 (Schechter decl, p 4). Dr. Karasic was a lead author of the Mental Health chapter for SOC 8 (Karasic decl, p. 3).

WPATH's Standards of Care 7 were produced over a decade ago in 2011. They were prepared within their advocacy organization and are purported to be a "professional consensus about the psychiatric, psychological, medical, and surgical management of gender dysphoria" (WPATH, 2022). However, the "professional consensus" exists only within the confines of its organization. Furthermore, their Standards of Care 7, unlike the Endocrine Society's guidelines, do not have a grading system for either the strength of their recommendations or the quality of the evidence presented.

While the Endocrine Society has issued "Endocrine Treatment of Gender-Dysphoric / Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline," these are only "guidelines." The Endocrine Society's guidelines (ESG) specifically state that their "guidelines cannot guarantee any specific outcome, nor do they establish a standard of care" (Hembree at al, 2017, p. 3895).

With respect to the makeup of authors of the ESG, nine out of ten authors were members of WPATH or worked on WPATH's scientific committees. Seven of those nine had at some time been in WPATH leadership including the WPATH presidency and board of directors (File: WPATH - Endocrine Society 2017 guidelines.pdf).

In the Endocrine Society's guidelines, the quality of evidence for the treatment of adolescents is rated "very low-quality evidence" and "low quality evidence". "The quality

of evidence for [puberty blocking agents] is noted to be low. In fact, all of the evidence in the guidelines with regard to treating children/adolescents by [gender affirmative therapy] is low to very low because of the absence of proper studies" (Laidlaw et al., 2019).

Unlike some other recommendations for adolescent GAT, the Endocrine Society's guidelines do not include any grading of the quality of evidence specifically for their justification of laboratory ranges of testosterone or estrogen or for adolescent mastectomy or other surgeries.

Endocrinologists W. Malone and P. Hruz and colleagues have written critically of the Endocrine Society's (ES) guidelines: "Unlike standards of care, which should be authoritative, unbiased consensus positions designed to produce optimal outcomes, practice guidelines are suggestions or recommendations to improve care that, depending on their sponsor, may be biased. In addition, the ES claim of effectiveness of these interventions is at odds with several systematic reviews, including a recent Cochrane review of evidence (5), and a now corrected population-based study that found no evidence that hormones or surgery improve long-term psychological well-being (6). Lastly, the claim of relative safety of these interventions ignores the growing body of evidence of adverse effects on bone growth, cardiovascular health, and fertility, as well as transition regret" (Malone et al., 2021).

In June of 2022, the Endocrine Society published "Enhancing the Trustworthiness of the Endocrine Society's Clinical Practice Guidelines" (McCartney et al., 2022). They wrote "In an effort to enhance the trustworthiness of its clinical practice guidelines, the Endocrine Society has recently adopted new policies and more rigorous methodologies for its guideline program." (Id.) They relate that in 2019, the ECRI Guidelines Trust "asked the Society for permission to include its guidelines in the ECRI Guidelines Trust database". However, after an evaluation by ECRI, the guideline related to osteoporosis "was the only guideline for which all recommendations were based on verifiable systematic evidence review with explicit descriptions of search strategy, study selection, and evidence summaries" (Id.). Therefore we can conclude that with regard to the recommendations from the ESG 2017 on Gender Dysphoria/Gender Incongruence not all recommendations were "based on verifiable systematic evidence review with explicit descriptions of search strategy, study selection, and evidence summaries". Furthermore, these ESG 2017 were highly subject to conflicts of interest. As related earlier, nine out of the 10 authors were members or worked on the scientific committees of the advocacy group WPATH. Additionally, the ESG 2017 document was endorsed by WPATH. The "Enhancing

Trustworthiness" article recommends the opposite composition of authors for guidelines: "A majority (>50%) of non-Chair GDP members must be free of relevant C/DOI [conflict/duality of interest]" (McCartney et al., 2022).

WPATH Standards of Care 8 (SOC 8) were just published Sep. 6, 2022 (Coleman et al., 2022) . In a correction to the SOC 8, all guidelines for minimum age of surgery were removed, meaning a minor of any age could be referred for any of the GAT surgeries listed previously (Correction IJTH, 2022). All guidelines for minimum age of oppposite sex hormones were also removed.

The correction reads: "On page S258, the following text was removed:
'The following are suggested minimal ages when considering the factors unique to the adolescent treatment time frame for gender-affirming medical and surgical treatment for adolescents, who fulfil all of the other criteria listed above.
– Hormonal treatment: 14 years
– Chest masculinization: 15 years
– Breast augmentation, Facial Surgery: 16 years
– Metoidioplasty, Orchiectomy, Vaginoplasty,
– Hysterectomy, Fronto-orbital remodeling: 17 years
– Phalloplasty: 18 years'" (WPATH SOC 8 Correction, p. S261).

Of great concern is that the minimum age recommendations were retracted, it appears, in contradiction to the recommendation of their own expert consensus:
"On page S66, the following text was removed:
'Age recommendations for irreversible surgical procedures were determined by a review of existing literature and the expert consensus of mental health providers, medical providers, and surgeons highly experienced in providing care to TGD adolescents.'" (WPATH SOC 8 Correction, p. S260).

Additionally, a chapter regarding eunuchs was inserted into SOC 8 that gives recommendations for how to induce hypogonadism in men who have the eunuch "gender identity"[6] by either orchiectomy [testicle removal] or chemical castration such as with GnRH analogues (Coleman et al., 2022)[7].

[6] The notion that there is a "eunuch gender identity" further invalidates the gender identity as a serious biological property of human beings: "Many eunuch individuals see their status as eunuch as their distinct gender identity with no other gender or transgender affiliation" (Coleman et al., 2022, p. S88).

[7] "Treatment options for eunuchs to consider include:

The SOC8 also used an aberrant form of the GRADE approach for systematic reviews that removed the grading of quality of evidence (which should be categorized as very low, low, moderate, and high quality).[8] Instead any recommendation of "recommend" is automatically assigned as high quality of evidence. SOC 8 also failed to provide evidence profile tables which should include "an explicit judgment of each factor that determines the quality of evidence for each outcome" (Guyatt et al., 2021).

Such a modification of GRADE is explicitly recommended against in the referenced GRADE document[9] and in so doing, in my opinion, invalidates all of the SOC 8 recommendations as being evidence-based.

For at least the reasons above, in my professional opinion WPATH SOC 8 represents a grave and immediate danger to minors, young adults, and adults and should not be followed by any physician, mental health care provider, or other medical professional.

K. Harms of off-label treatments in GAT

Dr. Antommaria makes a faulty comparison between migraine headaches and gender dysphoria (Antommaria decl, p. 7). First, migraine headaches are a neurological condition with a potential vascular component and not a condition of the mind, nor found as a psychological diagnosis in the DSM-5. Second the treament of migraine headaches

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• Hormone suppression to explore the effects of androgen deficiency for eunuch individuals wishing to become asexual, nonsexual,
or androgynous;
• Orchiectomy [testicle removal] to stop testicular production
of testosterone;
• Orchiectomy with or without penectomy to
alter their body to match their self-image;
• Orchiectomy followed by hormone replacement with testosterone or estrogen. " (Id.)

[8] From SOC 8 "The [recommendation] statements were classified as:
• Strong recommendations ("we recommend") are for
those interventions/therapy/strategies where:
• the evidence is of high quality" (Id., p. S250).

[9]From the GRADE guidelines: "Some organizations have used modified versions of the GRADE approach. We recommend against such modifications because the elements of the GRADE process are interlinked because modifications may confuse some users of evidence summaries and guidelines, and because such changes compromise the goal of a single system with which clinicians, policy makers, and patients can become familiar" (Guyatt et al., 2011).

with a medication such as sumitriptan or similar are labled indications for the condition unlike GnRH agonists and opposite sex hormones in GAT (FDA.gov sumitriptan). Third, the side effects of medications like sumitriptan do not alter or block normal human development such as the case with puberty blocking medication, or cause permanent alterations of the body such as with sex hormones, or lead to the permanent loss of healthy functioning organs such as occurs with surgeries which alter sex as a part of GAT.

Dr. Olson-Kennedy also draws a faulty comparison when she compares the off-label use of antibiotics or anti-histamines to blocking normal puberty, administering high-dose opposite sex hormones, or the permanent removal of healthy organs as part of GAT (Olson-Kennedy decl, p. 38). The health consequences are categorically different and the lifelong potential for permanent injury are extremely high in GAT.

L. The Lack of Evidence of Effectiveness of GAT

There is much additional evidence that questions the long-term benefits of opposite sex hormones and gender reassignment surgery and in fact suggests serious harms.

1. Sweden's Long-term study of 30 years of data by Dhejne

The most comprehensive study of its kind is from Sweden in 2011. The authors examined data over a 30-year time period (Dhejne, 2011). The Dhejne team made extensive use of numerous Swedish database registries and examined data from 324 patients in Sweden over 30 years who had taken opposite sex hormones and had undergone sex reassignment surgery. They used population controls matched by birth year, birth sex, and reassigned sex. When followed out beyond ten years, the sex-reassigned group had nineteen times the rate of completed suicides and nearly three times the rate of all-cause mortality and inpatient psychiatric care compared to the general population of Sweden.

2. The Branstrom and Pachankis Retraction

Other published studies of GAT have been shown to have serious errors. For example, a major correction was issued by the American Journal of Psychiatry. The authors and editors of a 2020 study, titled "Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: a total population study" (Bränström study, 2020) retracted their original primary conclusion. Letters to the editor by twelve authors

including myself led to a reanalysis of the data and a corrected conclusion stating that in fact the data showed no improvement in mental health for transgender identified individuals after surgical treatment nor was there improvement with opposite sex hormones ("Correction", 2020; Van Mol et al., 2020).

The initial reports of this study claimed that the authors found treatment benefits with surgery, and this was shared widely in the media. For example, ABC News posted an article titled "Transgender surgery linked with better long-term mental health, study shows" (Weitzer, 2019). An NBC news/Reuters headline reads "Sex-reassignment surgery yields long-term mental health benefits, study finds" (Reuters, 2019).

However, after twelve authors from around the world including our team investigated the study in detail, a number of serious errors were exposed leading to a retraction (Kalin, 2020; Anckarsäter et al., 2020).

In our letter to the editor which I co-wrote with former Chairman of Psychiatry at Johns Hopkins Medical School, Paul McHugh, MD, we noted key missing evidence in the original Branstrom report when compared to the previous body of knowledge yielded from the Swedish Dhejne study. We wrote that "[t]he study supports only weak conclusions about psychiatric medication usage and nothing decisive about suicidality. In overlooking so much available data, this study lacks the evidence to support its pro gender-affirmation surgery conclusion" (Van Mol, Laidlaw, et al., 2020).

In another letter, Professor Mikael Landen writes that "the authors miss the one conclusion that can be drawn: that the perioperative transition period seems to be associated with high risk for suicide attempt. Future research should use properly designed observational studies to answer the important question as to whether gender-affirming treatment affects psychiatric outcomes" (Landen, 2020).

In another letter to the editor, psychiatrist David Curtis noted that "[t]he study confirms the strong association between psychiatric morbidity and the experience of incongruity between gender identity and biological sex. However, the Branstrom study does not demonstrate that either hormonal treatment or surgery has any effect on this morbidity. It seems that the main message of this article is that the incidence of mental health problems and suicide attempts is especially high in the year after the completion of gender-affirming surgery" (Curtis, 2020).

In yet another critical letter, Dr. Agnes Wold states that "[w]hether these factors involve a causal relationship (i.e., that surgery actually worsens the poor mental health in individuals with gender dysphoria) cannot be determined from such a study. Nevertheless, the data presented in the article do not support the conclusion that such surgery is beneficial to mental health in individuals with gender dysphoria" (Wold, 2020).

3. Flawed studies based on the problematic 2015 US Transgender Survey

A 2021 study by Almazan and Keurghlian attempted to address mental health outcomes in relation to surgery as a part of GAT (Almazan & Keurghlian, 2021). This was not a randomized controlled study nor a prospective observational study. Rather the study relied upon the 2015 US Transgender Survey (USTS), which has been severely criticized for its serious limitations and weaknesses.

D'Angelo et al. have written about the 2015 USTS survey as part of the criticism of another flawed study in the journal Pediatrics by Jack Turban in 2020 titled "Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation" (Turban, 2020). They write in their critique of the USTS that it is "a convenience sampling, a methodology which generates low-quality, unreliable data." (Bornstein, Jager, & Putnick, 2013). Specifically, the participants were recruited through transgender advocacy organizations and subjects were asked to 'pledge' to promote the survey among friends and family. This recruiting method yielded a large but highly skewed sample...Their analysis is compromised by serious methodological flaws, including the use of a biased data sample, reliance on survey questions with poor validity, and the omission of a key control variable, namely subjects' baseline mental health status." They also state that "[s]tigmatizing non-'affirmative' psychotherapy for GD [gender dysphoria] as 'conversion' will reduce access to treatment alternatives for patients seeking non-biomedical solutions to their distress" (D'Angelo et al., 2021).

4. Mastectomy Surgery for Minors

Any serious look at long-term effects at surgical treatment would follow subjects out at least ten years. For example, an article was published recently examining patients who had mild calcium disorders due to a gland called the parathyroid. They compared a group of patients who had surgical removal of the parathyroid to a control group who had not. They examined data ten years after surgery was completed and concluded that parathyroid

surgery in this group "did not appear to reduce morbidity or mortality" in that patient group (Pretorius, 2022).

To my knowledge there exists no comparable studies of minors with gender dysphoria comparing those who had mastectomy surgery to a control group who had not. There are also no known studies of minors followed for 10 years or more to determine the long-term risks and benefits of mastectomy for gender dysphoria.

Good quality studies specifically showing that mastectomy surgery is safe, effective, and optimal for treating minors with gender dysphoria do not exist. For example, there is a study titled "Chest Reconstruction and Chest Dysphoria in Transmasculine Minors and Young Adults Comparisons of Nonsurgical and Postsurgical Cohorts" (Olson-Kennedy, 2018). The study authors conclude that "[c]hest dysphoria was high among presurgical transmasculine youth, and surgical intervention positively affected both minors and young adults." However, there are a number of problems with this study. First, the term "chest dysphoria" is a creation of the study authors and is not found as a diagnosis or even referenced in the DSM-5. Second the "chest dysphoria scale" is a measuring tool created by the authors, but which the authors state "is not yet validated." (*Id*., p. 435) Third, the mastectomies were performed on girls as young as 13 and 14 years old and who thereby lacked the maturity and capacity of good judgment for truly informed consent for this life altering procedure. For this reason, in my professional opinion, the research and surgeries performed were flawed and unethical.

There exists another poorly designed study which suffers from similar methodological and ethical problems as the Olson-Kennedy study. A 2021 study published in Pediatrics examined females aged 13-21 recruited from a gender clinic. Thirty young females had mastectomy procedures and sixteen had not. The average age at surgery was 16.4 years (Mehringer, 2021). The follow up time after surgery was only 19 months and no data is provided or analyzed about key psychiatric information such as comorbid psychological illnesses, self-harming behaviors, psychiatric hospitalizations, psychiatric medication use, or suicide attempts.

Information returned from the study surveys were all qualitative and included responses such as "[My chest dysphoria] made me feel like shit, honestly. It made me suicidal. I would have breakdowns". Another respondent stated, "I've been suicidal quite a few times over just looking at myself in the mirror and seeing [my chest]. That's not something that I should have been born with" (Mehringer, 2021). The omission of psychiatric data is a

major flaw in the study and also irresponsible given the obviously dangerous psychological states that some of these young people were in.

Since such a high proportion of subjects were using testosterone (83%), some of the responses could be attributed to adverse effects of testosterone. For example, as related earlier, high dose testosterone can manifest in irritability and aggressiveness. One study subject responded, "I get tingly and stuff and it kind of makes me want to punch something" (Mehringer, 2022).

The testosterone labeling also indicates nausea and depression as adverse reactions which are described by another study subject "There's a feeling of hopelessness, of desperation, of—almost makes me feel physically sick" (Actavis Pharma, Inc., 2018; Mehringer, 2022).

The study appears to have been designed, at least in part, to justify insurance companies paying for mastectomy procedure for minors with GD, even though they have provided no long-term statistical evidence of benefit: "These findings...underscore the importance of insurance coverage not being restricted by age" (Mehrniger, 2021). This also appears to be part of the aim of the flawed Olson-Kennedy study which stated "changes in clinical practice and in insurance plans' requirements for youth with gender dysphoria who are seeking surgery seem essential" (Olson-Kennedy, 2018). So these two studies, rather than being a thorough examination of the psychological and physical risks and benefits of mastectomy surgery over the long-term appear instead to exist, at least in part, to validate the need for insurance companies to insure the costs of these dubious procedures for minors.

5. Centers for Medicare and Medicaid Services

The Centers for Medicare and Medicaid Services ("CMS") has found "inconclusive" clinical evidence regarding gender reassignment surgery. Specifically, the CMS Decision Memo for Gender Dysphoria and Gender Reassignment Surgery (CAG-00446N) (June 19, 2019) states: "The Centers for Medicare & Medicaid Services (CMS) is not issuing a National Coverage Determination (NCD) at this time on gender reassignment surgery for Medicare beneficiaries with gender dysphoria because the clinical evidence is inconclusive for the Medicare population."

Dr. Schecter states: "The result of CMS's review of the evidence is not applicable to other population groups" (Schecter decl, p. 39). However it does not make the converse true as

Dr. Schecter seems to imply. In other words, the CMS review does not therefore mean that there is conclusive evidence of benefit and lack of harm for the under 65 population. On the contrary, evidence of benefit is lacking and the risks and harms due to GAT are very high as I have described.

6. Nations and States Question and Reverse Course on GAT

Also noteworthy is that other nations are questioning and reversing course regarding gender affirmative therapy. For example in the *Bell v. Tavistock* Judgment in the UK, regarding puberty blockers in GAT, they concluded that "there is real uncertainty over the short and long-term consequences of the treatment with very limited evidence as to its efficacy, or indeed quite what it is seeking to achieve. This means it is, in our view, properly described as experimental treatment" (*Bell v. Tavistock* Judgment, 2020).

The case was appealed and although the medical decision making was returned to clinicians (rather than the courts), it was noted that great pains should be taken to ensure that the child and parents are properly informed before embarking on such treatments. In its conclusion the appeals court stated that "[c]linicians will inevitably take great care before recommending treatment to a child and be astute to ensure that the consent obtained from both child and parents is properly informed by the advantages and disadvantages of the proposed course of treatment and in the light of evolving research and understanding of the implications and long-term consequences of such treatment. Great care is needed to ensure that the necessary consents are properly obtained " (*Bell v. Tavistock* Appeal, Judgment, 2021).

In the bulletin of the Royal College of Psychiatrists in 2021, in a reevaluation of the evidence, Griffin and co-authors write, "As there is evidence that many psychiatric disorders persist despite positive affirmation and medical transition, it is puzzling why transition would come to be seen as a key goal rather than other outcomes, such as improved quality of life and reduced morbidity. When the phenomena related to identity disorders and the evidence base are uncertain, it might be wiser for the profession to admit the uncertainties. Taking a supportive, exploratory approach with gender-questioning patients should not be considered conversion therapy" (Griffin et al., 2021).

In 2020, Finland recognized that "[r]esearch data on the treatment of dysphoria due to gender identity conflicts in minors is limited," and recommended prioritizing psychotherapy for gender dysphoria and mental health comorbidities over medical gender

affirmation (Council for Choices in Healthcare in Finland, 2020). Additionally, "[s]urgical treatments are not part of the treatment methods for dysphoria caused by gender-related conflicts in minors".

In 2021, Sweden's largest adolescent gender clinic announced that it would no longer prescribe puberty blockers or cross-sex hormones to youth under 18 years outside clinical trials (SEGM, 2021). "In December 2019, the SBU (Swedish Agency for Health Technology Assessment and Assessment of Social Services) published an overview of the knowledge base which showed a lack of evidence for both the long-term consequences of the treatments, and the reasons for the large influx of patients in recent years. These treatments are potentially fraught with extensive and irreversible adverse consequences such as cardiovascular disease, osteoporosis, infertility, increased cancer risk, and thrombosis. This makes it challenging to assess the risk / benefit for the individual patient, and even more challenging for the minors or their guardians to be in a position of an informed stance regarding these treatments" (Gauffen and Norgren, 2021).

Dr Hilary Cass "was appointed by NHS England and NHS Improvement to chair the Independent Review of Gender Identity Services for children and young people in late 2020" (The Cass Review website, 2022). In her interim report dated February 2022, it states that "[e]vidence on the appropriate management of children and young people with gender incongruence and dysphoria is inconclusive both nationally and internationally" (Cass, 2022).

M. Assessment of the patient with gender dysphoria

In light of the very serious medical concerns and potential harms of gender affirmative therapy, there are several criteria that I believe would be important to fulfill before applying the GAT model to a patient.

1. Minors should be evaluated to determine if they will follow the natural pattern of desistance which 50 to 98% of pediatric age children will follow[10].
2. Patients, parents and guardians should be made aware of other options for treatment of gender dysphoria including active psychosocial treatment or watching and waiting with support in order to help with natural desistance.

[10] From the DSM-5: "Rates of persistence of gender dysphoria from childhood into adolescence or adulthood vary…In natal males, persistence has ranged from 2.2% to 30%. In natal females, persistence has ranged from 12% to 50%" (American Psychiatric Association, 2013).

3. The patient should be provided an assessment by a qualified psychologist or psychiatrist who does not follow the WPATH GAT model. If underlying psychological conditions are diagnosed then these should be adequately evaluated and treated before proceeding to hormones and surgery.
4. If a medicalized approach with hormones such as testosterone or medications to stop menstruation is being considered then a clear description of the risks and benefits needs to be conveyed to the patient and if a minor also the parent or guardian. It needs to be verified that they fully understand these risks.
5. If surgical procedures such as mastectomy, hysterectomy, ovariectomy, orchiectomy, or vaginoplasty are being considered then clear descriptions of the risks and benefits need to be conveyed to the patient, and if a minor, the parent or guardian.

However, even if a minor and their parents or guardian are made fully aware of the risks and benefits of hormones and surgeries, in my opinion, the minor does not have adequate maturity and judgment to make permanent changes to their body that may result in infertility/sterility and the permanent loss of organs such as breasts whose functions will not be fully utilized (such as breastfeeding) until adulthood.

II. Medical Concerns Regarding Plaintiffs

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III. Conclusion

The gender affirmative therapy model suffers from serious deficiencies in logic and lacks scientific foundation. The deep error hidden in this model is that one cannot in fact change sex. One cannot acquire the deep characteristics of biological sex in order to gain the complete sexual and reproductive functions of the opposite sex. This is not technologically possible.

Children and adolescents are of such immature minds that they are likely to believe that it is possible. In fact they may come to believe that their inherent, biologically necessary puberty is "terrifying" or needs to be stopped. Social transition serves to convince the child or adolescent that they can be the opposite sex. Puberty blockers sustain this state of mind by retaining a childlike state with respect to the genitalia and body habitus. High dose opposite sex hormones then cause medical conditions such as hirsutism and irreversible damage to the vocal cords in females and gynecomastia in males. These conditions serve to convince the young person that they are going through puberty of the opposite sex when in fact they are not developing sexually and are infertile.

[15] There are serious concerns regarding liver dysfunction with testosterone: "Prolonged use of high doses of androgens ... has been associated with development of hepatic adenomas [benign tumors], hepatocellular carcinoma [cancer], and peliosis hepatis [generation of blood-filled cavities in the liver that may rupture] —all potentially life-threatening complications" (Actavis Pharma, 2018).

There are known risks for both adults and minors, some of which I have described above, including cardiovascular disease, cancer, deficiencies in ultimate bone density, harms to sexual function, infertility, and for some permanent sterility. The child or adolescent cannot consent to these harms when they are not mature enough to fully comprehend what they mean. Long-term studies regarding the treatment effects specifically for minors with hormones and surgeries, using randomized controlled studies or even proper observational studies do not exist. The two adult plaintiffs and the two plaintiffs' children have comorbidities which make GAT particularly dangerous.

WPATH's newly released SOC 8 represents a grave and immediate danger to minors, young adults, and adults and should not be followed by any physician, mental health care provider, or other medical professional.

For the reasons set forth above, in my professional opinion as an endocrinologist, no child or adolescent should receive puberty blockers to block normal puberty, nor should they receive supraphysiologic doses of opposite sex hormones to attempt to alter secondary sex characteristics, nor should they have surgeries to remove or alter the breasts, genitalia or reproductive tracts as part of GAT. The child cannot consent or assent to these procedures. The parent or guardian also cannot consent to the life altering changes resulting from GAT. There exists insufficient evidence of benefit for adults, but serious concerns for risk of harm.

Finally, the June 2022 AHCA GAPMS report states: "Following a review of available literature, clinical guidelines, and coverage by other insurers and nations, Florida Medicaid has determined that the research supporting sex reassignment treatment is insufficient to demonstrate efficacy and safety" (FL Medicaid GAPMS, 2022). I strongly agree with that statement.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 2nd day of October, 2022.

//s//Michael K. Laidlaw, MD
Michael K. Laidlaw, MD

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EXHIBIT "A"

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Endocrinology, Diabetes, and Metabolism
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Rocklin, CA 95677
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docdrlaidlaw@gmail.com

EMPLOYMENT

2006-Present	Michael K Laidlaw, MD Inc. Private Practice – Endocrinology, Diabetes, and Metabolism. Rocklin, CA

EDUCATION

2004-2006	Endocrinology and Metabolism Fellowship - Los Angeles County/University of Southern California Keck School of Medicine
2001-2004	Internal Medicine Residency - Los Angeles County/University of Southern California Keck School of Medicine
1997-2001	University of Southern California Keck School of Medicine Doctor of Medicine Degree May 2001
1990-1997	San Jose State University Bachelor of Science Degree in Biology with a concentration in Molecular Biology, Cum Laude

LICENSURE

California Medical License – Physician and Surgeon: # A81060: Nov 6, 2002. Exp 5/31/2024.

PROFESSIONAL AFFILIATIONS

Endocrine Society 2006-2022
American Board of Internal Medicine - Endocrinology, Diabetes, and Metabolism – 2006
American Board of Internal Medicine - Internal Medicine - 2005
National Board of Physicians and Surgeons - Endocrinology, Diabetes, & Metabolism 2018-2024
National Board of Physicians and Surgeons - Internal Medicine 2018-2024

HONORS AND RECOGNITION

2010	Endocrine Society Harold Vigersky Practicing Physician Travel Award
2004-2005	Vice President - Joint Council of Interns and Residents
2002-2004	Council Member – Joint Council of Interns and Residents
1996, 1997	Dean's Scholar, San Jose State University
1995	Golden Key National Honor Society

RESEARCH AND PUBLICATIONS

2021	Publication – Michael K Laidlaw, Andre Van Mol, Quentin Van Meter, Jeffrey E Hansen. Letter to the Editor from M Laidlaw et al.: "Erythrocytosis in a Large Cohort of Trans Men Using Testosterone: A Long-Term Follow-Up Study on Prevalence, Determinants, and Exposure Years." The Journal of Clinical Endocrinology & Metabolism, Volume 106, Issue 12, December 2021, Pages e5275–e5276, https://doi.org/10.1210/clinem/dgab514
2020	Publication – Van Mol A, Laidlaw MK, Grossman M, McHugh P. "Correction: Transgender Surgery Provides No Mental Health Benefit." Public Discourse, 13 Sep 2020. https://www.thepublicdiscourse.com/2020/09/71296/
2020	Publication – VanMol A, Laidlaw MK, Grossman M, McHugh P.. "Gender-affirmation surgery conclusion lacks evidence (letter)". Am J Psychiatry 2020; 177:765–766.
2020	Publication – Laidlaw MK. "The Pediatric Endocrine Society's Statement on Puberty Blockers Isn't Just Deceptive. It's Dangerous." Public Discourse. 13 Jan 2020. https://www.thepublicdiscourse.com/2020/01/59422/
2019	Speech to the U.K. House of Lords – Laidlaw MK. "Medical Harms Associated with the Hormonal and Surgical Therapy of Child and Adolescent Gender Dysphoria". Parliament, London, U.K. 15 May 2019.
2019	Publication – Laidlaw MK, Cretella M, Donovan K. "The Right to Best Care for Children Does Not Include the Right to Medical Transition". The American Journal of Bioethics. Volume 19. Published online 20 Feb 2019. 75-77. https://doi.org/10.1080/15265161.2018.1557288
2018	Publication – Laidlaw MK, Van Meter QL, Hruz PW, Van Mol A, Malone WJ. Letter to the Editor: "Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline." The Journal of Clinical Endocrinology & Metabolism, Volume 104, Issue 3, 1 March 2019, Pages 686–687, https://doi.org/10.1210/jc.2018-01925 (first published on-line 11/2018)
2018	Publication – Laidlaw MK. "The Gender Identity Phantom". gdworkinggroup.org, 24 Oct 2018. http://gdworkinggroup.org/2018/10/24/the-gender-identity-phantom/
2018	Publication – Laidlaw MK. "Gender Dysphoria and Children: An Endocrinologist's Evaluation of 'I am Jazz'". Public Discourse, 5 Apr 2018. https://www.thepublicdiscourse.com/2018/04/21220/
2013	Abstract – Poster presentation Jun 2013. Endocrine Society Annual Meeting. A 12 Step Program for the Treatment of Type 2 Diabetes and Obesity.
2011	Abstract – Poster presentation Nov 2011. Journal of Diabetes Science and Technology. A Video Game Teaching Tool for the Prevention of Type 2 Diabetes and Obesity in Children and Young Adults.
2011	Abstract – Journal of Diabetes Science and Technology. A Web-Based Clinical Software Tool to Assist in Meeting Diabetes Guidelines and Documenting Patient Encounters.
2008	Abstract - Accepted to Endocrine Society Annual Meeting 2008. Hypercalcemia with an elevated 1,25 dihydroxy-Vitamin D level and low PTH due to granulomatous disease.

2005-2006	Clinical Research - University of Southern California – Utility of Thyroid Ultrasound in the Detection of Thyroid Cancer. Study involving the use of color flow/power doppler ultrasound and ultrasound guided biopsy to detect the recurrence of thyroid cancer in patients with total thyroidectomies.
2005	Certification - Certification in Diagnostic Thyroid Ultrasound and Biopsy – AACE 2005
2003	Certification - Understanding the Fundamentals: Responsibilities and Requirements for the Protection of Human Subjects in Research. University of Southern California. 29 Sep 2003 - 29 Sep 2006
2002-2005	Clinical Research - University of Southern California - Determining the Role of Magnesium in Osteoporosis. Study involved collecting and analyzing patient data related to patient characteristics, laboratory results, bone mineral density exams, nutrition analysis, and genetic analysis in order to determine a link between magnesium deficiency and osteoporosis.
1996	Research Assistant - San Jose State University - Role of the suprachiasmatic nucleus pacemaker in antelope ground squirrels.
1995-1996	Research Assistant - San Jose State University/NASA. Acoustic tolerance test and paste diet study for space shuttle rats.

EXPERT WITNESS WORK AND AMICUS BRIEFS

2022	Expert Witness Report – Laidlaw MK. C. P., by and through his parents, Patricia Pritchard and Nolle Pritchard; and PATRICIA PRITCHARD, Plaintiff, vs. BLUE CROSS BLUE SHIELD OF ILLINOIS, Defendants. Case No. 3:20-cv-06145-RJB
2022	Expert Witness Report – Laidlaw MK. DISTRICT COURT OF TRAVIS COUNTY, TEXAS 459th JUDICIAL DISTRICT. PFLAG, INC., ET AL., Plaintiffs, v. GREG ABBOTT, ET AL., Defendants. NO. D-1-GN-22-002569. 3 July 2022.
2022	Expert Witness Report #2 – Laidlaw MK. United States District Court for the District of Arizona. DH and John Doe, Plaintiffs, vs. Jami Snyder, Director of the Arizona Health Care Cost Containment System, in her official capacity, Defendant. Case No. 4:20-cv-00335-SHR. 24 Jun 2022. (Sealed under Protective Order).
2022	Expert Witness Report – Laidlaw MK. United States District Court for the Middle District of Alabama Northern Division. REV. PAUL A. EKNES-TUCKER, et al., Plaintiffs, v. KAY IVEY, in her official capacity as Governor of Alabama, et al., Defendants. Civil Action No. 2:22-cv-184-LCB. 2 May 2022.
2021	Brief of Amicus Curiae – Bursch, John J., McCaleb, Gary S., Van Meter, Quentin L., Laidlaw, Michael K., Van Mol, Andre, Hansen, Jeffrey E. Brief of Amicus Curiae. United States Court of Appeals for the Eight Circuit. DYLAN BRANDT, et al., Plaintiffs-Appellees v. LESLIE RUTLEDGE, in her official capacity as the Arkansas Attorney General, et. al. Defendants-Appellants. 23 Nov 2021.
2020	Expert Witness – JULIANA PAOLI v. JOSEPH HUDSON et al. heard in THE SUPERIOR COURT OF THE STATE OF CALIFORNIA, COUNTY OF TULARE. CASE NO. 279126. 2021.
2021	Brief of Amicus Curiae – Bursch, John J., McCaleb, Gary S., Grossman, Miriam, Van Meter, Quentin L., Laidlaw, Michael K., Van Mol, Andre, Hansen, Jeffrey E.

Brief of Amicus Curiae. United States Court of Appeals for the Eleventh Circuit. DREW ADAMS, Plaintiffs-Appellee v. SCHOOL BOARD OF ST. JOHNS COUNTY, FLORIDA, et. al. Defendants-Appellant. 26 Oct 2021.

2020 Expert Witness Affidavit 1 & 2 – Laidlaw MK. Supreme Court of British Columbia. File No. S2011599, Vancouver Registry. Between A.M. Plaintiff and Dr. F and Daniel McKee Defendants. 11/23/20 & 11/25/20.

2020 Brief of Amicus Curiae – Wenger, Randal L., McCaleb, Gary S., Grossman, Miriam, Laidlaw, Michael K., McCaleb, Gary S., Van Meter, Quentin L., Van Mol, Andre. Brief of Amicus Curiae. United States Court of Appeals for the Ninth Circuit. LINDSAY HECOX and JANE DOE, with her next friends Jean Doe and John Doe, Plaintiffs-Appellees v. BRADLEY LITTLE, in his official capacity as Governor of the State of Idaho, et. al. Defendant-Appellant. 19 Nov 2020

2020 Expert Witness Report – Laidlaw MK. United States District Court for the District of Arizona. DH and John Doe, Plaintiffs, vs. Jami Snyder, Director of the Arizona Health Care Cost Containment System, in her official capacity, Defendant. Case No. 4:20-cv-00335-SHR. 27 Sep 2020.

2019 Expert Witness Affidavit – Laidlaw MK. Court of Appeal File No. CA45940, Vancouver Registry. B.C. Supreme Court File No. E190334, between A.B. Respondent/Claimant, and C.D. Appellant/Respondent, and E.F. Respondent/Respondent. 24 Jun 2019.

2018 Brief of Amicus Curiae – Alliance Defending Freedom, Campbell, James A., Grossman, Miriam, Laidlaw, Michael K., McCaleb, Gary S., Van Meter, Quentin L., Van Mol, Andre. Brief of Amicus Curiae. United States Court of Appeals for the Eleventh Circuit. Drew Adams, Plaintiff-Appellee, v. School Board of St. Johns County, Florida, Defendant-Appellant. 12/27/2018.

PERSONAL

Languages: Conversational Spanish, French
Tutor: Biochemistry, computer science, High School mentor
Computers: Ruby, Rails, Javascript, C++, C, Java, and HTML programming

Appendix Attachment

12

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION

AUGUST DEKKER, et al.,

Plaintiffs,

v. Case No. 4:22-cv-00325-RH-MAF

SIMONE MARSTILLER, et al.,

Defendants.
_____/

DECLARATION OF KRISTOPHER E. KALIEBE, M.D.

I, Kristopher E. Kaliebe, M.D., hereby declare and state as follows:

1. I am over the age of 18, of sound mind, and in all respects competent to testify. I have personal knowledge of the information contained in this declaration and would testify completely to those facts if called to do so.

2. I, Kristopher Kaliebe, MD. am an associate professor at the University of South Florida in Tampa Florida. I am Board Certified in Psychiatry, Child and Adolescent Psychiatry and Forensic Psychiatry. I am a Distinguished Fellow at the American Academy of Child and Adolescent Psychiatry (AACAP). My clinical work has been primarily in University based clinics, Federally Qualified Health Centers and juvenile corrections. I have extensive teaching experience including medical students, general psychiatry residents, child and adolescent psychiatry fellows and forensic psychiatry fellows. My CV is attached.

3. I have been retained by the Defendants in the case to describe my experience with gender dysphoria patients and opine as to the state of the evidence supporting gender dysphoria treatments. I also have been asked to opine on the influence of activism and suppression of open inquiry which has distorted academic dialogue and made published research and expert

recommendations less trustworthy. If called to testify in this matter, I will testify truthfully based on my personal experience and knowledge.

4. My curriculum vitae contains a list of papers I have authored within the past 10 years. I have testified in deposition or trial in the following cases over the past four years:

Civil Testimony:

In the Interest of RW, LL, AP Minor Children Circuit Court of the 13th judicial circuit, Juvenile Division, Tampa FL January 28, 2020

Jeffrey Spivey, petitioner/father and Teresa Spivey N/K/A Teresa Cartwright, respondent/mother Case No.: 2016 DR0471's, Circuit Court of the 12th judicial circuit in and for Manatee County Florida. February 28, 2020

Re: The Marriage of Robyn Cohen McCarthy and John McCarthy November 1, 2019 11th Judicial Circuit, Family Division, Dade County, Miami FL

Criminal Testimony:

The State of Florida v. Bill Paul Marquardt 5th Judicial Circuit, Sumner County, Florida, Bushnell Florida December 19, 2019

The State of Florida v. Bill Paul Marquardt 5th Judicial Circuit, Sumner County, Florida, Bushnell Florida August 24, 2022

State of Florida v. Justin Mitchell Pennell, 2020CF000159FAXWS, 6th Judicial Circuit in and for Pasco County, Florida March 23, 2022

Civil Depositions:

Z.M.L., a minor, through her parents and guardians, -vs- D.R. Horton, Inc., a foreign corporation authorized to do business in Florida, United States District Court, Middle Division of Florida, Tampa, May 6, 2021

Julie Tarallo versus Blue Rock Partners, LLC et al. in the Circuit Court for the 13th Judicial Circuit, Florida Civil Division. (2019-CA 012361.) June 3, 2022

Carlton Collins, individually, and on behalf of his minor son, Connor Samuel Collins v. David R. Wallace, Sr., M.D. Louisiana's 14th judicial district, Civil Suit: 2019 – 4128 – D, March 4th, 2022

Criminal Deposition:

State of Florida v. Justin Mitchell Pennell, 2020CF000159FAXWS, 6th Judicial Circuit of the State of Florida in and for Pasco County, March 11, 2022

5. I am being compensated at an hourly rate of $400 per hour for my time preparing this declaration. My compensation does not depend on the outcome of this litigation, the opinions I express, or the testimony I may provide.

6. I was awarded my medical degree in 1999, and subsequently completed general psychiatry, child and adolescent psychiatry and forensic psychiatry training. This training including education in human biology, human sexuality, development, brain functioning, normal development and psychopathology. Gender dysphoria and gender dysphoria treatment was part my professional training. I have additional training in Cognitive Behavioral Therapy and trauma-focused therapies. I have been providing psychotherapy and teaching psychotherapy to psychiatry trainees throughout my career. Since July 2005 I have worked as a university professor with primarily clinical psychiatric care and teaching duties. Since 2016 I have acted as a supervising physician at the University of South Florida's Silver Child Development Center. In this capacity my role is to function as a clinical supervisor and instructor. Child psychiatry residents and general psychiatry residents serve as the primary patient evaluators and clinicians. I evaluate new patients directly, and after see patients directly as needed. I oversee the resident's work products and function as the physician of record. Within this clinic I have evaluated and treated, along with resident physicians, patients with gender dysphoria. In addition to these direct clinical experiences, part of my scope of duties within the Silver Child Development Center is training residents regarding the treatment of patients, including patients with gender dysphoria. In addition to direct clinical care, I have been consulted by a colleague for my opinion regarding what would be the appropriate forensic and clinical approach regarding providing a letter as requested by an endocrinologist regarding a youth considering puberty blockers on a path toward sex hormone treatment and potential surgeries. Within the juvenile justice system I have been asked to provide a second opinion and coordinate care regarding a patient with gender dysphoria.

7. My review of the research concludes that the evidence base for gender dysphoria treatments is mixed and generally low quality. The administration of sex hormones and performing of surgeries are medical interventions with substantial risks, and as these interventions target otherwise healthy tissue, a high degree of evidence and certainty is demanded before such a life altering intervention. Until recently cross sex hormone and surgeries for gender dysphoria have been exceedingly rare, thus there exists nominal long term data. It is especially challenging to evaluate this evidence base due to changing definitions and epidemiology. The costs and benefits of medicalizing gender self-identification has not gone through academic inquiry with open rigorous academic review. Social affirmation can be considered a psychosocial treatment and also has an extremely limited evidence base as an intervention.

8. There is not an evidence base to support strictly "affirmative" psychotherapy for gender dysphoria. Psychotherapy, in general, should aim to help individuals gain a deeper understanding of themselves, develop coping skills and provide a neutral, unbiased process. The binary of affirmative psychotherapy versus conversion therapy for gender dysphoria is a serious misunderstanding of the complexities of ethical and effective psychotherapy. It is my opinion that insufficient data is available to make confident proclamation regarding the risks and benefits of treatment of gender dysphoria.

9. Open inquiry is the ability to ask questions and share ideas without risk of censure. It is fundamental to medical research and scientific progress. Within medicine and science the ability for constructive disagreement and the expression of divergent opinions has withered with regards to questions of biological sex, gender and gender medicine. Political and social pressures are not new to this line of research and clinical care and do not come from only one political pole or fraction of society. Yet especially within the last decade, academia, including academic medicine has become more tribal, moralizing and more likely to attempt to silence divergent opinions. This has led to a

suppression of research data, publication bias, and penalizing of divergent viewpoints. These dynamics have contributed to expert recommendations which exaggerate the strength of the evidence base for gender dysphoria.

10. I witnessed these dynamics personally at the American Psychiatric Association conference in May 2022. During a Clinical Perspectives where presenters opined that they questioned the evidence based supporting current practice regarding the treatment of transgender youth, a sizable crowd in the audience was disruptive. During the question and answer session, crowd members repeatedly made hostile ad-hominem statements towards the presenters while only a few questions responded to the evidence or viewpoints presented. Similarly, in 2018 Lisa Littman, MD presented her research data at American Academy of Child and Adolescent Psychiatry conference and received similar personal enmity which caused a colleague to remark he has never seen a presenter at a conference treated with such hostility. Dr. Littman is the same researcher who after her peer reviewed research was published by the journal PLOS ONE, disregarding the typical rules of scientific discourse, PLOS ONE had a re-editing of the publication with a commentary added, despite no finding of error or misconduct. Another colleague had a related difficult experience with editors of the American Academy of Psychiatry and the Law Newsletter. The editors would not permit him to describe in his article the problematic behaviors of youth who declared themselves to be transgender, thus undermining the exchange of important clinical data. Similarly, the 2022 American Academy of Child and Adolescent Psychiatry conference will feature at least 6 presentation related to gender dysphoria or transgender patients, none presenting new research. Yet a research Symposium which included a prominent international researcher, and was to feature detransitioners, was not accepted. Similarly, I submitted, with two other physicians, for a Special Interest Group which was to feature data on de-transitioning. This proposal was also not accepted. Likewise, when I wrote a *Letter to the Editor* of the major forensic psychiatric journal which expressed skepticism about a commentary

embracing progressive political ideologies, he replied that my letter would not be published, in part, because some would find my criticism of this ideology offensive. These personal experiences mirror what I observe globally in the medical and psychiatric literature. The viewpoints in the medical literature do mainly endorse support for gender affirmative care for gender dysphoria. Yet my personal interactions with thoughtful well regarded psychiatrists display a full range of views, and many consider automatic affirmation to be harmful and unsupported by science. Similarly, my assessment is that many Endocrinologists also believe their professional organization is too strongly influenced by gender ideology. Most physicians will not speak frankly in public on these issues for fear of reprisals. Attacking a physician as hateful is easily accomplished and can be instantly amplified online. These personal attacks are hard to defend, affect careers and can be personally devastating.

11. Regarding professional organizations input regarding the treatment of gender dysphoria, it should be put in the context of their political activism. Two recent press releases provide examples. The September 28th 2022 American Academy of Pediatrics (AAP) press release regarding the State of Oklahoma condemns any limits on gender affirming health care. Defending scope of practice is typical for medical associations. Yet the press release frames these limits as discrimination based on gender identity. The AAP thus takes a polarized position by invoking moralized characterization of these limits, rather than calling for a respectful, nuanced science-based dialogue on how to best care for and support transgender and gender diverse youth. This statement sidesteps an opportunity to call for open independent review of the evidence base and a thorough review the logic behind current treatment affirmative approaches. It also creates a serious contradiction. Parents are often skeptical of medicalization of self-reported gender. The AAP statement invokes parental rights, but without clarifying if the AAP supports the many parents who do not want affirmation of their child's self-reported gender.

Similarly, the American Academy of Child and Adolescent Psychiatry's (AACAP) March 18th, 2022 press release reveals their leadership's strident position by remarking on an education bill, typically considered outside psychiatrists' area of expertise. AACAP promotes politicized derogatory phrasing by calling Florida's legislation the "Don't Say Gay or Trans" bill. The press release demonizes supporters of the bill as unconscionable and implies they "target and harm" LGBTQ+ youth". The press release claims that differences in gender identifications are "part of healthy physical, social, and emotional developmental processes." The press release does not explain why if these differences in gender identification are part of healthy development, why would they require puberty blockers, sex hormones or surgery. The American Academy of Child and Adolescent Psychiatry's leadership moralizes the debate, uses polarizing language and does not engage in forthright discussion which must include skepticism, not just affirmation.

These professional organizations admonish those who they claim pathologize, but will not acknowledge that it is an unanswered scientific question to what degree, and in what circumstances, discomfort with biological sex is related to mental illness. As in body dysmorphic disorder or anorexia, there are longstanding examples where non-acceptance of one's body is aptly pathologized. Holding the opinion that logic and the evidence base do not support medical interventions for gender dysphoria is not a moral failure or discrimination as they infer, this conclusion is the result of deliberative analysis.

12. To conclude, I am presenting on the subject of misinformation at the October 2022 American Academy of Child and Adolescent Psychiatry conference Social Media Institute. My research into misinformation research leads me to determine that on the subject of gender dysphoria, academia, including academic medicine, has created conditions where perceived social justice, ideological and political priorities have undermined the creation of trustworthy science. Group-think and coercive tactics have led to the creation of misinformation. These dynamics have contributed to

subsequent misguided attempts of these professional organizations to suppress open inquiry, demand conformity of opinion and exaggerate the evidence base regarding gender dysphoria treatment.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 3rd day of October, 2022.

Respectfully submitted,

Kristopher Kaliebe MD

Kristopher E. Kaliebe, M.D.

CURRICULUM VITAE

Kristopher Edward Kaliebe, MD

Associate Professor
University of South Florida, Morsani College of Medicine, Tampa Florida

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Citizenship

United States

Education

Graduate/Medical: St. George's University
School of Medicine, Grenada, West Indies
Medical Doctor — January 1995- June 1999

Undergraduate: Columbia College,
Columbia University
New York, NY,
Bachelor of Arts, Biochemistry — September 1988-May 1992

Postgraduate Training

Clinical Fellowships:
Fellow, Forensic Psychiatry (PGY6)
Louisiana State University Medical Center
1542 Tulane Ave., New Orleans, LA 70112 — July 2004 to June 2005

Fellow, Child and Adolescent Psychiatry (PGY 4-5)
Louisiana State University Medical Center
1542 Tulane Ave., New Orleans, LA 70112 — July 2002 to June 2004

Chief Resident in Child and Adolescent Psychiatry

- Acted as liaison between Child Psychiatry Fellows and Administration
- Coordinated with Program Director lecture and rotation schedules

July 2003 to June 2004

Residency:

Resident, Psychiatry (PGY 2-3)
University of Medicine and Dentistry-
New Jersey Medical School
185 S Orange Ave, Newark, NJ 07103 July 2000- June 2002

Internship: (PGY 1)
University of Medicine and Dentistry-
New Jersey Medical School
185 S Orange Ave, Newark, NJ 07103 July 1999- June 2000

Diplomate, American Board of Psychiatry and Neurology:

- Board Certification in General Psychiatry, awarded 2004, active
- Specialty Board Certification Child and Adolescent Psychiatry, awarded 2005, active
- Specialty Board Certification Forensic Psychiatry, awarded 2007, active

Awards, Honors, Honorary Society Memberships:

Department of Veterans Affairs Special Contribution Award for Clinical Service in Psychiatry
February 22, 2002

Outstanding Resident Award, Presented at the American Academy of Child and Adolescent Psychiatry, Miami, Florida,
October 17, 2003

Inducted into Berkeley Preparatory School Athletic Hall of Fame, Tampa, Florida,
November 7, 2003

Fellow, Louisiana State University Academy for the Advancement of Educational scholarship
October 2007 – 2016

Best Doctors, Louisiana in the subspecialty of Child and Adolescent Psychiatry
Awarded 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015 and 2016

Best Doctors, in Tampa Florida
2017, 2018, 2019, 2020, 2021, 2022

Awarded status as a Distinguished Fellow of the American Academy of Child and Adolescent Psychiatry

July 6, 2016

Appointments:

Associate Professor, University of South Florida Medical School, Department of Psychiatry. September 2016 to present

- Supervise one afternoon weekly of outpatient Child and Adolescent Psychiatry Silver Center Resident Clinic with USF General Psychiatry Residents and Child and Adolescent Psychiatry fellows who performed assessment, consultation, and treatment.

Tampa General Hospital Psychiatrist on Duty September 2016 to present

Manage the night, weekend and holiday clinical responsibilities of Tampa General Hospital including the over 1000 bed hospital and a 24-hour emergency room. Usually done in partnership with a psychiatric resident from the University of South Florida.

Facility Psychiatrist. Tampa Residential Facility September 2016 to present

- Performed psychiatric evaluations and treatment in Florida's juvenile correctional system. Tampa Residential Facility is the most intensive level of mental health and substance abuse treatment, subcontracted to Truecore Solutions.

Facility Psychiatrist. Les Peters Academy Residential Facility

May 2017 to present

- Performed psychiatric evaluations and treatment in Florida's juvenile correctional system, subcontracted to Truecore Solutions.

Staff Psychiatrist, Orleans Parish Justice System March 2018 to July 2018

- Performed telepsychiatric evaluations and treatment in Orleans Parish Prison correctional system, subcontracted to Correct Care Solutions.

Facility Psychiatrist. Charles Britt Academy Residential Facility

November 2019 to July 2022

•Performed psychiatric evaluations and treatment in Florida's juvenile correctional system, subcontracted by Sequel.

Facility Psychiatrist. Columbus Youth Academy Residential Facility

June 2020 to present

•Performed psychiatric evaluations and treatment in Florida's juvenile correctional system, subcontracted by Sequel.

Louisiana State University Health Science Center Assistant Professor of Clinical Psychiatry July 2005 to June 2017

Louisiana State University Health Science Center Associate Professor of Clinical Psychiatry July 2016 - 2017

Mental Health Medical Director, St. Charles Community Health Center, Luling, Louisiana July 2005 to 2016

- Evaluated and treated a primarily Medicaid and underserved population of adult, child and adolescent patients in a Federally Qualified Health Care Center.

Coordinator for Child and Adolescent Integrated Mental and Behavioral Health Services, Louisiana Mental and Behavioral Health Capacity Project
September 2012 to July 2017

- Performed assessment, consultation, training, prevention, and education services to Federally Qualified Health Centers and community clinics in Coastal Louisiana.
- Evaluated and treat both on site and using remote video conferencing equipment (telehealth).

Staff Psychiatrist, Back-up coverage, Louisiana Juvenile Justice System July 2016 to September 2022

- Performed psychiatric evaluations and treatment in Louisiana's juvenile correctional system, subcontracted to Wellpath (formerly Correct Care Solutions).
- Back up on call coverage for on-site psychiatrists
- As needed evaluated and treated remote video conferencing equipment (telehealth).

Staff Psychiatrist, Louisiana Juvenile Justice System July 2010 to July 2016

- Performed psychiatric evaluations and treatment in Louisiana's juvenile correctional system, subcontracted to Correct Care Solutions.
- Evaluated and treated both on site and using remote video conferencing equipment (telehealth).

Staff Psychiatrist on Duty October 2011 to July 2016
Children Hospital, Calhoun Campus. New Orleans, Louisiana

- Facilitated development of protocols and supervision regarding the training of Medical Students, General Psychiatry Residents and Child and Adolescent Psychiatric Fellows who utilize the Calhoun unit as primary training site for Child Psychiatry.
- Manage night and weekend clinical responsibilities for Children's Hospital emergency room and Inpatient Psychiatric Unit, including individually assessing all inpatients each weekend.

Staff Psychiatrist, Louisiana State University Juvenile Justice Program
July 2005 to August 2010

- Performed psychiatric evaluations and treatment in Louisiana's juvenile correctional system at Bridge City Center for Youth and Jetson Center for Youth.
- Evaluated and treated both on site and using remote video conferencing equipment (telehealth).

Staff Psychiatrist, Florida Parish Juvenile Detention Center,
July 2007 to August 2010

- Performed psychiatric evaluations and treatment using remote video conferencing equipment (telehealth).

Medical Officer on Duty July 2002 to July 2005
New Orleans Adolescent Hospital. New Orleans, Louisiana

- Managed clinical responsibilities of Crisis Intervention Services, a 24-hour emergency mental health response team serving families, children and adolescents from the Southeast Louisiana region.
- Managed two psychiatric inpatient units including a twenty bed adolescent and ten bed children's unit after hours on call.
- On call physician for Crisis Respite, a short term residential facility for children and adolescents located on hospital grounds.

Psychiatrist on Duty September 2003 to July 2005
New Orleans Veterans Administration Medical Center, New Orleans, Louisiana

- Managed clinical psychiatric responsibilities of a 450 bed hospital
- Managed clinical psychiatric responsibilities of a 27 bed inpatient psychiatric unit
- Managed clinical psychiatric responsibilities of 24-hour emergency room

Psychiatrist on Duty September 2001 to June 2002
New Jersey Medical Center Veterans Administration

- East Orange Medical Center, East Orange, NJ

Managed clinical psychiatric responsibilities of 24 hour emergency room along with a 295 bed hospital, 30 Nursing Home and 30 Domiciliary beds.

- Lyons Hospital, Lyons, NJ

Managed clinical psychiatric responsibilities of 356 bed hospital.

Teaching, Lecture

Undergraduate Medical Student

BMS6920.002, BMS6920.001 University of South Florida: Created five session elective: "Mind Body Medicine" Developed as part of University of South Florida medical school elective curriculum from 2017-current. Offered for up to 12 students as a credited elective including study guide, organizing readings, and experiential class learning.
2017 to present

At Louisiana State University Health Science Center New Orleans:

4 one-hour lectures instructing all Medical Students (MS2) in Child and Adolescent mental health during Psychiatry Basic Science block

February 2004 to February 2016

LSU Physical therapy
Annual 2 two-hour lectures on a range of mental health topics annually

2012 to 2016

LSU Public Health
Annual 2 hour lecture on psychopharmacology to incoming Masters Level students in Public Health

2012 to 2016

Graduate Medical Teaching

MEL 8602 C65 M: Child and Adolescent Psychiatry

Child and Adolescent Psychiatry Resident Teaching:

Arranged and co-instructed Forensics Lecture Series, bi-annually 10 lecture hours and 4 hours of individual lectures.

2016 to present.

Teach various topics within residency training. 1 lecture per year.

2016 to present.

University of South Florida General Psychiatry Residency:

Co-Produced elective track for 2 residents per year within University of South Florida Psychiatry Residency. Supervision of Integrative Psychiatry residents within the University of South Florida's Integrative Psychiatry Track, biweekly sessions utilizing curriculum from the Andrew Weil Center for Integrative Medicine.

July 2020- present

Forensic Psychiatry Resident Teaching:

Teach child and corrections related forensic topics within residency training. 4 lectures per year.

2018 to present.

LSUHSC New Orleans, General Psychiatry Resident Teaching

- Created and taught one hour weekly (44 weeks per year) Cognitive Behavioral Therapy practicum for PGY 3 residents

2007 to 2016

- One hour lecture on evolution and mood disorder each year for PGY3 residents
  2010 to 2016

LSUHSC New Orleans Child and Adolescent Psychiatry Resident Teaching

- One-hour didactic lectures on psychopharmacology for 8 weeks and cognitive behavior therapy for 4 weeks bi-annually
  2008-2016
- Organized and taught majority of the year-long bi-weekly one hour didactic program entitled Special Topics including a wide range of topics including development, forensic psychiatry, evolution, anthropology, nutrition, effects of technology, electronic media, sleep, exercise and physical activity, wellness and systems of care.
  2008 to 2016

LSU- Kenner Family Practice Residency:
Once yearly didactic lectures for 1 to 2 hours for Kenner Family Practice Residents
2009 to 2016

Created one session Mini-Course: "Optimizing Neurocognition through Nutrition." Developed and co-facilitated a module as part of Goldring Center for Culinary Medicine curriculum for medical students and other trainees with Annie Yeh, MD). Offered as a 1 credit elective for Tulane medical students including study guide, organizing readings, online webinar to be viewed prior to class, case studies during class and test.
2014

At Louisiana State University Health Science Center New Orleans: Core Clinical Psychiatry Rotation Lecture, 1 hour lecture presented to MS3 students every six weeks to 3rd year medical students covering Child Psychiatry Basics.
October 2003 to June 2005

At University of Medicine and Dentistry- New Jersey Medical School, Department of Psychiatry
• Lecture: "The Media and Psychiatry" for General Psychiatry Residents, created as part of the Culture and Psychiatry Seminar
August 2001 and 2002

Teaching, Supervisory

At University of South Florida, Tampa Florida:

Medical Student supervision

University of South Florida - 2017 to present
MEL 8109 L69 M

BCC 7154 002 M Psychiatry / Neurology Clerkship. Medical Students rotation through clinic one afternoon weekly of outpatient Child and Adolescent Psychiatry Silver Center Resident Clinic

Psychiatry Elective, 2 to 4 week Medical Student rotation through Child and Adolescent Psychiatry Silver Center Resident Clinic

Graduate Medical Education Supervision

Child and Adolescent Psychiatry Residency

Supervise one afternoon weekly of outpatient Child and Adolescent Psychiatry Silver Center Resident Clinic with USF Child and Adolescent Psychiatry residents who performed assessment, consultation, and treatment.

September 2016 to June 2021

Supervise one afternoon weekly of outpatient Child and Adolescent Psychiatry correctional psychiatry with USF Child and Adolescent Psychiatry residents who observe clinical care in juvenile correctional facilities.

September 2016 to present

General Psychiatry Residency:

Supervise one afternoon weekly of outpatient Child and Adolescent Psychiatry Silver Center Resident Clinic with USF General Psychiatry Residents who performed assessment, consultation, and treatment.

September 2016 to present

Forensic Psychiatry Resident Teaching

Supervision of forensic psychiatry trainees within the University of South Florida forensic psychiatry training program. This includes review of resident competency evaluations along with co-evaluation of criminal defendants as individual cases arise.

2018 to present

At Louisiana State University Health Science Center New Orleans

LSU- Kenner Family Practice Residency:

- One month, once weekly half day mental health rotation at St Charles Community Health Center for all Kenner Family Practice Residents

2008 to 2016

Clerkship/Residency Directorship:

Child and Adolescent Psychiatry Fellowship Training Director, Louisiana State University Medical Center. Oversaw and supervised resident physician training Managed administrative, evaluation and scheduling issues within the training program Collaborated with Louisiana State University psychiatric faculty to develop policies and procedures at various clinical site.

July 2010 to September 2012

Teaching Awards:

Association for Academic Psychiatry Honorary Fellow

October 2001- October 2002

Louisiana State University Child and Adolescent Psychiatry Department Outstanding Teacher Award for the 2006-2007 academic year

Louisiana State University Child and Adolescent Psychiatry Department Outstanding Teacher Award for the 2015-2016 academic year

Peer to Peer: Institutional Grand Rounds

"The Minds, They are a Changin' – An Overview and Update on MDMA and Psilocybin Grand Rounds University of South Florida Psychiatry Department, Tampa Florida

January 28 2022

"3 Simple Rules for Overcoming Obesity" University of South Florida Endocrinology Department, Tampa Florida

November 9, 2021

"A hard pill to swallow: psychotropic medications in foster care", University of South Florida, Department of Public Health, Tampa Florida

November 3, 2017

"Rules of Thumb: The importance of heuristic and cognitive biases in pediatric physical and mental health" Grand Rounds Children's Hospital, New Orleans

July 30, 2014,

Grand Rounds, Louisiana State University Department of Psychiatry, "Rules of Thumb, lifestyle interventions for mental health professionals." New Orleans, Louisiana

January 23, 2014

"Just say No, the Case against Stimulant Medication" Grand Rounds Children's Hospital, New Orleans, Louisiana

May 19th, 2010

"Violence: Neurobiology, Risk Assessment and Beyond", Grand Rounds Louisiana State University Department of Psychiatry, New Orleans, Louisiana

August 9, 2012

"Is ADHD a Nutritional Disorder", Grand Rounds Louisiana State University Department of Psychiatry, New Orleans, Louisiana

July 28, 2011

"Just say No, the Case Against Stimulant Medication", Grand Rounds Louisiana State University Department of Psychiatry, New Orleans, Louisiana

July 29th, 2010

Grand Rounds Department of Psychiatry, Louisiana State University School of Medicine, New Orleans, Louisiana "The Application of Darwinian Principles to Child Custody Evaluations", New Orleans, Louisiana

May 26th, 2005

"Attention Deficit Hyperactivity Disorder" Grand Rounds Department of Pediatrics, Louisiana State University School of Medicine, New Orleans, Louisiana

May 25th, 2005

"The Media, Our New Social World, How Should Pediatricians Respond?" Grand Rounds, Louisiana State University School of Medicine, Children's Hospital, New Orleans, Louisiana

June 2nd, 2004

"Attention Deficit Disorder" for Louisiana State University Health Science Center Juvenile Corrections Program Continuing Medical Education Presentation via telemedicine New Orleans, Louisiana

March 16th, 2004

"The Media, Relationships to Children and Psychiatry", Grand Rounds, Department of Psychiatry, Louisiana State University School of Medicine, New Orleans, Louisiana

June 4th, 2003

"The Media, Relationships to Children and Psychiatry", Grand Rounds, New Orleans Adolescent Hospital, New Orleans, Louisiana

March 28th 2003

Lectures by Invitation

"The Media, Relationships to Children and Psychiatry" Grand Rounds, University of West Virginia, Charleston, West Virginia, Department of Psychiatry and Behavioral Science

April 10th 2003

"The Media and Child and Adolescent Psychiatry –An Evolving Relationship" Chair and Presenter, Media Theatre, Annual Conference of the American Academy of Child and Adolescent Psychiatry

October 21st, 2004

"The Media, Our New Social World, How Should Health Care Professionals Respond?" Continuing Medical Education Presentation Snowshoe Mountain Retreat, Snowshoe Mountain, West Virginia

September 19th, 2004

"The Application of Darwinian Principles to Child Custody Evaluations" Grand Rounds Department of Psychiatry, University of South Florida, Tampa, Florida

October 31st, 2005

"The Evaluation and Treatment of Traumatized Children and Adolescents with ADHD" Web Cast Presentation and Grand Rounds sponsored by the National Center for Child Traumatic Stress Network's Rural Consortium, New Orleans, Louisiana

January 25th, 2007

"Behavioral Disorder or Traumatized Child?" Louisiana Federation of Families for Children's Mental Health, Children's Mental Health Conference, Houma Louisiana

May 9th, 2008

"Behavioral Disorder or Traumatized Child?" Grand Rounds Tulane University Department of Child Psychiatry, New Orleans, Louisiana

March 13th, 2009

"Brother's Little Helper: The Simpsons Satirizes Stimulant Medication as a Response to Childhood Behavior Problems" Media Theatre, Annual meeting of the American Academy of Child and Adolescent Psychiatry, New York, New York Kristopher Kaliebe MD, K. Dalope, MD

October 30, 2010

"Violence Risk Assessment" Louisiana Psychiatric Medical Association Annual Meeting, New Orleans, LA

March 2, 2013,

"Telepsychiatry in Juvenile Justice Settings" part of "Telepsychiatry: Challenges and Successes Across Settings." Clinical Perspectives, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Orlando FL

October 22, 2013

"What are they Missing, When Electronic Media Displaces Sleep, Academics and Exercise" part of "Identifying and Treating Internet-Related Mental Health Problems: An Evidence-Based Approach" Clinical Perspectives. Annual meeting of the American Academy of Child and Adolescent Psychiatry, Toronto, Canada

October 24, 2014

"The Implications of the Pharmacological Treatment of Children" Michigan Drug Court Annual Conference, Lansing, Michigan

March 12, 2014

"Three rules to prevent and treat ADHD symptoms" as part of the Louisiana ADHD Symposium, organized by the Louisiana Department of Health and Hospitals ADHD Task Force, Baton Rouge, Louisiana

December 9, 2014

"Non-Pharmaceutical Interventions for ADHD", Invited Professorship: St George's University School of Medicine Complementary and Alternative Medicine Selective, St George's, Grenada, West Indies

August 28 – Sept. 3rd, 2014

"Screen Time and Childhood Behavior: Disruptive Influence or Easy Scapegoat" as part of "Caught in the Net, How Electronics effects Mental Illness" Chair and Presenter, Clinical Perspectives, Annual meeting of the American Academy of Child and Adolescent Psychiatry, San Diego, California

October 30, 2014

"The Management of Childhood Obesity" and "Disordered Eating in Children and Adolescents" Oregon Psychiatric Medical Association Conference, Portland, Oregon

February 27 and 28, 2015

"Rules of Thumb: 3 Simple Rules to Optimize Physical and Mental Health" National Alliance for the Mentally Ill Louisiana Annual Conference, New Orleans, Louisiana

April 17, 2015

"ADHD overdiagnosis in Louisiana, a child and adolescent psychiatrist's perspective" Preventing Overdiagnosis Conference, National Institutes of Health (NIH), Bethesda Maryland

September 2, 2015

"An alternative to diagnosis-based practice in pediatric mental health" Preventing Overdiagnosis Conference: National Institutes of Health NIH Bethesda Maryland

September 2, 2015

"Shell Shocked: Growing up in the Murder Capital of America". Discussant for Media Theatre, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Holly Peek, MD, Kristopher Kaliebe, MD San Antonio, Texas

October 29, 2015

"Screen Time and Childhood Behavior: Disruptive Influence or Easy Scapegoat" as part of "Caught in the Net, How Electronics effects Mental Illness" Chair and Presenter,

Clinical Perspectives, Annual meeting of the American Academy of Child and Adolescent Psychiatry, San Antonio, Texas

October 31, 2015

"What are they (we) Missing? When Electronic Media Displaces Sleep, Academics, and Exercise" Grand Rounds University of South Florida Psychiatry Department, Tampa Florida

November 12th, 2015

ADHD overdiagnosis in Louisiana, a child and adolescent psychiatrist's perspective, Louisiana Psychological Association, New Orleans, LA

May 20, 2016

"Rules of Thumb: 3 Simple Rules to Optimize Physical and Mental Health" Crohns and Colitis Association of America Regional Conference, New Orleans, LA,

June 12, 2016

"Evaluating and Assuring the Effective and Safe Use of Psychotropic Medications in Children" Webinar: National Council of Juvenile and Family Court Judges, with Judge Constance Cohen; Janie Huddleston and Dr. Joy Osofsky, Ph.D.

June 24, 2016,

"Psychotropic Medications 101: What Judges Need to Know for Effective Decision Making" Florida Child Protection Summit, with Melinda Sczepanski, Orlando FL

September 9, 2016

"Communicating With the Media and the Public as Child and Adolescent Psychiatrists Around Disaster and Highly Traumatic Events." Workshop, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Media Training Workshop, New York, New York

October 27, 2016

"Evolutionary Biology is a Basic Science for Child and Adolescent Psychiatry" Special Interest Group, Annual meeting of the American Academy of Child and Adolescent Psychiatry, New York, New York

October 28, 2016

"Is War Ever Really Over? War-Affected Youth From Home to Host ountry", Discussant, Clinical Perspectives. Annual meeting of the American Academy of Child and Adolescent Psychiatry, New York, New York

October 28, 2016

"Psychotropic Medications 101: The pertinent essentials for all involved in the child welfare system" Florida Child Protection Summit, with Melinda Sczepanski, Orlando, Florida

August 30, 2017

"Safe Use of Psychotropic Medications in Children." 2017 Safe Babies Court Teams Cross Sites Meeting, Fort Lauderdale, Florida
August 17, 2017

"Health Promotion in Pediatric Mental Health" Discussant, Clinical Perspectives, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Washington, DC
October 23, 2017

"New Technologies, New Laws, New Childhood" as part of "Clinical Guidelines for Navigating Media Use" Clinical Perspectives, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Washington, DC
October 24, 2017

"Screen Time and Childhood Behavior: Disruptive Influence or Easy Scapegoat" as part of "Caught in the Net, How Electronics effects Mental Illness" Chair and Presenter, Clinical Perspectives, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Washington, DC
October 26, 2017

"The Business of News, the Role of Child and Adolescent Psychiatrists in the Media, and Risk Communication." Member Services Forum, Annual meeting of the American Academy of Child and Adolescent Psychiatry: Washington, DC
October 27, 2017

"Caught in the net: a child psychiatrist's guide for navigating the internet age.", Workshop, International Association for Child and Adolescent Psychiatry and Allied Professions, Prague, Czechoslovakia
July 27, 2018

Chair, Clinical Perspectives, Annual meeting of the American Academy of Child and Adolescent Psychiatry, "Caught in the Net: How Digital Media Shapes Mental Illnesses in Youth and How Psychiatrists Should Respond." Seattle, Washington
October 24, 2018

"Self-Care in the Child Welfare System" YMCA/Safe Children Coalition Conference, with Catarlyn Glenn, Sarasota Florida
April 18, 2019

"Psychotropic Medications 101: The pertinent essentials for all involved in the child welfare system" Florida Child Protection Summit, with Catarlyn Glenn, Orlando Florida
December 17, 2019

"Caught in the Net: How Digital Media Interacts with Mental Illness in Children and Adolescents", Annual Conference of the Florida Psychiatric Society, Tampa, Florida
September 21, 2019

"Effective Strategies for Higher Education and Beyond" Clinical Perspectives, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Mastering Information Flow for Transitional-Age Youth (TAY): as part of "Promoting Digital Citizenship in Transitional-Aged Youth (TAY) and College Students", Chicago, IL
October 19, 2019

"Caught in the Net: How Digital Media Interacts with Mental Illness", virtually presented at the Andrew Weil Center for Integrative Medicine, Tucson, Arizona
April 1, 2020

"A deeper dive into child and adolescent psychopharmacology for families and professionals involved in the child welfare system" Florida Child Protection Summit, with Catarlyn Glenn. Orlando, FL
September 3, 2020

"Screenagers: Next Chapter – How Online Behaviors Affect Depression and Anxiety Disorders in Adolescents", Media Theater (virtual) Annual meeting of the American Academy of Child and Adolescent Psychiatry
October 19, 2020.

"Helping Child Psychiatrists Navigate the Internet Age", "Career Focus: Setup Your Own Telepsychiatry Practice", "COVID-19 Related Psychiatric Issues"
Oasis Child and Adolescent Psychiatry Conference, Charleston, SC
May 17, 2021

"Conversation about health information, COVID, news, and related topics", discussant and breakout group leader, Digital Media and Mental Health Research Virtual Retreat
May 24th 2021

"The Social Dilemma: Helping Families Navigate the Pull, Pulse, and Power of Social Media", Media Theater, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Virtual
October 29, 2021

"Appealing Applications for Adolescent Mental Health: Social Media's Transformation During the COVID-19 Pandemic", Discussant, Clinical Perspective, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Virtual
October 25, 2021

"Angry Young Men, Common Threads in Different Types of Extremist Groups" as part of Political Extremism & Hate Group Recruitment of Adolescents", Clinical Perspective, Annual meeting of the American Academy of Child and Adolescent Psychiatry, Virtual
October 26, 2021

"Angry Young Men: Boys and Adolescent Males with Disruptive and Aggressive Behavior", "Nutritional Child Psychiatry" Oasis Child and Adolescent Psychiatry Conference, Charleston, SC

May 1st / 2nd, 2022

"Sexts, Lies & Videogames: Adolescent Boys, the Internet, & Mental Health" Chair and presenter on violence and young men: Clinical Perspective, Annual Meeting of the American Academy of Psychiatry Annual Meeting, New Orleans, LA

May 25, 2022

Clinical Activities or Innovation

Licensure:

Louisiana State Medical License, expires December 31st, 2022
Florida Medical License, expires January 31st, 2024

Federal DEA Controlled Substances License 12/31/2023
Louisiana license for Controlled Dangerous Substances expires 10/1/2022
Certification: ECFMG Certificate 0-573-532-9

Forensic Training:

Florida Forensic Examiner Training completed through the University of South Florida Department of Mental Health Law and Policy

August 15-17, 2019

Certifications in Psychotherapy:

Basic Practicum in Rational Emotive Behavior Therapy completed at the Albert Ellis Institute in New York, NY

July 13, 2003

Advanced Practicum in Rational Emotive Behavior Therapy completed at the Albert Ellis Institute in New York, NY

July 20, 2003

Associate Fellowship in Rational Emotive Behavior Therapy completed at the Albert Ellis Institute in New York, NY,

July 15, 2005

Accelerated Resolution Therapy, Basic Training

April 1-3, 2017

Accelerated Resolution Therapy, Enhanced Training

Sept 31, October 1, 2018

Accelerated Resolution Therapy, Advanced Training
October 2,3, 2018

American Association of Medical Colleges Medical Education Research Certificate
October 13th, 2010

Scholarly Activity

Funded block grants

Co-investigator on the Mental and Behavioral Health Capacity Project from September 2012 to June 2017

Unfunded research

Supervisor mentoring Medical Students:

University of South Florida IRB: Faculty Advisor Co Investigator May 2021

What is the impact of coronavirus confinement on Japanese college students' mental health? Ivana Radosavljevic STUDY002335

University of South Florida IRB: Faculty Advisor Co Investigator May 2021
Changes in college aged students' metabolic health due to Covid-19 confinement Matthew Udine, STUDY002341

PI as student supervisor, STUDY004118, IRB approved as Exempt Status, Palliative Care Patients' Attitudes & Openness to Psilocybin assisted Psychotherapy for Treatment of Existential Distress, Julia Wang

Journal Publications:

Peer Reviewed

Kaliebe, Kristopher and Adrian Sondheimer. "The media: Relationships to psychiatry and children." *Academic Psychiatry* 26.3 (2002): 205-215.

Kaliebe, Kristopher "Rules of thumb: three simple ideas for overcoming the complex problem of childhood obesity." *Journal of the American Academy of Child & Adolescent Psychiatry* 53.4 (2014): 385-387.

Kaliebe, Kristopher. "Dr Kaliebe Replies", Journal of the American Academy of Child & Adolescent Psychiatry, (2014) 53:10 1134.

Kaliebe, Kristopher "The Future of Psychiatric Collaboration in Federally Qualified Health Centers." *Psychiatric Services* (2016): appi-ps.

Kaliebe, Kristopher, and Josh Sanderson. "A Proposal for Postmodern Stress Disorder." The American journal of medicine 129.7 (2016): e79.

Osofsky, Howard J., Anthony Speier, Tonya Cross Hansel, John H. Wells II, **Kristopher E. Kaliebe**, and Nicole J. Savage. "Collaborative Health Care and Emerging Trends in a Community-Based Psychiatry Residency Model." *Academic Psychiatry* (2016): 1-8.

Yeh, Y. Y. and **K. Kaliebe**. "Impact of Nutrition on Neurocognition." *Southern medical journal* 109.8 (2016): 454.

K. Kaliebe Expanding Our Reach: Integrating Child and Adolescent Psychiatry Into Primary Care at Federally Qualified Health Centers. J Am Acad Child Adolesc Psychiatry. 56.11 (2017)

Kass, R. and **Kaliebe, K**., Stress and Inflammation: New Perspectives on Major Depressive Disorder. JAACAP Connect, p.22. Winter 2020

Case Reports, Technical Notes, Letters

Books, Textbook Chapters:

Weigle, P., Kaliebe, K., Dalope, K., Asamoah, T., & Shafi, R. M. A. (2021). 18 Digital Media Use in Transitional-Age Youth: Challenges and Opportunities. Transition-Age Youth Mental Health Care: Bridging the Gap Between Pediatric and Adult Psychiatric Care, 357.

Papers in Press:

Accepted for publication: Prescribing Psychotropic Medications for Justice-Involved Juveniles, Journal of Correctional Health Care, A Tamburello, J Penn, R Negron-Muñoz, **K Kaliebe**

Invited Publications

"Telepsychiatry in Juvenile Justice Settings", **K Kaliebe**, J Heneghan, T Kim, Child and Adolescent Clinics of North America, 20 (2011) 113-123

American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Telepsychiatry and AACAP Committee on Quality Issues. Clinical Update: Telepsychiatry With Children and Adolescents. J Am Acad Child Adolesc Psychiatry. 2017 Oct; 56(10):875-893. Epub 2017 Jul 25. PMID: 28942810.

Kaliebe, Kristopher and Paul Weigle. "Child Psychiatry in the Age of the Internet." (2017). Child and Adolescent Psychiatric Clinics of North America, April 2018Volume 27, Issue 2, Pages xiii–xv

Gerwin, Roslyn L., **Kristopher Kaliebe,** and Monica Daigle. "The Interplay Between Digital Media Use and Development." Child and Adolescent Psychiatric Clinics 27.2 (2018): 345-355.

Other Research and Creative Achievements:

Poster Presentations:

"Collaborative Child and Adolescent Psychiatry within Primary Care Clinics in Coastal Louisiana" Poster, Annual meeting of the American Academy of Child and Adolescent Psychiatry, **Kristopher Kaliebe MD**, Joy Osofsky, PhD; Howard Osofsky, MD, PhD; Lucy King, BA; Tonya Hansel, PhD, San Antonio, TX

October 29, 2015

"Benefits of Integrating Young Child Psychiatric Services Into Primary Care Clinics in Underserved Communities" Poster, Annual meeting of the American Academy of Child and Adolescent Psychiatry, New York, NY Joy Osofsky, PhD; Howard Osofsky, MD, PhD; Lucy King, BA; Tonya Hansel, PhD, **Kristopher Kaliebe MD**

October 28, 2016

"Integrating child and adolescent psychiatry into community based primary care networks", Poster, International Association for Child and Adolescent Psychiatry and Allied Professions, Prague, Czechoslovakia **Kristopher Kaliebe MD**

July 25, 2018

" The Prevalence of the Adverse Childhood Experiences (ACE) in Florida Youth Referred to the Department of Juvenile Justice" Poster, Annual meeting of the American Academy of Psychiatry and the Law, Greg Iannuzzi, MD, Mark Greenwald, PhD**, Kristopher Kaliebe MD**

October 25, 2018

Other articles:

"LSU's *Breakfast Club* emphasizes education and recruitment into Child and Adolescent Psychiatry", American Academy of Child and Adolescent Psychiatry News,

January 2004

"Trix are for Kids!", American Academy of Child and Adolescent Psychiatry News,

May, 2013

Expanded Psychiatric Care Can Transform Federally Qualified Health Centers, American Psychiatric Association News,

.....

Published online June 17, 2016

News Stories on Suicide, Fictional Content may Increase Risk for Contagion, Hansa Bhargava and **Kristopher Kaliebe**, American Academy of Pediatrics News, *Mastering the Media Column*,

Published online July 10, 2019

Webinars and creation of enduring materials:

Rules for Optimal Health, Webinar, University of South Florida Quality Parenting Initiative, Florida's Center for Child Welfare Information and Training Resources for Child Welfare Professionals, released
..... December 11, 2017

Florida's Center for Child Welfare Information and Training Resources, webinars series on pediatric mental health for child welfare professionals and caregivers, Kristopher Kaliebe with Catarolyn Johnson;
..... June 1, 8, 15, 22 and 29, 2020

"Don't just sit there- Adapt and Optimize in a post Covid world" University of South Florida Global Health Conversation Series, presented virtually
September 22, 2020

Service

Membership in Professional Organizations:

Member, American Academy of Child and Adolescent Psychiatry (AACAP),
2000 to present

AACAP Media Committee member
2003 –2021

C0-Chair, AACAP Media Committee
2013-2021

Media Committee Liaison to the Complementary and Integrative Medicine Committee of the AACAP
2012 to 2019

Liaison to the Committee on Communications and Media of the American Academy of Pediatrics, from American Academy of Child and Adolescent Psychiatry (AACAP)
2015 to present

Member Association for Behavioral and Cognitive Therapies
2004 – 2016

Member American Academy of Psychiatry and the Law
2004 to present

Member Zero to Three

2017 to 2021

Member Louisiana Council for Child Psychiatry (LCCP)
2003 to 2016

Louisiana Council for Child Psychiatry (LCCP)

Secretary-Treasurer
March 2010-March 2014

President
March 2014- June 2016

Member, American Psychiatric Association
2000 - 2012 , 2021 to present

LSUHSC Psychiatry Interest Group Faculty advisor
2008 to 2012

University of South Florida Medical School Integrative Medicine Student Interest Group faculty advisor
January 2020 to present

University of South Florida Medical School Mindfulness and Meditation in Medicine Group faculty advisor
January 2022 to present

University of South Florida Interdisciplinary (university wide) Psychedelics Interest Group faculty advisor
March 2022 to present

Editorial Posts and Activities:
Journal editorships, Reviewer

LSUHSC Institutional Review Board alternate reviewer 2008-2012

Safety Committee Member, Accelerated Resolution Therapy for Treatment of Complicated Grief in Senior Adults, University of South Florida
2017-19

Expert reviewer for *Adolescent Psychiatry* Thematic Special Issue: Coming of Age Online: Challenges of Treating the Internet Generation: (2), 4, 2014

Expert reviewer for *Academic Psychiatry* Media Column June 2018

Expert Reviewer for *Pediatrics*	January 2021
Expert reviewer for *Academic Psychiatry* Media Column	March 2022
Expert Reviewer for *Harvard Review of Psychiatry*	May 2021
Co-editor: Kaliebe, Kristopher, and Paul Weigle. Youth Internet Habits and Mental Health, An Issue of Child and Adolescent Psychiatric Clinics of North America, E-Book. Vol. 27. No. 2. Elsevier Health Sciences.	2018
Member, Planning Committee for the Digital Media and Mental Health Research Retreat hosted by the nonprofit Children and Screens.	May 24th, 25th 2021.

Revised: October 2022

Appendix Attachment

13

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	)	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of C.G. (pseudonym) In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, C.G. (pseudonym) declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of Defendants' opposition to Plaintiffs' Complaint and Motion for a Preliminary Injunction.

2. Florida's Rule 59G-1.050(7) of the Florida Administrative Code disallows Medicaid coverage for medical and surgical interventions that "alter primary or secondary sexual characteristics."

3. Florida's Rule will prevent manipulation and coercion on the part of health care providers. Most importantly, this Rule will protect vulnerable children and young people from grievous harm.

4. Florida's new regulation will prevent the state funding of situations like mine in which a parent acceded to the requests of a vulnerable 15-year-old and placed me on the fast track to medical and surgical interventions which have left me at age 21 facing a lifetime of sterility with a mutilated body.

5. Like many detransitioning young people, I was a gender non-conforming child who is on the autism spectrum and suffered with depression and anxiety. I was often bullied at school. I began seeing therapists when I was 6 years old.

6. When I was about 8 years old, I began to think that I did not like stereotypical "boy stuff," such as athletics and rough play. Instead, I liked the ways girls behaved and was drawn to stereotypical "girl stuff."

7. I did not socialize well with male peers and believed that if the behavior and habits of my male peers were what it meant to be a boy then maybe I was not a boy. Those feelings were confirmed by postings on transgender websites

that told me I was a girl if I liked "girl things." I also began conversing with trans-identifying people through phone apps.

8. At age 14, I told a friend I was "trans" and wanted to be a girl. I believed that I was "a girl trapped in a boy's body."

9. I told my parent, who quickly celebrated my "trans" identity and arranged for me to see a "gender affirming" therapist. The therapist immediately affirmed my "trans" identity without any psychological testing or exploration as to why I believed I was "trans." My parent also bought a whole new female wardrobe and cut off relatives and family friends who did not affirm my new female identity.

10. My parent also arranged for me to see an endocrinologist who runs a gender clinic for children and young adults within a hospital in Providence, Rhode Island. The endocrinologist diagnosed me with gender dysphoria based only on my statements alone and immediately prescribed estrodial (estrogen) and spironolactone (a testosterone blocker) on the first visit.

11. The endocrinologist told me that the hormones would feminize my body, but downplayed the side effects, saying things like, "There is a minor risk of blood clots, but it's not a big deal because you don't see cis women dropping dead of blood clots every day."

12. I began the hormone regimen at age 15 with my parent's consent. My other parent eventually "came around" to support my female identity and transition.

13. I experienced significant negative psychological effects from the hormones. I became depressed to the point that I was not getting out of bed. I became too anxious to go anywhere or talk to people and skipped school for months on end. I ended up dropping out of school.

14. I also developed an eating disorder and addiction to the internet. I clearly was not functioning healthfully, but my parent and therapist continued to move me along the "gender affirmation path."

15. I was scheduled for surgery when I was 17. Once the time for the surgety came closer I had fears and doubts about the surgery that I mentioned to my doctor, but she told me it was nothing to worry about and that soon I would have a brand new (vulgar word for female genitalia). I also expressed some of these fears to my parent but was similarly told that the surgeries would be good for me and that I had nothing to worry about. Soon after turning 18 I got on a plane to travel to Washington DC where my testicles and penis were removed, I was given a vaginoplasty to create an artificial vagina, and I received plastic surgery on my face.

16. About a year into the treatments I started having doubts. I would talk myself out of the second thoughts.

17. Whenever I wanted a higher dose of estrogen the doctor complied and glossed over any negative side effects. She also put me on progesterone to give my body a more feminine appearance. During the time that she treated me her demeanor

was wholly unprofessional. I later learned that the high dose of estrogen could have caused blood clots.

18. I was never offered any alternatives to medication and surgery.

19. No one attempted to explore any underlying reasons for my depression and discomfort with being male. No one suggested to me that I could become comfortable just being a "feminine" male.

20. I was only told that I was "born this way." No medical professional asked deeper questions because apparently none thought they should.

21. I realized that the treatments had not improved my life and returned to living as a male at age 20.

22. I am 21 years old. My body is completely ruined. I do not have any good options. My body is going to be a "freak" no matter what I do.

23. Even, as was true in my case, when parents consent to the treatments, these hormone and surgical treatments put kids and young people on a path of harm.

24. I was not able to grow up in a healthy way. I have been deeply scarred by these treatments. My relationship with my parent, whom I wish would have protected me, is deeply strained.

25. I know from experience that this path leads to depression, suicide, or ending up like me, physically marred and out of place with everyone. At times I do

not even feel like a person, but more like a freak. Even if some may feel they want the treatments as I did, these treatments lead nowhere good. I do not want to see other young people similarly harmed.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: October 3, 2022.

/s/ *C.G.*
C.G. (pseudonym)

Appendix Attachment

14

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	)	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of Camille Kiefel In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, Camille Kiefel, declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of Defendants' opposition to Plaintiffs' Motion for a Preliminary Injunction and Complaint.

2. Florida Administrative Code § 59G-1.050(7), which prohibits Medicaid coverage for medical and surgical interventions meant to "alter primary or secondary sexual characteristics," is a necessary and potentially life-saving regulation that will protect vulnerable young people from physical and mental harm, irreversible physical changes, and deep regret that I have experienced.

3. The Florida regulation is particularly important to me in that my surgery was paid for by Medicaid. Had a regulation like Florida's been in place when I sought my surgery, it would have required me to pause before undergoing surgery and perhaps prevented me from the loss of health body parts I now regret.

4. I suffered a series of traumatic events while growing up that distorted my view of the sexes. My parents went through a difficult divorce in which my mom was emotionally dysfunctional and spiteful, while my dad was more stable. In fifth or sixth grade, I began to wear girly preteen fashion and my dad told me how men his age talked about girls my age. My dad told me later that he was concerned about me being promiscuous. Then my friend was raped by her brother and the police interviewed me. I found the whole experience traumatic.

5. I was diagnosed with ADHD and put on medication to which I reacted poorly. That made me further lose respect for my mom because she had put me on the medication.

6. I then began to dress masculine. Previously an avid writer, I developed writer's block. I then focused on Anime.

7. In high school, I changed my diet and stopped eating meat. I started to have depression. There is evidence that suggests a meatless diet can contribute to depression.

8. In college I was ostracized by the "call out" culture, because in that culture if you are not part of a group then you are worthless.

9. I have done all kinds of therapy over the course of 20 years, including talk therapy, hypnotherapy, EMDR (eye movement desensitization and reprocessing), DBT (dialectical behavior therapy), TMS (transcranial magnetic stimulation therapy), Somatic Experiencing, and medications.

10. In 2016, I started seeing a gender therapist and came out as nonbinary.

11. I was still dealing with anxiety and depression and in 2020 I was on my second set of TMS, trans-cranial magnetic stimulation, treatments which helped some but not as much as I felt I needed. So, I turned to top surgery for an answer.

12. I did not want to be a man or a woman but instead wanted out of all sex types. I had a double mastectomy with nipple grafts in August 2020, not to emulate either sex but to be non-binary.

13. I had seen "female to non-binary" "top surgery" on the internet and believed it was an accepted, proven treatment. I did not realize at the time that it is experimental and had discomfort around my breasts due to trauma.

14. I received two letters recommending surgery from two mental health professionals at gender clinics one in May 2020 and the second in July 2020. Although I had a number of mental health issues and years of treatment, these providers did not review or ignored my records nor did they do a psychological evaluation even though they acknowledged that I had trauma.

15. I developed complications from the surgery. I developed "Raynaud's Syndrome" in which one's capillaries shrink and caused my extremities to get cold and discolored. This caused great discomfort. I also developed a burning sensation in back of my neck, tinnitus (ringing) in my ears, musculoskeletal issues, skin discoloration, most likely bone spurs, and insomnia.

16. My suicidal ideation worsened. I became terribly sleep deprived and my anxiety worsened. I became deeply depressed and distraught over time after the surgery. I knew something was going wrong with my body. My mother had to lay down with me to help me sleep. I had many physical problems and made many trips to the ER. The doctors were stymied. My mother talked to me about psychiatric hospitalization.

17. Rather than fixing my problems, the surgery made my physical and mental health worse.

18. I began to focus on holistic treatments through my own research with the help of a naturopathic doctors, bodywork practitioners, and trained staff certified in functional hyperbaric medicine who did treatments that helped restore balance to my nervous system. The holistic treatments helped me a great deal, and as my physical health improved so did my mental health. I began a slow progression to reconnect with my female body and womanhood.

19. I began looking at different information that offered different perspectives than I had received from internet transgender sources.

20. I detransitioned in 2022 when, after the effective holistic treatments, I was at peace with the realization that I am a woman.

21. I hate that I underwent the surgery. I can never breast feed if I have children. For many years I did not want a family because I felt so poorly physically and mentally. Now I want to marry and have kids. I can't fit clothing the same way again.

22. I believed that I was doing everything I was supposed to do. Now I realize that I was having a number of physical and mental health problems that no professionals investigated or addressed before prescribing a treatment that caused me to lose a part of my body.

23. Surgery is such a drastic, irreversible step. As I experienced, we do not truly know what these surgeries will do to the body – they are experimental. They are doing surgeries for a state that does not exist in nature. Those undergoing the surgeries are putting their bodies at risk and subjecting their bodies to trauma.

24. I am quite concerned that doctors are not running the right lab tests or doing the right holistic medical assessments to find out what is truly causing gender dysphoric patients their dysphoria and the desire to surgically remove parts of their body.

25. I have significant concerns about the experimental nature of the surgery. There is no biological blueprint for the surgery. There are no controlled studies. As I have experienced, because of the experimental and unpredictable nature of these surgeries the medical care one receives afterward is abysmal because they don't know what to do for you. These surgeries should not be funded by tax dollars.

I declare under penalty of perjury that the foregoing is true and corrected.

Executed on October 3, 2022.

/s/ *Camille Kiefel*
Camille Kiefel

Appendix Attachment

15

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of Carol Freitas In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, Carol Freitas, declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of Defendants' opposition to Plaintiffs' Motion for Preliminary Injunction and Complaint.

2. Florida's Rule 59G-1.050(7) of the Florida Administrative Code prohibits Medicaid coverage for medical and surgical interventions meant to "alter primary or secondary sexual characteristics." This rule is a much needed regulation that will protect dysphoric young people from focusing on treatments that may ultimately seriously harm their physical and emotional health and that overlook untreated mental health issues and negative social influences and displace other more effective and less intrusive options.

3. As a youth, I was what some describe as "gender non-conforming," but I lived in a household where gender expression was strictly aligned with cultural stereotypes. I was not allowed to wear boys' clothes or play boys' sports.

4. At puberty I realized I was same-sex attracted with crushes on girls. I became depressed and anxiety-ridden as fear what "being gay" might mean to how I lived my life and my family relationships. I later dropped out of high school.

5. At age 20 I began to meet other LGBT youth and my life stabilized. However, I also learned that many masculine females, like me, felt that they were "born in the wrong body" and were transitioning, so I adopted that persona.

6. I went to a gender therapist who diagnosed me with gender dysphoria and told me that transition was the only treatment that would alleviate my discomfort and anxiety.

7. However, at that time there were gatekeeping standards for gender transition, which required that I first live as man for six months, including using a male name, showing a male appearance, and using male spaces. I had very large breasts and could not pass for a male in male spaces, so I did not pursue testosterone at that time. I viewed myself as a male trapped in the "wrong body," but my mental health otherwise was stable.

8. In 2014, I revisited the idea of transitioning, believing it would make me feel better because I was undergoing trauma in various forms. My grandmother who had practically raised me died. I had suffered severe abuse and neglect in childhood, and in retrospect believe I was experiencing symptoms of PTSD from that. I had just become a new mother a couple of months before my brother-in-law committed suicide.

9. I spiraled downward and wanted out. I couldn't commit suicide because I was a mother, so I returned to the idea of transition, believing it would help me feel better. By that time the requirements for testosterone had lessened. I went to Planned Parenthood for testosterone and was given it right away. I was not given any information on uterine atrophy, vaginal atrophy, or other effects of testosterone and the staff did not talk about any of my emotional or mental health issues.

10. Four months after starting testosterone, I went to a plastic surgeon for a double mastectomy. I needed a letter from a therapist and received one from the

therapist who had affirmed me and originally recommended transition. As was true with testosterone, I was not given any information about the procedure. Instead, I had a consultation with the surgeon, who said "this is what we are going to do," drew on my chest, took pictures and asked me what I wanted out of the surgery. He said, "we'll create a masculine looking chest, you'll look great."

11. During the first four months on testosterone menstruation stopped, my sex drive went way up, my voice deepened, and facial and body hair came in. As I continued on testosterone, my personality changed drastically and my verbal abilities declined. Testosterone lowered and muted my emotions and empathy, but also gave me a lot of energy and a sense of a high. My depression and anxiety worsened to the point that I was having such severe panic attacks that I could not leave home. I told my doctors that I thought the testosterone was making the anxiety worse, but they said no.

12. I went to a psychiatrist to deal with the depression and I was provided with an anti-depressant that really worked. I felt mentally stable and able to address the trauma that led me to transition.

13. Within a month of starting the anti-depressant, I realized that I had not needed to transition. It was the biggest mistake I had ever made. I did not detransition for a year because I couldn't believe that it was so easy, i.e., that anti-depressants alleviated my depression and enabled me to think clearly and reason better. This

allowed me to address my internalized homophobia and childhood abuse through therapeutic means.

14. Meanwhile, my health began going downhill. Before going on testosterone, I had no health problems. After being on it for four years, I was pre-diabetic, had high cholesterol, and had a high red blood cell count to the point that doctors were recommending that I donate blood to reduce the volume.

15. I stopped taking testosterone and four months later my blood work was back down to normal. I thought to myself "How do they [doctors] not know about this?" Going off testosterone allowed me to finally sleep. I felt like I never slept all the time that I was taking testosterone. Going off testosterone also helped with empathy and other emotions. My personal relationships, including my relationship with my wife, were better.

16. I believe that healthcare providers did not ask me about mental health issues because they believed that those issues were caused by gender dysphoria and that transitioning would fix the problem. In fact, the opposite was true.

17. Florida's Rule is necessary and essential because it will give gender dysphoric people the chance to work through and address their underlying issues such as depression, trauma, or PTSD effectively without doing their body harm and undermining their health. I would have been spared physical, psychological, and emotional losses if I had received a proper diagnosis and treatment for PTSD and

depression instead of undergoing years of medical and surgical interventions. Prioritizing treatments focused solely on gender dysphoria caused my doctors to miss the real mental health issues that should have been treated by other more effective, less destructive means.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: October 3, 2022.

/s/ *Carol Freitas*
Carol Freitas

Appendix Attachment

16

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration Of Chloe Cole In Support Of Plaintiffs' Opposition to Defendants' Motion For Preliminary Injunction.

I, Chloe Cole, declare as follows:

1. I am 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of Defendants' opposition to Plaintiffs' Motion for a Preliminary Injunction and Complaint.

2. Florida Administrative Code § 59G-1.050(7), which prohibits Medicaid coverage for medical and surgical interventions meant to "alter primary or

secondary sexual characteristics," is a necessary and potentially life-saving regulation that will protect vulnerable young people from the heartbreaking regret, irreversible physical changes, and emotional pain that I have experienced.

3. Starting around the age of 12, I began to believe that I was transgender. This belief was not organic. All the media I consumed as a kid showed me how stupid and vulnerable being a girl was. All the sexualized images of women gave me an unrealistic expectation of womanhood.

4. I spent a lot of time online and quickly saw all the praise coming out as "trans" got on Instagram and other social media. I was a bit awkward in school and had some trouble making friends.

5. Like many dysphoric children, I also suffered from a variety of mental health conditions, such as ADHD, so I easily fell prey to the narrative that if I felt different, and did not want to be a highly sexualized girl, that I must be a boy.

6. I obsessed over becoming a boy. I believed that all of my insecurities and anxiety would magically disappear once I transitioned. The mental health professionals did not try to dissuade me of this delusional belief.

7. I was fast-tracked into medical transition after I was diagnosed with Gender dysphoria. In my home state of California, a child can pick their gender identity and a care provider cannot question that choice because it would be regarded as illegal conversion therapy. This wasn't a misdiagnosis, it was mistreatment.

8. I was diagnosed with gender dysphoria by a "gender specialist" when I was 12. The gender specialist told my parents that children know their gender from a young age, and I know what's best for myself. The specialist cited the suicide rate and said, "If you don't affirm your child she will commit suicide." The specialist asked them, if they would they rather have a "dead daughter or live son." My parents complied because they were not offered any other treatment solution for my distress. My distraught parents wanted me alive, so they listened to my doctors.

9. I started receiving puberty blockers at age 13. A month later I was put on testosterone. I stayed on puberty blockers for a year and on testosterone for three years. At the time I received the hormones, the endocrinologist cited some of the risks, including vaginal atrophy and inability to have children. However, I did not really understand what that would mean and didn't realize that could involve other pelvic structures. I was in 8th grade. I had no concept of what it would someday mean to me as an adult to have children. I cannot imagine a doctor asking a child this and expecting them to make a mature judgment.

10. While taking the hormones I began having severe hot flashes, like women in menopause. My entire body got very itchy. After a while I would sometimes hear loud cracks in my neck and back.

11. The hormones caused atrophy of my urinary track. I suffered from urinary track infections and blood clots in my urine. I did not want to discontinue

testosterone because I wanted to continue to be treated as a boy. I also developed digestive problems.

12. I also experienced a very heightened libido which was very difficult to deal with at such a young age. This caused me to make a lot of regrettable sexual decisions.

13. The treatments seemed to worsen my mental health the longer I was on them. My anxiety got worse, and I became prone to making rash and regrettable decisions. And as discussed below, I also became suicidal.

14. I was approved for a double mastectomy at 15. I had been binding my breasts for about two years. I had been groped by a classmate in 8th grade and wanted to make sure that did not happen again. From the time I began seeking a mastectomy to having my breasts removed was only six months. There was no psychological evaluation. I was simply referred to a surgeon by a gender specialist.

15. During the surgery, the nerve endings and blood vessels in my breast tissue were severed and my nipples were removed and grafted onto another part of my chest to make my chest appear more masculine. So I will not have normal sensation.

16. I have had serious complications from the surgery. After 2 years the skin at the surgical site started to regress and the top layer of skin is failing to heal.

The tissue continually emits fluid, such that I have to wear bandages. I was given the impression that the grafts would heal in nine months, but that is not true.

17. The surgery has also affected me mentally as I am really struggling with the fact that I will not be able to breast feed my future children. I was told about this, but no teenager is able to grasp what that means.

18. About 11 months after my surgery I began experiencing grief. I realized this was a mistake, that I had lost a part of my body that will mean that I will not be able to bond in an important way with any future children and might not be able to even have children.

19. I started to become suicidal for the first time. I was not suicidal prior to the treatments. I was beginning to feel growing alienation. I began to experience increasing suicidal thoughts. Although I did not act on them, they were taking a toll on me.

20. I broke down one night as it all came to a head and made the decision to stop the testosterone. I also dropped the male identification and began to identify again as a female.

21. At first some things got worse as I had more UTIs, more blood clots in my urine, and worse digestive issues. I was very emotionally volatile, and my suicidal ideation got worse. I became very sick and lost a lot of weight. My overall

mental health got worse. I had to drop out of school and get a GED because I couldn't perform at school.

22. Over time my body began to readjust. My features resoftened. The fat in my body and body shape began to return to a female form and I have regained the weight.

23. Currently my mental health is stable. The treatments were just band aids for my mental health issues. I still struggle, but my depression and anxiety have improved.

24. At no point in my journey did anyone explore why I did not want to be girl.

25. More and more kids are falling for the false promise of happiness if they transition. Gender clinics in the United States are turning a blind eye to European countries, who are pumping the brakes on this experiment on youth.

26. Fortunately, Florida regulators are not turning a blind eye. Enacting the regulation that bans Medicaid payment for these treatments is an important step in the state doing no harm to its citizens through these treatments. It should not have been an option for me to be prescribed hormone treatments that caused me harm and may have affected my fertility, or to have my healthy breasts removed at the age of 15. This regulation will help decrease the chance that it will be an option for

vulnerable teenage girls in Florida. Taxpayer money should not go toward paying for child mutilation and child sterilization.

27. Even for adults, these treatments are at best cosmetic. They do not enhance function, but actually take away functions from the body. They are elective. The state should not be paying for treatments that actually remove or distort normal bodily functions, and yet do not bring long-term relief.

I declare under penalty of perjury that the foregoing is true and corrected.

Executed on October 3, 2022.

/s/ *Chloe Cole*
Chloe Cole

Appendix Attachment

17

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of KathyGrace Duncan In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, KathyGrace Duncan, declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of

Defendants' opposition to Plaintiffs' Motion for Preliminary Injunction and Complaint.

2. Florida's Rule 59G-1.050(7) of the Florida Administrative Code (the "Challenged Exclusion") prohibits Medicaid coverage for medical and surgical interventions meant to "alter primary or secondary sexual characteristics." This Rule is an appropriate and necessary regulation that will protect young people and patients of any age from the regret of false promises, untreated trauma, and irreversible physical changes and lost previously healthy body parts.

3. From a very young age, I was what is called today "gender non-conforming." I preferred male clothing, I thought I was a "boy" and I wanted to live as one.

4. I grew up in a dysfunctional family in which my mother was often the victim of my father's emotional and verbal abuse. As a result I internalized the message that "my dad would love me if I were a boy."

5. Sexual abuse by a family member between the ages of 10 and 12 further convinced me that being a girl meant being unsafe and unlovable.

6. In sixth grade, I learned about female to male transsexuals. I believed that my distress was caused by not having the "right" body and the only way to live a normal life was to medically transition and become a heterosexual male.

7. At age 19, I began living as a man named Keith and went to a therapist who formally diagnosed me with gender dysphoria. I began testosterone and a year later had a double mastectomy. At the time, I believed it was necessary so that what I saw in the mirror matched what I felt on the inside.

8. I never viewed my condition as touching on mental health issues, and neither did the therapist who diagnosed me. The question of whether my self-perception and desire to transition was related to her mental health issues was never explored.

9. After 11 years passing as a man and living what I thought was a relatively "happy" and stable life (which included having a number of girlfriends), I realized that I was living a lie built upon years of repressed pain and abuse. Hormones and surgery had not helped me resolve underlying issues of rejection, abuse, and sexual assault. I came to understand that my desire to live as a man was a symptom of deeper unmet needs.

10. With the help of life coaches and a supportive community, I returned to my female identity and began addressing the underlying issues that had been hidden in my attempt to live as a man. I experienced depression that I had repressed for years and grieved over the irreversible changes to my body.

11. If someone had walked with me through my feelings instead of affirming my desire to transition, then I would have been able to address my issues more effectively and not spend so many years making and recovering from a grave mistake.

12. Florida's Rule is necessary and essential because it will give gender dysphoric young people (and even older adults) a chance to work through their feelings, which can be overwhelming and deeply confusing, and address their underlying issues effectively without being pulled onto the affirmation medical conveyor belt.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: October 3, 2022

/s/ *KathyGrace Duncan*
KathyGrace Duncan

Appendix Attachment

18

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of Sydney Wright In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, Sydney Wright, declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts. I am submitting this Declaration in support of Defendants' opposition to Plaintiffs' Motion for a Preliminary Injunction.

2. Florida's Rule 59G-1.050(7) of the Florida Administrative Code (the "Challenged Exclusion") prohibits Medicaid coverage for medical and surgical interventions to "alter primary or secondary sexual characteristics." This Rule is

needed to protect vulnerable young people from being misled and from physical harm like what I experienced.

3. I'm a 23-year-old woman who spent a year as a "transman" after taking mega doses of testosterone at age 18.

4. I began to identify as transgender in 2017 during counseling after reading about transgenderism on the internet. I had not experienced feelings of gender dysphoria prior to this time.

5. A neighborhood boy engaged in sexually touching with me from age 5 to 12. This awakened sexual feelings at too young an age and caused me to feel unsafe.

6. I was very tomboyish growing up and was sometimes bullied. I began having same-sex attractions as a teen. I was raised in a strict religious home, where homosexuality was frowned upon. When my father learned that I had same-sex attractions he kicked me out of his house (my parents divorced when I was 12) and I went to live with my mother.

7. I was first introduced to transgenderism on social media at around age 18. I began to question if I was really a man because I was attracted to girls.

8. I cut my long blond hair, which caused me to look more masculine. This made me want to move quickly through transition.

9. I started seeing a counselor on June 13, 2017. I disclosed to the counselor that I had been sexually molested for years as a child, about my parents' contentious divorce, and about my dysfunctional relationship with both parents. I also disclosed that I was in a dysfunctional marriage to a physically abusive woman who bought and sold drugs.

10. The counselor did not explore how any of this history might be contributing to my dysphoria, but simply asked some questions and diagnosed me with gender dysphoria and gave me a recommendation to a physician for testosterone treatment within five weeks of our first meeting.

11. My frame of mind at the time, at age 18, was that I believed I might have been "born in the wrong body" and needed to correct it. But I was also unsure, confused, and in need of guidance. Had a professional told me the truth and helped me explore why I was distressed by being a girl (and a lesbian) in a nonjudgmental way, I would not have proceeded with testosterone.

12. However, that was not the case, and I met with the doctor in Atlanta Georgia to whom the counselor referred me. The visit lasted about 10 minutes. He asked me for my "hormone letter," but did not open it or read it. He did not ask any questions to confirm that I had gender dysphoria or any questions concerning my medical history or past or present physical condition or symptoms.

13. I told the doctor that I was nervous, and he simply asked, "Do you want to do this?" and told me I could pick up the testosterone that day. I asked the doctor if he would administer the injections in the office. He said no and told me to go home and look on You Tube to find out how to give myself the shots, indicating "There's no wrong way to do it." I later learned that the shots were supposed to be administered intramuscularly after administering them subcutaneously in my stomach which caused pain and bubbles to form under the skin.

14. My voice began to deepen, which I have found out is going to be a permanent, irreversible change.

15. I gained over 50 pounds and became pre-diabetic. When I mentioned this to the physician during a follow up appointment, he just told me to start working out.

16. After about a year on testosterone, test results revealed that my blood was starting to thicken, my red blood cell count was too high, and I was developing a blood disorder that could lead to a heart attack or stroke if not controlled. I did some research and believe this was polycythemia. I began experiencing chest pains and was told I had developed a blood clot in my lungs because of the thickening blood. I also developed tachycardia.

17. I began suffering excruciating and constant abdominal pain and could not eat. Testing did not reveal any disorders. I was later diagnosed with irritable bowel syndrome, which I continue to suffer with.

18. The pain was becoming so excruciating that I became suicidal. My mental health was deteriorating as I was suffering from depression, irritability, insecurity, and exhaustion.

19. The changes brought on by the testosterone caused my family tremendous emotional distress. Finally, my grandfather sat me down with tears in his eyes and asked me to stop what I was doing to myself. That was a saving grace. I would have let the treatment kill me before admitting that I had made a mistake. My grandfather's intervention saved my life.

20. I stopped taking testosterone and resumed living as a female. My physical and mental health have improved, but I continue to suffer adverse effects from the treatments, including a deepened voice and digestive issues that I've been told will be permanent.

21. I also suffer extreme regret for the choices I made as a teenager. I trusted the doctors' advice. They were the experts, who was I as a confused and scared 18-year-old not to listen to them?

22. But telling an I8-year-old girl that mega-doses of testosterone would fix her mental health problems? They didn't even talk to me about other treatment

options. No doctor or therapist suggested I give myself time to grow up, or suggested counseling for what was causing my feelings - no doctor or therapist told me most young people outgrow their feelings of wanting to be the opposite sex. The only advice I got was to take mega-doses of testosterone.

23. Unfortunately, there are more and more young people like me being deceived every day, being told that the solution to their insecurity and identity problems is to get a "sex change." The problem is a person's sex can't really be changed. You can take hormones and have cosmetic surgeries, but that doesn't really change your sex, or solve your problems. I wish I knew that when I was younger.

24. Florida's Rule is a critical and necessary regulation that will help spare Florida citizens from being similarly misled and suffering the distress I am continuing to suffer because of the availability of medical interventions to young people like me. This Rule will save a lot of pain and may even save lives.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: October 3, 2022.

/s/ *Sydney Wright*
Sydney Wright

Appendix Attachment

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of Zoe Hawes In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, Zoe Hawes, declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of Defendants' opposition to Plaintiffs' Complaint and Motion for Preliminary Injunction.

2. Florida Administrative Code § 59G-1.050(7), which prohibits

Medicaid coverage for medical and surgical interventions meant to "alter primary or secondary sexual characteristics," is a necessary and potentially life-saving regulation that will protect vulnerable young people from the regret of false promises, deteriorating mental health and loss of life.

3. I'm a 23-year-old wife and expectant mother who would have been deprived of motherhood if state funding of medical and surgical interventions had been available when I was a traumatized teenager looking for a quick fix to relieve my pain.

4. A series of traumatic events, including my parents' divorce when I was 8 years old, my mother's mental health struggles, including her suicide attempts, and being molested by a classmate at school, left me with significant mental health problems by the age of 15.

5. I was diagnosed with major depression, anxiety, complex PTSD and Obsessive-Compulsive Disorder by different doctors at mental hospitals. I saw several therapists and psychiatrists.

6. When I was 16 years old, I was attracted to women and began researching the LGBTQ community online. I came across a book, "Some Assembly Required," which was a memoir of a female to male transgender young person. I was extremely depressed at the time and immediately resonated with the young person's story. It became the explanation I clung to for the pain in my life.

7. My mom found a gender therapist who did the bare minimum required to be able to write a letter approving me for hormones. I saw her for three months, but she asked me very few questions. I was desperate to get the hormones, so I was willing to say anything to get the letter. I was diagnosed with gender dysphoria and encouraged to pursue medical transition.

8. Once I received the letter from the gender therapist, an Endocrinologist prescribed testosterone for me at age 16 with my mom's consent. At first, my mother did not know what to think, but I was so suicidal that she was willing to go along.

9. I was on testosterone for nearly 4 years. At age 16, I was absolutely convinced that I was a male in a female body, and that transitioning from female to male was the only thing that would bring me peace.

10. My body started to masculinize pretty quickly after I began testosterone injections. I developed a more male musculature. My hips seemed narrower. My jaw seemed more angular. Facial hair grew. Every change in my body that made me appear more masculine made me euphoric. I was quickly able to present socially as male without people recognizing I had been born female.

11. I also became more angry and developed debilitating anxiety while on testosterone. I felt tired and gained a lot of weight. My mental health was

negatively affected by the testosterone. The initial euphoria would wear off and I would still have the same problems.

12. I was introduced to the LGBTQ community. I joined an LGBTQ group for young people in my city, where I was "love bombed" and affirmed in my new identity. The group encouraged me to cut off anyone who did not affirm my male identity, new name, and new pronouns. I followed that advice and became estranged from my father and his family, who would not affirm the male identity. I did not talk to my father's family for over four years.

13. I was also binding my breasts, which was causing chest pain and headaches.

14. My mental health was terrible while I was on testosterone. I was hospitalized six times while on testosterone and in each case the doctors affirmed my male identity. I was also in outpatient programs multiple times. In 2018, I tried to commit suicide and was again hospitalized. Finally, I began to do the inner work I needed to do to start to heal.

15. At age 20, I stopped taking testosterone and my body began to regain its female characteristics. I am no longer on any mental health medications or receiving therapy. I believe the gender dysphoria was brought on by trauma and culture – by people and medical professionals encouraging me to believe that becoming a man was an option and transitioning would bring me peace.

16. I reconciled with my father's family, who remained an anchor to reality and affirmed me as the woman that I am and who have helped me on the long journey to learn what is means to be a woman, a daughter, and now a wife and mother.

17. At the time that I was taking testosterone, between ages 16 and 20, I desperately wanted gender transition surgeries. I wanted a double mastectomy because I was binding and it was very uncomfortable, so much so that I once had threatened to take a knife to my chest. I also wanted a hysterectomy because at that age I did not want to have to worry about periods or ever getting pregnant.

18. The only reason I did not get the surgeries was that I did not have the money to pay for them. If the state had been willing to pay for them through Medicaid, then I absolutely would have had them, and would have never found the peace with my female body I now enjoy and would not be able to experience being a mother or breastfeeding my son.

19. If access to these treatments is easily affordable, then it could do great damage to a young person that may not be able to be undone.

20. I am convinced that funding these treatments is funding a false chemical or surgical promise – that these chemicals or surgery will bring lasting peace to what is truly causing body dysphoria. This would mask a great deal of

mental illness. It would likely result in increased suicides, as these treatments almost did to me.

21. By not having state funding available for these procedures, I was saved, as was my future child. This regulation will save lives.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: October 3, 2022.

/s/ *Zoe Hawes*
Zoe Hawes

Appendix Attachment

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	)	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of Yaacov Sheinfeld In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, Yaacov Sheinfeld, declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of Defendants' opposition to Plaintiffs' Complaint and Motion for Preliminary Injunction.

2. Florida's Rule 59G-1.050(7) of the Florida Administrative Code (the "Challenged Exclusion") states that Florida Medicaid does not cover services for the treatment of gender dysphoria.

3. Florida's Rule will prevent manipulation and coercion on the part of health care providers and from that of their own distressed and confused children to comply with demands for medical and surgical interventions aimed at "affirming" a young person's professed discordant gender identity under threats of alienation or loss of a child to suicide. Most importantly, this law protects vulnerable children and young people from grievous harm and even death.

4. Had a law like Florida's Rule been in effect Massachusetts my daughter might still be alive today.

5. My daughter, S. had been in counseling for depression since age 15, but had never said anything about gender dysphoria to her counselor.

6. At age 17, S.'s mother told me that S. was transgender. I did not think it was a good idea to pursue transitioning, nevertheless, I told S. that I would help her in any other way.

7. S. had suffered a lot of rejection in school and was seeking affirmation. Five of her friends announced that they were transgender. When S. said she was transgender too it was seen as fashionable and she finally had the peer acceptance she had not previously experienced in high school.

8. When S. went to college at age 18, unbeknownst to me, she began taking testosterone. When I met with her at school, I noticed she was very depressed.

9. A social worker who was also present at my meeting with S., Shannon Sennott, told me that S. was going to get a double mastectomy.

10. When I objected to her taking such a drastic step at such a young age, the social worker told me I was an "Israeli chauvinist", a typical chauvinist male, who doesn't love his child enough. Her approach was that this is what we're going to do and you need to just get on board.

11. The social worker assured me that everything would be fine if I just loved my daughter.

12. After this meeting S. refused to talk to me and began threatening that she would kill herself if she did not get the surgery she wanted. She had a double mastectomy at age 19.

13. I witnessed distressing physical and emotional changes in S. The changes in her because of the testosterone were so distressing that I even considered suicide at one time. S. gained and lost lots of weight, had pain all over her body, suffered from mood swings, could not concentrate, and described herself at times as "barely alive." At one point she was hospitalized in a psychiatric hospital for depression and suicidal thoughts.

14. S. was deeply depressed and taking a significant number of medications along with testosterone. It did not appear any medical professional was monitoring all these medications or even understood their possible interactions. I kept assuring her that I would do whatever I could to help her.

15. S.'s pain became so intense that she began taking Fentanyl.

16. S. was found dead on August 6, 2021 with Fentanyl and alcohol in her system. She was 28. S. had been identifying as a male and taking testosterone for ten years.

17. Florida's Rule and similar laws to not cover services for the treatment of gender dysphoria are critically important because young people, especially those with mental health issues such as S, cannot make clear decisions about their future, particularly when neither they nor their parents are provided with full information about the effects of these interventions. We know from research that the brain is not fully formed until a person reaches her mid-20s, so even a healthy 18-year-old does not have the mental maturity to make life-altering decisions such as taking cross-sex hormones or surgeries that will significantly alter their bodies and impact their mental health.

18. The medical interventions that were promoted to my daughter with a promise that they would relieve her problems, in fact, increased them and led to her death.

19. Parents should not be put in the position to support decisions for their child that can result in infertility or other life-long harms, especially when the young person has mental health issues that are not being addressed.

20. Florida's Rule protects parents from being coerced into supporting these decisions through manipulation and threats like the one leveled at me that my daughter would commit suicide if she did not get the intervention she demanded. Most importantly, it will save the lives of vulnerable young people like my daughter.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: October 3, 2022.

/s/ *Yaacov Sheinfeld*
Yaacov Sheinfeld

Appendix Attachment

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of Julie Framingham In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, Julie Framingham, declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of Defendants' opposition to Plaintiffs' Motion for Preliminary Injunction and Complaint.

2. Florida's Rule 59G-1.050(7) of the Florida Administrative Code (the "Challenged Exclusion") states that Florida Medicaid does not does not provide coverage for hormonal and surgical interventions to "alter primary or secondary sexual characteristics."

3. Florida's Rule will protect vulnerable young people like my son from grievous harm. This rule will prevent the State from facilitating further harm to vulnerable young people like my son by paying for life-altering and irreversible treatments that will not address their underlying mental health issues and will likely cause such young people to forego needed mental health treatment.

4. My son, T., was an Eagle Scout, martial arts student who at age 22 decided he was transgender. After six years of social transitioning and hormone treatments T. has lost a great deal of weight, is anorexic and extremely underweight, sometimes not eating for days, and has significant mental health problems.

5. T. was depressed as a teenager. He kept his feelings inside and wouldn't see a therapist. T. was not comfortable with his looks and was seen as a geeky, small boy. He showed signs that he hated himself, including refusing to brush his teeth so that they rotted away.

6. There were trans-identified kids at T.'s high school but he showed no interest in them at that time. He attended community college in Tallahassee and

Florida State University, which were very progressive campuses. He was around others who were trans-identifying.

7. At age 19 or 20 T. began wearing girls' accessories. He saw a social worker in Tallahassee for a couple of months, and she gave him information about where to get hormone treatments.

8. He began taking estrogen and spirolactone (lowers testosterone). He got the prescriptions from an endocrinologist at Tallahassee Memorial Hospital and the FSU medical group. I do not know whether any of the practitioners did a psychological evaluation prior to prescribing hormones.

9. T. was binding his testicles for a time in an effort to appear more feminine. However, he developed health problems related to the binding in that it cut off oxygen and permitted infection to develop. As a result T. stopped binding and began to just wear loose-fitting clothing.

10. T. began seeing a therapist when he was 23. He said the therapist was very helpful with dealing with anxiety, but T. refused to talk with the therapist about this trans identity. T. had spent a lot of time online listening to trans advocates who affirmed his trans identity and he would not stay in therapy.

11. The therapist diagnosed T. with borderline personality disorder. Patients with borderline personality disorder often hate themselves and will engage

in self-harm. She explained that T. had let his teeth rot away because he hates himself.

12. T. has not undergone any surgeries because he hasn't been able to pay them.

13. T. has not received any treatment for his underlying borderline personality disorder. His father and I are concerned that if the state were to pay for surgery to remove his penis and testicles he will not get the treatment he needs for his actual underlying mental illness. That is a great concern because so long as he has untreated mental illness he will continue to engage in self-destructive behavior and to decline. The trans identification and hormone interventions operate as a vehicle for self-harm. Adding irreversible surgery on top of that would only compound the harm.

14. Florida's Rule 59G-1.050(7) will prevent the state from enabling vulnerable young people like my son to receive life-altering irreversible treatments that result in the loss of healthy body parts and bodily functions and yet will not actually treat what is causing their mental health problems. We are concerned that without this Rule underlying mental health issues such young people are experiencing will go untreated.

15. For T. and many others like him, the regulation would very likely save their lives and a life-time of regret.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: October 3, 2022.

/s/ *Julie Framingham*
Julie Framingham

Appendix Attachment

22

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
Tallahassee Division

AUGUST DEKKER, legally known as KORI DEKKER; BRIT ROTHSTEIN; SUSAN DOE, a minor, by and through her parents and next friends, JANE DOE and JOHN DOE; and K.F., a minor, by and through his parent and next friend, JADE LADUE, *Plaintiffs*, v. SIMONE MARSTILLER, in her official capacity as Secretary of the Florida Agency for Health Care Administration; and FLORIDA AGENCY FOR HEALTH CARE ADMINISTRATION, *Defendants*.	Civil Action No. 4:22-cv-00325-RH-MAF

Declaration of Jeanne Crowley In Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction

I, Jeanne Crowley[1] declare as follows:

1. I am over the age of 18 years and am not a party to this action. I have actual knowledge of the following facts and if called upon to testify to them could and would do so competently. I am submitting this Declaration in support of

[1] Declarant is submitting this Declaration using a pseudonym to protect the privacy of her children and other family members.

Defendants' opposition to Plaintiffs' Complaint and Motion for Preliminary Injunction.

2. Florida's Rule 59G-1.050(7) of the Florida Administrative Code (the "Challenged Exclusion") states that Florida Medicaid does not does not provide coverage for hormonal and surgical interventions to "alter primary or secondary sexual characteristics."

3. This Rule is necessary to prevent parents such as myself from being subjected to coercion, manipulation, alienation from their child and help support parental rights to make medical and mental health decisions that will protect their children's developing bodies and long-term physical and mental health.

4. My husband and I were repeatedly told that the puberty blockers our pre-teen daughter, M., was clamoring for were the answer for her anxiety and distress about her changing body. We were advised that children like M. had high rates of suicide and self-harm and that puberty blockers would help by stopping the development of secondary sex characteristics that cause children distress and "give the children time to explore their identity."

5. Gender-affirming mental health and medical professionals assured us that acceding to our daughter's demand for puberty blockers was necessary for her mental health. We were repeatedly assured that the puberty blockers were nothing more than a "pause button" and completely reversible. We were not told that these

treatments could cause harm to our child's developing bones or that there were no clinical studies establishing them to be safe and effective as a "treatment" for gender dysphoria in children.

6. Based on these assurances we consented to M. receiving a long-lasting puberty-blocking implant. Once the implant was in place, there was no follow up. I had to initiate contact with the clinic to replace the implant and get necessary lab work.

7. M. previously had psychological evaluations that revealed depression, Autism Spectrum Disorder (ASD) with sensory issues, dyslexia, and dysgraphia. M. had also experienced social trauma. However, none of these issues was addressed by health care professionals once they determined M. had gender dysphoria. Nor did they offer any other treatment options.

8. I learned through my own research that puberty blockers were shown to cause loss of bone density and diminished cognitive development. Healthcare professionals did not inform my husband and me about those harms. When we raised the issue, the doctors responded that they have been prescribing the blockers for many years to treat precocious puberty and the reported bone loss was "nothing to worry about."

9. I had a bone density scan done for M. It revealed that M. has an 11 percent loss of bone density in one hip, 14 percent loss in the other, and a 7 percent

loss in the lumbar region. She has developed osteopenia at a time in her life when her bone density should be increasing and her body building a reservoir of strong developing bones as an important protection against osteoporosis in adulthood.

10. When my husband and I confronted the physician to have the puberty blocker implant removed, the doctor recommended that M. continue on to cross-sex hormones, *i.e.,* testosterone. We were not informed this would very likely *sterilize* our child. I declined, pointing out to the doctor that it is estrogen, not testosterone, that improves bone density.

11. Throughout the time that M. was on puberty blockers, we had difficulty finding a therapist to explore M.'s underlying mental health issues. Therapists were unwilling to address anything other than affirming M. as transgender. After we had the blocker removed M. worked with a psychotherapist that was willing to explore the underlying issues with M. However, she continues to have loss of bone density that will significantly affect her physical health and growth and having lasting effects possibly for the rest of her life.

12. The availability of these medical interventions for a pre-teen girl distressed by changes in her body meant that neither M. nor her healthcare providers would consider other alternatives.

13. Florida's Rule will help prevent coercive manipulation and potential harm against vulnerable children like our daughter and should be upheld for the protection of children and their families.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: October 3, 2022.

/s/ *Jeanne Crowley*
Jeanne Crowley (pseudonym)