

VIRGINIA: IN THE CIRCUIT COURT FOR ROCKINGHAM COUNTY

DEBORAH FIGLIOLA, et al.,

Plaintiffs,

v.

THE SCHOOL BOARD OF THE CITY OF
HARRISONBURG, VIRGINIA, et al.,

Defendants.

Case No. CL22-1304

AFFIDAVIT OF STEPHEN B. LEVINE, MD

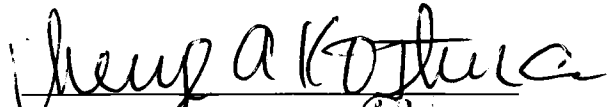
I, Dr. Stephen B. Levine, declare under penalty of perjury under the laws of the United States of America that the statements contained in my Report of Stephen B. Levine, MD., in the case of *Deborah Figliola, et al. v. The School Board of the City of Harrisonburg, et al.*, dated August 26, 2022, and attached hereto, are true and correct to the best of my knowledge and belief, and that the opinions expressed therein represent my own opinions.



Dr. Stephen B. Levine, MD.

Executed on August 26, 2022.

Subscribed and sworn to before me
this 31 day of August, 2022.



Notary Public, State of Ohio

My commission expires 12-18-2024



CHERYL A. KOSTURA
NOTARY PUBLIC • STATE OF OHIO
My Commission Expires Dec. 18, 2024

Report of

Stephen B. Levine, MD

In the case of Deborah Figliola, et.al., v. The School Board of the City of Harrisonburg, et.al.

CL22-1304

August 26, 2022

TABLE OF CONTENTS

I. CREDENTIALS & SUMMARY	1
II. BACKGROUND ON THE FIELD	7
A. The biological baseline of the binary sexes.....	7
B. Definition and diagnosis of gender dysphoria.....	11
C. Impact of gender dysphoria on minority and vulnerable groups.....	12
D. Three competing conceptual models of gender dysphoria and transgender identity	13
E. Four competing models of therapy	15
III. THERE IS NO CONSENSUS OR AGREED “STANDARD OF CARE” CONCERNING THERAPEUTIC APPROACHES TO CHILD OR ADOLESCENT GENDER DYSPHORIA.....	21
A. Experts and organizations disagree as to whether “distress” is a necessary element for diagnoses that justifies treatment for gender identity issues.	22
B. Opinions and practices vary widely about the utilization of social transition for children and adolescents.	23
C. Opinions and practices differ widely with respect to the proper role of psychological counseling before, as part of, or after a diagnosis of gender dysphoria.	24
D. Internationally, there has been a recent marked trend against the use of puberty blockers and cross-sex hormones.	25
E. Opinions and practices vary widely with respect to the administration of puberty blockers and cross-sex hormones.	26
IV. GENDER IDENTITY IS EMPIRICALLY NOT FIXED FOR MANY INDIVIDUALS.	29
A. Transgender identity has not been shown to be biologically based, and its epidemiology demonstrates large and radical changes across time and geography.	29
B. Most children who experience gender dysphoria ultimately “desist” and achieve comfort with their biological sex.....	32
C. Desistance is increasingly observed among teens and young adults who first manifest GD during or after adolescence.	33
V. TRANSITION AND AFFIRMATION IS AN IMPORTANT PSYCHOLOGICAL AND MEDICAL INTERVENTION THAT CHANGES GENDER IDENTITY OUTCOMES.	37
A. If both a typical gender or a transgender long-term gender identity outcome are possible for a particular patient, the alternatives are not medically neutral.	37
B. Social transition of young children is a powerful psychotherapeutic intervention that radically changes outcomes, almost eliminating desistance.....	37

C. Administration of puberty blockers is a powerful medical and psychotherapeutic intervention that radically changes outcomes, almost eliminating desistance on the historically observed timeline.....	40
VI. TRANSITION AND AFFIRMATION ARE EXPERIMENTAL THERAPIES THAT HAVE NOT BEEN SHOWN TO IMPROVE MENTAL OR PHYSICAL HEALTH OUTCOMES BY YOUNG ADULTHOOD.....	41
A. The knowledge base concerning therapies for gender dysphoria is “very low quality.”	41
B. Youth who adopt a transgender identity show no durable improvement in mental health after social, hormonal, or surgical transition and affirmation.	44
C. Long-term mental health outcomes for individuals who persist in a transgender identity are poor.....	46
VII. TRANSITION AND AFFIRMATION DO NOT DECREASE, AND MAY INCREASE, THE RISK OF SUICIDE.....	47
A. The risk of suicide among transgender youth is confused and exaggerated in the public mind.....	47
B. Transition of any sort has not been shown to reduce levels of suicide.	49
C. Long-term life in a transgender identity correlates with very high rates of completed suicide among adults.....	50
VIII. HORMONAL INTERVENTIONS ARE EXPERIMENTAL PROCEDURES THAT HAVE NOT BEEN PROVEN SAFE.....	53
A. Use of puberty blockers has not been shown to be safe or reversible for gender dysphoria.	54
B. Use of cross-sex hormones in adolescents for gender dysphoria has not been shown to be medically safe except in the short term.....	59
C. The timing of harms.	62
IX. PARENTAL INVOLVEMENT IS ESSENTIAL IN MOST CASES FOR ETHICAL TREATMENT OF A CHILD WHO SUFFERS FROM GENDER DYSPHORIA OR SEEKS SOCIAL TRANSITION.....	64
A. Involvement of a mental health professional is necessary for accurate diagnosis and appropriate treatment, and access to a mental health professional ordinarily requires parental involvement.	64
B. Parental involvement is necessary for accurate and thorough diagnosis of the child.	65
C. Parental involvement is important for effective psychotherapeutic treatment and support of the child.....	68
D. Schools are not equipped to enable and obtain informed consent, nor resolve the complex ethical implications raised by social transition.....	69
Bibliography	72

I. CREDENTIALS & SUMMARY

1. I am Clinical Professor of Psychiatry at Case Western Reserve University School of Medicine, and maintain an active private clinical practice. I received my MD from Case Western Reserve University in 1967, and completed a psychiatric residency at the University Hospitals of Cleveland in 1973. I became an Assistant Professor of Psychiatry at Case Western in 1973, became a Full Professor in 1985, and in 2021 was honored to be inducted into the Department of Psychiatry's "Hall of Fame."

2. Since July 1973, my specialties have included psychological problems and conditions relating to individuals' sexuality and sexual relations, therapies for sexual problems, and the relationship between love, intimate relationships, and wider mental health. In 2005, I received the Masters and Johnson Lifetime Achievement Award from the Society of Sex Therapy and Research. I am a Distinguished Life Fellow of the American Psychiatric Association.

3. I have served as a book and manuscript reviewer for numerous professional publications. I have been the Senior Editor of the first (2003), second (2010), and third (2016) editions of the *Handbook of Clinical Sexuality for Mental Health Professionals*. In addition to five previously solo-authored books for professionals, I have recently published *Psychotherapeutic Approaches to Sexual Problems* (2020). The book has a chapter titled "The Gender Revolution."

4. In total I have authored or co-authored over 180 journal articles and book chapters, 20 of which deal with the issue of gender dysphoria. I am an invited member of a Cochrane Collaboration subcommittee that is currently preparing a review of the scientific literature on the effectiveness of puberty blocking hormones and of cross-sex hormones for

gender dysphoria for adolescents. Cochrane Reviews are a well-respected cornerstone of evidence-based practice, comprising a systematic review that aims to identify, appraise, and synthesize all the empirical evidence that meets pre-specified eligibility criteria in response to a particular research question.

5. I first encountered a patient suffering what we would now call gender dysphoria in July 1973. In 1974, I founded the Case Western Reserve University Gender Identity Clinic, and have served as Co-Director of that clinic since that time. Across the years, our Clinic evaluated and treated hundreds of patients who were experiencing a transgender identity. An occasional child was seen during this era. I was the primary psychiatric caregiver for several dozen of our patients and supervisor of the work of other therapists. I was an early member of the Harry Benjamin International Gender Dysphoria Association (later known as WPATH) and served as the Chairman of the committee that developed the 5th version of its Standards of Care. In 1993 the Gender Identity Clinic was renamed, moved to a new location, and became independent of Case Western Reserve University. I continue to serve as Co-Director.

6. In the course of my five decades of practice treating patients who suffered from gender dysphoria, I have at one time or another recommended or prescribed or supported social transition, cross-sex hormones, and surgery for particular patients, but only after extensive diagnostic and psychotherapeutic work.

7. In 2006, Judge Mark Wolf of the Eastern District of Massachusetts asked me to serve as an independent, court-appointed expert in a litigation involving the treatment of a transgender inmate within the Massachusetts prison system. In that litigation, the U.S. Court of Appeals for the First Circuit in a 2014 (En Banc) opinion cited and relied on my expert

testimony. I have been retained by the Massachusetts Department of Corrections as a consultant on the treatment of transgender inmates since 2007.

8. In 2019, I was qualified as an expert and testified concerning the diagnosis, understanding, developmental paths and outcomes, and therapeutic treatment of transgenderism and gender dysphoria, particularly as it relates to children, in the matter of *In the Interest of J.A.D.Y. and J.U.D.Y.*, Case No. DF-15-09887-S, 255th Judicial District, Dallas County, TX (the “*Younger* litigation”). In 2019, I provided written expert testimony in the landmark case in the United Kingdom; *Bell v. The Tavistock and Portman NHS Foundation Trust*. I have further listed the cases in which, during the previous 4 years, I testified as an expert at trial or by deposition in my curriculum vitae.

9. I am regularly requested to speak on the topic of gender dysphoria and have given countless presentations to academic conferences and Departments of Psychiatry around the country. In May of this year, I co-presented a symposium on the management of adolescent-onset transgender identity at American Psychiatric Association’s Annual Meeting.

10. A fuller review of my professional experience, publications, and awards is provided in my curriculum vitae, a copy of which is attached hereto as Exhibit A.

11. I am being compensated for my time spent in connection with this case at a rate of \$400.00 per hour.

12. A summary of the key points that I explain in this report is as follows:

a. Sex as defined by biology and reproductive function is clear, binary, and cannot be changed. While hormonal and surgical procedures may enable some individuals to “pass” as the opposite gender during some or all of their lives, such procedures carry with them physical, psychological, and social risks, and no procedures

can enable an individual to perform the reproductive role of the opposite sex. (Section II.A.)

b. The diagnosis of “gender dysphoria” encompasses a diverse array of conditions, with widely differing pathways and characteristics depending on age of onset, biological sex, mental health, intelligence, motivations for gender transition, socioeconomic status, country of origin, etc. Data from one population (e.g., adults) cannot be assumed to be applicable to others (e.g., children). (Section II.B.)

c. Among practitioners in the field, there are currently widely varying views concerning both the causal influences on and the appropriate therapeutic response to gender dysphoria in children or adolescents. There are no generally accepted “standards of care” either internationally or within the United States. Existing studies do not provide a basis for a scientific conclusion as to which therapeutic response results in the best long-term outcomes for affected individuals. (Section III.).

d. Transgender identity is not biologically determined. Rather, gender dysphoria is a psychiatric condition that cannot be identified by any biological test or measurement. (Sections IV.A.)

e. The large majority of children who are diagnosed with gender dysphoria “desist”—that is, their gender dysphoria does not persist—by puberty or adulthood. Desistance is also increasingly observed among teens and young adults who have experienced “rapid onset gender dysphoria” — first manifesting gender dysphoria during or shortly after adolescence. (Section IV.B, IV.C.)

f. “Social transition” —the active affirmation of transgender identity—in young children is a powerful psychotherapeutic intervention that will substantially reduce the

number of children “desisting” from transgender identity. Therefore, the profound implications of future “affirmative” treatment—which include taking puberty blockers and cross-sex hormones—must be taken into account where social transition of a child is being considered. (Section V.A, V.B.)

g. Administration of puberty blockers is not a benign “pause” of puberty, but rather a powerful medical and psychotherapeutic intervention that almost invariably leads to persistence in a transgender identity and, ultimately, to the administration of cross-sex hormones. (Section V.C.)

h. The knowledge base concerning the “affirmative” treatment of gender dysphoria available today has very low scientific quality with many long-term implications remaining unknown. (Section VI.A.)

i. There are no studies that show that affirmation of transgender identity in young children reduces suicide or suicidal ideation, or improves long-term outcomes, as compared to other therapeutic approaches. Meanwhile, multiple studies show that adult individuals living transgender lives suffer much higher rates of suicidal ideation, completed suicide, and negative physical and mental health conditions than does the general population. This is true before and after transition, hormones, and surgery. (Section VI.B., VI.C.)

j. In light of what is known and not known about the impact of affirmation on the incidence of suicide, suicidal ideation, and other indicators of mental and physical health, it is scientifically baseless, and therefore unethical, to assert that a child or adolescent who express an interest in a transgender identity will kill him- or herself unless adults and peers affirm that child in a transgender identity. (Section VII.)

k. Hormonal interventions to treat gender dysphoria are experimental in nature and have not been shown to be safe, but rather put an individual at risk of life-long harms. These include diverse physical health risks; sterilization; impaired sexual response; and the need for lifelong medical monitoring. Moreover, hormonal treatment very often leads to surgical interventions which have significant complications. Psychiatric complications include the alienation of family; impaired romantic relationships; and elevated risks of depression, anxiety, substance abuse, and suicide. (Section VIII.)

l. When dealing with a minor child or adolescent with a transgender identity, parental (or guardian) involvement is necessary to obtain an accurate, thorough, and relevant developmental history. Not only does this increase the chances of a comprehensive list of diagnoses, but it guides effective psychotherapeutic treatment planning and execution. (Section IX.A, IX.B.)

m. It is psychologically unhealthy for a minor to live radically different identities at home and at school, and to conceal what he or she perceives to be his or her current gender identity from parents. This typically creates an adversarial relationship between the minor and the parents, distorting the fact that the welfare of the minor is their joint goal. (Section IX.C.)

n. Schools are not equipped to guide minors through the difficult and life-altering decisions surrounding social transition to support a transgender identity given the complex medical ethics issues that arise. (Section IX.D.)

II. BACKGROUND ON THE FIELD

A. The biological baseline of the binary sexes

13. Biological sex is very well defined in all biological sciences including medicine.

It is pervasively important in human development throughout the lifecycle.

14. Sex is not “assigned at birth” by humans visualizing the genitals of a newborn; sex determination is not an imprecise process. Rather, it is clear, binary, and determined at conception. The sex of a human individual at its core structures the individual’s biological reproductive capabilities—to produce ova and bear children as a mother, or to produce semen and beget children as a father. As physicians know, sex determination occurs at the instant of conception, depending on whether a sperm’s X or Y chromosome fertilizes the egg. A publication of the federal government’s National Institute of Health accurately summarizes the scientific facts:

“Sex is a biological classification, encoded in our DNA. Males have XY chromosomes, and females have XX chromosomes. Sex makes us male or female. Every cell in your body has a sex—making up tissues and organs, like your skin, brain, heart, and stomach. Each cell is either male or female depending on whether you are a man or a woman.” (NIH 2022.)

15. The binary of biological sex is so fundamental and wide-ranging in its effects on human (and mammal) development and physiology that since 2014 the NIH has required all funded research on humans or vertebrate animals to include “sex as a biological variable” and give “adequate consideration of both sexes in experiments.” (NIH 2015). In 2021, the Endocrine Society issued a position paper elaborating on the application of the NIH requirement. The Endocrine Society correctly stated that “Sex is a biological concept . . . all mammals have 2 distinct sexes;” that “biological sex is . . . a fundamental source of intraspecific variation in anatomy and physiology;” and that “In mammals, numerous sexual traits (gonads, genitalia, etc.)

that typically differ in males and females are tightly linked to each other because one characteristic leads to sex differences in other traits.” (Bhargava et al. 2021 at 221, 229.)

16. The Endocrine Society has emphasized that “The terms sex and gender should not be used interchangeably,” and noted that even in the case of those “rare” individuals who suffer from some defect such that they “possess a combination of male- and female-typical characteristics, those clusters of traits are sufficient to classify most individuals as either biologically male or female.” They concluded, “Sex is an essential part of vertebrate biology, but gender is a human phenomenon. Sex often influences gender, but gender cannot influence sex.” (Bhargava et al. 2021 at 220-221, 228.)

17. As these statements and the NIH requirement suggest, biological sex pervasively influences human anatomy, its development and physiology. This includes, of course, the development of the brain, in which many sexually dimorphic characteristics have now been identified. In particular, the Endocrine Society and countless other researchers have determined that human brains undergo particular sex-specific developmental stages during puberty. This predictable developmental process is a genetically-controlled coordinated endocrine response that begins with pituitary influences leading to increases in circulating sex hormones. (Bhargava et al. 2021 at 225, 229; Blakemore et al. 2010 at 926-927, 929; NIH 2001.).

18. Humans have viewed themselves in terms of binary sexes since the earliest historical records. Recognizing a concept of “gender identity” as something distinct from sex is a rather recent innovation whose earliest manifestations likely began in the late 1940s. Its usage became common in medicine in the 1980s and subsequently in the larger culture. Definitions of gender have been evolving and remain individual-centric and subjective. In a statement on “Gender and Health,” the World Health Organization defines “gender” as “the characteristics of

women, men, girls and boys that are socially constructed” and that “var[y] from society to society and can change over time,” and “gender identity” as referring to “a person’s deeply felt, internal and individual experience of gender.” (WHO Gender and Health.) As these definitions indicate, a person’s “felt” “experience of gender” is inextricably bound up with and affected by societal gender roles and stereotypes—or, more precisely, by the affected individual’s *perception* of societal gender roles and stereotypes and their personal idiosyncratic meanings. Typically, gendered persons also have subtly different, often idiosyncratic, reactions to societal gender roles and stereotypes without preoccupation with changing their anatomy.

19. Thus, the self-perceived gender of a child begins to develop along with the early stages of identity formation generally, influenced in part from how others label the infant: “I love you, son (daughter).” This designation occurs thousands of times in the first two years of life when a child begins to show awareness of the two possibilities. As acceptance of the designated gender corresponding to the child’s sex is the outcome in >99% of children everywhere, anomalous gender identity formation begs for understanding. Is it biologically shaped? Is it biologically determined? Is it the product of how the child was privately regarded and treated? Is it a product of the quality of early life attachments to caregivers? Does it stem from trauma-based rejection of maleness or femaleness, and if so, flowing from what trauma? Does it derive from a tense, chaotic interpersonal parental relationship without physical or sexual abuse? Is it a symptom of another, as of yet unrevealed, emotional disturbance or neuropsychiatric condition (autism)? The answers to these relevant questions are not scientifically known but are not likely to be the same for every trans-identified child, adolescent, or adult. Ideally, clinicians try to answer these questions as best as they can when reviewing a child development.

20. Under the influence of hormones secreted by the testes or ovaries, numerous additional sex-specific differences between male and female bodies continuously develop postnatally, culminating in the dramatic maturation of the primary and secondary sex characteristics with puberty. These include differences in hormone levels, height, weight, bone mass, shape, musculature, body fat levels and distribution, and hair patterns, as well as physiological differences such as menstruation and ejaculation. These are genetically programmed biological consequences of sex. These are the predictable consequences of the determination of sex that occurred when the ovum was fertilized by the sperm. Among the usual consequences of sex is the continuing consolidation process of a congruent gender identity during and after puberty.

21. Despite the increasing ability of hormones and various surgical procedures to reconfigure some male bodies to visually pass as female, or vice versa, the biology of the person remains as defined by his (XY) or her (XX) chromosomes, including cellular, anatomic, and physiologic characteristics and the particular disease vulnerabilities associated with that chromosomally defined sex. For instance, the XX (genetically female) individual who takes testosterone to stimulate certain male secondary sex characteristics will nevertheless remain unable to produce sperm and father children. These changes are “skin deep.”

22. Contrary to assertions and hopes that medicine and society can fulfill the aspiration of the trans individual to become “a complete man” or “a complete woman,” this is not biologically attainable. (Levine 2018 at 6; Levine 2016 at 238.) It is possible for some adolescents and adults to pass unnoticed—that is, to be perceived by most individuals as a member of the gender that they aspire to be—but with limitations, costs, and risks, as I detail later.

B. Definition and diagnosis of gender dysphoria

23. Specialists have used a variety of terms over time, with somewhat shifting definitions, to identify and speak about a distressing incongruence between an individual's genetically determined sex and the gender with which they identify or to which they aspire. Today's American Psychiatric Association *Diagnostic and Statistical Manual of Mental Disorders* ("DSM-5-TR") employs the term Gender Dysphoria and defines it with separate sets of criteria for adolescents and adults on the one hand, and children on the other.

24. There are at least five distinct pathways to gender dysphoria: early childhood onset; onset near or after puberty with no prior cross gender patterns; onset after defining oneself as gay for several or more years and participating in a homosexual lifestyle; adult onset after years of heterosexual transvestism; and onset in later adulthood with few or no prior indications of cross-gender tendencies or identity. (Levine 2021.) The early childhood onset pathway and the more recently observed onset around puberty pathway are most relevant to this matter.

25. Gender dysphoria has very different characteristics depending on age and sex at onset. Young children who are living a transgender identity commonly suffer materially fewer symptoms of concurrent mental distress than do older patients. (Zucker 2018 at 10.) The developmental and mental health patterns for each of these groups are sufficiently different that data developed in connection with one of these populations cannot be assumed to be applicable to another.

26. The criteria used in DSM-5-TR to identify Gender Dysphoria include a number of signs of discomfort with one's natal sex and vary somewhat depending on the age of the patient, but in all cases require "clinically significant distress or impairment in . . . important areas of functioning" such as social, school, or occupational settings. The symptoms must persist for at least six months.

27. Children who conclude that they are transgender are often unaware of a vast array of adaptive possibilities for how to live life as a man or a woman—possibilities that become increasingly apparent over time to both males and females. A boy or a girl who claims or expresses interest in pursuing a transgender identity often does so based on stereotypical notions of femaleness and maleness that reflect constrictive notions of what men and women can be. (Levine 2017 at 7.) A young child’s—or even an adolescent’s—understanding of this topic is quite limited. Nor can they grasp what it may mean for their future to be sterile. These children and adolescents consider themselves to be relatively unique; they do not realize that discomfort with the body and perceived social role is neither rare nor new to civilization. What is new is that such discomfort is thought to indicate that they must be a trans person.

C. Impact of gender dysphoria on minority and vulnerable groups

28. Given that, as I discuss later, a diagnosis of gender dysphoria is now frequently putting even young children on a pathway that leads to irreversible physical changes and sterilization by young adulthood, it should be of serious concern to all practitioners that minority and vulnerable groups are receiving this diagnosis at disproportionately high rates. These include: children of color (Rider et al. 2018), children with mental developmental disabilities (Reisner et al. 2015), children on the autistic spectrum (at a rate more than 7x the general population) (Shumer et al. 2016a; van der Miesen et al. 2018), children with ADHD (Becerra-Culqui et al. 2018), children residing in foster care homes, adopted children (at a rate more than 3x the general population) (Shumer et al. 2017), victims of childhood sexual or physical abuse or other “adverse childhood events” (Thoma 2021 et al.; Newcomb et al. 2020; Kozłowska et al. 2021), children with a prior history of psychiatric illness (Edwards-Leeper et al. 2017; Kaltiala-Heino et al. 2015; Littman 2018), and more recently adolescent girls (in a large recent study, at a rate more than 2x that of boys) (Rider et al. 2018 at 4).

29. Furthermore, in my own practice, I have seen how families facing hardships such as financial difficulties, family conflict, imprisonment, and health issues are unable to thoroughly consider the full implications of gender transition and affirmative care. Thus, these already vulnerable minors are particularly susceptible to the possibility of life-changing interventions that can end in sterilization.

D. Three competing conceptual models of gender dysphoria and transgender identity

30. Discussions about appropriate responses by mental health professionals (“MHPs”) to actual or sub-threshold gender dysphoria are complicated by the fact that various speakers and advocates (or a single speaker at different times) view transgenderism through at least three very different paradigms, often without being aware of, or at least without acknowledging, the distinctions.

31. Gender dysphoria is **conceptualized and described by some professionals and laypersons as though it were a serious, physical medical illness that causes suffering,** comparable to diseases that are curable before it spreads, such as melanoma or sepsis. Within this paradigm, whatever is causing distress associated with gender dysphoria—whether secondary sex characteristics such as facial hair, nose and jaw shape, presence or absence of breasts, or the primary anatomical sex organs of testes, ovaries, penis, or vagina—should be removed to alleviate the illness. The promise of these interventions is the cure of the gender dysphoria.

32. It should be noted that gender dysphoria is a psychiatric, not a medical, diagnosis. Since its inception in DSM-III in 1983, it has always been specified in the psychiatric DSM manuals and has not been specified in medical diagnostic manuals. Notably, gender dysphoria is the only psychiatric condition to be routinely treated by surgery, even though no endocrine or

surgical intervention package corrects any identified biological abnormality. (Levine 2016 at 240.)

33. Gender dysphoria is alternatively **conceptualized in developmental terms**, as an adaptation to a psychological problem that may have been first manifested as a failure to establish a comfortable conventional sense of self in early childhood. This paradigm starts from the premise that all human lives are influenced by past processes and events. Trans lives are not exceptions to this axiom. (Levine 2016 at 238.) MHPs who think of gender dysphoria through this paradigm may work both to identify and address causes of the basic problem of the deeply uncomfortable self or a sense of self impaired by later adversity or abuse. The purpose is to ameliorate suffering when the underlying problem cannot be solved. MHPs first work with the patient and (ideally) family to learn about the events and processes that may have led to the trans person repudiating the gender associated with his sex. The developmental paradigm is mindful of temperamental, parental bonding, psychological, sexual, and physical trauma influences, and the fact that young children work out their psychological issues through fantasy and play and adolescents work out their issues by adopting various interests and identity labels.

34. There is evidence among adolescents that peer social influences through “friend groups” (Littman 2018) or through the internet can increase the incidence of gender dysphoria or claims of transgender identity. Responsible MHPs will want to probe these potential influences to better understand what is truly deeply tied to the psychology of the patient, and what may instead be being “tried on” by the youth as part of the adolescent process of self-exploration and self-definition.

35. In addition, the developmental paradigm recognizes that, with the important exception of genetic sex, essentially all of the numerous aspects of an individual’s identity

evolve—often markedly—across the individual’s lifetime (Levine, 2021). This includes gender identity. Some advocates assert that a transgender identity is biologically caused, fixed from early life, and eternally present in an unchanging manner. As I review later, however, this assertion is not supported by science.¹

36. The third paradigm through which gender dysphoria is alternatively conceptualized is from **a sexual minority rights perspective**. Under this paradigm, any response other than medical and societal affirmation and implementation of a patient’s claim to “be” the opposite gender is a violation of the individual’s civil right to self-expression. Any effort to ask “why” questions about the patient’s condition, or to address underlying causes, is viewed as a violation of autonomy and civil rights. In the last few years, this paradigm has been successful in influencing public policy and the education of pediatricians, endocrinologists, and many MHPs. Obviously, however, this is not a medical or psychiatric perspective. Unfortunately, it appears to be the most powerful perspective that exists in the public, non-scientific debate. More worrisome is the fact that this perspective profoundly influences thinking within many elements of the medical profession, giving precedence to political ideology over science.

E. Four competing models of therapy

37. Few would disagree that the human psyche is complex. Few would disagree that children’s and adolescents’ developmental pathways typically have surprising twists and turns. The complexity and unpredictability of childhood and adolescent development equally applies to trans-identifying youth. Because of past difficulties of running placebo-controlled clinical trials in the transgender treatment arena, substantial disagreements among professionals about the causes of trans identities and their ideal treatments exist. These current disagreements might have

¹ Even the advocacy organization The Human Rights Campaign asserts that a person can have “a fluid or unfixed gender identity.” <https://www.hrc.org/resources/glossary-of-terms>.

been minimized if trans treated persons were carefully followed up to determine long term outcomes. They have not been. When we add to this to the very different current paradigms for understanding transgender phenomena, it is not scientifically surprising that disagreements are sharply drawn. It is with this in mind that I summarize below the leading approaches, and offer certain observations and opinions concerning them.

(1) The “watchful waiting” therapy model

38. In Section V.A below I review the uniform finding of eleven follow-up studies that the large majority of children who present with gender dysphoria will desist from desiring a transgender identity by adulthood if left untreated by social transition approaches.

39. When a pre-adolescent child presents with gender dysphoria, a “watchful waiting” approach seeks to allow for the fluid nature of gender identity in children to naturally evolve—that is, take its course from forces within and surrounding the child. Watchful waiting has two versions:

a. Treating any other psychological co-morbidities—that is, other mental illnesses as defined by DSM-5-TR (separation anxiety disorder, attention deficit hyperactivity disorder, autism spectrum disorder, obsessive compulsive disorder, etc), or subthreshold for diagnosis but behavioral problems that the child may exhibit (school avoidance, bedwetting, inability to make friends, aggression/defiance) without a focus on gender (**model #1**); and

b. No treatment at all for anything but a regular follow-up appointment. This might be labeled a “hands off” approach (**model #2**).

(2) The psychotherapy model: Alleviate distress by identifying and addressing causes (model #3)

40. One of the foundational principles of psychotherapy has long been to work with a patient to identify the causes of observed psychological distress and then to address those causes as a means of alleviating the distress. The National Institute of Mental Health has promulgated the idea that 75% of adult psychopathology has its origins in childhood experience.

41. Many experienced practitioners in the field of gender dysphoria, including myself, have believed that it makes sense to employ these long-standing tools of psychotherapy for patients suffering gender dysphoria, asking the question as to what factors in the patient's life are the determinants of the patient's repudiation of his or her natal sex. (Levine 2017 at 8; Levine 2021.) I and others have reported success in alleviating distress in this way for some patients, whether the patient's sense of discomfort or incongruence with his or her natal sex entirely disappeared or not. Relieving accompanying psychological co-morbidities leaves the patient freer to consider the pros and cons of transition as he or she matures.

42. Among other things, the psychotherapist who is applying traditional methods of psychotherapy may help—for example—the male patient appreciate the wide range of masculine emotional and behavioral patterns as he grows older. He may discuss with his patient, for example, that one does not have to become a “woman” in order to be kind, compassionate, caring, noncompetitive, to love the arts, and to be devoted to others' feelings and needs. (Levine 2017 at 7.) Because he is interested in classical music and not sports and feels unready to be interested in partner sexual behaviors does not mean he must be a woman. Many biologically male trans individuals, from childhood to older ages, speak of their perceptions of femaleness as enabling them to discuss their feelings openly, whereas they perceive boys and men to be constrained from emotional expression within the family and larger culture, and to be aggressive.

Men, of course, can be emotionally expressive, just as they can wear pink. Converse examples can be given for girls and women. These types of ideas regularly arise during psychotherapies.

43. As I note above, many gender-nonconforming children and adolescents in recent years derive from minority and vulnerable groups who have reasons to feel isolated and have an uncomfortable sense of self. A trans identity may be a hopeful attempt to redefine the self in a manner that increases their comfort and decreases their anxiety. The clinician who uses traditional methods of psychotherapy may not focus on their gender identity, but instead work to help them to address the actual sources of their discomfort. Success in this effort may remove or reduce the desire for a redefined identity. This often involves a focus on disruptions in their attachment to parents in vulnerable children, for instance, those in the foster care system.

44. Because “watchful waiting” can include treatment of accompanying psychological co-morbidities, and the psychotherapist who hopes to relieve gender dysphoria may focus on potentially causal sources of psychological distress rather than on the gender dysphoria itself, there is no sharp line between “watchful waiting” and the psychotherapy model in the case of prepubescent children.

45. To my knowledge, there is no evidence beyond anecdotal reports that psychotherapy can enable a return to male identification for genetically male boys, adolescents, and men, or return to female identification for genetically female girls, adolescents, and women. On the other hand, anecdotal evidence of such outcomes does exist; I and other clinicians have witnessed reinvestment in the patient’s biological sex in some individual patients who are undergoing psychotherapy. The Internet contains many such reports, and I have published a paper on a patient who sought my therapeutic assistance to reclaim his male gender identity after 30 years living as a woman and is in fact living as a man today. (Levine 2019.)

46. I have seen children desist even before puberty in response to thoughtful parental interactions and a few meetings of the child with a therapist. In conducting parent guidance, I have seen an adolescent desist in response to his parents' calmness and their comments about the normality of adolescent exploration of various forms of sexual identity. And as a supervisor, I have guided an experienced psychotherapist in her work with trans-identified adolescents and young adults who have desisted and returned to social roles consistent with their biological sex. There are now a series of articles and at least one major book on the psychological treatment of adolescents. (D'Angelo et al. 2021 at 7-16; Evans & Evans 2021; Marchiano 2021.)

(3) The affirmation therapy model (model #4)

47. While it is widely agreed that the therapist should not directly challenge a claimed transgender identity in a child, some advocates and practitioners go much further, and promote and recommend that any expression of transgender identity should be immediately accepted as decisive, and thoroughly affirmed by means of consistent use of clothing, toys, pronouns, etc., associated with transgender identity. They argue that the child should be comprehensively re-socialized in grade school in their aspired-to gender. As I understand it, this is asserted as a reason why male students who assert a female gender identity must be permitted to compete in girls' or women's athletic events. These advocates treat any question about the causes of the child's transgender identification as inappropriate. They may not recognize the child's ambivalence. They assume that observed psychological co-morbidities in the children or their families are unrelated or will get better with transition and need not be addressed by the MHP who is providing supportive guidance concerning the child's gender identity.

48. Some advocates assert that unquestioning affirmation of any claim of transgender identity in children is essential, and that the child will otherwise face a high risk of suicide or severe psychological damage. This claim is simply not supported by the clinical data we have

available to us. Indeed, available long-term data contradicts this claim. I address physical and mental health outcomes in Section VII below, and suicide in Section VIII below.

49. Indeed, my own conversations and contacts lead me to believe that Dr. James Cantor was correct when he wrote that “almost all clinics and professional associations in the world” do not use “gender affirmation” for prepubescent children and instead “delay any transitions after the onset of puberty.” (Cantor 2019 at 1.)

50. I do not know what proportion of practitioners are using which model. However, in my opinion, in the case of young children, prompt and thorough affirmation of a transgender identity disregards the principles of child development and family dynamics and is not supported by science. Instead of science, this approach is currently being reinforced by an echo-chamber of approval from other like-minded child-oriented professionals who do not sufficiently consider the known negative medical and psychiatric outcomes of trans adults. Rather than recommend social transition in grade school, the MHP must focus attention on the child’s underlying internal and familial issues. Ongoing relationships between the MHP and the parents, and the MHP and the child, are vital to help the parents, child, other family members, and the MHP to understand over time the issues that need to be dealt with by each of them. As I discuss further in Section III.D below, it should be noted that the distinct trend in western Europe is to make psychotherapy, not affirmation, the first approach to Gender Dysphoria in children and adolescents. Many advocates in the United States seem to be still defending immediate affirmative care, rejecting or being unaware of the evidence reviews that changed policies in several European countries.

51. Likewise, since the child’s sense of gender develops in interaction with his parents and their own gender roles and relationships, the responsible MHP will almost certainly need to delve into family and marital dynamics.

III. THERE IS NO CONSENSUS OR AGREED “STANDARD OF CARE” CONCERNING THERAPEUTIC APPROACHES TO CHILD OR ADOLESCENT GENDER DYSPHORIA.

52. As I review in separate sections later, there is far too little firm clinical evidence in this field to permit any evidence-based standard of care. Given the lack of scientific evidence, it is neither surprising nor improper that—as I detailed in Section II—there is a diversity of views among practitioners as to the best therapeutic response for the child, adolescent, or young adult who suffers from gender dysphoria.

53. Reviewing the state of opinion and practice in 2021, the Royal Australian and New Zealand College of Psychiatrists observed that “There are polarised views and mixed evidence regarding treatment options for people presenting with gender identity concerns, especially children and young people.” (RANZCP, 2021.) Similarly, a few years earlier prominent Dutch researchers noted: “[T]here is currently no general consensus about the best approach to dealing with the (uncertain) future development of children with GD, and making decisions that may influence the function and/or development of the child — such as social transition.” (Ristori & Steensma 2016 at 18.)² In this Section, I comment on some of the more important areas of disagreement within the field.

² See also Zucker 2020 which questions the merit of social transition as a first-line treatment.

A. Experts and organizations disagree as to whether “distress” is a necessary element for diagnoses that justifies treatment for gender identity issues.

54. As outlined in Section II.B above, “clinically significant distress” is one of the criteria used in DSM-5-TR to identify gender dysphoria. This indicates a heightened level of distress that rises beyond a threshold level of social awkwardness or discomfort with the changing body. It is known that many trans-identified youth with incongruence between their sexed bodies and their gender identity choose not to take hormones; their incongruence is quite tolerable as they further clarify their sexual identity elements. This population raises the questions of what distress is being measured when DSM-5-TR criteria are met, and what else might be done about it.

55. There is no “clinically significant distress” requirement in World Health Organization’s International Classification of Diseases (ICD-11) criteria for gender incongruence, which rather indicates “a marked and persistent incongruence between an individual’s experienced gender and the assigned sex.” (World Health Organization 2019.)

56. Therefore, even between these two committee-based authorities, there is a significant disagreement as to what constitutes a gender condition justifying life-changing interventions. To my knowledge, some American gender clinics and practitioners are essentially operating under the ICD-11 criteria rather than the APA’s DSM-5-TR criteria, prescribing transition for children, hormonal interventions for slightly older children, and different hormones for adolescents who assert a desire for a transgender identity whether or not they are exhibiting “clinically significant distress.” Others adhere to the DSM-5-TR diagnostic standard.

57. Even from within one “school of thought,” it is not responsible to make a single, categorical statement about the proper treatment of children or adolescents presenting with gender dysphoria or other gender-related issues. There is no single pathway to the development

of a trans identity and no reasonably uniform short- or long-term outcome of medically treating it. As individuals grow physically, mature psychologically, and experience or fail to experience satisfying romantic relationships, their life course depends on their differing psychological, social, familial, and life experiences. There should be no trust in assertions that trans identified youth must be treated in a particular manner to avoid harm for three reasons: first, there is no systematic data on the nature of, and the rate of harms of either affirmative treatment, no treatment, or psychological only treatment. Second, as in other youthful psychiatric and other challenges, outcomes vary. Third, many psychological, social, and experiential forces outside of medical professions' knowledge shape outcomes. Medical and surgical interventions do not necessarily take account of, nor resolve, the broader issues facing the youth in question.

B. Opinions and practices vary widely about the utilization of social transition for children and adolescents.

58. The World Professional Association for Transgender Health (WPATH)— which explicitly views itself as not merely a scientific organization, but also as an advocacy organization³—does not take a position concerning whether or when social transition may be appropriate for pre-pubertal children. Instead, the WPATH states that the question of social transition for children is a “controversial issue” and calls for mental health professionals to support families in what it describes as “difficult decisions” concerning social transition.

59. Dr. Erica Anderson is a prominent practitioner in this area who identifies as a transgender woman, who was the first transgender president of USPATH, and who is a former board member of WPATH. Dr. Anderson recently resigned from those organizations and has condemned automatic approval of transition upon the request of a child or adolescent, noting that “adolescents . . . are notoriously susceptible to peer influence,” that transition “doesn’t cure

³ Levine 2016 at 240.

depression, doesn't cure anxiety disorders, doesn't cure autism-spectrum disorder, doesn't cure ADHD," and instead that "a comprehensive biopsychosocial evaluation" should proceed allowing a child to transition. (Davis 2022.) And as I have explained previously, my own view based on 50 years of experience in this area favors strong caution before approving life-altering interventions such as social transition, puberty blockers, or cross-sex hormones.

C. Opinions and practices differ widely with respect to the proper role of psychological counseling before, as part of, or after a diagnosis of gender dysphoria.

60. In Version 7 of its self-proclaimed "Standards of Care" document,⁴ released in 2012, WPATH downgraded the role of counseling or psychotherapy, and the organization no longer sees psychotherapy without transition and hormonal interventions as a potential path to eliminate gender dysphoria by enabling a patient to return to or achieve comfort with the gender identity aligned with his or her biology.

61. Around the world, many prominent voices and practitioners disagree. For example, renowned gender therapists Dr. Laura Edwards-Leeper and Dr. Erica Anderson (who, as mentioned above, identifies as a transgender woman) have recently spoken out arguing that children and adolescents are being subjected to puberty blockers and hormonal intervention far too quickly, when careful and extended psychotherapy and investigation for potential causes of feelings of dysphoria (such as prior sexual abuse) should be the first port of call and might resolve the dysphoria. (Edwards-Leeper & Anderson 2021; Davis 2022.)

62. In a recently published position statement on gender dysphoria, the Royal Australian and New Zealand College of Psychiatrists emphasized the critical nature of mental health treatment for gender dysphoric minors, stressing "the importance of the psychiatrist's role

⁴ It should be noted that WPATH's "Standards of Care" document is not the product of a strictly scientific organization and is by no means accepted by all, or even most, practitioners as setting out best practices. *See* Levine 2016 at 240.

to undertake thorough assessment and evidence-based treatment ideally as part of a multidisciplinary team, especially highlighting co-existing issues which may need addressing and treating.” The Royal College also emphasized the importance of assessing the “psychological state and context in which Gender Dysphoria has arisen,” before any treatment decisions are made. (RANZCP, 2021.)

63. Dr. Paul Hruz of the University of Washington St. Louis Medical School has noted, “The WPATH has rejected psychological counseling as a viable means to address sex–gender discordance with the claim that this approach has been proven to be unsuccessful and is harmful (Coleman et al. 2012). Yet the evidence cited to support this assertion, mostly from case reports published over forty years ago, includes data showing patients who benefited from this approach (Cohen-Kettenis and Kuiper 1984).” (Hruz 2020.)

D. Internationally, there has been a recent marked trend against the use of puberty blockers and cross-sex hormones.

64. Further to extensive evidence reviews by national medical bodies (which I discuss later) four European countries have revised their practices around the use of puberty blockers and cross-sex hormones, as well as issuing strong cautions around their use.

65. The main gender clinic in Sweden has declared that it will no longer authorize use of puberty blockers for minors below the age of 16. Finland has similarly reversed its course, issuing new guidelines that allow puberty blockers only on a case-by-case basis after an extensive psychiatric assessment.

66. A landmark legal challenge against the UK’s National Health Service in 2020 by “detransitioner” Keira Bell led to the suspension of the use of puberty blockers and new procedures to ensure better psychological care, as well as prompting a thorough evidence review

by the National Institute for Health and Care Excellence (NICE 2021a; NICE 2021b).⁵ Dr. Hillary Cass, who is undertaking an Independent Review of the UK’s treatment model, recently recommended that the Tavistock clinic in London—the world’s largest dedicated gender clinic—should be replaced by regional centers with an “appropriate multi-professional workforce to enable them to provide an integrated model of care that manages the holistic needs of this population” – a recommendation that the UK’s National Health Service has since accepted. (Cass 2022b, Brooks 2022.)

67. France’s Académie Nationale de Médecine issued a statement this February urging “great medical caution” when treating gender dysphoric youth “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.”

68. Given these developments, it is evident that U.S. Assistant Secretary of Health Levine’s recent remark that there is “no argument among medical professionals . . . about the value and the importance of gender-affirming care”⁶ does not accurately reflect the current state of scientific opinion on the topic.

E. Opinions and practices vary widely with respect to the administration of puberty blockers and cross-sex hormones.

69. There is likewise no broadly accepted standard of care with respect to use of puberty blockers. The WPATH “Standards of Care” explicitly recognize the lack of any consensus on this important point, stating: “Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH

⁵ The decision requiring court approval for administration of hormones to any person younger than age 16 was later reversed on procedural grounds by the Court of Appeal.

⁶ The NPR article is available at: <https://www.npr.org/sections/health-shots/2022/04/29/1095227346/rachel-levine-calls-state-anti-lgbtq-bills-disturbing-and-dangerous-to-trans-you>

analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. . . The percentages of treated adolescents are likely influenced by the organization of health care, insurance aspects, cultural differences, opinions of health professionals, and diagnostic procedures offered in different settings.”

70. The use of puberty blockers as a therapeutic intervention for gender dysphoria is often justified by reference to the seminal work of a respected Dutch research team that developed a protocol that administered puberty blockers to children no younger than age 14. However, many clinics in North America now administer puberty blockers to children at much younger ages than the “Dutch Protocol” allows. (Zucker 2019.) The Dutch protocol only treated children with these characteristics: a stable cross gender identity from early childhood; dysphoria that worsened with the onset of puberty; were otherwise psychologically healthy; had healthy families; the patient and family agreed to individual and family counselling throughout the protocol. But the experience and results of the Dutch model are being used as a justification for giving puberty blockers to children who differ considerably from these criteria. Its authors have also recently noted this fact. (de Vries 2020.)

71. However, Zucker notes that “it is well known” that clinicians are administering cross-sex hormones, and approving surgery, at ages lower than the minimum age thresholds set by that “Dutch Protocol.” (Zucker 2019 at 5.)

72. Some voices in the field are now publicly arguing that *no* comprehensive mental health assessment at all should be required before putting teens on puberty blockers or cross-sex hormones (Ghorayshi 2022), while Dr. Anderson and Dr. Edwards-Leeper argue that U.S. practitioners are already moving too quickly to hormonal interventions. (Edwards-Leeper & Anderson 2021; Davis 2022.)

73. In 2018, a committee of the American Academy of Pediatrics issued a statement supporting administration of puberty blockers to children diagnosed with gender dysphoria. It is also true that no other American medical association has endorsed the use of puberty blockers, and that pediatricians are neither endocrinologists nor psychiatrists. Dr. James Cantor published a peer-reviewed paper detailing that the Academy’s statement is not evidence-based and misdescribed the few scientific sources it did reference. (Cantor 2019.) It has been well noted in the field that the AAP has declined invitations to publish any rebuttal to Dr. Cantor’s analysis and is currently refusing requests from both inside and outside the organization to review the 2018 policy shift. But this is all part of ongoing debate, simply highlighting the absence of any generally agreed standard of care. It is evident that opinions and practices are all over the map.

74. While there is too little meaningful clinical data and no consensus concerning best practices or a “standard of care” in this area, there are long-standing ethical principles that do or should bind all medical and mental health professionals as they work with, counsel, and prescribe for these individuals (Levine et al, 2022).

75. One of the oldest and most fundamental principles guiding medical and psychological care—part of the Hippocratic Oath—is that the physician must “do no harm.” This states an ethical responsibility that cannot be delegated to the patient. Physicians themselves must weigh the risks of treatment against the harm of not treating. If the risks of treatment outweigh the benefits, principles of medical ethics prohibit the treatment.

IV. GENDER IDENTITY IS EMPIRICALLY NOT FIXED FOR MANY INDIVIDUALS.

A. Transgender identity has not been shown to be biologically based, and its epidemiology demonstrates large and radical changes across time and geography.

76. While advocates of affirmative care assert that gender identity is a biological phenomenon, there is no medical consensus that transgender identity has any biological basis. There is considerable well-documented evidence that is inconsistent with the hypothesis of a biological basis for gender identity—at least in the large majority of currently-presenting patients.

77. The Endocrine Society 2017 Guidelines recognize: “With current knowledge, we cannot predict the psychosexual outcome for any specific child” and “there are currently no criteria to identify the GD/gender-incongruent children to whom this applies. At the present time, clinical experience suggests that persistence of GD/gender incongruence can only be reliably assessed after the first signs of puberty.” (Hembree et al. 2017 at 3876.)

78. Moreover, no biological test or measurement has been identified that provides any ability to predict which children will exhibit, and which children will persist in, gender dysphoria or a transgender identification. In fact, there is substantial evidence that the “biological basis” theory is incorrect.

79. **Vast changes in incidence:** Historically, there were very low reported rates of gender dysphoria or transgender identification. In 2013, the DSM-5-TR estimated the incidence of gender dysphoria in adults to be at 2-14 per 100,000, or between 0.002% and 0.014%. (APA 2013 at 454.) Recently however, these numbers have increased dramatically, particularly in adolescent populations. Recent surveys estimate that between 2-9% of high school students self-identify as transgender or “gender non-conforming.” with a significantly large increase in adolescents claiming “nonbinary” gender identity as well. (Johns et al. 2019; Kidd et al. 2021.)

80. Consistent with these surveys, gender clinics around the world have seen numbers of referrals increase rapidly in the last decade, with the Tavistock clinic in London seeing a 30-fold increase in the last decade (GIDS 2019), and similar increases being observed in Finland (Kaltiala-Heino et al. 2018), the Netherlands (de Vries 2020), and Canada (Zucker 2019). The rapid change in the number of individuals experiencing gender dysphoria points to social and cultural, not biological, causes.

81. **Large change in sex ratio:** In recent years there has been a marked shift in the sex ratio of patients presenting with gender dysphoria or transgender identification. The Tavistock clinic in London saw a ratio of 4 biological females(F):5 biological males(M) shift to essentially 11F:4M in a decade. (GIDS 2019.) One researcher summarizing multiple sources documented a swing of 1F:2M or 1F:1.4M through 2005 to 2F:1M generally (but as high as 7F:1M) in more recent samples. (Zucker 2019 at 2.) This phenomenon has been noted by Dr. Erica Anderson, who said: “The data are very clear that adolescent girls are coming to gender clinics in greater proportion than adolescent boys. And this is a change in the last couple of years. And it’s an open question: What do we make of that? We don’t really know what’s going on. And we should be concerned about it.” (Davis 2022.) Again, this large and rapid change in who is experiencing gender dysphoria points to social, not biological, causes.

82. **Clustering:** Littman’s study documented “clustering” of new presentations of gender dysphoria among natal females in specific schools and among specific friend groups. Her work documented what many clinicians and parents had been observing. This points strongly to social causes for gender dysphoria at least among the adolescent females. (Littman 2018.)

83. **Desistance:** There are very high levels of desistance among children diagnosed with gender dysphoria (Cantor, 2019). There are increasing (or at least increasingly vocal)

numbers of individuals who first asserted a transgender identity during or after adolescence, underwent substantial medical interventions to “affirm” that trans-identity, and then “desisted” and reverted to a gender identity congruent with their sex (Entwistle 2020; Littman 2021; Vandebussche 2021; Hall et al, 2021.) (See Section IV.C below.) These narratives, too, point to a social and/or psychological cause, rather than a biological one.

84. **“Fluid” gender identification:** Advocates and others observe that recent forms of gender identities are not uniformly binary. Rather they now span an almost endless range of gender identity self-labels, which a given individual may try on, inhabit, and often discard. (A recent article identifies 72.⁷) This, of course, presents a compelling argument that gender identity is not fixed prenatally. It illustrates that post-natal intrapsychic and social forces interact in unseen ways to shape and reshape gender identities.

85. I frequently read attempts to explain away the points raised above. They include: these problems always existed, but children are now learning that there are effective treatments for their dilemma and are simply seeking them. And; children have hidden their trans identity throughout childhood and now that trans people are recognized and accepted, they are presenting themselves. And; now pediatricians realize that girls can have gender dysphoria and are referring them to gender clinics. But these are all mere hypotheses unsupported by evidence. One set of unproven hypotheses cannot provide support for the unproven hypothesis of biological basis. And none of these hypotheses could even potentially explain the failure of science thus far to identify any predictive biological marker of transgender identification.

⁷ Allarakha, *What Are the 72 Other Genders?*, MedicineNet, available at: https://www.medicinenet.com/what_are_the_72_other_genders/article.htm

86. **Therapies affect gender identity outcomes:** Finally, the evidence shows that therapeutic choices can have a powerful effect on whether and how gender identity does change, or gender dysphoria desists. Social transition of juveniles, for instance, strongly influences gender identity outcomes to such an extent that it has been described a “unique predictor of persistence.” (See Section V.B below.) Again, this observation cuts against the hypothesis of biological origin.

B. Most children who experience gender dysphoria ultimately “desist” and achieve comfort with their biological sex.

87. A distinctive and critical characteristic of juvenile gender dysphoria is that multiple studies from separate groups and at different times have reported that in the large majority of patients, absent a substantial intervention such as social transition or puberty blocking hormone therapy, it does *not* persist through puberty.

88. A recent article reviewed all existing follow-up studies that the author could identify of children diagnosed with gender dysphoria (11 studies), and reported that “every follow-up study of GD children, without exception, found the same thing: By puberty, the majority of GD children ceased to want to transition.” (Cantor 2019 at 1.) Another author reviewed the existing studies and reported that in “prepubertal boys with gender discordance . . . 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 et al. 2012 at 963; see also Cohen-Kettinis 2008 at 1895.) The Endocrine Society recognized this important baseline fact in its 2017 Guidelines. (Hembree 2017 at 3879.) It should be noted that the reason that the Dutch Protocol waited until age 14 to initiate puberty blockers was that it was well known that many children would desist if left free of hormonal intervention until that age.

89. Findings of high levels of desistance among children who experience gender dysphoria or incongruence have been reaffirmed in the face of critiques through thorough reanalysis of the underlying data. (Zucker 2018.)

90. As I explained in detail in Section IV above, it is not yet known how to distinguish those children who will desist from that small minority whose trans identity will persist.

91. It does appear that prevailing circumstances during particularly formative years can have a significant impact on the outcome of a juvenile's gender dysphoria. A 2016 study reviewing the follow-up literature noted that "the period between 10 and 13 years" was "crucial" in that "both persisters and desisters stated that the changes in their social environment, the anticipated and actual feminization or masculinization of their bodies, and the first experiences of falling in love and sexual attraction in this period, contributed to an increase (in the persisters) or decrease (in the desisters) of their gender related interests, behaviors, and feelings of gender discomfort." (Ristori & Steensma 2016 at 16.) As I discuss in Section VI below, there is considerable evidence that early transition and affirmation causes far more children to persist in a transgender identity.

C. Desistance is increasingly observed among teens and young adults who first manifest GD during or after adolescence.

92. Desistance within a relatively short period may also be a common outcome for post-pubertal youths who exhibit recently described "rapid onset gender disorder." I have observed an increasingly vocal online community of young women who have reclaimed a female identity after claiming a male gender identity at some point during their teen years, and young "detransitioners" (individuals in the process of reidentifying with their birth sex after having undergone a gender transition) are now receiving increasing attention in both clinical literature

and social media channels. (On March 12, 2022, the first annual international Detransition Awareness Day was held.)

93. Recently, Dr. Michael Irwig, professor at Harvard Medical School, an endocrinologist, and Director of Transgender Medicine at Boston Beth Israel Deaconess Medical Center, cited two major studies to observe that claims of low rates of desistance or regret among those who have transitioned may be inaccurate due to strikingly high rates of subjects “lost to follow-up” in prospective studies. (Irwig 2022.)

94. Almost all scientific articles on this topic have appeared within the last few years. Perhaps this historic lack of coverage is not entirely surprising – one academic who undertook an extensive review of the available scientific literature in 2021 noted that the phenomenon was “socially controversial” in that it “poses significant professional and bioethical challenges for those clinicians working in the field of gender dysphoria.” (Expósito-Campos 2021 at 270.) This review reported on multifarious reasons for why individuals were motivated to detransition, which included coming to “understand[] how past trauma, internalized sexism, and other psychological difficulties influenced the experience of GD.”

95. In 2021, Lisa Littman of Brown University conducted a ground-breaking study of 100 teenage and young adults who had transitioned and lived in a transgender identity for a number of years, and then “detransitioned” or changed back to a gender identity matching their sex. She noted that the “visibility of individuals who have detransitioned is new and may be rapidly growing.” (Littman 2021 at 1.) Of the 100 detransitioners, 60% reported that their decision to detransition was motivated (at least in part) by the fact that they had become more comfortable identifying as their natal sex, and 38% had concluded that their gender dysphoria

was caused by something specific such as trauma, abuse, or a mental health condition. (Littman 2021 at 9.)

96. A significant majority (76%) did not inform their clinicians of their detransition. (Littman 2021 at 11.)

97. A similar study that recruited a sample of 237 detransitioners (the large majority of whom had initially transitioned in their teens or early twenties) similarly reported that a common reason for detransitioning was the subject's conclusion that his or her gender dysphoria was related to other issues (70% of the sample). (Vandenbussche 2021.)

98. The existence of increasing numbers of youth or young adult detransitioners has also been recently noted by Dr. Edwards-Leeper and Dr. Anderson. (Edwards-Leeper & Anderson 2021.) Edwards-Leeper and Anderson noted "the rising number of detransitioners that clinicians report seeing (they are forming support groups online)" which are "typically youth who experienced gender dysphoria and other complex mental health issues, rushed to medicalize their bodies and regretted it." Other clinicians working with detransitioners have also noted the recent phenomenon. (Marchiano 2020.)

99. A growing body of evidence suggests that for many teens and young adults, a post-pubertal onset of transgender identification can be a transient phase of identity exploration, rather than a permanent identity, as evidenced by a growing number of young detransitioners (Entwistle 2020; Littman 2021; Vandenbussche 2021). Previously, the rate of detransition and regret was reported to be very low, although these estimates suffered from significant limitations and were likely undercounting true regret (D'Angelo 2018). As gender-affirmative care has become popularized, the rate of detransition appears to be accelerating.

100. A recent study from a UK adult gender clinic observed that 6.9% of those treated with gender-affirmative interventions detransitioned within 16 months, and another 3.4% had a pattern of care suggestive of detransition, yielding a rate of probable detransition in excess of 10%. Another 21.7%, however, disengaged from the clinic without completing their treatment plan. While some of these individuals later re-engaged with the gender service, the authors concluded, “detransitioning might be more frequent than previously reported.” (Hall et al. 2021).

101. Another study from a UK primary care practice found that 12.2% of those who had started hormonal treatments either detransitioned or documented regret, while the total of 20% stopped the treatments for a wider range of reasons. The mean age of their presentation with gender dysphoria was 20, and the patients had been taking gender-affirming hormones for an average 5 years (17 months-10 years) prior to discontinuing. Comparing these much higher rates of treatment discontinuation and detransition to the significantly lower rates reported by the older studies, the researchers noted: “Thus, the detransition rate found in this population is novel and questions may be raised about the phenomenon of overdiagnosis, overtreatment, or iatrogenic harm as found in other medical fields” (Boyd et al. 2022 at 15.) Indeed, given that regret may take up to 8-11 years to materialize (Dhejne et al., 2014; Wiepjes et al., 2018), many more detransitioners are likely to emerge in the coming years. Detransitioner research is still in its infancy, but the Littman and Vandebussche studies in 2021 both report that detransitioners from the recently transitioning cohorts feel they were rushed into medical gender-affirmative interventions with irreversible effects, often without the benefit of appropriate, or in some instances any, psychologic exploration.

V. TRANSITION AND AFFIRMATION IS AN IMPORTANT PSYCHOLOGICAL AND MEDICAL INTERVENTION THAT CHANGES GENDER IDENTITY OUTCOMES.

A. If both a typical gender or a transgender long-term gender identity outcome are possible for a particular patient, the alternatives are not medically neutral.

102. Where a juvenile experiences gender dysphoria, the gender identity that is stabilized will have a significant impact on the course of their life. Living in a transgender identity for a time will make desistance, if it is ever considered, more difficult to accomplish.

103. If the juvenile desists from the gender dysphoria and becomes reasonably comfortable with a gender identity congruent with their sex—the most likely outcome from a statistical perspective absent affirming intervention—the child will not require ongoing pharmaceutical maintenance and will not have their fertility destroyed post-puberty.

104. However, if the juvenile persists in a transgender identity, under current practices, the child is most likely to require regular administration of hormones for the rest of their lives, exposing them to significant physical, mental health, and relational risks (which I detail in Section VIII below), as well as being irreversibly sterilized chemically and/or surgically. The child is therefore rendered a “patient for life” with complex medical implications further to a scientifically unproven course of treatment.

B. Social transition of young children is a powerful psychotherapeutic intervention that radically changes outcomes, almost eliminating desistance.

105. Social transition has a critical effect on the persistence of gender dysphoria. It is evident from the scientific literature that engaging in therapy that encourages social transition before or during puberty—which would include participation on athletic teams designated for the opposite sex—is a psychotherapeutic intervention that dramatically changes outcomes. A prominent group of authors has written that “The gender identity affirmed during puberty appears to predict the gender identity that will persist into adulthood.” (Guss et al. 2015 at 421.)

Similarly, a comparison of recent and older studies suggests that when an “affirming” methodology is used with children, a substantial proportion of children who would otherwise have desisted by adolescence—that is, achieved comfort identifying with their natal sex—instead persist in a transgender identity. (Zucker 2018 at 7.)

106. Indeed, a review of multiple studies of children treated for gender dysphoria across the last three decades found that early social transition to living as the opposite sex severely reduces the likelihood that the child will revert to identifying with the child’s natal sex, at least in the case of boys. That is, while, as I review above, studies conducted before the widespread use of social transition for young children reported desistance rates in the range of 80-98%, a more recent study reported that fewer than 20% of boys who engaged in a partial or complete social transition before puberty had desisted when surveyed at age 15 or older. (Zucker 2018 at 7⁸; Steensma et al. 2013.)⁹ Another researcher observed that a partial or complete gender social transition prior to puberty “proved to be a unique predictor of persistence.” (Singh et al. 2021 at 14.)

107. Some vocal practitioners of prompt affirmation and social transition even proudly claim that essentially *no* children who come to their clinics exhibiting gender dysphoria or cross-gender identification desist in that identification and return to a gender identity consistent with

⁸ Zucker found social transition by the child to be strongly correlated with persistence for natal boys, but not for girls. (Zucker 2018 at 5.)

⁹ Only 2 (3.6%) of 56 of the male desisters observed by Steensma et al. had made a complete or partial transition prior to puberty, and of the twelve males who made a complete or partial transition prior to puberty, only two had desisted when surveyed at age 15 or older. Steensma 2013 at 584.

their biological sex.¹⁰ This is a very large change as compared to the desistance rates documented apart from social transition.

108. Even voices generally supportive of prompt affirmation and social transition are acknowledging a causal connection between social transition and this change in outcomes. As the Endocrine Society recognized in its 2017 Guidelines: “If children have completely socially transitioned, they may have great difficulty in returning to the original gender role upon entering puberty. . . [S]ocial transition (in addition to GD/gender incongruence) has been found to contribute to the likelihood of persistence.” (Hembree et al. 2017 at 3879.) The fact is that these unproven interventions with the lives of kids and their families have systematically documented outcomes. Given this observed phenomenon, I agree with Dr. Ken Zucker who has written that social transition in children must be considered “a form of psychosocial treatment.” (Zucker 2020 at 1.)

109. Moreover, as I review below, social transition cannot be considered or decided alone. Studies show that engaging in social transition starts a juvenile on a “conveyor belt” path that almost inevitably leads to the administration of puberty blockers, which in turn almost inevitably leads to the administration of cross-sex hormones. The emergence of this well-documented path means that the implications of taking puberty blockers *and* cross-sex hormones must be taken into account even where “only” social transition is being considered or requested by the child or family. As a result, there are a number of important “known risks” associated with social transition.

¹⁰ *See, e.g.*, Ehrensaft 2015 at 34: “In my own clinical practice . . . of those children who are carefully assessed as transgender and who are allowed to transition to their affirmed gender, we have no documentation of a child who has ‘desisted’ and asked to return to his or her assigned gender.”

C. Administration of puberty blockers is a powerful medical and psychotherapeutic intervention that radically changes outcomes, almost eliminating desistance on the historically observed timeline.

110. Advocates of affirmative care speak of the use of puberty blockers as though this major hormonal disruption of some of the most basic aspects of ordinary human development were entirely benign, acting as a “pause.” This optimistic view is not based on science. In fact, it should be understood that puberty blockers are usually administered to early-stage adolescents as part of a path that includes social transition. Moreover, medicine does not know what the long-term health effects on bone, brain, and other organs are of a “pause” between ages 11-16. Medicine also does not know if the long-term effects of these compounds are different in boys than in girls. The mental health professional establishment likewise does not know the long-term effects on coping skills, interpersonal comfort, and intimate relationships of this “pause” while one’s peers are undergoing their maturational gains in these vital arenas of future mental health. I address medical, social, and mental health risks associated with the use of puberty blockers in Section VIII. Here, I note that the data strongly suggests that the administration of puberty blockers, too, must be considered to be a component of a “psychosocial treatment” with complex implications, rather than a “pause.”

111. Multiple studies show that the large majority of children who begin puberty blockers go on to receive cross-sex hormones. (de Vries 2020 at 2.) A recent study by the Tavistock and Portman NHS Gender Identity Development Service (UK)—the world’s largest gender clinic—found that 98% of adolescents who underwent puberty suppression continued on to cross-sex hormones. (Carmichael et al 2021 at 12.)¹¹ Beyond hormonal intervention, three

¹¹ See also Brik 2020 where Dutch researchers found nearly 97% of adolescents who received puberty blockers proceeded to cross-sex hormones.

Dutch clinical follow-up studies have shown that *all* of the adolescents who received puberty blockers and/or cross-sex hormones went on receive surgery. (Leibowitz & de Vries 2016, 23.)

112. These studies demonstrate that going on puberty blockers virtually eliminates the possibility of desistance in juveniles. Rather than a “pause,” puberty blockers appear to act as a psychosocial “switch,” decisively shifting many children to a persistent transgender identity. Therefore, as a practical and ethical matter the decision to put a child on puberty blockers must be considered as the equivalent of a decision to put that child on cross-sex hormones, with all the considerations and informed consent obligations implicit in that decision.

VI. TRANSITION AND AFFIRMATION ARE EXPERIMENTAL THERAPIES THAT HAVE NOT BEEN SHOWN TO IMPROVE MENTAL OR PHYSICAL HEALTH OUTCOMES BY YOUNG ADULTHOOD.

113. It is undisputed that children and adolescents who present with gender dysphoria exhibit a very high level of mental health comorbidities. (Section II.C.) Whether the gender dysphoria is cause or effect of other diagnosed or undiagnosed mental health conditions, or whether these are merely coincident comorbidities, is hotly disputed, but the basic fact is not.

A. The knowledge base concerning therapies for gender dysphoria is “very low quality.”

114. At the outset, it is important for all sides to admit that the knowledge base concerning the causes and treatment of gender dysphoria has low scientific quality.

115. In evaluating claims of scientific or medical knowledge, it is axiomatic in science that no knowledge is absolute, and to recognize the widely accepted hierarchy of reliability when it comes to “knowledge” about medical or psychiatric phenomena and treatments. Unfortunately, in this field opinion is too often confused with knowledge, rather than clearly locating what exactly is scientifically known. In order of increasing confidence, such “knowledge” may be based upon data comprising:

a. Expert opinion—it is perhaps surprising to educated laypersons that expert opinion standing alone is the lowest form of knowledge, the least likely to be proven correct in the future, and therefore does not garner as much respect from professionals as what follows;

b. A single case or series of cases (what could be called anecdotal evidence) (Levine 2016 at 239.);

c. A series of cases with a control group;

d. A cohort study;

e. A randomized double-blind clinical trial;

f. A review of multiple trials;

g. A meta-analysis of multiple trials that maximizes the number of patients treated despite their methodological differences to detect trends from larger data sets.

116. Prominent voices in the field have emphasized the severe lack of scientific knowledge in this field. The American Academy of Child and Adolescent Psychiatry has recognized that “Different clinical approaches have been advocated for childhood gender discordance. . . . There have been no randomized controlled trials of any treatment. . . . [T]he proposed benefits of treatment to eliminate gender discordance . . . must be carefully weighed against . . . possible deleterious effects.” (Adelson et al. at 968–69.) Similarly, the American Psychological Association has stated, “because no approach to working with [transgender and gender nonconforming] children has been adequately, empirically validated, consensus does not exist regarding best practice with pre-pubertal children.” (APA 2015 at 842.)

117. Critically, “there are no randomized control trials with regard to treatment of children with gender dysphoria.” (Zucker 2018 at 8.) On numerous critical questions relating to

cause, developmental path if untreated, and the effect of alternative treatments, the knowledge base remains primarily at the level of the practitioner’s exposure to individual cases, or multiple individual cases. As a result, claims to certainty are not justifiable. (Levine 2016 at 239.)

118. Within the last two years, at least three formal evidence reviews concerning hormonal interventions for gender dysphoria have been conducted. All three found all of the available clinical evidence to be very low quality.

119. The British National Health Service (NHS) commissioned formal “evidence reviews” of all clinical papers concerning the efficacy and safety of puberty blockers and cross-sex hormones as treatments for gender dysphoria. These evidence reviews were performed by the U.K. National Institute for Health and Care Excellence (NICE), applying the respected “GRADE” criteria for evaluating the strength of clinical evidence.

120. Both the review of evidence concerning puberty blockers and the review of evidence concerning cross-sex hormones were published in 2020, and both found that *all* available evidence as to both efficacy and safety was “very low quality” according to the GRADE criteria. (NICE 2021a; NICE 2021b.) “Very low quality” according to GRADE means there is a high likelihood that the patient *will not experience* the hypothesized benefits of the treatment. (Balshem et al. 2011.) Specifically in relation to puberty blockers, the NICE review found that every study conducted thus far had been a “small, uncontrolled observational stud[y],” “subject to bias and confounding,” with “results ... of very low certainty.” (NICE 2021a at 13.)

121. Similarly, the highly respected Cochrane Library—the leading source of independent systematic evidence reviews in health care—commissioned an evidence review concerning the efficacy and safety of hormonal treatments now commonly administered to “transitioning transgender women” (i.e., testosterone suppression and estrogen administration to

biological males). That review, also published in 2020, concluded that “We found insufficient evidence to determine the efficacy or safety of hormonal treatment approaches for transgender women in transition.” (Haupt et al. 2020 at 2.) It must be understood that both the NICE and the Cochrane reviews considered *all* published scientific studies concerning these treatments.

122. More recently in the United States, Florida’s Agency for Health Care Administration released an extensive literature review conducted by researchers at McMaster University in June 2022, and concluded: “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 [generally accepted professional medical standards] and are experimental and investigational.” (Division of Florida Medicaid 2022 at 3.)

123. As to social transition, as I have noted above, considerable evidence suggests that socially transitioning a pre-pubertal child puts him or her on a path from which very few children escape—a path which includes puberty blockers and cross-sex hormones before age 18. As a practical matter, then, a decision about social transition for a child must be made in light of what is known and what is unknown about the effects of those expected hormonal interventions.

124. I discuss safety considerations in Section VIII below. Here, I detail what is known about the effectiveness of social and hormonal transition and affirmation to improve the mental health of individuals diagnosed with gender dysphoria.

B. Youth who adopt a transgender identity show no durable improvement in mental health after social, hormonal, or surgical transition and affirmation.

125. As I noted above, the evidence reviews for the efficacy and safety of hormonal interventions published in 2020 concluded that the supporting evidence is so poor that there is “a

high likelihood that the patient will not experience the hypothesized benefits of the treatment.” There is now some concrete evidence that on average they do not experience those benefits.

126. An important paper published in 2021 by Tavistock clinic clinicians provided the results of the first longitudinal study that measured widely used metrics of general psychological function and suicidality before commencement of puberty blockers, and then at least annually after commencing puberty blockers. After up to three years, they “found no evidence of change in psychological function with GnRHa treatment as indicated by parent report (CBCL) or self-report (YSR) of overall problems, internalizing or externalizing problems or self-harm” as compared to the pre-puberty-blocker baseline evaluations. “Outcomes that were not formally tested also showed little change.” (Carmichael et al. 2021 at 18-19.) Similarly, a study by Bränström and Pachankis of the case histories of a set of individuals diagnosed with GD in Sweden found no positive effect on mental health from hormonal treatment. (Landen 2020.)

127. A cohort study by authors from Harvard and Boston Children’s Hospital found that youth and young adults (ages 12-29) who self-identified as transgender had an elevated risk of depression (50.6% vs. 20.6%) and anxiety (26.7% vs. 10.0%); a higher risk of suicidal ideation (31.1% vs. 11.1%), suicide attempts (17.2% vs. 6.1%), and self-harm without lethal intent (16.7% vs. 4.4%) relative to the matched controls; and a significantly greater proportion of transgender youth accessed inpatient mental health care (22.8% vs. 11.1%) and outpatient mental health care (45.6% vs. 16.1%) services. (Reisner et al. 2015 at 6.) Similarly, a recent longitudinal study of transgender and gender diverse youth and young adults in Chicago found rates of alcohol and substance abuse “substantially higher than those reported by large population-based studies of youth and adults.” (Newcomb et al. 2020 at 14.) Members of the clinical and research team at the prominent Dutch VU University gender dysphoria center recently compared mental

health metrics of two groups of subjects before (mean age 14.5) and after (mean age 16.8) puberty blockers. But they acknowledged that the structure of their study meant that it “can . . . not provide evidence about . . . long-term mental health outcomes,” and that based on what continues to be extremely limited scientific data, “Conclusions about the long-term benefits of puberty suppression should . . . be made with extreme caution.” In other words, we just don’t know. (van der Miesen et al. 2020 at 703.)

C. Long-term mental health outcomes for individuals who persist in a transgender identity are poor.

128. The responsible MHP cannot focus narrowly on the short-term happiness of the young patient, but must instead consider the happiness and health of the patient from a “life course” perspective. When we look at the available studies of individuals who continue to inhabit a transgender identity across adult years, the results are strongly negative.

129. In the United States, the death rates of trans veterans are comparable to those with schizophrenia and bipolar diagnoses—20 years earlier than in the general population. These crude death rates include significantly elevated rates of substance abuse as well as suicide. (Levine 2017 at 10.) Similarly, researchers in Sweden and Denmark have reported on almost all individuals who underwent sex-reassignment surgery over a 30-year period. (Dhejne et al. 2011; Simonsen et al. 2016.) The Swedish follow-up study similarly found a suicide rate in the post-SRS population 19.1 times greater than that of the controls; both studies demonstrated elevated mortality rates from medical and psychiatric conditions. (Levine 2017 at 10.)

130. A recent study in the American Journal of Psychiatry reported high mental health utilization patterns of adults for ten years after surgery for approximately 35% of patients. (Bränström & Panchankis, 2020.) Indeed, earlier Swedish researchers in a long-term study of all patients provided with SRS over a 30-year period (median time since SRS of > 10 years)

concluded that individuals who have SRS exhibit such poor mental health that they should be provided very long-term psychiatric care as the “final” transition step of SRS. (Dhejne et al. 2011, at 6-7.) Unfortunately, across the succeeding decade, in Sweden and elsewhere their suggestion has been ignored.

131. I will note that these studies do not tell us whether the subjects first experienced gender dysphoria as children, adolescents, or adults, so we cannot be certain how their findings apply to each of these subpopulations which represent quite different pathways. But in the absence of knowledge, we should be cautious.

132. Meanwhile, no studies show that affirmation of pre-pubescent children or adolescents leads to more positive outcomes (mental, physical, social, or romantic) by, e.g., age 25 or older than does “watchful waiting” or ordinary therapy.

133. The many studies that I have cited here warn us that as we look ahead to the patient’s life as a young adult and adult, the prognosis for the physical health, mental health, and social well-being of the child or adolescent who transitions to live in a transgender identity is not good.

VII. TRANSITION AND AFFIRMATION DO NOT DECREASE, AND MAY INCREASE, THE RISK OF SUICIDE.

A. The risk of suicide among transgender youth is confused and exaggerated in the public mind.

134. While suicide is closely linked to mental health, I comment on it separately because rhetoric relating to suicide figures prominently in debates about responses to gender dysphoria.

135. Any discussion of suicide when considering younger children involves very long-range and, therefore, very uncertain prediction. Suicide in pre-pubescent children is extremely

rare, and the existing studies of gender identity issues in pre-pubescent children do not report significant incidents of suicide. Any suggestion otherwise is misinformed. Our focus for this topic, then, is on adolescents and adults, mindful that in a few short years, prepubertal children will be adolescents.

136. Some authors have reported rates of suicidal thoughts and behaviors among trans-identifying teens or adults ranging from 25% to as high as 52%, generally through non-longitudinal self-reports obtained from non-representative survey samples. (Toomey et al. 2018.) The vast majority, if not all studies, repeatedly demonstrate that transgender adolescents and homosexually-identified agemates have elevated rates of suicidal thoughts when compared to their cis-gendered and heterosexual peers (Canetto et al, 2021). Advocates frequently assert that affirmative care is the only way to avoid the possibility of suicide. No statistically meaningful studies show that affirmation of children, adolescents, or adults reduces suicide, prevents suicidal ideation, or improves long-term outcomes. For this to be demonstrated, prospective studies comparing two groups of gender dysphoric teens, one medicalized and one not, would need to be carried out. The group who did not receive affirmative care might undergo either “watchful waiting” or a psychotherapy. Such studies have not been initiated.

137. Moreover, a clear grasp of the differences between suicidal thoughts, suicidal gestures (that represent a cry for help, manipulation, or expression of rage), and sincere attempts to end life is required. Too often, in both public and professional discussions, suicidal thoughts are blurred with suicide. Yet the available data tells us that suicide among children and youth suffering from gender dysphoria is extremely rare.

138. An important analysis of data covering patients as well as those on the waiting list (and thus untreated) at the UK’s Gender Identity and Development Service at the Tavistock and

Portman NHS Foundation Trust (“Tavistock”) gender clinic—the world’s largest gender service that deals with children and adolescents only—found a total of four completed suicides across 11 years’ worth of patient data, reflecting an estimated cumulative 30,000 patient-years spent by patients under the clinic’s care or on its waiting list. This corresponded to an annual suicide rate of 0.013%. The proportion of individual patients who died by suicide was 0.03%, which is orders of magnitude smaller than trans adolescents who self-report suicidal behavior or thoughts on surveys. (Biggs 2022b.)

139. Thus, only a minute fraction of trans-identifying adolescents who report thoughts or conduct considered to represent “suicidality” commit suicide. I agree with the statement by Dr. Zucker that the assertion by, for example, Karasic and Ehrensaft (2015) that completed suicides among transgender youth are “alarmingly high” “has no formal and systematic empirical basis.” (Zucker 2019 at 3.)

140. Professor Biggs of Oxford, author of the above study of incidence of suicide, rightly cautions that it is “irresponsible to exaggerate the prevalence of suicide” (Biggs 2022b at 4.). It is my opinion that telling parents—or even allowing them to believe from their Internet reading—that they face a choice between “a live son or a dead daughter” is both factually wrong and unethical. Informed consent requires clinicians to tell the truth and ensure that their patients understand the truth. To be kind, the clinicians who believe such figures represent high risk of ultimate suicide during adolescence simply do not know the truth; they are ill-informed.

B. Transition of any sort has not been shown to reduce levels of suicide.

141. Every suicide is a tragedy, and steps that reduce suicide should be adopted. I have noted above that suicidality (that is, suicidal thoughts or behaviors, rather than suicide) is common among transgender adolescents and young adults before, during, and after social and medical transition. If a medical or mental health professional believes that an individual he or she

is diagnosing or treating for gender dysphoria presents a suicide risk, in my view it is unethical for that professional merely to proceed with treatment for gender dysphoria and hope that “solves the problem.” Rather, that professional has an obligation to provide or refer the patient for evidence-based therapies for addressing depression and suicidal thoughts that are well-known to the profession. (Levine 2016 at 242.)

142. There is in fact no evidence that social and/or medical transition reduces the incidence of suicide. Prominent Dutch researchers documented that suicides occur at a similar rate through all stages of transition, from pre-treatment assessment to post-transition follow-up (Wiepjes et al., 2020). On the contrary, in his analysis of those who were patients of or on the waiting list of the Tavistock clinic, Professor Biggs found that the suicide rate was not higher among those on the clinic’s waiting list (and thus as-yet untreated), than for those who were patients under care. (Biggs 2022b.) Bränström and Pachankis, after correcting their original article, similarly acknowledge that their review of records of GD patients “demonstrated no advantage of surgery in relation to . . . hospitalizations following suicide attempts.” (They did not include completed suicides in their study.)¹²

C. Long-term life in a transgender identity correlates with very high rates of completed suicide among adults.

143. As with mental health generally, the patient, parent, or clinician fearing the risk of suicide must consider not just the next month or year, but a life course perspective.

144. There are now five long-term studies that analyze completed suicides among those living in transgender identities into adulthood. The results vary significantly, but are uniformly highly negative.

¹² Turban et al. (2020) has been described in press reports as demonstrating that administration of puberty suppressing hormones to transgender adolescents reduces suicide or suicidal ideation. The paper itself does not make that claim, nor permit that conclusion.

145. Dhejne reported a long-term follow-up study of Swedish subjects after sex reassignment surgery. Across the multi-year study, subjects who had undergone SRS committed suicide at 19.1 times the expected rate compared to general population controls matched by age and both sexes. MtF subjects committed suicide at 13.9 times the expected rate, and FtM subjects committed suicide at 40.0 times the expected rate. (Dhejne et al. 2011 Supplemental Table S1.)

146. Asscheman reported results of a long-term follow-up of all transsexual subjects of the Netherlands' leading gender medicine clinic who started cross-sex hormones before July 1, 1997, a total of 1331 patients. The Dutch system of medical and death records enables extensive follow-up. Median follow-up period was 18.5 years. The mortality rate among MtF patients was 51% higher than among the age-matched general population; the rate of completed suicide among MtF patients was six times that of the age-matched general population. (Asscheman et al. 2011.)

147. Asscheman et al. found that "No suicides occurred within the first 2 years of hormone treatment, while there were six suicides after 2-5 years, seven after 5-10 years, and four after more than 10 years of CSH treatment at a mean age of 41.5 years." (Asscheman et al. 2011 at 637-638.) Their data suggest that such short-term follow-up is engaging only with an initial period of hopeful optimism. Short-term follow-ups will miss the feelings of disillusion and the increase in attempted and completed suicide in later years.

148. A retrospective, long-term study published in 2020 of a very large cohort (8263) of patients referred to the Amsterdam University gender clinic between 1972 and 2017 found that the annual rate of completed suicides among the transgender subjects was "three to four times higher than the general Dutch population." "[T]he incidence of observed suicide deaths was almost equally distributed over the different stages of treatment." The authors concluded that

“vulnerability for suicide occurs similarly in the different stages of transition.” (Wiepjes et al. 2020.) In other words, neither social nor medical transition reduced the rate of suicide.

149. As with Asscheman et al., Wiepjes et al. found that the median time between start of hormones and suicide (when suicide occurred) was 6.1 years for natal males, and 6.9 years for natal females. Again, short- or even medium-term studies will miss this suicide phenomenon.

150. A 2021 study analyzed the case histories of a cohort of 175 gender dysphoria patients treated at one of the seven UK adult gender clinics who were “discharged” (discontinued as patients) within a selected one-year period. The authors reported the rather shocking result that 7.7% (3/39) of natal males who were diagnosed and admitted for treatment, and who were between 17 and 24 years old, were “discharged” because they committed suicide during treatment. (Hall et al. 2021, Table 2.)

151. None of these studies demonstrates that the hormonal or surgical intervention *caused* suicide. That is possible, but as we have seen, the population that identifies as transgender suffers from a high incidence of comorbidities that correlate with suicide. What these studies demonstrate—at the least—is that this remains a troubled population in need of extensive and careful psychological care that they generally do not receive, and that neither hormonal nor surgical transition and “affirmation” resolve their underlying problems and put them on the path to a stable and healthy life.

152. One prudent interpretation of these findings is that when evaluating the benefits and risks of affirmative care, a long-term perspective is required. Patients and their parents need to be informed about this information prior to affirmative care. It is not likely that educators are aware of long-term premature mortality data and the role that suicide plays among these adults.

153. In sum, claims that affirmation will reduce the risk of suicide for children and adolescents are not based on science. Instead, transition of any sort must be justified, if at all, as a life-enhancing measure, not a lifesaving measure. (Levine 2016 at 242.) In my opinion, this is an important fact that patients, parents, many MHPs, and educators fail to understand.

VIII. HORMONAL INTERVENTIONS ARE EXPERIMENTAL PROCEDURES THAT HAVE NOT BEEN PROVEN SAFE.

154. Advocates of affirmative care assert as a fact that social transition, puberty blockers, and cross-sex hormones are known to be “safe.” This is not true. And a number of voices in the field also assert that puberty blockers act merely as a “pause” in the process of puberty-driven maturation, suggesting that this hormonal intervention has been proven to be fully reversible. This is also an unproven belief.

155. On the contrary, no studies have been done that meaningfully demonstrate that either puberty blockers or cross-sex hormones, as prescribed for gender dysphoria, are safe in other than the short run. No studies have attempted to determine whether the effects of puberty blockers, as currently being prescribed for gender dysphoria, are fully reversible. In fact, there are substantial reasons for concern that these hormonal interventions are not safe. Multiple researchers have expressed concern that the full range of possible harms have not even been correctly conceptualized. In July 2022, the FDA issued a warning that puberty blockers carry a risk of pseudotumor cerebri presenting with swelling of the optic nerve, headaches, vomiting, elevated blood pressure, and eye muscle paralysis. (FDA, 2022.)

156. Because, as I have explained in Section V, recent evidence demonstrates that pre-pubertal social transition almost always leads to progression on to puberty blockers which in turn almost always leads to the use of cross-sex hormones, physicians bear the ethical responsibility for a thorough informed consent process for parents and patients that includes this fact and its

full implications. Informed consent does not mean sharing with the parents and patients what the doctor believes: it means sharing what is known and what is not known about the intervention. Much of what doctors believe is based on mere trust in what they have been taught. Neither they themselves nor their teachers may be aware of the scientific foundation and scientific limitations of what they are recommending.

A. Use of puberty blockers has not been shown to be safe or reversible for gender dysphoria.

157. As I noted above, the recent very thorough literature review performed for the British NHS concluded that *all* available clinical evidence relating to “safety outcomes” from administration of puberty blockers for gender dysphoria is of “very low certainty.” (NHS 2020a at 6.)

158. In its 2017 Guidelines, the Endocrine Society cautioned that “in the future we need more rigorous evaluations of the effectiveness and safety of endocrine and surgical protocols” including “careful assessment of . . . the effects of prolonged delay of puberty in adolescents on bone health, gonadal function, and the brain (including effects on cognitive, emotional, social, and sexual development).” (Hembree et al. 2017 at 3874.) No such “careful” or “rigorous” evaluation of these very serious safety questions has yet been done.

159. Some advocates appear to assume that puberty blockers are “safe” because they have been approved by the Food and Drug Administration (FDA) for use to treat precocious puberty—a rare condition in which the puberty process may start at eight or younger. No such conclusion can be drawn. As the “label” for Lupron (one of the most widely prescribed puberty blockers) explains, the FDA approved the drug only *until* the “age was appropriate for entry into puberty.” The study provides no information at all as to the safety or reversibility of instead *blocking* healthy, normally-timed puberty’s beginning, and *throughout* the years that body-wide

continuing changes normally occur. Given the physical, social, and psychological dangers to the child with precocious puberty, drugs like Lupron are effective in returning the child to a puerile state without a high incidence of significant side effects—that is, they are “safe” to reverse the condition. But use of drugs to suppress normal puberty has multiple organ system effects whose long-term consequences have not been investigated.

160. **Fertility:** The Endocrine Society Guidelines rightly say that research is needed into the effect of puberty blockade on “gonadal function” and “sexual development.” The core purpose and function of puberty blockers is to prevent the maturation of the ovaries or testes, the sources of female hormones and male hormones when stimulated by the pituitary gland. From this predictable process fertility is accomplished within a few years. Despite widespread assertions that puberty blockers are “fully reversible,” there has been no study published on the critical question of whether patients ever develop normal levels of fertility if puberty blockers are terminated after a “prolonged delay of puberty.” The 2017 Endocrine Society Guidelines are correct that there are no data on achievement of fertility “following prolonged gonadotropin suppression” (that is, puberty blockade). (Hembree et al. 2017 at 3880.)

161. **Brain development:** The scientific literature is clear that important neurological growth and development in the brain occurs across puberty.¹³ The anatomic and functional effect on brain development of blocking the natural puberty process has not been well studied. A prominent Australian clinical team recently expressed concern that “no data were (or are) available on whether delaying the exposure of the brain to a sex steroid affects psychosexual, cognitive, emotional, or other neuropsychological maturation.” (Kozłowska et al. 2021 at 89.) In my opinion, given the observed correlation between puberty and brain development, the default

¹³ See Blakemore et al. 2010.

hypothesis must be that there *would* be a negative impact. For the purpose of protecting patients all over the world, the burden of proof should be on advocates to first demonstrate to a reasonable degree of certainty that brain structure and its measurable cognitive and affect processing are not negatively affected. This recalls the ethical principle: Above All Do No Harm.

162. The Endocrine Society Guidelines state that side effects of pubertal suppression “may include . . . unknown effects on brain development,” that “we need more rigorous evaluations of . . . the effects of prolonged delay of puberty in adolescents on . . . the brain (including effects on cognitive, emotional, social, and sexual development),” and stating that “animal data suggests there may be an effect of GnRH analogs [puberty blockers] on cognitive function.” (Hembree et al. 2017 at 3874, 3882, 3883.)

163. Writing in 2022, Dr. Cass strongly flagged the risk of harm to brain development in her Interim Report, stating:

“A closely linked concern [arising from use of puberty blockers] is the unknown impacts on development, maturation and cognition if a child or young person is not exposed to the physical, psychological, physiological, neurochemical and sexual changes that accompany adolescent hormone surges. It is known that adolescence is a period of significant changes in brain structure, function and connectivity. During this period, the brain strengthens some connections (myelination) and cuts back on others (synaptic pruning). There is maturation and development of frontal lobe functions which control decision making, emotional regulation, judgement and planning ability. Animal research suggests that this development is partially driven by the pubertal sex hormones, but it is unclear whether the same is true in humans. If pubertal sex hormones are essential to these brain maturation processes, this raises a secondary question of whether there is a critical time window for the processes to take place, or whether catch up is possible when oestrogen or testosterone is introduced later.

“An international interdisciplinary panel has highlighted the importance of understanding the neurodevelopmental outcomes of pubertal suppression and defined an appropriate approach for investigating this further. However, this work has not yet been undertaken.” (Cass 2022a.)

164. Given that respected voices have repeatedly raised concern about harm to the development of the adolescent's brain, one can only wonder how advocates continue to assert that use of puberty blockers is known to be "safe," and why this relevant question has not been scientifically investigated in a large group of natal males and females.

165. There has been a longitudinal study of one natal male child, assessed before, and again 20 months after, puberty suppression was commenced. It reported a reduction in the patient's "global IQ," measured an anomalous absence of certain structural brain development expected during normal male puberty, and hypothesized that "a plausible explanation for the G[lobal] IQ decrease should consider a disruption of the synchronic [i.e., appropriately timed] development of brain areas by pubertal suppression." (Schneider et al. 2017 at 7.) This should cause parents and practitioners serious concern.

166. Whether any impairment of brain development is "reversed" upon later termination of puberty blockade has, to my knowledge, not been studied. As a result, assertions by medical or mental health professionals that puberty blockade is "fully reversible" are unjustified and based on hope rather than science.

167. **Bone strength:** Multiple studies have documented adverse effects from puberty blockers on bone density. (Klink et al. 2015; Vlot et al. 2016; Joseph et al. 2019.) The most recent found that after two years on puberty blockers, the bone density measurements for a significant minority of the children had declined to clinically concerning levels. Density in the spines of some subjects fell to a level found in only 0.13% of the population. (Biggs 2021.) Some other studies have found less concerning effects on bone density. While the available evidence remains limited and conflicting, it is not possible to conclude that the treatment is "safe."

168. **Psycho-social harm:** Puberty is a time of stress, anxiety, bodily discomfort during physical development, and identity formation for *all* humans. No careful study has been done of the long-term impact on the young person's coping skills, interpersonal comfort, and intimate relationships from remaining puerile for, e.g., two to five years while one's peers are undergoing pubertal transformations, and of then undergoing an artificial puberty at an older age. However, pediatricians and mental health professionals hear of distress, concern, and social awkwardness in those who naturally have a delayed onset of puberty. In my opinion, individuals in whom puberty is delayed multiple years are likely to suffer at least subtle negative psychosocial and self-confidence effects as they stand on the sidelines witnessing their peers developing the social relationships (and attendant painful social learning experiences) that come with adolescence. (Levine 2018 at 9.) Social anxiety and social avoidance are common findings in the evaluation of trans-identified children and teens. Are we expected to believe that creating years of being further different than their peers has no lasting internal consequences? Do we ignore Adolescent Psychiatry's knowledge of the importance of peer groups among adolescents?

169. We simply do not know what all the psychological impacts of NOT grappling with puberty at the ordinary time may be, because it has not been studied. And we have no information as to whether that impact is "fully reversible."

170. In addition, since the overwhelming proportion of children who begin puberty blockers continue on to cross-sex hormones, it appears that there is an important element of "psychological irreversibility" in play. The question of to what extent the physical and developmental impacts of puberty blockers might be reversible is an academic one, if psycho-social realities mean that very few patients will ever be able to make that choice once they have started down the road of social transition and puberty blockers.

B. Use of cross-sex hormones in adolescents for gender dysphoria has not been shown to be medically safe except in the short term.

171. As with puberty blockers, all evidence concerning the safety of extended use of cross-sex hormones is of “very low quality.” The U.K. NICE evidence review cautioned that “the safety profiles” of cross-sex hormone treatments are “largely unknown,” and that several of the limited studies that do exist reported high numbers of subjects “lost to follow-up,” without explanation—a worrying indicator. (NICE 2020b.)

172. The 2020 Cochrane Review reported that: “We found insufficient evidence to determine the . . . safety of hormonal treatment approaches for transgender women in transition.” (Haupt et al. 2020 at 4.) Even the Endocrine Society tagged all its recommendations for the administration of cross-sex hormones as based on “low quality evidence.” (Hembree et al. 2017 at 3889.)

173. **Sterilization:** It is undisputed, however, that harm to the gonads is an expected effect, to the extent that it must be assumed that cross-sex hormones will sterilize the patient. Thus, the Endocrine Society 2017 Guidelines caution that “[p]rolonged exposure of the testes to estrogen has been associated with testicular damage,” that “[r]estoration of spermatogenesis after prolonged estrogen treatment has not been studied,” and that “[i]n biological females, the effect of prolonged treatment with exogenous testosterone upon ovarian function is uncertain.” (Hembree et al. 2017 at 3880.)¹⁴

174. The Guidelines go on to recommend that the practitioner counsel the patient about the (problematic and uncertain) options available to collect and preserve fertile sperm or ova

¹⁴ See also Guss et al. 2015 at 4 (“a side effect [of cross-sex hormones] may be infertility”) and at 5 (“cross-sex hormones . . . may have irreversible effects”); Tishelman et al. 2015 at 8 (Cross-sex hormones are “irreversible interventions” with “significant ramifications for fertility”).

before beginning cross-sex hormones. The life-long negative emotional impact of infertility on both men and women has been well studied. While this impact has not been studied specifically within the transgender population, the opportunity to be a parent is likely a human, emotional need, and so should be considered an important risk factor when considering gender transition for any patient.

175. **Sexual response:** Puberty blockers prevent maturation of the sexual organs and response. Some, and perhaps many, transgender individuals who did not go through puberty consistent with their sex and are then put on cross-sex hormones face significantly diminished sexual response as they enter adulthood and are unable ever to experience orgasm. In the case of males, the cross-sex administration of estrogen limits penile genital growth and function. In the case of females, prolonged exposure to exogenous testosterone impairs vaginal function. Much has been written about the negative psychological and relational consequences of anorgasmia among non-transgender individuals that is ultimately applicable to the transgendered. (Levine 2018 at 6.) At the same time, prolonged exposure of females to exogenous testosterone often increases sexual drive to a distracting degree. It is likely that parents and physicians are uncomfortable discussing any aspects of genital sexual activity with patients.

176. **Cardiovascular harm:** Several researchers have reported that cross-sex hormones increase the occurrence of various types of cardiovascular disease, including strokes, blood clots, and other acute cardiovascular events. (Getahun et al. 2018; Guss et al. 2015; Asscheman et al. 2011.) With that said, I agree with the conclusion of the Endocrine Society committee (like that of the NICE Evidence Review) that: “A systematic review of the literature found that data were insufficient (due to very low-quality evidence) to allow a meaningful assessment of patient-important outcomes, such as death, stroke, myocardial infarction, or

venous thromboembolism in transgender males. Future research is needed to ascertain the potential harm of hormonal therapies.” (Hembree et al. 2017 at 3891.) Future research questions concerning long-term harms need to be far more precisely defined. The question of whether cross-sex hormones are safe for adolescents and young adults cannot be answered by analogies to hormone replacement therapy in menopausal women (which is not a cross-sex usage). Medicine has answered safety questions for menopausal women in terms of cancer and cardiovascular safety: at what dose, for what duration, and at what age range. The science of endocrine treatment of gender dysphoric youth is being bypassed by short-term clinical impressions of safety even though physicians know that cardiovascular and cancer processes often develop over many years.

177. Further, in contrast to administration for menopausal women, hormones begun in adolescence are likely to be administered for four to six decades. The published evidence of adverse impact, coupled with the lack of data sufficient to reach a firm conclusion, make it irresponsible to assert that cross-sex hormones “are safe.”

178. **Harm to family and friendship relationships:** As a psychiatrist, I recognize that mental health is a critical part of health generally, and that relationships cannot be separated from and profoundly impact mental health. Gender transition routinely leads to isolation from at least a significant portion of one’s family in adulthood. In the case of a juvenile transition, this will be less dramatic while the child is young, but commonly increases over time as siblings who marry and have children of their own do not wish the transgender individual to be in contact with those children. By adulthood, the friendships of transgender individuals tend to be confined to other transgender individuals (often “virtual” friends known only online) and the generally limited set

of others who are comfortable interacting with transgender individuals. (Levine 2017 at 5.) My concerns about this are based on decades of observations in my professional work with patients.

179. **Sexual-romantic harms associated with transition:** After adolescence, transgender individuals find the pool of individuals willing to develop a romantic and intimate relationship with them to be greatly diminished. When a trans person who passes well reveals his or her natal sex, many potential mates lose interest. When a trans person does not pass well, options are likely further diminished. But regardless of a person's appearance, these adults soon learn that many of their dates are looking for exotic sexual experiences rather than genuinely loving relationships. (Levine 2017 at 5, 13; Levine 2013 at 40; Anzani 2021.)

C. The timing of harms.

180. The multi-year delay between start of hormones and the spike in completed suicide demonstrated by several of the studies discussed in Section VII.B above provide a warning that the safety and beneficence of these treatments cannot be judged based on short-term studies or those that do not continue into adulthood. Similarly, several of the harms would not be expected to manifest until the patients reach at least middle-age. For example, stroke or other serious cardiovascular event is a complication that is unlikely to manifest during teen years even if its likelihood over the patient's lifetime has been materially increased via obesity, lipid abnormalities, and smoking. Regret over sterilization or over an inability to form a stable romantic relationship may occur sooner. Psychological challenges of being a trans adult may become manifest after the medical profession is only doing routine follow up care—or, in many cases, has lost contact with the patient altogether. Because few, if any, clinics in this country are conducting systematic long-term follow-up with their child and adolescent patients, the doctors who counsel, prescribe, or perform hormonal and surgical therapies are unlikely ever to become aware of the later negative life impacts, however severe. These concerns are compounded by the

findings in the recent “detransitioner” research that 76% did not inform their clinicians of their detransition. (Littman 2021.)

181. The possibility that steps along the transition and affirmation pathway, while lessening the pain of gender dysphoria in the short term, could lead to additional sources of crippling emotional and psychological pain, are too often not considered by advocates of social transition and not considered at all by the trans child. (Levine 2016 at 243.) Clinicians must distinguish the apparent short-term safety of hormones from likely or possible long-term consequences, and help the patient or parents understand these implications as well. The young patient may feel, “I don’t care if I die young, just as long I get to live as a woman.” The mature adult may take a different view. Hopefully, so will the child’s physician.

182. Individual patients often pin excessive hope in transition, believing that transition will solve what are in fact ordinary social stresses associated with maturation, or mental health co-morbidities. In this way, transition can prevent them from mastering personal challenges at the appropriate time or directly addressing conditions that require treatment. When the hoped-for “vanishing” of other mental health or social difficulties does not occur, disappointment, distress, and depression may ensue. It is noteworthy that half of the respondents to the larger “detransitioner” survey reported that their transition had not helped the gender dysphoria, and 70% had concluded that their gender dysphoria was related to other issues. (Vandenbussche 2021.) Without the clinical experience of monitoring the psychosocial outcomes of these young patients as they age into adulthood, many such professionals experience no challenge to their affirmative beliefs. But medical and mental health professionals who deliver trans affirmative care for those with previous and co-existing mental health problems have an ethical obligation to

inform themselves, and to inform patients and parents, that these dramatic treatments are not a panacea.

183. In sum, whether we consider physical or mental health, science does not permit us to say that either puberty blockers or cross-sex hormones are “safe.”

IX. PARENTAL INVOLVEMENT IS ESSENTIAL IN MOST CASES FOR ETHICAL TREATMENT OF A CHILD WHO SUFFERS FROM GENDER DYSPHORIA OR SEEKS SOCIAL TRANSITION.

184. For many reasons, in the large majority of cases the involvement of one or both parents will be essential to a responsible, effective, and indeed ethical diagnosis and treatment of a child who is or may be suffering from gender dysphoria or one of the related conditions I have described above.

A. Involvement of a mental health professional is necessary for accurate diagnosis and appropriate treatment, and access to a mental health professional ordinarily requires parental involvement.

185. Both the WPATH “Standards of Care” and the Endocrine Society Guidelines are clear that the involvement of a credentialed MHP is important in assessing, diagnosing, and supporting minors who are experiencing gender dysphoria or similar discomfort.

186. Specifically, the Endocrine Society Guidelines advise that: “decisions regarding the social transition of prepubertal youth are made with the assistance of a mental health professional or similarly experienced professional,” and further note that “[b]ecause of the psychological vulnerability of many individuals with GD/gender incongruence, it is important that mental health care is available before, during, and sometimes also after transitioning.” (Hembree et al. 2017 at 3872; 3876.)

187. Yet without parental involvement, schools are not able to send minors to a competent MHP for a comprehensive assessment and diagnosis, nor the accompanying support

that would be required. School policies that circumvent parental involvement therefore act to block the involvement of an MHP to the clear detriment of the minor and, ultimately, to the parents as well.

B. Parental involvement is necessary for accurate and thorough diagnosis of the child.

188. Once an appropriate MHP is involved, parents remain essential to the diagnostic process. A claim or expression of interest in a transgender identity by a child must be the beginning, not the end, of a careful diagnostic and therapeutic process. Transgender identification in a child is not a simple, uniform phenomenon; there is no single pathway of development and outcomes governing transgender identity, nor one that predominates over the large majority of cases. Instead, as individuals grow up and age, depending on their differing psychological, social, familial, and life experiences, their outcomes differ widely.

189. What can be observed by—for example—a teacher or counselor at school, although important, is only one limited window into the multi-faceted life and psyche of a child. A classroom teacher’s perspective emphasizes learning capacities, social interactions, and gender style relative to other similarly aged children, typically during just one nine-month school year.

190. As a starting point, any child suffering serious tension between his or her reproductive potential, biologically-dictated body, and sense of gender identity (or desired gender identity) should have the assistance and support of a skilled mental health professional. A meaningful diagnosis of the child’s condition requires a sustained relationship between an MHP, the child, and the parents over time. The work cannot be accomplished in a meeting or two.

191. What the child means by a claim of transgender identity may vary widely depending on age. Younger grade school children have some concept of gender, but they “know”

little about sex, about the future meanings and manifestations of male or female, about gender identity, and about the evolution of all aspects of identity over the course of life. What they know is how they currently feel and think, what they have been told by adults, and what they have observed and unconsciously absorbed from various family members. Thus, these children demonstrate atypicality in choice of colors, clothing, toys, and playmates. These behavioral patterns form the basis of the label of transgendered or the diagnosis of Gender Dysphoria of Childhood. The diagnosis tells nothing about the forces that shaped the child's thinking and behavior, nor does it dictate the need for affirmative care.

192. The child may or may not actually suffer from Gender Dysphoria, and this should be determined.¹⁵ Input from parents is important to evaluating whether a child is suffering from “clinically significant distress or impairment in social, school, or other important areas of functioning.” (DSM-5-TR.)

193. Parents typically have observed the child over his or her entire lifetime, and so will have unique insight into whether the child's attraction to a transgender identity is longstanding and stable, or whether it has been abrupt and associated with intensive online interaction with transgender “communities.” (Levine 2021; Leibowitz & de Vries 2016 at 26.) Based on my experience, many children manifesting Gender Dysphoria have only one functional parent, and others are adopted or in foster care. Early life history may not always be available or reliably correct. All children are profoundly influenced by family members interactions and how

¹⁵ See Shumer et al. 2016b at 7: “The Endocrine Society guidelines recommend that children and adolescents with gender concerns be seen by a mental health professional with training in child and adolescent developmental psychology. The mental health professional should: 1) determine whether the individual fulfills DSM criteria for gender dysphoria; 2) inform the individual with respect to possibilities and limitations of sex reassignment and other treatments; and 3) assess for potential psychological comorbidities.”

they are regarded and treated. The gender atypical child is no exception. (Katz-Wise 2017 at 9.) The MHP evaluator needs to explore the sometimes secretive inner dynamics of the family. This often requires building of trust between the parents and the MHP. Medical systems value efficiency, high throughput of processing patients, and making diagnoses upon the first visit. All of this tends to obscure the MHP's ability to understand the life experiences of the minor patient.

194. This important dynamic is recognized by WPATH "Standards of Care" which says that any psychological assessment of children or adolescents: "should include an evaluation of the strengths and weaknesses of family functioning." (WPATH 2012 at 15.) Dr. Edwards-Leeper and Dr. Anderson also recognized this, writing in the Washington Post that: "[t]he approach WPATH recommends is collaborative and aims to provide a developmentally appropriate process that involves the parents and takes the complexities of adolescence into consideration." (Edwards-Leeper & Anderson 2021.)

195. In addition, as I detail elsewhere, a large proportion of children (and adults) who present with a transgender identity suffer from identifiable psychiatric co-morbidities. (See Section II.C, II.E.) Regardless of whether these are in any way related to the child's gender identity, it is important that these co-morbidities be identified and that appropriate psychotherapeutic help is obtained for the minor.

196. For many parents, a trans identity may appear to arise "out of the blue" around puberty. They may have been dealing with other "normal" behavioral problems in their child—eating patterns, learning disability, social anxiety, autism, prolonged bedwetting, depression, cutting, rebellion against religion, etc. However, the announcement of a new identity may be first problem for which they seek a MHP's evaluation.

197. A child who exhibits or expresses an interest in a transgender identity should be evaluated for psychiatric co-morbidities and for the nature of that form of gender identity. A thorough, careful evaluation of the child, his family interactions, and life course, needs to be undertaken thoroughly.

C. Parental involvement is important for effective psychotherapeutic treatment and support of the child

198. Theories as to the causes of psychological problems, and how they can best be addressed once identified vary widely. There is, however, a broad consensus on the importance of identifying and addressing the causes of distress regardless of its symptomatic manifestation. This is accomplished via a stable trusting relationship with a MHP who is able to form caring and empathetic relationships with the child and parents. Child-oriented psychotherapists are diverse in how they think about and perform parent guidance and child interventions (Zucker 2020.)

199. Since the child's sense of gender develops in interaction with his parents, and the child's own emerging gender roles and relationships, the MHP needs to delve into family, marital, and each parent's relationship patterns with the child. These topics are often referred to as the elements of family dynamics.

200. For a child to perform different gender identities and gender roles at home and at school, thereby deceiving parents about his or her current self-concepts, is inherently psychologically unhealthy. No professional medical organization has endorsed such an approach. Holding the secret increases minor's anxiety load and can consolidate the young person's view of parents as "the enemy." The minor can fall into assumptions such as "my parents would not understand or accept. They may throw me out of the house or want to kill me." While clinicians occasionally encounter volatile parental responses to the initial announcement of a trans identity,

this is very far from the usual responses of shocked, concerned, and caring parents who remain loving and committed to their child. Parents have a vested interest in the mental health of their child—an interest that is not facilitated by a school deceiving them and increasing the anxiety of the child around what the parent’s response might be. Indeed, the WPATH “Standards of Care” explicitly recognizes the need to support “[c]lients and their families” in the difficult issues that arise.

201. In my experience, many parents are in fact taken aback by their child’s announcement of a trans identity. However, clinicians are there to help them and their offspring address the gulf between them. Extending secrecy and facilitating a “double life” is neither the path to psychological health for the minor nor the parents.

D. Schools are not equipped to enable and obtain informed consent, nor resolve the complex ethical implications raised by social transition.

202. As I have explained in Section V.B above, social transition in young children is a powerful psychotherapeutic intervention that multiple informed observers have warned is likely to reduce the number of children “desisting” from transgender identity. Moreover, as I detailed in Section V.C above, social transition starts a young child on a “conveyor belt” path that leads in the large majority of cases to the administration of puberty blockers, which in turn almost inevitably leads to the administration of cross-sex hormones – all of which carry known risks. Given these risks, medical and mental health ethics require at least two things before a minor child is placed on the first step of that conveyor belt: (i) informed consent from the parents (as the minor can only provide *assent*), and (ii) concurrence in the decision by a professional who exercises clinical judgment informed by scientific principles.

203. First, the threshold fact is that educators and generally trained school counselors do not have sufficient knowledge of the complexities and risks in this field to provide the

accurate and extensive information that is an essential prerequisite to informed consent.

Knowing the uncertainties in this arena of care requires an open, honest, thorough, and informed consent process. (Levine et al, 2022.) Consent without comprehensive information cannot be informed consent.

204. Second, children are held to be cognitively incapable of giving informed consent to life-altering interventions such as are entailed by affirmative care (including social transition) as they have not lived long enough to appreciate each element of the affirmative care. It is the ethical responsibility of the medical professional to inform and to see to it that the parents as well as the child comprehend the various possibilities of harm. This requirement would be subverted by a school policy that provides for personnel to undertake the social transition of minors without the knowledge and permission of the parents.

205. Third, because they do not possess the relevant scientific knowledge, school personnel are not in a position to exercise the separate and independent judgment that ethical principles would require of a medical or mental health professional. Medical professionals, be they physicians or psychologists, must weigh the risks and benefits of treatment against the benefits and harms of not treating, in the short and in the long term. In medicine as a whole, when in the judgment of the medical professional the risks outweigh the benefits, ethical principles prohibit the treatment. The medical professional may not abdicate or delegate this independent ethical responsibility.

206. Most commonly, meaningful engagement with difficult and painful questions such as those above requires a process that will consist of multiple discussions in a psychotherapeutic or counseling context, not merely “disclosure” of facts. In my experience, a

too-rapid or too-eager attachment to some outcome is a warning flag that the patient is not able to tolerate knowledge of the risks and alternative approaches.

207. The absence of long-term studies in the arena of childhood gender dysphoria or the more recently documented phenomenon of “rapid onset gender dysphoria” among adolescents means that therapeutic responses to these conditions are still at a primitive stage of development, and must be considered to be experimental, rendering adequately informed consent all the more essential, and all the more difficult to obtain. Claims that a civil right is at stake do not change the fact that what is proposed is a social and medical experiment. (Levine 2016 at 241.)

208. Hence, it is evident that schools have neither the moral, nor legal, authority to resolve these complex medical and ethical issues and proceed to socially transition a child in the school context while excluding the child’s parents or guardians.

Bibliography

- Adelson, S. & American Academy of Child & Adolescent Psychiatry (2012). *Practice Parameter on Gay, Lesbian, or Bisexual Sexual Orientation, Gender Nonconformity, and Gender Discordance in Children and Adolescents*. JOURNAL OF THE AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY 51(9) 957.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- American Psychological Association. *Guidelines for Psychological Practice with Transgender & Gender Nonconforming People* (2015). AMERICAN PSYCHOLOGIST 70(9) 832.
- Anderson, E. (2022, January 3). *Opinion: When it comes to trans youth, we're in danger of losing our way*. THE SAN FRANCISCO EXAMINER. Accessed January 5, 2022 <http://www.sfexaminer.com/opinion/are-we-seeing-a-phenomenon-of-trans-youth-social-contagion/>
- Anzani, A., Lindley, L., Tognasso, G., Galupo, M. & Prunas, A. (2021). “*Being Talked to Like I Was a Sex Toy, Like Being Transgender Was Simply for the Enjoyment of Someone Else*”: *Fetishization and Sexualization of Transgender and Nonbinary Individuals*. ARCHIVES OF SEXUAL BEHAVIOR 50(3) 897-911..
- Asscheman, H., Giltay, E. J., Megens, J. A. J., de Ronde, W. (Pim), van Trotsenburg, M. A. A., & Gooren, L. J. G. (2011). *A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones*. EUROPEAN JOURNAL OF ENDOCRINOLOGY 164(4) 635–642.
- Balshem, H., Helfand, M., Schünemann, H. J., Oxman, A. D., Kunz, R., Brozek, J., Vist, G. E., Falck-Ytter, Y., Meerpohl, J., & Norris, S. (2011). *GRADE guidelines: 3. Rating the quality of evidence*. JOURNAL OF CLINICAL EPIDEMIOLOGY 64(4), 401–406.
- Becerra-Culqui, T. et. al. (2018). *Mental Health of Transgender and Gender Nonconforming Youth Compared with Their Peers*. PEDIATRICS 141(5).
- Bhargava, A., et al. (2021). *Considering Sex as a Biological Variable in Basic and Clinical Studies: An Endocrine Society Scientific Statement*. ENDOCRINE REVIEWS 42(3) 219-158.
- Biggs, M. (2021). *Revisiting the effect of GnRH analogue treatment on bone mineral density in young adolescents with gender dysphoria*. JOURNAL OF PEDIATRIC ENDOCRINOLOGY AND METABOLISM 34(7), 937-939.

- Biggs, M. (2022a). *Estrogen is Associated with Greater Suicidality among Transgender Males, and Puberty Suppression is not Associated with Better Mental Health Outcomes for Either Sex*. [Journals.plos.org/plosone/article/comment?id=10.1371/annotation/dcc6a58e-592a-49d4-9b65-ff65df2aa8f6](https://doi.org/10.1371/annotation/dcc6a58e-592a-49d4-9b65-ff65df2aa8f6).
- Biggs, M. (2022b). *Suicide by Clinic-Referred Transgender Adolescents in the United Kingdom*. ARCHIVES OF SEXUAL BEHAVIOR. <https://doi.org/10.1007/s10508-022-02287-7>.
- Blakemore, S., Burnett, S., and Dahl, R. (2010). *The Role of Puberty in the Developing Adolescent Brain*. HUMAN BRAIN MAPPING 31:926-933.
- Boyd, I., Hackett, T. & Bewley, S. (2022). *Care of Transgender Patients: A General Practice Quality Improvement Approach*. HEALTHCARE. 10(1):121.
- Bränström, 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.
- Bränström, R., & Pachankis, J. E. (2020b). *Correction to Bränström and Pachankis*. (2020). AMERICAN JOURNAL OF PSYCHIATRY, 177(8), 734–734. <https://doi.org/10.1176/appi.ajp.2020.1778correction>
- Brik, T. et al. (2020). *Trajectories of Adolescents Treated with Gonadotropin-Releasing Hormone Analogues for Gender Dysphoria*. ARCHIVES OF SEXUAL BEHAVIOR. <https://doi.org/10.1007/s10508-020-01660-8>.
- Brooks, L. (2022, July 28). *Tavistock gender identity clinic is closing: what happens next?* THE GUARDIAN. Accessed August 20, 2022 <https://www.theguardian.com/society/2022/jul/28/tavistock-gender-identity-clinic-is-closing-what-happens-next>
- Canetto, S. S., Antonelli, P., Ciccotti, A., Dettore, D., & Lamis, D. A. (2021). *Suicidal as Normal - A Lesbian, Gay, and Bisexual Youth Script?*. Crisis, 42(4), 292–300. <https://doi.org/10.1027/0227-5910/a000730>
- Cantor, J. (2019). *Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy*. JOURNAL OF SEX & MARITAL THERAPY, 46(4), 307–313.
- Carmichael, P., Butler, G., Masic, U., Cole, T. J., De Stavola, B. L., Davidson, S., Skageberg, E. M., Khadr, S., & Viner, R. M. (2021). *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*. PLOS ONE, 16(2), e0243894.
- Cass, H. (2022a) *Independent review of gender identity services for children and young people: Interim report*. <https://cass.independent-review.uk/publications/interim-report/>

- Cass, H. (2022b) *Letter to NHS England: Independent review of gender identity services for children and young people – further advice* . https://cass.independent-review.uk/wp-content/uploads/2022/07/Cass-Review-Letter-to-NHSE_19-July-2022.pdf
- Clark, B. A., & Virani, A. (2021). This Wasn't a Split-Second Decision": An Empirical Ethical Analysis of Transgender Youth Capacity, Rights, and Authority to Consent to Hormone Therapy. *Journal of bioethical inquiry*, 18(1), 151–164. <https://doi.org/10.1007/s11673-020-10086-9>
- Cohen-Kettenis, P. and Kuiper, B. (1984). *Transsexuality and Psychotherapy*. TIJDSCHRIFT VOOR PSYCHOTHERAPIE 10 (153-166).
- Cohen-Kettenis, P. T., Delemarre-van de Waal, H. A., & Gooren, L. J. G. (2008). *The treatment of adolescent transsexuals: Changing insights*. THE JOURNAL OF SEXUAL MEDICINE, 5(8), 1892–1897.
- D'Angelo, R. (2018). *Psychiatry's ethical involvement in gender-affirming care*. AUSTRALASIAN PSYCHIATRY 26(5), 460–463.
- D'Angelo, R., Syrulnik, El, Ayad, S., Marchiano, L., Kenny, D.T., & Clarke, P. (2021). *One Size Does Not Fit All: In Support of Psychotherapy for Gender Dysphoria*. ARCHIVES OF SEXUAL BEHAVIOR 50(1) 7-16.
- Davis, L. (2022). *A Trans Pioneer Explains Her Resignation from the US Professional Association for Transgender Health*. QUILETTE. Accessed February 1, 2022. <https://quillette.com/2022/01/06/a-transgender-pioneer-explains-why-she-stepped-down-from-uspath-and-wpath/>
- de Vries, A. L. C. (2020). *Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents*. PEDIATRICS 146(4), e2020010611.
- Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L. V., Långström, N., & Landén, M. (2011). *Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden*. PLoS ONE 6(2), e16885.
- Dhejne, C., Öberg, K., Arver, S., & Landén, M. (2014). *An Analysis of All Applications for Sex Reassignment Surgery in Sweden, 1960–2010: Prevalence, Incidence, and Regrets*. ARCHIVES OF SEXUAL BEHAVIOR, 43(8), 1535–1545.
- Dreger, A. (2015) *Galileo's Middle Finger: Heretics, Activists, and One Scholar's Search for Justice Paperback*. PENGUIN BOOKS.
- Edwards-Leeper, L. and Anderson, E. (November 24, 2021). *The Mental Health Establishment is Failing Trans Kids*. THE WASHINGTON POST. Accessed February 1, 2022. <https://www.washingtonpost.com/outlook/2021/11/24/trans-kids-therapy-psychologist/>

- Edwards-Leeper, L. et al. (2017). *Psychological Profile of the First Sample of Transgender Youth Presenting for Medical Intervention in a U.S. Pediatric Gender Center*. PSYCHOLOGY OF SEXUAL ORIENTATION AND GENDER DIVERSITY 4(3) 374.
- Ehrensaft, B. (2015). *Listening and Learning from Gender-Nonconforming Children*. THE PSYCHOANALYTIC STUDY OF THE CHILD 68(1) 28.
- Entwistle, K. (2020). *Debate: Reality check – Detransitioners’ testimonies require us to rethink gender dysphoria*. CHILD AND ADOLESCENT MENTAL HEALTH camh.12380.
- Evans, M. and Evans, S. (2021). *Psychotherapy of Gender Dysphoria of Children and Young Adults*. PHOENIX PUBLICATION, UK.
- Expósito-Campos, P. (2021). *A Typology of Gender Detransition and Its Implications for Healthcare Providers*. JOURNAL OF SEX & MARITAL THERAPY. <https://doi.org/10.1080/0092623X.2020.1869126>.
- Division of Florida Medicaid (2022). *Generally Accepted Professional Medical Standard Determination on the Treatment of Gender Dysphoria*. https://ahca.myflorida.com/letkidsbekids/docs/AHCA_GAPMS_June_2022_Report.pdf
- Food and Drug Administration (2022). *Update: Risk of pseudotumor cerebri added to labeling for gonadotropin-releasing hormone agonists*. [https://www.fda.gov/media/159663/download#:~:text=The%20Food%20and%20Drug%20Administration%20\(FDA\)%20has%20added%20a%20warning,precocious%20puberty%20in%20pediatric%20patients](https://www.fda.gov/media/159663/download#:~:text=The%20Food%20and%20Drug%20Administration%20(FDA)%20has%20added%20a%20warning,precocious%20puberty%20in%20pediatric%20patients).
- Frigerio, A. et al. (2021). *Structural, Functional, and Metabolic Brain Differences as a Function of Gender Identity or Sexual Orientation: A Systematic Review of the Human Neuroimaging Literature*. ARCHIVES OF SEXUAL BEHAVIOR 50:3329-3352.
- Getahun, D., Nash, R., Flanders, W. D., Baird, T. C., Becerra-Culqui, T. A., Cromwell, L., Hunkeler, E., Lash, T. L., Millman, A., Quinn, V. P., Robinson, B., Roblin, D., Silverberg, M. J., Safer, J., Slovis, J., Tangpricha, V., & Goodman, M. (2018). *Cross-sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study*. ANNALS OF INTERNAL MEDICINE, 169(4), 205.
- Gender Identity Development Service of the NHS (2019). *Referrals to the Gender Identity Development Service (GIDS) Level Off in 2018-19*. <https://tavistockandportman.nhg.uk/about-us/news/stories/referrals-gender-identity-development-service-gids-level-2018-19>.
- Ghorayshi, A. (2022, January 13). *Doctors Debate Whether Trans Teens Need Therapy Before Hormones*. THE NEW YORK TIMES. Accessed February 1, 2022. <https://www.nytimes.com/2022/01/13/health/transgender-teens-hormones.html>.

- Griffin, L., Clyde, K., Byng, R., & Bewley, S. (2021). *Sex, Gender and Gender Identity: A Re-evaluation of the Evidence*. BJPSYCH BULLETIN, 45(5), 291-299.
- Guss, C. et al. (2015). *Transgender and Gender Nonconforming Adolescent Care: Psychosocial and Medical Considerations*. CURRENT OPINIONS IN PEDIATRICS 26(4) 421.
- Hall, R., Mitchell, L., & Sachdeva, J. (2021). *Access to care and frequency of detransition among a cohort discharged by a UK national adult gender identity clinic: Retrospective case-note review*. BJPSYCH OPEN, 7(6), e184.
- Haupt, C. et al. (2020). *Antiandrogen or Estradiol Treatment or Both During Hormone Therapy in Transitioning Transgender Women (Review)*. COCHRANE DATABASE OF SYSTEMATIC REVIEWS 11. DOI: [10.1002/14651858.CD013138.pub2](https://doi.org/10.1002/14651858.CD013138.pub2).
- Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S. E., Meyer, W. J., Murad, M. H., Rosenthal, S. M., Safer, J. D., Tangpricha, V., & T'Sjoen, G. G. (2017). *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society* Clinical Practice Guideline*. THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM 102(11), 3869–3903.
- Hruz, P. (2020). *Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria*. THE LINACRE QUARTERLY 87(1):34-42.
- Irwig, M. (2022). *Detransition Among Transgender and Gender-Diverse People—An Increasing and Increasingly Complex Phenomenon. Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria*. THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM. <https://doi.org/10.1210/clinem/dgac356>
- Johns, M. M., Lowry, R., Andrzejewski, J., Barrios, L. C., Demissie, Z., McManus, T., Rasberry, C. N., Robin, L., & Underwood, J. M. (2019). *Transgender Identity and Experiences of Violence Victimization, Substance Use, Suicide Risk, and Sexual Risk Behaviors Among High School Students—19 States and Large Urban School Districts, 2017*. MORBIDITY AND MORTALITY WEEKLY REPORT 68(3) 67–71.
- Joseph, T., Ting, J., & Butler, G. (2019). *The effect of GnRH analogue treatment on bone mineral density in young adolescents with gender dysphoria: findings from a large national cohort*. JOURNAL OF PEDIATRIC ENDOCRINOLOGY METABOLISM 32(10):1077-1081.
- Kaltiala-Heino, R., Bergman, H., Työläjärvi, M., & Frisen, L. (2018). *Gender dysphoria in adolescence: Current perspectives*. ADOLESCENT HEALTH, MEDICINE AND THERAPEUTICS 9 (31–41).

- Kaltiala-Heino, R., Sumia, M., Työläjärvi, M., & Lindberg, N. (2015). *Two years of gender identity service for minors: Overrepresentation of natal girls with severe problems in adolescent development*. CHILD AND ADOLESCENT PSYCHIATRY AND MENTAL HEALTH, 9(1), 9.
- Katz-Wise, S. (2017). *Transactional Pathways of Transgender Identity Development in Transgender and Gender Nonconforming Youth and Caregivers from the Trans Youth Family Study*. INT J TRANSGEND. 18(3): 243–263.
- Kendler K. S. (2019). *From Many to One to Many-the Search for Causes of Psychiatric Illness*. JAMA PSYCHIATRY, 76(10) 1085–1091.
- Kidd, K. M., Sequeira, G. M., Douglas, C., Paglisotti, T., Inwards-Breland, D. J., Miller, E., & Coulter, R. W. S. (2021). *Prevalence of Gender-Diverse Youth in an Urban School District*. PEDIATRICS, 147(6) e2020049823.
- Klink, D. et al. (2015). *Bone mass in young adulthood following gonadotropin-releasing hormone analog treatment and cross-sex hormone treatment in adolescents with gender dysphoria*. JOURNAL OF CLINICAL ENDOCRINOLOGY METABOLISM 100(2):E270-5.
- Kozłowska, K., Chudleigh, C., McClure, G., Maguire, A. M., & Ambler, G. R. (2021). *Attachment Patterns in Children and Adolescents with Gender Dysphoria*. FRONTIERS IN PSYCHOLOGY 11. <https://doi.org/10.3389/fpsyg.2020.582688>.
- Laidlaw, M. K., Van Meter, Q. L., Hruz, P. W., Van Mol, A., & Malone, W. J. (2019). *Letter to the Editor: "Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline"*. THE JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM. 104(3), 686–687.
- Landén, M. (2020). *The Effect of Gender-Affirming Treatment on Psychiatric Morbidity Is Still Undecided*. AMERICAN JOURNAL OF PSYCHIATRY. 177(8):767-768.
- Leibowitz, S., & de Vries, A. L. (2016). *Gender dysphoria in adolescence*. INTERNATIONAL REVIEW OF PSYCHIATRY (Abingdon, England), 28(1), 21–35. <https://doi.org/10.3109/09540261.2015.1124844>
- Levine, S. (2013). *Barriers to Loving: A Clinician's Perspective*. (Routledge, New York 2013).
- Levine, S. (2016). *Reflections on the Legal Battles Over Prisoners with Gender Dysphoria*. JOURNAL OF THE AMERICAN ACADEMY OF PSYCHIATRY LAW 44, 236.

- Levine, S. (2017). *Ethical Concerns About Emerging Treatment Paradigms for Gender Dysphoria*. JOURNAL OF SEX & MARITAL THERAPY at 7. DOI: [10.1080/0092623X.2017.1309482](https://doi.org/10.1080/0092623X.2017.1309482).
- Levine, S. (2019). *Informed Consent for Transgender Patients*, JOURNAL OF SEX & MARITAL THERAPY 45(3):218-229.
- Levine, S. (2021). *Reflections on the Clinician's Role with Individuals Who Self-identify as Transgender*. ARCHIVES OF SEXUAL BEHAVIOR. <https://doi.org/10.1007/s10508-021-02142-1>
- Levine, S., Abbruzzese E., Mason J.. (2022). *Reconsideration of Informed Consent for Trans-identified Children, Adolescents, and Young Adults*. J. SEX AND MARITAL THERAPY. <https://doi.org/10.1080/0092623X.2022.2046221>
- Lichtenstein M, Stein L, Connolly E, Goldstein ZG, Martinson T, Tiersten L, Shin SJ, Pang JH, Safer JD (2020). *The Mount Sinai patient-centered preoperative criteria meant to optimize outcomes are less of a barrier to care than WPATH SOC 7 criteria before transgender-specific surgery*. TRANSGENDER HEALTH 5:3, 166–172.
- Littman, L. (2018). *Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria*. PLoS ONE 13(8): e0202330.
- Littman, L. (2021). *Individuals Treated for Gender Dysphoria with Medical and/or Surgical Transition Who Subsequently Detransitioned: A Survey of 100 Detransitioners*. ARCHIVES OF SEXUAL BEHAVIOR. <https://doi.org/10.1007/s10508-021-02163-w>
- Malone, W., Hruz, P., Mason, J., Beck, S., (2021). *Letter to the Editor from William J. Malone et al: "Proper Care of Transgender and Gender-diverse Persons in the Setting of Proposed Discrimination: A Policy Perspective"*. THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM Volume 106, Issue 8, August 2021, Pages e3287–e3288.
- Marchiano, L. (2021). *Gender detransition: a case study*. JOURNAL OF ANALYTICAL PSYCHOLOGY. 66:813– 832.
- Meyer-Bahlburg H. F. (2005). *Gender identity outcome in female-raised 46,XY persons with penile agenesis, cloacal exstrophy of the bladder, or penile ablation*. ARCHIVES OF SEXUAL BEHAVIOR, 34(4), 423–438.
- National Institute for Health and Care Excellence (2021a). *Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria*. <https://arms.nice.org.uk/resources/hub/1070905/attachment>

- National Institute for Health and Care Excellence. (2021b). *Evidence review: Gender-affirming hormones for children and adolescents with gender dysphoria*. <https://arms.nice.org.uk/resources/hub/1070871/attachment>
- National Institutes of Health. *NIH Policy and Guidelines on The Inclusion of Women and Minorities as Subjects in Clinical Research*. Notice Number NOT-OD-02-001 released 10-09-2001. <https://grants.nih.gov/policy/inclusion/women-and-minorities/guidelines.htm>
- National Institutes of Health. *Consideration of Sex as a Biological Variable in NIH-Funded Research*. Notice Number NOT-OD-15-102 released 06-09-2015. <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-102.html>
- National Institutes of Health, Office of Research on Women's Health. *How Sex and Gender Influence Health and Disease*. Downloaded 2-11-2022 https://orwh.od.nih.gov/sites/orwh/files/docs/SexGenderInfographic_11x17_508.pdf.
- Newcomb, M. et al. (2020). *High Burden of Mental Health Problems, Substance Use, Violence, and Related Psychosocial Factors in Transgender, Non-Binary, and Gender Diverse Youth and Young Adults*. ARCHIVES OF SEXUAL BEHAVIOR 49(2) 645-659.
- Reiner, W. G., & Gearhart, J. P. (2004). *Discordant sexual identity in some genetic males with cloacal exstrophy assigned to female sex at birth*. THE NEW ENGLAND JOURNAL OF MEDICINE 350(4), 333–341.
- Reisner, S. et al. (2015), *Mental Health of Transgender Youth in Care at an Adolescent Urban Community Health Center: A Matched Retrospective Cohort Study*, JOURNAL OF ADOLESCENT HEALTH 56(3) at 6.
- Rider, G. et al. (2018), *Health and Care Utilization of Transgender/Gender Non-Conforming Youth: A Population Based Study*. PEDIATRICS at 4, DOI: [10.1542/peds.2017-1683](https://doi.org/10.1542/peds.2017-1683).
- Ristori, J., & Steensma, T. D. (2016). *Gender dysphoria in childhood*. INTERNATIONAL REVIEW OF PSYCHIATRY, 28(1), 13–20.
- Royal Australian and New Zealand College of Psychiatrists. (2021) *Statement: Recognising and addressing the mental health needs of people experiencing Gender Dysphoria / Gender Incongruence*. <https://www.ranzcp.org/news-policy/policy-and-advocacy/position-statements/gender-dysphoria>
- Saraswat, A. et al. (2015). *Evidence Supporting the Biologic Nature of Gender Identity*. ENDOCRINE PRACTICE 21(2) 199.

- Schneider, M. et al. (2017). *Brain Maturation, Cognition and Voice Pattern in a Gender Dysphoria Case Under Pubertal Suppression*. FRONTIERS IN HUMAN NEUROSCIENCE 11:528.
- Shumer, D. & Tishelman, A. (2015). *The Role of Assent in the Treatment of Transgender Adolescents*, INTERNATIONAL JOURNAL OF TRANSGENDERISM. DOI: [10.1080/15532739.2015.1075929](https://doi.org/10.1080/15532739.2015.1075929).
- Shumer, D. et al. (2016a), *Evaluation of Asperger Syndrome in Youth Presenting to a Gender Dysphoria Clinic*, LGBT HEALTH 3(5) 387.
- Shumer, D. et al. (2016b), *Advances in the Care of Transgender Children & Adults*, ADV. PEDIATR.. DOI: [10.1016/j.yapd.2016.04.018](https://doi.org/10.1016/j.yapd.2016.04.018)
- Shumer, D. et al. (2017), *Overrepresentation of Adopted Adolescents at a Hospital-Based Gender Dysphoria Clinic*, TRANSGENDER HEALTH Vol. 2(1) 76.
- Simonsen, R.K. et al. (2016), *Long-Term Follow-Up of Individuals Undergoing Sex Reassignment Surgery: Psychiatric Morbidity & Mortality*, NORDIC JOURNAL OF PSYCHIATRY 70(4).
- Singh, D., Bradley, S. J., & Zucker, K. J. (2021). *A Follow-Up Study of Boys with Gender Identity Disorder*. FRONTIERS IN PSYCHIATRY, 12. <https://doi.org/10.3389/fpsy.2021.632784>
- 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 & ADOLESCENT PSYCHIATRY, 52(6), 582–590.
- Thoma, B. et al. (2021). *Disparities in Childhood Abuse Between Transgender and Cisgender Adolescents*. PEDIATRICS 148(2).
- Tishelman, A. C., Kaufman, R., Edwards-Leeper, L., Mandel, F. H., Shumer, D. E., & Spack, N. P. (2015). *Serving Transgender Youth: Challenges, Dilemmas and Clinical Examples*. PROFESSIONAL PSYCHOLOGY, RESEARCH AND PRACTICE 46(1), 37–45.
- Toomey R. B., Syvertsen A. K., Shramko M. (2018). *Transgender Adolescent Suicide Behavior*. PEDIATRICS.142(4):e20174218.
- Turban, J. L., King, D., Carswell, J. M., & Keuroghlian, A. S. (2020). *Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation*. PEDIATRICS 145(2), e20191725. <https://doi.org/10.1542/peds.20191725>.

- Vandenbussche, E. (2021). *Detransition-Related Needs and Support: A Cross-Sectional Online Survey*. JOURNAL OF HOMOSEXUALITY 20.
<https://doi.org/10.1080/00918369.2021.1919479>.
- van der Miesen, A. I. R., Cohen-Kettenis, P. T., & de Vries, A. L. C. (2018). *Is There a Link Between Gender Dysphoria and Autism Spectrum Disorder?* JOURNAL OF THE AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY 57(11), 884–885.
- van der Miesen, A. I. R. et al. (2020). *Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared With Cisgender General Population Peers*. JOURNAL OF ADOLESCENT HEALTH, Volume 66, Issue 6, 699-704.
- Vlot, M. et al. (2016). *Effect of pubertal suppression and cross-sex hormone therapy on bone turnover markers and bone mineral apparent density (BMAD) in transgender adolescents*. BONE 95:11-19.
- Wiepjes, C. M., Nota, N. M., de Blok, C. J. M., Klaver, M., de Vries, A. L. C., Wensing-Kruger, S. A., de Jongh, R. T., Bouman, M.-B., Steensma, T. D., Cohen-Kettenis, P., Gooren, L. J. G., Kreukels, B. P. C., & den Heijer, M. (2018). *The Amsterdam Cohort of Gender Dysphoria Study (1972–2015): Trends in Prevalence, Treatment, and Regrets*. THE JOURNAL OF SEXUAL MEDICINE, 15(4), 582–590.
- Wiepjes, C. M., den Heijer, M., Bremmer, M. A., Nota, N. M., Blok, C. J. M., Coumou, B. J. G., & Steensma, T. D. (2020). *Trends in suicide death risk in transgender people: Results from the Amsterdam Cohort of Gender Dysphoria study (1972–2017)*. ACTA PSYCHIATRICA SCANDINAVICA 141(6) 486–491.
- World Health Organization. Gender and Health. https://www.who.int/health-topics/gender#tab=tab_1. Downloaded 2-11-2022.
- World Health Organization (2019). *International statistical classification of diseases and related health problems (11th ed.)*. <https://icd.who.int/>.
- World Professional Association for Transgender Health *De-Psychopathologisation Statement* (May 26, 2010), available at wpath.org/policies (last accessed January 21, 2020).
- World Professional Association for Transgender Health. (2012). *Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People* [7th Version]. <https://www.wpath.org/publications/soc>
- Zucker, K. (2018). *The myth of persistence: Response to “A critical commentary on follow-up studies and ‘desistance’ theories about transgender and gender non-conforming children” by Temple Newhook et al.* (2018). INTERNATIONAL JOURNAL OF TRANSGENDERISM 19(2) 231–245.

Zucker, K. (2019). *Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues*. ARCHIVES OF SEXUAL BEHAVIOR 48(7) 1983–1992.

Zucker, K. (2020). *Different strokes for different folks*. CHILD ADOLESC MENT HEALTH 25(1): 36–37. <https://doi: 10.1111/camh.12330>.