

EXHIBIT B

**Expert Affidavit of
Dr. Stephen B. Levine, M.D.**

**EXPERT AFFIDAVIT OF
DR. STEPHEN B. LEVINE, M.D.**

June 4, 2020

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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, and became a Full Professor in 1985.

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. 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 treated hundreds of patients who were experiencing a transgender identity. An occasional child was seen during this era. I was the primary psychiatric care-giver 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.

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

6. 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”).

7. 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.

8. I have reviewed the “Expert Declaration of Deanna Adkins, MD, in Support of Plaintiffs’ Motion for Preliminary Injunction,” dated April 27, 2020 (“Adkins”). In that declaration Dr. Adkins makes a variety of statements about gender dysphoria, therapies for gender dysphoria, and outcomes of therapies, which I believe to be inaccurate, or unsupported by scientific evidence. Dr. Adkins is a pediatric endocrinologist. I note with some concern that Dr. Adkins makes a number of sweeping and purportedly scientific assertions but cites almost no

peer-reviewed articles or studies that support her opinions, and I note also that Dr. Adkins herself has published only one peer-reviewed article relating to treatment of individuals suffering from gender dysphoria.

9. Based on her declaration, Dr. Adkins' practice is focused on children and adolescents; her CV and declaration do not suggest substantial experience in working with adults or older young adults who are living in a transgender identity, or who suffer from gender dysphoria. (This diagnosis requires distress). The wider lifecycle view that derives from experience with these adults (and familiarity with the literature concerning them) provides an important cautionary perspective. The psychiatrist or psychologist treating a trans child or adolescent, of course seeks to make the young patient happy, but the overriding consideration is the creation of a happy, highly functional, mentally healthy person for the next 50 to 70 years of life. I refer to treatment that keeps this goal in view as the "life course" perspective.

10. It is my opinion that a number of Dr. Adkins' assertions are inaccurate or unsupported, for reasons that I explain in this Declaration. I will provide citations to published, peer-reviewed articles that inform my judgments.

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

a. Sex as defined by biology and reproductive function 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.) Generalizations about the treatment children in one country (e.g., Holland) do not necessarily apply to another (e.g., United States).

c. Among psychiatrists and psychotherapists who practice in the area, there are currently widely varying views concerning both the causes of and appropriate therapeutic response to gender dysphoria in children. 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. (Sections II.E, II.F.)

d. A majority of children (in several studies, a large majority) who are diagnosed with gender dysphoria “desist”—that is, their gender dysphoria does not persist—by puberty or adulthood. It is not currently known how to distinguish children who will persist from those who will not. (Section III.)

e. Some recent studies suggest that active affirmation of transgender identity in young children will substantially reduce the number of children “desisting” from transgender identity. This raises concern that this will increase the number of individuals who suffer the multiple long-term physical, mental, and social limitations that are strongly associated with living life as a transgender person. (Section III.)

f. Thus, social transition is itself an important intervention with profound implications for the long-term mental and physical health of the child. When a mental health professional evaluates a child or adolescent and then recommends social transition, presumably that professional is available to help with interpersonal, familial, and

psychological problems that may already exist and will likely arise after transition.

However, many adolescents are medically transitioned without a thorough, long-lasting mental health assessment and psychological ongoing care, leaving themselves and their families on their own to deal with ongoing and subsequent problems. (Section III.)

g. The knowledge-base concerning the cause and treatment of gender dysphoria available today has low scientific quality. (Section IV.)

h. 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 before and after transition, hormones, and surgery. (Section IV.)

i. 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 IV.)

j. Putting a child or adolescent on a pathway towards life as a transgender person puts that individual at risk of a wide range of long-term or even life-long harms, including: sterilization (first chemical, then surgical) and associated regret and sense of loss; inability to experience orgasm (for trans women); physical health risks associated with exposure to elevated levels of cross-sex hormones; surgical complications and life-long after-care; alienation of family relationships; inability to form lasting romantic

relationships and attract a desirable mate; elevated mental health risks of depression, anxiety, and substance abuse. (Section V.)

II. BACKGROUND ON THE FIELD

A. The biological baseline of sex

12. Dr. Adkins refers to the sex of an individual as “given at birth” or “designated at birth.” (Adkins 4, 5.) This phrasing is misleading. 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. Medical technology can now be used to determine a fetus’s sex before birth almost as easily as after birth. It is thus not correct to assert that doctors “designate” or “assign” the sex of a child at birth. Instead, they simply recognize the existing fact of that child’s sex; barring rare disorders of sexual development, anyone can identify the sex of an infant by genital inspection. What the general public may not understand, however, is that every nucleated cell of an individual’s body is chromosomally identifiably male or female—XY or XX.

13. The self-perceived gender of a child, in contrast, arises 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? 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.

14. Under the influence of hormones secreted by the testes or ovaries, numerous additional sex-specific differences between male and female bodies continuously develop post-natally, 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 and development, musculature, body fat levels and distribution, and hair patterns, as well as physiological differences such as menstruation. These are genetically programmed biological consequences of sex, which also serve to influence the consolidation of gender identity during and after puberty.

15. 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. It is certainly true, as Dr. Adkins writes, that “[h]ormone therapy and social transition significantly change a person’s physical appearance.” (Adkins 9.) But in critical respects this change can only be “skin deep.” 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.¹ It is possible for some adolescents and adults to pass unnoticed as the opposite gender that they aspire to be—but with limitations, costs, and risks, as I detail later. These risks include a continuing sense of inauthenticity as a member of the opposite “sex.”

B. Definition and diagnosis of gender dysphoria

16. 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 sex as determined by their chromosomes and their thousands of genes, and the gender with which they eventually subjectively identify or to which they aspire. Today’s American Psychiatric Association *Diagnostic and Statistical Manual of Mental Disorders* (“DSM-5”) 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.

17. 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 life style; adult onset after years of heterosexual transvestism; and onset in later adulthood with few or no prior indications of cross-gender tendencies or identity. The early childhood onset pathway and the more recently observed onset around puberty pathway are relevant to this matter.

18. 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

¹ S. Levine (2018), *Informed Consent for Transgendered Patients*, J. OF SEX & MARITAL THERAPY, at 6, DOI: 10.1080/0092623X.2018.1518885 (“*Informed Consent*”); S. Levine (2016), *Reflections on the Legal Battles Over Prisoners with Gender Dysphoria*, J. AM. ACAD. PSYCHIATRY LAW 44, 236 at 238 (“*Reflections*”).

symptoms of concurrent mental distress than do older patients.² 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.

19. The criteria used in DSM-5 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.

20. When these criteria in children (or adolescents, or adults) are not met, two other diagnoses may be given. These are: Other Specified Gender Dysphoria and Unspecified Gender Dysphoria. Specialists sometimes refer to children who do not meet criteria as being "subthreshold."

21. 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.³ 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

² K. Zucker (2018), *The Myth of Persistence: Response to "A Critical Commentary on Follow-Up Studies & 'Desistance' Theories about Transgender & Gender Non-Conforming Children"* by Temple Newhook et al., INT'L J. OF TRANSGENDERISM at 10, DOI: 10.1080/15532739.2018.1468293 ("Myth of Persistence").

³ S. Levine (2017), *Ethical Concerns About Emerging Treatment Paradigms for Gender Dysphoria*, J. OF SEX & MARITAL THERAPY at 7, DOI: 10.1080/0092623X.2017.1309482 ("Ethical Concerns").

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

22. In considering the appropriate response to gender dysphoria, it is important to know that certain groups of children and adolescents have an increased prevalence and incidence of trans identities. These include: children of color,⁴ children with mental developmental disabilities,⁵ including children on the autistic spectrum (at a rate more than 7x the general population),⁶ children residing in foster care homes, adopted children (at a rate more than 3x the general population),⁷ children with a prior history of psychiatric illness,⁸ and more recently adolescent girls (in a large recent study, at a rate more than 2x that of boys). (G. Rider at 4.)

⁴ G. Rider 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. (In a large sample, non-white youth made up 41% of the set who claimed a transgender or gender-nonconforming identity, but only 29% of the set who had a gender identity consistent with their sex.)

⁵ D. Shumer & A. Tishelman (2015), *The Role of Assent in the Treatment of Transgender Adolescents*, INT. J. TRANSGENDERISM at 1, DOI: 10.1080/15532739.2015.1075929.

⁶ D. Shumer et al. (2016), *Evaluation of Asperger Syndrome in Youth Presenting to a Gender Dysphoria Clinic*, LGBT HEALTH, 3(5) 387 at 387.

⁷ D. Shumer et al. (2017), *Overrepresentation of Adopted Adolescents at a Hospital-Based Gender Dysphoria Clinic*, TRANSGENDER HEALTH Vol. 2(1) 76 at 77.

⁸ L. Edwards-Leeper 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 at 375 (“Psychological Profile”); R. Kaltiala-Heino et al. (2015), *Two Years of Gender Identity Service for Minors: Overrepresentation of Natal Girls with Severe Problems in Adolescent Development*, CHILD & ADOLESCENT PSYCHIATRY & MENTAL HEALTH 9(9) 1 at 5. (In 2015 Finland gender identity service statistics, 75% of adolescents assessed “had been or were currently undergoing child and adolescent psychiatric treatment for reasons other than gender dysphoria.”); L. Littman (2018), *Parent Reports of Adolescents & Young Adults Perceived to Show Signs of a Rapid Onset of Gender Dysphoria*, PLoS ONE 13(8): e0202330 at 13 (Parental survey concerning adolescents exhibiting Rapid Onset Gender Dysphoria reported that 62.5% of gender dysphoric adolescents had “a psychiatric disorder or neurodevelopmental disability preceding the onset of gender dysphoria.”)

23. The social transitioning, hormonal, and surgical paths often recommended and facilitated by gender clinics may lead to life-long sterilization by the time the patient reaches young adulthood. They may add a future source of despair in an already vulnerable person. Caution, and time to reflect as one matures, are prudent.

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

24. 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.

25. Gender dysphoria is **conceptualized and described by some professionals and laypersons as though it were a serious, physical medical illness that causes suffering**, comparable, for example, to prostate cancer, a disease that is curable before it spreads. 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.

26. Dr. Adkins appears to endorse this perspective, asserting that gender dysphoria is a “medical condition.” (Adkins 5.) It should be noted, however, 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 is not specified in medical diagnostic manuals. Notably, gender dysphoria is the only psychiatric condition to be treated by surgery, even though

no endocrine or surgical intervention package corrects any identified biological abnormality.
(Levine, *Reflections*, at 240.)

27. Gender dysphoria is alternatively **conceptualized in developmental terms**, as an adaptation to a psychological problem that was 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, *Reflections*, 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, and also to ameliorate suffering when the underlying problem cannot be solved. They work with the patient and (ideally) family to inquire what forces 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.

28. In addition, the developmental paradigm recognizes that, with the important exception of genetic sex, essentially all aspects of an individual's identity evolve—often markedly—across the individual's lifetime. This includes gender. Some advocates assert that a transgender identity is biologically caused, fixed from early life, and eternally present in an unchanging manner. Taking this line, Dr. Adkins asserts that gender identity is “fixed.” (Adkins 5.) This assertion, however, is not supported by science.⁹ Although numerous studies have been undertaken to attempt to demonstrate a distinctive physical brain structure associated with transgender identity, as of yet there is no evidence that these patients have any defining

⁹ 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>.

abnormality in brain structure that precedes the onset of gender dysphoria. The belief that gender dysphoria is the consequence of brain structure is challenged by the sudden increase in incidence of child and adolescent gender dysphoria over the last twenty years in North America and Europe. Meanwhile, multiple studies have documented rapid shifts in gender ratios of patients presenting for care with gender-related issues, pointing to cultural influences,¹⁰ while a recent study documented “clustering” of new presentations in specific schools and among specific friend groups, pointing to social influences (Littman). Both of these findings strongly suggest cultural factors. From the beginning of epidemiological research into this arena, there have always been some countries, Poland and Australia, for example, where the sex ratios were reversed as compared to North America and Europe, again demonstrating a powerful effect of cultural influences.

29. Further, as I detail later below, many studies and clinical observations confirm that gender identity can and does change or evolve over time for many individuals. And recent studies and anecdotal reports provide strong if preliminary evidence that therapeutic choices can have a powerful effect on whether and how gender identity does change, or gender dysphoria desists.

30. In recent years, for adolescent patients, intense involvement with online transgender communities or “friends” is the rule rather than the exception, and the MHP will also be alert to this as a potentially significant influence on the identity development of the patient.

31. The third paradigm through which gender dysphoria is alternatively conceptualized is from a **sexual minority rights perspective**. Under this paradigm, any response

¹⁰ Levine, *Ethical Concerns*, at 8 (citing M. Aitken, T. D. Steensma, et al. (2015), *Evidence for an Altered Sex Ratio in Clinic-Referred Adolescents with Gender Dysphoria*, J. OF SEXUAL MEDICINE 12(3) 756 at 756-63).

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 mental health professionals. Obviously, however, this is not a medical or psychiatric perspective.

E. Four competing models of therapy

32. Because of the complexity of the human psyche and the difficulty of running controlled experiments in this area, substantial disagreements among professionals about the causes of psychological disorders, and about the appropriate therapeutic responses, are not unusual. When we add to this the very different paradigms for understanding transgender phenomena discussed above, it is not surprising that such disagreements also exist with regard to appropriate therapies for patients experiencing gender-related distress. I summarize below the leading approaches, and offer certain observations and opinions concerning them.

(1) The “watchful waiting” therapy model

33. I review below the uniform finding of 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. (See *infra* ¶ 60.)

34. 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—that the child may exhibit (separation anxiety,

bedwetting, attention deficit disorder, obsessive-compulsive disorder) 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)

35. 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.

36. 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, *Ethical Concerns*, at 8.) I and others have reported success in alleviating distress in this way for at least some patients, whether or not the patient’s sense of discomfort or incongruence with his or her natal sex entirely disappeared. Relieving accompanying psychological co-morbidities leaves the patient freer to consider the pros and cons of transition as he or she matures.

37. 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, and devoted to others' feelings and needs.¹¹ 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. 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.

38. 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.

39. 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.

40. 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.

¹¹ S. Levine (2017), *Transitioning Back to Maleness*, ARCH. OF SEXUAL BEHAVIOR at 7, DOI: 10.1007/s10508-017-1136-9) ("*Transitioning*").

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, *Transitioning*, at 1.) I have seen children desist even before puberty in response to thoughtful parental interactions and a few meetings of the child with a therapist.

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

41. 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. 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, and 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.

42. Some advocates, indeed, 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. Dr. Adkins appears to follow this line, asserting that "My clinical experience . . . has been that [patients] suffer and experience worse health outcomes" when they are not permitted to enter all spaces and participate in all activities in a

manner “consistent with gender identity.” (Adkins 11.) I address claims about suicide and health outcomes in Sections IV and V below.

43. Dr. Adkins asserts that fully supported social transition is the “only treatment for prepubertal children.” (Adkins 7.) As my discussion above indicates, this is not correct. On the contrary, one respected academic in the field has recently written 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.”¹²

44. It is notable that even the Standards of Care published by WPATH, an organization which in general leans strongly towards affirmation in the case of adults, do not specify affirmation of transgender identity as the indicated therapeutic response for young children. Instead, the WPATH Standards of Care recognize that social transition in early childhood “is a controversial issue, and divergent views are held by health professionals”; state that “[t]he current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood”; and acknowledge that “previously described relatively low persistence rates of childhood gender dysphoria” are “relevant” to the wisdom of social transition in childhood. (WPATH SOC p. 17.)

45. Dr. Adkins cites a statement published by the American Academy of Pediatrics (Rafferty 2019) as asserting that “gender transition” “is safe, effective, and medically necessary treatment for the health and wellbeing of children and adolescents suffering from gender dysphoria.” (Adkins 7.) Dr. Adkins neglects to mention that a detailed and peer-reviewed review of that AAP statement by prominent researcher James Cantor concluded that “In its policy

¹² J. Cantor (2019), *Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy*, J. OF SEX & MARITAL THERAPY at 1, DOI: 10.1080.0092623X.2019.1698481.

statement, AAP told neither the truth nor the whole truth, committing sins both of commission and of omission, asserting claims easily falsified by anyone caring to do any fact-checking at all,” and described Rafferty 2019 as “a systematic exclusion and misrepresentation of entire literatures.” Based on my professional expertise and my review of the literature, I agree with Dr. Cantor’s evaluation of Rafferty 2019.

46. In fact, the DSM-5 added—for both children and adolescents—a requirement that a sense of incongruence between biological and felt gender must last at least six months as a precondition for a diagnosis of gender dysphoria, precisely because of the risk of “transitory” symptoms and “hasty” diagnosis that might lead to “inappropriate” treatments.¹³

47. 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. Rather, 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 over time by each of them.

48. 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.

F. Patients Differ Widely and Must Be Considered Individually.

49. In my opinion, it is not possible to make a single, categorical statement about the proper treatment of children or adolescents presenting with gender dysphoria or other gender-

¹³ K. Zucker (2015), *The DSM-5 Diagnostic Criteria for Gender Dysphoria*, in C. Trombetta et al. (eds.), *MANAGEMENT OF GENDER DYSPHORIA: A MULTIDISCIPLINARY APPROACH*, DOI 10.1007/978-88-470-5696-1_4 (Springer-Verlag Italia 2015).

related issues. 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.

50. As to causes in children and adolescents, details about the onset of gender dysphoria may be found in an understanding of family relationship dynamics. In particular, the relationship between the parents and each of the parents and the child, and each of the siblings and the child, should be well known by the MHP. Further, a disturbingly large proportion of children and adolescents who seek professional care in connection with gender issues have a wider history of psychiatric co-morbidities. (*See supra* n. 9.) A 2017 study from the Boston Children’s Hospital Gender Management Service program reported that: “Consistent with the data reported from other sites, this investigation documented that 43.3% of patients presenting for services had significant psychiatric history, with 37.1% having been prescribed psychotropic medications, 20.6% with a history of self-injurious behavior, 9.3% with a prior psychiatric hospitalization, and 9.3% with a history of suicide attempts.” (L. Edwards-Leeper, *Psychological Profile*, at 375.) It seems likely that an even higher proportion will have had prior undiagnosed psychiatric conditions.

51. In the case of adolescents, as I have noted above, there is evidence that peer social influences through “friend groups” (Littman) or through the internet can increase the incidence of gender dysphoria or claims of transgender identity, so the responsible MHP will want to probe these potential influences to better understand what is truly deeply tied to the psychology of this particular individual, and what may instead be “tried on” by the youth as part of the adolescent process of self-exploration and self-definition.

G. Understanding the WPATH and its “Standards of Care”

52. Dr. Adkins notes that she is a member of the World Professional Association for Transgender Health (WPATH), invokes Standards of Care that that organization publishes, and asserts that the WPATH Standards of Care are “widely accepted.” (Adkins 3, 6.) Accordingly, I provide some context concerning that private organization and its Standards of Care.

53. I was a member of the Harry Benjamin International Gender Dysphoria Association from 1974 until 2001. From 1997 through 1998, I served as the Chairman of the eight-person International Standards of Care Committee that issued the fifth version of the Standards of Care. I resigned my membership in 2002 due to my regretful conclusion that the organization and its recommendations had become dominated by politics and ideology, rather than by scientific process, as it was years earlier. In approximately 2007, the Henry Benjamin International Gender Dysphoria Association changed its name to the World Professional Association for Transgender Health.

54. WPATH is a voluntary membership organization. Since at least 2002, attendance at its biennial meetings has been open to trans individuals who are not licensed professionals. While this ensures taking patients’ needs into consideration, it limits the ability for honest and scientific debate, and means that WPATH can no longer be considered a purely professional organization.

55. WPATH takes a decided view on issues as to which there is a wide range of opinion among professionals. WPATH explicitly views itself as not merely a scientific organization, but also as an advocacy organization. (Levine, *Reflections*, at 240.) WPATH is supportive to those who want sex reassignment surgery (“SRS”). Skepticism as to the benefits of SRS to patients, and strong alternate views, are not well tolerated in discussions within the organization or their educational outreach programs. Such views have been known to be shouted

down and effectively silenced by the large numbers of nonprofessional adults who attend the organization's biennial meetings.

56. The Standards of Care ("SOC") is the product of an enormous effort to be balanced, but it is not a politically neutral document. WPATH aspires to be both a scientific organization and an advocacy group for the transgendered. These aspirations sometimes conflict. The limitations of the Standards of Care, however, are not primarily political. They are caused by the lack of rigorous research in the field, which allows room for passionate convictions on how to care for the transgendered.

57. In recent years, WPATH has fully adopted some mix of the medical and civil rights paradigms. It has downgraded the role of counseling or psychotherapy as a requirement for these life-changing processes. WPATH no longer considers preoperative psychotherapy to be a requirement. It is important to WPATH that the person has gender dysphoria; the pathway to the development of this state is not. (Levine, *Reflections*, at 240.) The trans person is assumed to have thoughtfully considered his or her options before seeking hormones, for instance.

58. Most psychiatrists and psychologists who treat patients suffering sufficiently severe distress from gender dysphoria to seek inpatient psychiatric care are not members of WPATH. Many psychiatrists, psychologists, and pediatricians who treat some patients suffering gender dysphoria on an outpatient basis are not members of WPATH. WPATH represents a self-selected subset of the profession along with its many non-professional members; it does not capture the clinical experiences of others. WPATH claims to speak for the medical profession; however, it does not welcome skepticism and therefore, deviates from the philosophical core of medical science.

59. For example, in 2010 the WPATH Board of Directors issued a statement advocating that incongruence between sex and felt gender identity should cease to be identified in the DSM as a pathology.¹⁴ This position was debated but not adopted by the (much larger) American Psychiatric Association, which maintained the definitions and diagnoses of gender dysphoria as a pathology in the DSM-5 manual issued in 2013.

60. In my experience most current members of WPATH have little ongoing experience with the mentally ill, and many trans care facilities are staffed by MHPs who are not deeply experienced with recognizing and treating frequently associated psychiatric co-morbidities. Because the 7th version of the WPATH SOC deleted the requirement for therapy, trans care facilities that consider these Standards sufficient are permitting patients to be counseled to transition by means of social presentation, hormones, and surgery by individuals with masters rather than medical degrees. As a result of the downgrading of the role of the psychiatric assessment of patients, new “gender affirming” clinics have arisen in many urban settings that quickly (sometimes within an hour’s time) recommend transition. Concerned parents who came wanting to know what is going on in their children are overwhelmed, and feel disoriented, fearful for the health and safety of their children, and dependent on the professional. In has been nine years since the Standards of Care were last revised. Much has changed in that interval. It is my understanding that the complex committee process that will generate an 8th version is underway.

¹⁴ WPATH *De-Psycho-pathologisation Statement* (May 26, 2010), available at wpath.org/policies (last accessed January 21, 2020).

III. GENDER IDENTITY, GENDER DYSPHORIA, AND THERAPIES FOR GENDER DYSPHORIA IN YOUNGER CHILDREN

61. 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 and/or hormone therapy, it does *not* persist through puberty. 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 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.”¹⁵ A third summarized the existing data as showing that “Symptoms of GID at prepubertal ages decrease or disappear in a considerable percentage of children (estimates range from 80-95%).”¹⁶

62. It is not yet known how to distinguish those children who will desist from that small minority whose trans identity will persist. (Levine, *Ethical Concerns*, at 9.)¹⁷

63. 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 observe an increasingly vocal online community of young women who have reclaimed a female identity

¹⁵ S. Adelson & 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*, J. AM. ACAD. CHILD ADOLESCENT PSYCHIATRY 51(9) 957 at 963 (“*Practice Parameter*”).

¹⁶ P. T. Cohen-Kettenis, H. A. Delemarre-van de Waal et al. (2008), *The Treatment of Adolescent Transsexuals: Changing Insights*, J. SEXUAL MEDICINE 5(8) 1892 at 1895.

¹⁷ It is also apparent in the adolescent phenomenon of rapid onset of gender dysphoria following a gender normative childhood that childhood gender identity is not inherently stable in either direction.

after claiming a male gender identity at some point during their teen years. However, data on outcomes for this age group with and without therapeutic interventions is not yet available to my knowledge.

64. In contrast, there is now data that suggests that a therapy that encourages social transition before or during puberty—which would include participation on athletic teams designated for the opposite sex—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.”¹⁸ 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, *Myth of Persistence*, at 7.)¹⁹

65. 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,

¹⁸ C. Guss et al. (2015), *Transgender and Gender Nonconforming Adolescent Care: Psychosocial and Medical Considerations*, CURR. OPIN. PEDIATR. 26(4) 421 at 421 (“TGN Adolescent Care”).

¹⁹ One study found that social transition by the child was found to be strongly correlated with persistence for natal boys, but not for girls. (Zucker, *Myth of Persistence*, at 5 (citing T.D. Steensma, J.K. McGuire et al. (2013), *Factors Associated with Desistance & Persistence of Childhood Gender Dysphoria: A Qualitative Follow-up Study*, J. OF THE AM. ACAD. OF CHILD & ADOLESCENT PSYCHIATRY 52, 582.).)

Myth of Persistence, at 7; Steensma (2013).)²⁰ Some vocal practitioners of prompt affirmation and social transition even 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 their biological sex.²¹ This is a very large change as compared to the desistance rates documented apart from social transition. Some researchers who generally advocate prompt affirmation and social transition also acknowledge a causal connection between social transition and this change in outcomes.²²

66. Accordingly, I agree with a noted researcher in the field who has written that social transition in children must be considered “a form of psychosocial treatment.” (Zucker, *Debate*, at 1.)

67. Dr. Adkins speaks of the use of puberty blockers as though this major hormonal disruption of some of the most basic aspects of ordinary human development were a small thing, and entirely benign. (Adkins 8.) It should be understood that puberty blockers are usually administered to early-stage adolescents as part of a path that includes social transition. I address later medical, social, and mental health risks associated with the use of puberty blockers. Here, I note that the data reviewed above strongly suggests that the administration of puberty blockers,

²⁰ 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.

²¹ See, e.g., B. Ehrensaft (2015), *Listening and Learning from Gender-Nonconforming Children*, *THE PSYCHOANALYTIC STUDY OF THE CHILD* 68(1) 28 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.”

²² See Guss, *TGN Adolescent Care*, at 2. “The gender identity affirmed during puberty appears to predict the gender identity that will persist into adulthood.” “Youth with persistent TNG [transgender, nonbinary, or gender-nonconforming] identity into adulthood . . . are more likely to have experienced social transition, such as using a different name . . . which is stereotypically associated with another gender at some point during childhood.”

too, must be considered to be a component of a “psychosocial treatment” with complex implications, and an experimental treatment at that.

68. So far as I am aware, no study yet reveals whether the life-course mental and physical health outcomes for this relatively new class of “persisters” are more similar to those of the general non-transgender population, or to the notably worse outcomes exhibited by the transgender population generally.

69. However, I agree with Zucker who has written, “. . .we cannot rule out the possibility that early successful treatment of childhood GID [Gender Identity Disorder] will diminish the role of a continuation of GID into adulthood. If so, successful treatment would also reduce the need for the long and difficult process of sex reassignment which includes hormonal and surgical procedures with substantial medical risks and complications.”²³ By the same token, a therapeutic methodology for children that *increases* the likelihood that the child will continue to identify as the opposite gender into adulthood will *increase* the need for the long and potentially problematic processes of hormonal and genital and cosmetic surgical procedures.

70. Not surprisingly, given these facts, encouraging social transition in children remains controversial. Supporters of such transition acknowledge that “Controversies among providers in the mental health and medical fields are abundant. . . . These include differing assumptions regarding . . . the age at which children . . . should be encouraged or permitted to

²³ Zucker, *Myth of Persistence*, at 8 (citing H. Meyer-Bahlburg (2002), *Gender Identity Disorder in Young Boys: A Parent- & Peer-Based Treatment Protocol*, CLINICAL CHILD PSYCHOLOGY & PSYCHIATRY 7, 360 at 362.).

socially transition These are complex and providers in the field continue to be at odds in their efforts to work in the best interests of the youth they serve.”²⁴

71. In sum, therapy for young children that encourages transition (including use of names, clothing and restrooms, and participating on athletic teams, associated with the opposite sex) cannot be considered to be neutral, but instead is an experimental procedure that has a high likelihood of changing the life path of the child, with highly unpredictable effects on mental and physical health, suicidality, and life expectancy. Claims that a civil right is at stake do not change the fact that what is proposed is a social and medical experiment. (Levine, *Reflections*, at 241.) Ethically, then, it should be undertaken only subject to standards, protocols, and reviews appropriate to such experimentation.

IV. THE AVAILABLE DATA DOES NOT SUPPORT THE CONTENTION THAT “AFFIRMATION” OF TRANSGENDER IDENTITY REDUCES SUICIDE OR RESULTS IN BETTER PHYSICAL OR MENTAL HEALTH OUTCOMES GENERALLY.

72. I am aware that organizations including The Academy of Pediatrics and Parents, Families and Friends of Lesbians and Gays (PFLAG) have published statements that suggest that all children who express a desire for a transgender identity should be promptly supported in that claimed identity. This position appears to rest on the belief—which is widely promulgated by certain advocacy organizations—that science has already established that prompt “affirmance” is best for all patients, including all children, who present indicia of transgender identity. As I discuss later below, this belief is scientifically incorrect, and ignores both what is known and what is unknown.

²⁴ A. Tishelman et al. (2015), *Serving Transgender Youth: Challenges, Dilemmas and Clinical Examples*, PROF. PSYCHOL. RES. PR. at 11, DOI: 10.1037/a0037490 (“*Serving TG Youth*”).

73. The knowledge-base concerning the causes and treatment of gender dysphoria has low scientific quality.

74. In evaluating claims of scientific or medical knowledge, it is important to understand that 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, *Reflections*, 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.

75. 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., *Practice Parameter*, 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.”²⁵

76. Critically, “there are no randomized control trials with regard to treatment of children with gender dysphoria.” (Zucker, *Myth of Persistence*, 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, *Reflections*, at 239.)

77. Extending beyond treatment of children, a review of 28 studies of outcomes from hormonal therapy in connection with sex reassignment reported that these studies provided only “very low quality evidence” for a variety of reasons.²⁶ Large gaps exist in the medical community’s knowledge regarding the long-term effects of SRS and other gender identity disorder treatments in relation to their positive or negative correlation to suicidal ideation, attempts, and completion. What is known, however, is not encouraging.

²⁵ American Psychological Association, *Guidelines for Psychological Practice with Transgender & Gender Nonconforming People* (2015), AM. PSYCHOLOGIST 70(9) 832 at 842.

²⁶ H. Murad et al., *Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychosocial outcomes*. CLINICAL ENDOCRINOLOGY 2010; 72(2): 214-231. See also R. D’Angelo, *Psychiatry’s ethical involvement in gender-affirming care*, AUSTRALASIAN PSYCHIATRY 2018, Vol 26(5) 460-463, noting the large number of non-responders in follow-up outcome studies, and observing that “it is generally not known whether they are alive or dead,” and that “it is . . . pure speculation to assume that none committed suicide.”

78. With respect to suicide, individuals with gender dysphoria are well known to commit suicide or otherwise suffer increased mortality before and after not only social transition, but also before and after SRS. (Levine, *Reflections*, at 242.) For example, in the United States, the death rates of trans veterans are comparable to those with schizophrenia and bipolar diagnoses—20 years earlier than expected. These crude death rates include significantly elevated suicide rates. (Levine, *Ethical Concerns*, at 10.) Similarly, researchers in Sweden and Denmark have reported on almost all individuals who underwent sex-reassignment surgery over a 30-year period.²⁷ The Swedish follow-up study 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, *Ethical Concerns*, at 10.)

79. Advocates of immediate and unquestioning affirmation of social transition in children who indicate a desire for a transgender identity sometimes assert that any other course will result in a high risk of suicide in the affected children and young people. Dr. Adkins asserts that “Attempted suicide rates in the transgender community are over 40%,” and that “[t]he only treatment to avoid this serious harm is to . . . affirm gender identity.” (Adkins 6.) Contrary to these assertions, no studies show that affirmation of children (or anyone else) reduces suicide, prevents suicidal ideation, or improves long-term outcomes, as compared to either a “watchful waiting” or a psychotherapeutic model of response, as I have described above.²⁸ In considering

²⁷ C. Dhejne et al. (2011), *Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden*, PLOS ONE 6(2) e16885 (“*Long Term*”); R. K. Simonsen et al. (2016), *Long-Term Follow-Up of Individuals Undergoing Sex Reassignment Surgery: Psychiatric Morbidity & Mortality*, NORDIC J. OF PSYCHIATRY 70(4).

²⁸ A recent article, J. Turban et al. (2020), *Puberty Suppression for Transgender Youth and Risk of Suicidal Ideation*, PEDIATRICS 145(2), DOI: 10.1542/peds.2019-1725, 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.

“suicide,” mental health professionals distinguish between suicidal thoughts (ideation), suicide gestures, suicide attempts with a lethal potential, and completed suicide. Dr. Atkins may be referring to numerous studies that have found suicidal ideation to have been present at some time in life in ~40-50%. This figure is approximately twice that in gay and lesbian communities. In the heteronormative communities it is approximately 4%. Mental health professionals distinguish clearly between gestures and potentially lethal attempts, which often result in hospitalization.

80. I will also note that any discussion of suicide when considering younger children involves very long-range and very uncertain prediction. Suicide in pre-pubescent children is rare and the existing studies of gender identity issues in pre-pubescent children do not report significant incidents of suicide. The estimated suicide rate of trans adolescents is the same as teenagers who are in treatment for serious mental illness. What trans teenagers do demonstrate is more suicidal ideation and attempts (however serious) than other teenagers.²⁹ Their completed suicide rates are not known.

81. In sum, claims that affirmation will reduce the risk of suicide for children are not based on science. Such claims overlook the lack of even short-term supporting data as well as the lack of studies of long-term outcomes resulting from the affirmation or lack of affirmation of transgender identity in children. They also overlook the other tools that the profession does have for addressing depression and suicidal thoughts in a patient once that risk is identified. (Levine, *Reflections*, at 242.)

²⁹ A. Perez-Brumer, J. K. Day et al. (2017), *Prevalence & Correlates of Suicidal Ideation Among Transgender Youth in Cal.: Findings from a Representative, Population-Based Sample of High Sch. Students*, J. AM. ACAD. CHILD ADOLESCENT PSYCHIATRY 56(9), 739 at 739.

82. A number of data sets have also indicated significant concerns about wider indicators of physical and mental health, including ongoing functional limitations;³⁰ substance abuse, depression, and psychiatric hospitalizations;³¹ and increased cardiovascular disease, cancer, asthma, and COPD.³² Worldwide estimates of HIV infection among transgendered individuals are up to 17-fold higher than the cisgender population. (Levine, *Informed Consent*, at 6.)

83. 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. Because affirmation and social transition for children and adolescents, and the use of puberty blockers for transgender children, are a recent phenomenon, it could hardly be otherwise.

84. Given what is known and what is not known about the incidence and causes of suicide attempts and suicide in children and adolescents who suffer from gender dysphoria, and what is known about the incidence of suicide attempts and suicide in individuals who have transitioned to live in a transgender identity, it is in my view unethical for a mental health professional to tell a young patient, or the parents of a young patient, that social transition, puberty blockers, or use of cross-sex hormones will reduce the likelihood that the young person will commit suicide.

³⁰ G. Zeluf, C. Dhejne et al. (2016), *Health, Disability and Quality of Life Among Trans People in Sweden—A Web-Based Survey*, BMC PUBLIC HEALTH 16(903), DOI: 10.1186/s12889-016-3560-5.

³¹ C. Dhejne, R. Van Vlerken et al. (2016), *Mental Health & Gender Dysphoria: A Review of the Literature*, INT’L REV. OF PSYCHIATRY 28(1) 44.

³² C. Dragon, P. Guerino, et al. (2017), *Transgender Medicare Beneficiaries & Chronic Conditions: Exploring Fee-for-Service Claims Data*, LGBT HEALTH 4(6) 404, DOI: 10.1089/lgbt.2016.0208.

85. Instead, transition of any sort must be justified, if at all, as a life-enhancing measure, not a lifesaving measure. (Levine, *Reflections*, at 242.) In my opinion, this is an important fact that patients, parents, and even many MHPs fail to understand.

V. KNOWN, LIKELY, OR POSSIBLE DOWNSIDE RISKS ATTENDANT ON MOVING QUICKLY TO “AFFIRM” TRANSGENDER IDENTITY IN CHILDREN.

86. As I have detailed above, enabling and affirming social transition in a prepubescent child appears to be highly likely to increase the odds that the child will in time pursue pubertal suppression and persist in a transgender identity into adulthood. This means that the MHP, patient, and in the case of minors, parents must consider long-term as well as short-term implications of life as a transgender individual when deciding whether to permit or encourage a child to socially transition.

87. Dr. Adkins asserts without citation to peer-reviewed literature that social transition and hormone therapy are “safe, effective and essential” for young people. (Adkins 6, 10.) A great deal of data point in the opposite direction. The multiple studies from different nations that have documented the increased vulnerability of the adult transgender population to substance abuse, mood and anxiety disorders, suicidal ideation, and other health problems warn us that assisting the child or adolescent down the road to becoming a transgender adult is a very serious decision, and stand as a reminder that a casual assumption that transition will improve the young person’s life is not justified based on numerous scientific snapshots of cohorts of trans adults and teenagers.

88. The possibility that steps along this pathway, while lessening the pain of gender dysphoria, 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, *Reflections*, at 243.)

89. I detail below several classes of predictable, likely, or possible harms to the patient associated with transitioning to live as a transgender individual.

A. Physical risks associated with transition

90. Sterilization. Dr. Adkins rightly notes that many patients who begin down the path defined by puberty blockers and social transition end up feeling the need to undergo “surgical treatment” “to alleviate gender dysphoria.” (Adkins 10.) As I have noted above, there is not good scientific evidence that SRS results in better long-term mental health outcomes. What is certain, however, is that SRS that removes testes, ovaries, or the uterus is inevitably sterilizing. While by no means all transgender adults elect SRS, many patients do ultimately feel compelled to take this serious step in their effort to live fully as the opposite sex. More immediately, practitioners recognize that the administration of cross-sex hormones, which is often viewed as a less “radical” measure, and is now increasingly done to minors, creates at least a risk of irreversible sterility.³³ As a result, even when treating a child, the MHP, patient, and parents must consider loss of reproductive capacity—sterilization—to be one of the major risks of starting down the road. The risk that supporting social transition may put the child on a pathway that leads to intentional or unintentional permanent sterilization is particularly concerning given the disproportionate representation of minority and other vulnerable groups among children reporting a transgender or gender-nonconforming identity. (*See supra* ¶ 21.)

³³ *See* C. Guss et al., *TGN Adolescent Care* at 4 (“a side effect [of cross-sex hormones] may be infertility”) and 5 (“cross-sex hormones . . . may have irreversible effects”); Tishelman et al., *Serving TG Youth* at 8 (Cross-sex hormones are “irreversible interventions” with “significant ramifications for fertility”).

91. Loss of sexual response. Puberty blockers prevent maturation of the sexual organs and response. Some, and perhaps many, transgender individuals who transitioned as children and thus did not go through puberty consistent with their sex face significantly diminished sexual response as they enter adulthood and are unable ever to experience orgasm. Dr. Adkins acknowledges that those “who undergo hormone treatment before the end of puberty may experience some permanent changes that a person who transitions later in life would not” (Adkins 10), and this may be one of the irreversible effects to which she refers. She may also be referring to the social, psychological, and interpersonal impact of not being in puberty for 4-5 years while one’s peers are challenged by the normative processes of maturing bodies and minds. To my knowledge, data quantifying these impacts has not been published. In the case of males, the cross-sex administration of estrogen limits penile genital 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, *Informed Consent*, at 6.)

92. Other effects of hormone administration. While it is commonly said that the effects of puberty blockers are reversible after cessation (Dr. Adkins describes the effect of puberty blockers as just a “pause” (Adkins 8)), in fact controlled studies have not been done of how completely this is true. A more prudent assessment is that medicine does not know what the long-term health effects on bone, brain, and other organs are of a “pause” between ages 11-16, and psychology 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. However, it is well known that many effects of cross-sex hormones cannot be reversed should the patient later regret his

transition. After puberty, the individual who wishes to live as the opposite sex will in most cases have to take cross-sex hormones for most of life.

93. The long-term health risks of this major alteration of hormonal levels have not yet been quantified in terms of exact risk.³⁴ However, a recent study found greatly elevated levels of strokes and other acute cardiovascular events among male-to-female transgender individuals taking estrogen. Those authors concluded, “it is critical to keep in mind that the risk for these cardiovascular events in this population must be weighed against the benefits of hormone treatment.”³⁵ Another group of authors similarly noted that administration of cross-sex hormones creates “an additional risk of thromboembolic events”—which is to say blood clots (Guss et al., *TGN Adolescent Care* at 5), which are associated with strokes, heart attacks, and lung and liver failure. 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.

94. Health risks inherent in complex surgery. Complications of surgery exist for each procedure,³⁶ and complications in surgery affecting the reproductive organs and urinary tract can have significant anatomical and functional complications for the patient’s quality of life.

³⁴ See Tishelman et al., *Serving TG Youth* at 6-7 (Long-term effect of cross-sex hormones “is an area where we currently have little research to guide us.”).

³⁵ D. Getahun et al. (2018), *Cross-Sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study*, ANNALS OF INTERNAL MEDICINE at 8, DOI:10.7326/M17-2785.

³⁶ Levine, *Informed Consent*, at 5 (citing T. van de Grift, G. Pigot et al. (2017), *A Longitudinal Study of Motivations Before & Psychosexual Outcomes After Genital Gender-Confirming Surgery in Transmen*, J. SEXUAL MEDICINE 14(12) 1621.).

95. Disease and mortality generally. The MHP, the patient, and in the case of a child, the parent must also be aware of the wide sweep of strongly negative health outcomes among transgender individuals, as I have detailed above.

B. Social risks associated with transition

96. Family and friendship relationships. 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, *Ethical Concerns*, at 5.)

97. Long term psychological and social impact of sterility. 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. However, it is particularly difficult for parents of a young child to seriously contemplate that child's potential as a future parent and grandparent. This makes it all the more critical that the MHP spend substantial and repeated time with parents to help them see the implications of what they are considering.

98. Sexual-romantic risks 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 cisgender mates lose interest. When a trans person does not pass well, he

discovers that the pool of those interested consists largely of individuals looking for exotic sexual experiences rather than genuinely loving relationships. (Levine, *Ethical Concerns*, at 5, 13.) Nor is the problem all on the other side; transgender individuals commonly become strongly narcissistic, unable to give the level of attention to the needs of another that is necessary to sustain a loving relationship.³⁷

99. Social risks associated with delayed puberty. The social and psychological impacts of remaining puerile for, e.g., three-to- five years while one's peers are undergoing pubertal transformations, and of undergoing puberty at a substantially older age, have not been systematically studied, although clinical mental health professionals often hear of distress 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 while their peers are developing the social relationships (and attendant painful social learning experiences) that come with adolescence. (Levine, *Informed Consent*, at 9.)

C. Mental health costs or risks

100. One would expect the negative physical and social impacts reviewed above to adversely affect the mental health of individuals who have transitioned. In addition, adult transitioned individuals find that living as the other (or, in a manner that is consistent with the stereotypes of the other as the individual perceives them) is a continual challenge and stressor, and many find that they continue to struggle with a sense of inauthenticity in their transgender identity. (Levine, *Informed Consent*, at 9.)

³⁷ S. Levine, *Barriers to Loving: A Clinician's Perspective*, at 40 (Routledge, New York 2013).

101. In addition, individuals 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. Thus, transition can result in deflection from mastering personal challenges at the appropriate time or addressing conditions that require treatment.

102. Whatever the reason, transgender individuals including transgender youth certainly experience greatly increased rates of mental health problems. I have detailed this above with respect to adults living under a transgender identity. Indeed, Swedish researchers in a long-term study (up to 30 years since SRS, with a median time since SRS of > 10 years) concluded that individuals who have SRS should have postoperative lifelong psychiatric care. (Dhejne, *Long Term*, at 6-7.) With respect to youths a cohort study found that transgender youth 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.³⁸

103. Dr. Adkins asserts that when the “transition, affirmation, and hormones” therapy that she advocates is followed, “gender dysphoria is easily managed.” (Adkins 6.) I am not aware of any long-term studies that justify this assertion, and as I have explained above, the responsible MHP cannot focus narrowly on the short-term happiness of the patient, but must instead consider the happiness and health of the patient from a “life course” perspective. 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

³⁸ S. Reisner et al. (2015), *Mental Health of Transgender Youth in Care at an Adolescent Urban Community Health Center: A Matched Retrospective Cohort Study*, J. OF ADOLESCENT HEALTH 56(3) at 6, DOI:10.1016/j.jadohealth.2014.10.264; see also *supra* ¶ 21.

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. Gender dysphoria is not “easily managed” except when it naturally desists. A recent study in the American Journal of Psychiatry reported the high mental health utilization patterns of adults for ten years after surgery for approximately 35% of patients.³⁹ This is not “easy” management.

D. Regret following transition is not an infrequent phenomenon.

104. The large numbers of children and young adults who have desisted as documented in both group and case studies each represent “regret” over the initial choice in some sense.

105. The phenomenon of desistance or regret experienced *later* than adolescence or young adulthood, or among older transgender individuals, has to my knowledge not been quantified or well-studied. However, it is a real phenomenon. I myself have worked with multiple individuals who have abandoned trans female identity after living in that identity for years, and who would describe their experiences as “regret.”

106. I have seen several Massachusetts inmates and trans individuals in the community abandon their [trans] female identity after several years. (Levine, *Reflections*, at 239.) In the gender clinic which I founded in 1974 and to this day, in a different location, continue to co-direct, we have seen many instances of individuals who claimed a transgender identity for a time, but ultimately changed their minds and reclaimed the gender identity congruent with their sex.

³⁹ Branstrom & Pachankis, (2019), *Reduction in Mental Health Treatment Utilization Among Transgender Individuals After Gender-Affirming Surgeries*, AM. J. OF PSYCHIATRY. 4:Appiajp201919010080. Doi: 10.1176/Appi.Ajp.2019.19010080.

107. More dramatically, a surgical group prominently active in the SRS field has published a report on a series of seven male-to-female patients requesting surgery to transform their surgically constructed female genitalia back to their original male form.⁴⁰

108. I noted above an increasingly visible online community of young women who have desisted after claiming a male gender identity at some point during their teen years. (*See supra* ¶ 62.) Given the rapid increase in the number of girls presenting to gender clinics within the last few years, the phenomena of regret and desistance by young women deserves careful attention and study by MHPs.

109. Thus, one cannot assert with any degree of certainty that once a transgendered person, always a transgendered person, whether referring to a child, adolescent, or adult, male or female.

I, Dr. Stephen B. Levine, swear that the statements in this affidavit are true and accurate to the best of my knowledge, and represent my professional opinions. Because of restrictions and health concerns relating to COVID-19, I am not readily able to subscribe this affidavit in the presence of a notary, but I am willing to do so if desired when it becomes practical to do so.

Dated: June 4, 2020.



Stephen B. Levine

⁴⁰ Djordjevic et al. (2016), *Reversal Surgery in Regretful Male-to-Female Transsexuals After Sex Reassignment Surgery*, J. Sex Med. 13(6) 1000, DOI: 10.1016/j.jsxm.2016.02.173.