

**UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WISCONSIN**

CODY FLACK and
SARA ANN MAKENZIE,
MARIE KELLY, and
COURTNEY SHERWIN,

Plaintiffs,

v.

WISCONSIN DEPARTMENT OF
HEALTH SERVICES and
LINDA SEEMEYER, in her official capacity
as Secretary of the Wisconsin Department of
Health Services,

Defendants.

Case No. 3:18-cv-00309-wmc
Judge William Conley

**SUPPLEMENTAL EXPERT WITNESS DECLARATION OF
LOREN S. SCHECHTER, M.D.**

I, Loren S. Schechter, M.D. declare as follows:

1. I have been retained by counsel for the Plaintiffs as an expert in the above-captioned lawsuit. I submitted an expert witness declaration [Dkt. No. 27] (“Schechter Dec.”) in connection with Plaintiffs’ original motion for a preliminary injunction in this case. I submit this declaration to supplement my original declaration and to respond to points raised in the declaration of Daniel D. Sutphin, M.D. [Dkt. No. 188] (“Sutphin Dec.”), which was submitted by Defendants in connection with their response to Plaintiffs’ second preliminary injunction motion.

2. My background, qualifications, and compensation for my services in this case, and the bases for my opinions in this case are described in my original declaration, and in my CV. A true and correct copy of my current CV (updated since my previous declaration) is

attached to this declaration as Exhibit A. The additional sources I have consulted in preparing this supplemental declaration are identified below.

3. I have personal knowledge of the matters stated in this supplemental declaration.

Summary of Opinion

4. For the reasons explained below, it is my professional medical opinion that Dr. Sutphin's contentions that gender-confirming surgeries are cosmetic, not medically necessary, and not safe or effective, are unsupported by the weight of the professional medical consensus and prevailing standards of care for treating gender dysphoria and are inconsistent with mainstream medical standards.¹ To the contrary, it is my professional opinion, supported by the prevailing consensus of the medical community, that procedures used to treat gender dysphoria are reconstructive, not cosmetic; are medically necessary treatments for gender dysphoria for many transgender individuals; and are safe and effective.

Gender-confirming surgeries are reconstructive

5. As I discussed in my first declaration in this case, the medical community and insurance providers recognize a distinction between cosmetic surgery and reconstructive surgery, which is medically necessary. Schechter Dec. ¶ 31. No particular procedure is inherently

¹ Based on my review of Dr. Sutphin's declaration and CV, it appears that Dr. Sutphin has no clinical experience providing gender-confirming surgical treatments to transgender individuals with gender dysphoria. When determining what treatments are medically necessary, surgeons rely on a number of factors including medical research and literature, patient input, and their own clinical experience. Dr. Sutphin himself acknowledges that he is not trained to perform the procedures; as such, he is therefore not sufficiently qualified to make determinations regarding their efficacy and necessity. His apparent lack of experience is further reflected by the outdated language he uses throughout his declaration regarding sex, gender, and transgender status. For example, in paragraph 6, Dr. Sutphin incorrectly suggests that transgender individuals like the plaintiffs in this case want to "change their sex." This misrepresents the purpose of gender-affirming surgery, which is to better align a person's body with their gender identity in order to relieve their gender dysphoria. I discuss this in further detail in my original declaration. Schechter Decl. ¶¶ 22-28.

cosmetic or inherently reconstructive; rather, the underlying diagnosis determines whether the procedure is considered cosmetic or reconstructive.

6. Gender-confirming surgeries are not cosmetic because, when performed in accordance with the WPATH Standards of Care, they are clinically indicated to treat the underlying medical condition of gender dysphoria. The professional medical consensus is that these are appropriately categorized as reconstructive procedures.

7. Dr. Sutphin simply does not accept this widely-held understanding of reconstructive surgery to treat gender dysphoria. First, he equates a transgender patient who receives surgery to treat gender dysphoria with a cisgender woman who receives breast augmentation surgery to improve her self-esteem. He concludes that because the cisgender woman's procedure would be considered cosmetic, so too should the transgender patient's procedure. Sutphin Dec. ¶¶ 49, 52. However, while the procedures themselves are technically similar, the reasons for performing the procedures are not. Unlike the transgender patient, the cisgender woman does not have a recognized medical condition for which the surgery performed is a clinically indicated treatment.

8. In a similar vein, Dr. Sutphin's lack of understanding of gender dysphoria and gender-confirming procedures is further revealed by his attempts to analogize gender dysphoria to a condition termed "Body Identity Integrity Disorder" or "BIID." Sutphin Dec. ¶¶ 59-63. To my knowledge, BIID is not a recognized medical condition. Unlike gender dysphoria, it is not listed in the Diagnostic and Statistical Manual, Version 5 ("DSM-5"). Thus, this analogy is not apt.

9. Dr. Sutphin contends that gender-confirming procedures "are in fact better categorized as *ablative* or *neoconstructive* in nature. *Id.* at ¶ 51. "Ablative" and

“neoconstructive” are not terms that are commonly used to describe plastic surgery procedures. Notably, the terms (as he has defined them) would appear to also apply to many procedures performed on cisgender individuals. For example, “neoconstructive” procedures would include genital surgery for a cisgender woman with congenital absence of the vagina. Again, the professional medical consensus is that such procedures are reconstructive in nature.

10. Dr. Sutphin also appears to argue that gender-confirming surgery cannot be considered medically necessary because it involves operating on physiologically healthy tissue and is “based on the seminal impetus of patient desire and perception.” *Id.* ¶ 54. First, a number of procedures that involve the removal of physiologically healthy tissue are considered medically necessary. The most obvious example is prophylactic mastectomy for cisgender women who are carriers of one of the BRCA (breast cancer susceptibility) genes. Women may choose to undergo elective removal of their breasts, uteri, and ovaries (presumably healthy and non-cancerous) so as to reduce their risk of developing cancer. Second, Dr. Sutphin is simply incorrect that gender-confirming surgery is performed to fulfill a “strong desire” or “want” of the patient. *Id.* at ¶ 49. As I mentioned previously, gender-confirming surgery is performed to treat a recognized medical condition, and is more properly characterized as a health need, not a “want.” *Schechter Dec.* ¶ 27-28. Moreover, reconstructive surgery to promote a patient’s psychological well-being is often a component of medically necessary care. This is one reason why, for example, reconstructive breast surgery is considered medically necessary for women who have mastectomies to treat breast cancer.

Gender-confirming surgeries are safe and effective

11. The prevailing peer-reviewed clinical research, as well as my own clinical expertise as a plastic surgeon specializing in gender-confirming surgeries, show that surgical

procedures for gender dysphoria are safe and effective, and that many of these procedures are analogous to surgical procedures used to treat other medical conditions. Schechter Dec. ¶¶ 35-39. The fact that the medical community deems these analogous procedures sufficiently safe to treat conditions other than gender dysphoria is by itself more than sufficient to support the safety of those surgeries to treat gender dysphoria.

12. For example, surgeons regularly perform mastectomies and chest/breast reconstruction, hysterectomies/salpingo-oophorectomies, and orchiectomies to treat individuals with cancer, or a genetic predisposition to cancer (BRCA 1, 2 genes in the case of prophylactic mastectomy or oophorectomy). Similarly, surgeons perform procedures to reconstruct external genitalia for individuals who have certain medical conditions (e.g., cancer) or who have suffered traumatic injuries to or disabling infections of their genitalia. For the cis-male genitalia, this would include procedures to correct conditions such as hypospadias, epispadias, exstrophy, fournier's gangrene, penile webbing, or buried penis (which can occur as a result of obesity, diabetes, or recurrent infections). For the cis-female genitalia, this would include procedures to correct conditions such as congenital absence of the vagina or reconstruction of the vagina/vulva following oncologic resection, traumatic injury, or infection.

13. When billing insurers for reimbursement, health care providers use Current Procedural Terminology (CPT) codes, which are developed and maintained by the American Medical Association. The same code or codes may apply to a particular procedure regardless of whether the procedure is performed on a transgender patient or a cisgender patient. For example, a subcutaneous mastectomy may be performed for a cisgender woman to reduce her risk of breast cancer or for a transgender man with gender dysphoria. The same CPT code may be used for both procedures. In general, the charge per CPT code would be the same, whether the

procedures were used for treatment of gender dysphoria or treatment of another condition—for example, the charge for a subcutaneous mastectomy (19304).

14. Despite Dr. Sutphin’s suggestion to the contrary, gender-confirming surgeries do not have a particularly high rate of complications when compared with analogous procedures for other conditions. For example, a recent study of 7,905 persons with gender dysphoria, of whom 1,047 underwent surgery between 2009-2015, revealed an overall complication rates for all surgical procedures on persons with gender dysphoria of only 5.8%.² Looking specifically at the complication rates for chest surgeries (subcutaneous mastectomy and chest wall contouring), two recent study reveal a complication rate among transgender men of between 11% -12%,³ in comparison to the complication rate of 43% for cisgender women undergoing breast reduction shown in a 2005 study.⁴ Likewise, in a systematic review of cisgender women undergoing nipple-sparing mastectomy and immediate breast reconstruction using breast implants and acellular dermal matrix the complication rates include: 11% skin necrosis, 5% nipple necrosis, 12% infection, 1% hematoma, 5% seroma, 4% explanation, and 9% unplanned return to the operating room.⁵ In short, the complication rates for gender-confirming surgeries are lower than

² Lane, M., et al. Trends in gender-affirming surgery in insured patients in the United States. *Plastic and Reconstructive Surgery – Global Open*. 2018; 6(4), e1738. doi: 10.1097/GOX.0000000000001738.

³ Berry, M., et al. Female-to-male transgender chest reconstruction: A large consecutive, single-surgeon experience. *J Plast Reconstr Aesthet Surg*. 2012 Jun; 65(6):711-9. doi: 10.1016; Agarwal, A. et al. Quality of life improvement after chest wall masculinization in female-to-male transgender patients: A prospective study using the BREAST-Q and Body Uneasiness Test. *J Plast Reconstr Aesthet Surg*. 2018 May;71(5):651-657. doi: 10.1016.

⁴ Cunningham, B. et al.. Analysis of breast reduction complications derived from the BRAVO study. *Plast Reconstr Surg*. 2005 May;115(6):1597-604.

⁵ Heidemann, L., et al. Complications following nipple-sparing mastectomy and immediate acellular dermal matrix implant-based breast reconstruction-A systematic review and meta-analysis. *Plast Reconstr Surg Glob Open*. 2018 Jan 12;6(1):e1625. doi: 10.1097.

or in the same range as the rates for the same surgeries when used to treat cisgender patients for other conditions.

15. Dr. Sutphin repeatedly emphasizes the risks associated with vaginoplasty (a genital reconstruction surgery performed on transgender women) where the vagina is constructed using a segment of the colon. But this is the *least* common method of vaginoplasty for transgender women. The main type of vaginoplasty is the penile inversion vaginoplasty, which may be combined or augmented with skin grafts. Aside from the colon, other forms of vaginoplasty include the use of peritoneum (lining of the abdominal cavity) as well as other intestinal segments (ie small intestine). The colonic vaginoplasty is typically reserved as a revision procedure or, on occasion, as a primary procedure for individuals who lack sufficient local-regional tissue and/or have inadequate donor sites for skin grafts. Moreover, complication rates for vaginoplasties (of all forms) in transgender women are similar to rates of complications for cisgender women undergoing vaginal or vulvar reconstruction for medical conditions (e.g., cancer).⁶

⁶ For example, a 2018 study looking at complications and patient reported outcomes in 3716 cases of male-to-female vaginoplasty found complications rates of 2% fistula, 14% stenosis and strictures, 1% tissue necrosis, and 4% prolapse with patient-reported satisfaction of 93% (overall results). See Manrique, O., et al. Complications and Patient-Reported Outcomes in Male-to-female Vaginoplasty-Where We Are Today. *Annals of Plastic Surgery*: June 2018; 80(6): 684–691. doi: 10.1097. An additional 2018 study published in the *Journal of Urology* evaluated 330 patients presenting for primary vaginoplasty. The overall complication rate in this study was 28.7%. Gaither, T., et al. Postoperative Complications Following Primary Penile Inversion Vaginoplasty Among 330 Male-to-Female Transgender Patients. *J Urol*. 2018 Mar; 199(3):760-765. doi: 10.1016. In comparison, studies examining complication rates in cis-gender women undergoing vaginal and vulvar reconstruction demonstrate complication rates ranging as high as 61%. Crosby, M., et al. Outcomes of Partial Vaginal Reconstruction with Pedicled Flaps following Oncologic Resection. *Plast Reconstr Surg*. 2011 Feb;127(2):663-9. doi: 10.1097. And additional studies demonstrate complication rates for cis-gender women of 22.3%-26.7% for flap-related complications and between 7%-22% for donor site and flap-related complications. See Di Donato, V., et al. Vulvovaginal reconstruction after radical excision from treatment of vulvar cancer: evaluation of feasibility and morbidity of different surgical techniques. *Surg*

16. Dr. Sutphin expresses concern that gender-confirming surgeries require specialized training and can be performed only by “a select group of surgeons” and that he cannot offer to perform a procedure unless positive outcomes are “reproducible with my own hands and with the resources available at my disposal.” Sutphin Decl. ¶ 21. It is true that certain gender-confirming procedures, such as genital surgeries, do require specialized training. (Other procedures, like mastectomies, breast augmentations, or hysterectomies, are common and can be performed by many surgeons without specialized training in transgender care.) As described in my first declaration in this case, I am actively involved in training surgeons to perform genital reconstruction procedures. Schechter Dec. ¶¶ 12-13. But, *many* surgical procedures require highly specialized training. For example, I do not perform pediatric craniofacial surgery or brachial plexus surgery as these procedures are highly specialized and best performed by surgeons with particular expertise in these areas. The fact that I personally do not perform those surgeries does not mean that those surgeries are not safe or fail to meet accepted standards of medicine.

17. Decades of clinical experience, as well as a substantial body of peer-reviewed research, show that the standard medical surgical treatments for gender dysphoria are effective.⁷

Oncol. 2017 Dec;26(4):511-521. doi: 10.1016 (flap-related complications); McArdle, A., et al. Vaginal reconstruction following radical surgery for colorectal malignancies: a systematic review of the literature. Ann Surg Oncol. 2012 Nov;19(12):3933-42. doi: 10.1245 (donor site and flap-related complications). Additional studies reviewing reconstruction of congenital deformities found complication rates as high as 57%. Versteegh, H., et al., (2015). Postoperative complications after reconstructive surgery for cloacal malformations: a systematic review. Tech Coloproctol. 2015; 19(4): 201–207. doi: 10.1007.

⁷ See Schechter Dec. at ¶¶ 36-37. For example, a recent literature review concluded that gender confirmation surgery is effective at improving quality of life, overall happiness, and sexual functioning in gender dysmorphic MTF patients appropriately selected with WPATH SOC criteria. Hadj-Moussa, M., et al. Feminizing Genital Gender-Confirmation Surgery, 2018, 1-14. Similarly, a pre-operative and six-month post-operative survey of FTM patients found strong increases in positive body image, as well as decreases in gender dysmorphia and feelings of low

As support for his claim to the contrary, Dr. Sutphin cites a flawed and outdated 1979 study by Jon Meyer and a study by Dhejne et al. His citation to these sources shows his misunderstanding of the relevant research in this area. Sutphin Dec. ¶¶ 37-39. The Meyer report is extremely outdated by current standards but was even criticized at the time of publication because of serious methodological flaws. In 1980, Fleming, Steinman, and Bockman published a paper challenging the report's findings, citing methodological problems, as well as conceptual flaws in research design, score reporting, interpretation of data, and conclusions.⁸ One striking example of the flaws includes the authors' assignment of a negative value of minus one to persons who cohabited with a person of "the non-gender appropriate sex." It is unclear what such cohabitation was intended to imply and why it was given a negative value. This is just one example of the value judgments and researcher bias that contaminate the findings of this 1979 study.

18. Dr. Sutphin similarly mischaracterizes the Dhejne study. Sutphin Dec. ¶¶ 37-39. Dr. Sutphin cites the Dhejne study to imply that because gender-confirming surgeries do not, in and of themselves, completely resolve morbidity and mortality among transgender individuals, they are not effective. In the first place, the study itself clearly states that it is not intended to evaluate whether gender-confirming surgeries are effective treatments. Dhejne et al. at e16885.⁹

self-worth. Sex Med Rev. 2018 Jul;6(3):457-468.e2. doi: 10.1016; Van de Grift, et al. Body Image in Transmen: Multidimensional Measurement and the Effects of Mastectomy. J Sex Med. 2016 Nov;13(11):1778-1786. doi: 10.1016. Another recent post-operative and six-month follow-up survey of MTF patients found improvements in quality of life in a significant majority of patients. Papadopoulos, N.A., et al. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increase Quality of Life in a Prospective Study. Plast Reconstr Surg. 2017 Aug;140(2):286-294. doi: 10.1097.

⁸ Fleming, M., Steinman, C., Bocknek, G. Methodological problems in assessing sex reassignment surgery: A reply to Meyer and Reter. Arch Sex Behav. 1980 Oct;9(5):451-6.

⁹ See Science AMA Series: *I'm Cecilia Dhejne a fellow of the European Committee of Sexual Medicine, from the Karolinska University Hospital in Sweden. I'm here to talk about transgender health, suicide rates, and my often misinterpreted study. Ask me anything!*, Reddit.com, July 27, 2017 05:14 ("Despite the paper clearly stating that the study was not designed to evaluate

But the fact that gender-confirming surgeries do not entirely resolve all possible causes of morbidity and mortality is completely unsurprising. While surgery can treat gender dysphoria by aligning transgender people's bodies with their gender identity, surgery alone cannot fully eliminate the stigma and discrimination that transgender people have faced. Moreover, it is rare for any surgery to eliminate morbidity and mortality. For example, people who have surgery to remove a cancerous tumor may still experience higher rates of morbidity and mortality than the general population, but that doesn't mean that they shouldn't undergo the surgery. And, those who receive such surgery generally have reduced morbidity and mortality compared to those with the same condition who do not, even if morbidity and mortality for both groups is higher than average. The continued existence of elevated morbidity and mortality rates, compared to the population at large, therefore say nothing about whether a treatment is a safe and effective means of treating an underlying condition.

19. Despite his own misreading of the literature, Dr. Sutphin at the same time suggests that the quality of the evidence supporting gender-affirming surgeries is "low." Sutphin Dec. ¶¶ 40, 46. But the quality of the evidence is comparable to that supporting many surgeries and clinical procedures – especially in plastic surgery. Moreover, while randomized, double-blind, placebo-controlled studies are the gold standard for scientific studies, they cannot always be used to test clinical procedures. There are simply inherent limitations to our ability to conduct such studies in clinical medicine. First, it is unethical to withhold medically necessary care. As such, in many situations, clinicians cannot conduct a study that uses a control group who is deprived of the treatment being studied. Second, it is not possible to perform a double-blind

whether or not gender-affirming is beneficial, it has been interpreted as such.”), https://www.reddit.com/r/science/comments/6q3e8v/science_ama_series_im_cecilia_dhejne_a_fellow_of/.

study of surgeries that modify body parts, nor is there a placebo that can mimic such a surgery – unlike studies that use placebo drug regimens, for example, people will know if they have had an operation or not. Third, for conditions like gender dysphoria that are relatively uncommon, sample sizes of individuals with the condition who are available to participate in a clinical study tend to be small.[¶] This is especially true where treatment for a condition has not been covered by insurance programs, since that very lack of access to the procedure results in there being fewer people who have received treatment who can participate in a prospective study of that treatment's effects.

20. Additionally, clinical and scientific literature is only one component of how surgeons determine whether a particular procedure is appropriate. We not only consider the literature *en masse*, but must also account for our own clinical experience and that of our colleagues, as well as our patients' experiences and input. Here, the existing literature indicates that gender-confirming surgeries are safe and effective treatment for gender dysphoria. My own experience is consistent with the literature and the experience documented by clinicians across the globe: that gender-confirming surgeries are safe and effective treatment for gender dysphoria. Schechter Dec. ¶¶ 41-42.

21. Dr. Sutphin also points to a 2016 decision of the U.S. Department of Health & Human Services Center for Medicare and Medicaid Services (CMS) to support his claim that gender confirming surgery is not effective. Sutphin Dec. ¶ 22. What Dr. Sutphin fails to point out is that in 2014 an impartial adjudicative board in the Department of Health & Human Services concluded, based on decades of studies, that surgical care to treat gender dysphoria is safe, effective, and not experimental. See Exhibit B. The decision specifically noted that, regardless of whether the studies were randomized double-blind trials, there was sufficient evidence to prove

“a consensus among researchers and mainstream medical organizations that transsexual surgery is an effective, safe and medically necessary treatment for [gender dysphoria].” *Id.* at 20. Ever since the adjudicative board’s decision, Medicare has provided coverage for transition-related surgery based on patients’ individual needs.

22. It is important to point out that CMS, in the 2016 CMS Decision Memo, was primarily addressing the medical necessity for treatments of the Medicare-aged population (typically 65 and over), not the under-65 population that participates in Medicaid. Nevertheless, CMS decided to continue to cover surgical treatment of gender dysphoria based on patients’ individual needs and to refrain from issuing national standards regarding how to determine medical necessity in individualized cases. See Exhibit C. The decision specifically clarified that “GRS [gender reassignment surgery] may be a reasonable and necessary service for certain beneficiaries with gender dysphoria,” but “[t]he current scientific information is not complete for CMS to make a [national coverage determination] that identifies the precise patient population for whom the service would be reasonable and necessary.” *Id.* at 54. In particular, CMS expressed concern that the Medicare population includes “older adults [who] may respond to health care treatments differently than younger adults.” *Id.* at 57. These differences can be due to, for example, multiple health conditions or co-morbidities, longer duration needed for healing, metabolic variances, and impact of reduced mobility.” *Id.* Indeed, most studies on outcomes of patients with gender dysphoria include only a minority of individuals over the age of 65, which is not uncommon in medical studies that are not focused on geriatric issues. The CMS memorandum concluded that the appropriateness of surgical care for this population should be determined on an individualized basis. Notably, I have performed gender-confirming surgeries on a number of Medicare beneficiaries in recent years. Indeed, most medical and surgical care

provided to patients should be individualized, taking into account each patient's unique clinical circumstances. In contrast, the exclusion challenged in this case does not evaluate the medical necessity of care for gender dysphoria on an individualized basis. It categorically excludes all coverage regardless of an individualized showing of medical necessity.

23. Dr. Sutphin also makes much of the fact that neither the American Board of Surgery nor the American Board of Plastic Surgery have created standards of care for gender-affirming surgical procedures. Sutphin Dec. ¶ 44. However, these Boards are designed to provide training and certification of doctors with the goal of providing excellent care in their field. Moreover, the American Board of Plastic Surgery includes gender-confirming surgical procedures as a part of surgical training and also examines candidates on these procedures. Moreover, the American Society of Plastic Surgeons and the American College of Surgeons, both of which are involved with surgical education, include training on gender-affirming surgeries among their educational offerings. (I will also be conducting a training at the annual meeting of the American Urologic Association in May of 2019).

24. Dr. Sutphin also contends that gender-confirming surgery cannot be effective because some patients have expressed “[p]oignant regret and vacillation regarding the surgical outcome of sex reassignment surgery.” Sutphin Dec. ¶ 27. To demonstrate that transgender patients experience regret from gender confirming surgery, Dr. Sutphin cites the work of Dr. Miroslav Djordjevic regarding his experience with patients seeking “reversal of their sex reassignment surgeries.” However, according to the article itself, the patients described therein did not receive surgery consistent with the WPATH Standards of Care.¹⁰ In fact, all available

¹⁰ See Djordjevic, M., et al. Reversal Surgery in Regretful Male-to-Female Transsexuals After Sex Reassignment Surgery. J Sex Med. 2016 Jun;13(6):1000-7. doi: 10.1016.

research – as well as my own clinical experience – indicates that very few patients experience regret when gender confirming surgery is provided in accordance with the WPATH Standards of Care by a qualified surgeon. While regret of any kind is rare (0.6% in transgender women and 0.3% of transgender men)¹¹, what researchers term “true regrets,” as opposed to regrets due to lack of social acceptance, comprise an even smaller percentage (approximately half this group, roughly 0.3% in transwomen and 0.15% in transmen.)¹²

25. In contrast to extremely low regret rates, the overwhelming majority of patients who obtain gender confirming surgery consistent with the standards of care are satisfied and experience a reduction of gender dysphoria. For the vast majority of transgender people who seek such surgery, the surgery is successful at alleviating a lifelong struggle to find peace of mind and comfort with their bodies.

I declare under penalty of perjury that the forgoing is true and correct.

Executed this 10th day of December, 2018.



Loren Schechter, M.D.

¹¹ Wiepjes, et. al. The Amsterdam Cohort of Gender Dysphoria Study 1972-2015: Trends in Prevalence, Treatment, And Regrets. J Sex Med. 2018 Apr;15(4):582-590. doi: 10.1016.

¹² *Id.* at 585, 587 (researchers classified “social regrets” as those experienced by individuals who still identified as transwomen, but reported feeling “ignored by surroundings” or regretted loss of relatives,” and classified “true regrets” as those experienced by individuals who “thought gender-affirming treatment would be a ‘solution’ for, for example, homosexuality or [lack of] personal acceptance, but, in retrospect, regretted the diagnosis and treatment”).