IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

ALINA BOYDEN and
SHANNON ANDREWS,

Plaintiffs,

v. Case No. 17-CV-0264

STATE OF WISCONSIN DEPARTMENT
OF EMPLOYEE TRUST FUNDS, et al.,

Defendants.

**SUPPLEMENTAL EXPERT WITNESS REPORT
OF STEPHANIE BUDGE, PH.D**

I, Stephanie Budge, Ph.D., have been retained by counsel for the Plaintiffs as an expert in the above-captioned lawsuit to provide an expert opinion. This Supplemental Report addresses the following questions: 1) Whether medical treatments to lessen gender dysphoria the same as treatments for cisgender persons seeking cosmetic surgery to change or enhance their bodies; 2) Whether there is a difference between gender dysphoria and anxiety and mood disorders; 3) Whether the methodology for conducting the research regarding hormone therapy and surgery indicates the treatments are safe and effective for gender dysphoria and if the research is consistent with applicable scientific standards; 4) Whether these medical interventions can save transgender people's lives; and 5) Whether there is

any dispute in the medical/psychological community over whether persons' status as transgender can be changed.

I have personal knowledge of the matters stated in this supplemental report as well as my original report. I may further supplement these opinions in response to information produced by Defendants in discovery and in response to additional information from Defendants' experts. My opinions contained in this supplemental report are based on: (1) my clinical experience as a licensed psychologist working with transgender patients; (2) my knowledge of the peer-reviewed research, including my own, regarding the psychological outcomes related to gender dysphoria and the treatments for gender dysphoria; and, (3) my work training therapists to use evidence-based practice and up-to-date standards of care, specifically with transgender patients.

1) **Are medical treatments to lessen gender dysphoria the same as treatments for cisgender persons seeking cosmetic surgery to change or enhance their bodies?**

There is general scientific agreement that gender confirming surgeries are considered reconstructive, not cosmetic, surgeries. Laungani & Brassard (2017) indicate that: "It is crucial to recognize gender confirmation surgical procedures as reconstructive and classify/publish them accordingly… it perpetrates the wrong idea that being gender dysphoric is a choice and that undergoing medical, psychiatric, and surgical therapy is a chosen way to enhance one's physical appearance."

The WPATH standards of care also outline the importance of not determining gender confirming surgeries as "elective." One factor that assists with the process of

defining these surgeries as medically necessary instead of elective, is the inclusion of an assessment by a qualified mental health professional who will assess whether or not the individual meets criteria for gender dyphoria (Coleman et al., 2012). If an individual does not meet criteria for gender dysphoria, the standards of care indicate that clinicians should not recommend medical interventions as medically necessary for the individual. The standards of care indicate: "typical elective procedures involve only a private mutually consenting contract between a patient and a surgeon. Genital and breast/chest surgeries as medically necessary treatments for gender dysphoria are to be undertaken only after assessment of the patient by qualified mental health professionals, as outlined in section VII of the *SOC*. These surgeries may be performed once there is written documentation that this assessment has occurred and that the person has met the criteria for a specific surgical treatment."

Medical treatments to lessen gender dysphoria (e.g., hormone therapy, gender confirming surgeries) are considered separate from cosmetic surgeries sought by transgender individuals (see above). Cosmetic and elective surgeries are performed to enhance an individual's self-esteem and self-confidence and should not be performed to treat or improve psychological disorders (Honigman, Phillips, & Castle, 2004). In their systematic review of the literature, Honigman et al. (2004) note that where cosmetic surgeries are performed on cisgender individuals, the research indicates that there is either no benefit or worse outcomes for individuals with depression, anxiety, personality disorders, or body dysmorphic disorder. In an

additional review, Cook, Rosser, & Salmon (2006) came to similar conclusions and state: "There is currently no evidence to support the view that cosmetic surgery is of lasting benefit to patients with pre-existing psychological or personality problems" (p. 1146). More recent studies and reviews show similar findings (Brunton et al., 2014; von Soest, Kvalem, Roald, & Skolleborg, 2009)

2) Is there a difference between gender dysphoria and anxiety and mood disorders?

Gender dysphoria is a diagnosis that is considered distinct from both anxiety and mood disorders (see American Psychiatric Association [APA], 2013). Gender dysphoria is a diagnosis indicating that specific distress is directly derived from incongruence with one's assigned sex and one's gender identity. Anxiety and mood disorders often accompany gender dysphoria (i.e., are comorbid) (APA, 2013), but the disorders should not be conflated.

In Mayer's deposition, he noted a misunderstanding of the difference between gender dysphoria as a diagnosis and the term "dysphoria." Mayer states in his deposition: "Now, if the dysphoria is depression, there are treatments for depression. We have a great experience with people dissatisfied with their body appearance, and we do plastic surgery on them. We have a great deal of experience on that, what it does to their image and all that. And we have evidence on medicine, like depression. The question is, what is their dysphoria? Dysphoria is a general term. Is it anxiety? Is it depression? Is it social withdrawal, social isolation? And then you go after treating those characteristics." Dysphoria, not to be confused with

gender dysphoria, is a general term that is often used to describe general dissatisfaction with life or unease. The term dysphoria is not a diagnosis.

The diagnosis of gender dysphoria, according to the American Psychiatric Association (2013), also indicates: "although not all individuals will experience distress as a result of such incongruence, many are distressed if the desired physical interventions by means of hormones and/or surgery are not available." Along with the APA, the World Professional Association of Transgender Health, the American Medical Association, and the American Psychological Association all note the importance of deeming hormones and gender confirming surgeries as medically necessary care for some individuals with gender dysphoria, because the diagnosis of gender dysphoria is a specific type of distress that is often related to one's body not aligning to one's gender identity.

Even though gender dysphoria should not be used synonymously with mood or anxiety disorders, research has shown that experiencing gender dysphoria (or aspects of gender dysphoria) can often lead to depression, anxiety, suicidality, as well as additional mental health concerns (e.g., Bockting et al., 2013; Budge, Adelson, & Howard, 2013; Dhejne, Van Vlerken, Heylens, & Arcelus, 2016; Tebbe & Moradi, 2016). As noted in my original report (see page 12), it is often the lack of access or ability to receive transition-related care that causes the mental health concerns. As well, even if there are treatments for the comorbid diagnoses, these will not treat the gender dysphoria caused by incongruence between one's body and one's identity, which is why medical treatments are indicated.

3) What is the appropriate methodology for conducting research on the efficacy and safety of treatments for gender dysphoria?

In Mayer's deposition, he notes three critiques of the current state of the research, including: 1) the studies do not use gender dysphoria as an outcome, 2) the studies do not have control groups, and 3) that the researchers are not blind to the treatment group.

To address Mayer's first critique, there are studies that measure gender dysphoria as a specific outcome of transition-related care and these studies have found that gender dysphoria is significantly reduced after the medical interventions (for example, see Garcia & Karasic, 2018; Glynn et al., 2016; Fisher et al., 2016; Van de Grift et al., 2018). As well, even when studies do not use gender dysphoria as the primary outcome, the literature is indicative of the powerful effect that transition-related care has on psychological well-being. The large body of longitudinal, retrospective, and cross-sectional research that focuses on psychological outcomes of hormone therapy and gender confirming surgeries overwhelmingly indicates improvement in mental and physical health for patients with gender dysphoria (Costa & Colizzi, 2016; Kuzon, Sluiter, & Gast, 2018). In the numerous studies that have focused on the outcomes of gender confirming surgeries and hormone therapy, the majority of studies are consistent in their findings regarding the benefit and safety of these surgeries, thus leading to major national and international organizations to deem these interventions as medically necessary (see the American Medical Association, American Psychiatric Association, American Psychological Association, World Professional Association for Transgender Health,

amongst others). See pages 15 – 18 of my original report for a more comprehensive discussion of the safety and effectiveness of these treatments.

To address Mayer's second critique, there are many studies that have used control groups to research these treatments. For example, Fisher et al., (2016) compared a cross-hormone therapy group (CHT) to a no cross hormone therapy group (no-CHT) for individuals diagnosed with gender dysphoria. Analyses indicated that gender dysphoria (as measured by a validated gender dysphoria scale) showed a statically significant decrease over four time points for those engaging in hormone therapy. Results also indicate that depression and body uneasiness also decreased over the four time points for those engaging in hormone therapy. In an additional study that compared matched control groups of transgender individuals using in hormone therapy versus those who were not using hormone therapy, Witcomb et al. (2018) found that transgender individuals not using hormone therapy were four times more likely to report depressive symptoms than transgender individuals using hormone therapy. As well, Keo-Meier et al. (2015) conducted a study to determine if transgender men using hormone therapy demonstrate improvement in mental health concerns when compared to cisgender men and women as controls. The study indicated that transgender men reported a statistically significant decrease in mental health concerns when compared to cisgender men and women as controls; the outcome measure included subscales on the MMPI-II (Minnesota Multiphasic Personality Inventory-II), which has been validated with thousands of individuals.

There are several concerns with conducting randomized controlled trials (RCTs) with transgender individuals. Deutch, Radix, & Rasa (2016) note that RCTs with transgender individuals are likely not ethically acceptable or feasible. They state that randomizing transgender people to receive or not receive hormone therapy or surgery violates the principle of equipoise (true scientific uncertainty about whether an intervention will help the individual). However, the authors do note that RCTs could be designed about schedules and delivery modes of treatments.

Mayer's second critique is that studies are not double-blind designs, which he states would be difficult to conduct, and suggests a single-blind design. This design suggestion impossible regarding surgical interventions. In a single-blind design, the researcher is aware of the intervention, but the participant is unaware of which intervention they are receiving (a placebo or the true intervention). For surgeries, there is no way for a patient to not know if they have received the surgery or not. In addition, it would be extremely unlikely that a single-blind design could exist for hormone therapies. The result of hormone therapies include physiological changes (depending on the hormone, there could be changes in hair growth, voice, skin, breasts, genitals, etc.)—for most of these effects, placebos will not create these physiological changes.

Instead, Mayer suggests a study where patients are randomized to either having gender confirming surgery or a financial payout that is equivalent to the cost of the surgery. He indicates that the comparative outcomes would indicate

whether or not someone's dysphoria has been treated. However, the control group (the payment group) is not a viable treatment (as would be offered in some controlled trials) or a no-treatment group (which would be considered unethical due to the amount of evidence indicating the improved psychological well-being from surgery).

4). Can medical interventions save transgender individuals' lives?

There is a body of research that clearly demonstrates a relationship between transgender individuals obtaining transition-related care (e.g., hormones and gender confirmation surgery [GCS]) and a reduction in suicidal ideation. In their recent study, Tucker et al. (2018) found that transgender individuals who had undergone hormone therapy and GCS reported lower suicidal ideation within the past year and past two weeks when compared to transgender individuals who had not received any medical treatments or only one medical treatment. Additional studies indicate that suicidal ideation is significantly lower for transgender individuals who receive hormone therapy versus those who do not (see Bauer et al., 2015; Wilson et al., 2015).

Regarding surgeries, some studies have found that even though there is a decrease in the transgender sample's suicidal ideation, the suicidal ideation rates remain higher than the general population (for example, Dhjene et al., 2011). In response to these findings, Bauer et al. (2015) conducted analyses to determine the relative risk reduction post-surgery, and found that there was a there is a 62% relative risk reduction post-surgery for the transgender sample in their study.

Additionally, Wilson et al. (2015) found transgender women who had breast augmentation reported lowered suicidal ideation than those who had not had surgery or hormones.

In addition to reducing suicidal ideation (and thus suicide completion rates), studies also indicate that hormone therapy and gender confirmation surgery improves quality of life for transgender individuals. For example, van de Grift et al.'s (2018) study indicated high scores for transgender women on the Satisfaction with Life Scale, which measures aspects such as "the conditions of my life are excellent" and "in most ways, my life is close to ideal." Ainsworth and Spiegel (2010) measured quality of life for transgender women post-surgery (as measured by the widely validated quality of life measure, San Francisco 36-question health questionnaire); quality of life in this study measured vitality, physical functioning, bodily pain, general health perceptions, physical role functioning, emotional role functioning, social role functioning, and mental health. Results indicated that transgender women who had gender confirmation surgery (GCS) reported a higher quality of life when compared to transgender women who had not had GCS. Numerous other studies have noted the positive impact on quality of life when transgender individuals receive hormone therapy and/or surgeries (also see page 17 of my original expert report).

Cosmetic surgery for cisgender individuals is not considered a treatment for suicidal ideation. As noted above in this report, cosmetic surgery has not been seen to improve mental health for individuals with mental health concerns. In addition

to there not being evidence that cosmetic surgery can reduce suicidal ideation, there is some evidence that cosmetic surgery for cisgender individuals is associated with suicidal ideation and suicide completion for some procedures (see Philips, 2017; Phillips, 2007; Sarwer, Brown, & Evans, 2007).

5). Is there is consensus in the medical/psychological community regarding whether or not one's gender identity can be changed?

In my original expert report, I provided information regarding the unethical nature of reparative therapy for transgender individuals (see pages 19 and 20). Major medical and psychological associations within the United States denounce the practice of reparative therapies regarding an individual's gender identity on the basis that one's gender identity is immutable. Research studies report psychological harm and ineffectiveness when therapists, family members, or others pressure a transgender individual to change or adjust their transgender identity (for example, Bettergarcia & Israel, 2018; Gijs & Brewaeys, 2007; Mizock & Lundquist, 2016).

There is a growing body of research that indicates an underlying biological etiology related to transgender identity (see expert report page 8) that also demonstrates the immutability of gender identity. Recent studies also indicate that the concept of transgender individuals "changing their minds" or the concept of "transgender regret" related to hormone therapy and/or gender confirmation surgery is minimal to nonexistent within the study populations (e.g., Gijs & Brewaeys, 2007; van de Grift et al., 2018). The concept of transgender regret is often associated with misdiagnosis, poor social support, and comorbidity of severe psychopathology (Gijs & Brewaeys, 2007). The combination of information above

(ineffectual reparative therapies, biological etiology, and lack of regret) provides solid evidence regarding the immutability of gender identity. Based on this evidence, the consensus in the medical/psychological community with respect to post-pubescent children and adults is that a person's gender identity cannot be changed.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed this 25th day of June, 2018.

Stephanie Budge, Ph.D.

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