

FOR PUBLICATION

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

ADREE EDMO, AKA Mason Edmo,
Plaintiff-Appellee,

v.

CORIZON, INC.; SCOTT ELIASON;
MURRAY YOUNG; CATHERINE
WHINNERY,
Defendants-Appellants,

and

IDAHO DEPARTMENT OF
CORRECTIONS; AL RAMIREZ, in his
official capacity as warden of Idaho
State Correctional Institution;*
HENRY ATENCIO; JEFF ZMUDA;
HOWARD KEITH YORDY; RICHARD
CRAIG; RONA SIEGERT,
Defendants.

No. 19-35017

D.C. No.
1:17-cv-00151-
BLW

ADREE EDMO, AKA Mason Edmo,
Plaintiff-Appellee,

No. 19-35019

* Al Ramirez is substituted in his official capacity for his predecessor, Howard Keith Yordy, pursuant to Rule 43(c)(2) of the Federal Rules of Appellate Procedure.

v.

IDAHO DEPARTMENT OF
CORRECTIONS; AL RAMIREZ, in his
official capacity as warden of Idaho
State Correctional Institution; HENRY
ATENCIO; JEFF ZMUDA; HOWARD
KEITH YORDY; RICHARD CRAIG;
RONA SIEGERT,

Defendants-Appellants,

and

CORIZON, INC.; SCOTT ELIASON;
MURRAY YOUNG; CATHERINE
WHINNERY,

Defendants.

D.C. No.
1:17-cv-00151-
BLW

OPINION

Appeal from the United States District Court
for the District of Idaho
B. Lynn Winmill, Chief District Judge, Presiding

Argued and Submitted May 16, 2019
San Francisco, California

Filed August 23, 2019

Before: M. Margaret McKeown and Ronald M. Gould,
Circuit Judges, and Robert S. Lasnik, ** District Judge.

Per Curiam Opinion

** The Honorable Robert S. Lasnik, United States District Judge for
the Western District of Washington, sitting by designation.

SUMMARY***

Eighth Amendment / Prisoner Rights

The panel affirmed the district court's entry of a permanent injunction in favor of Idaho state prisoner Adree Edmo, but vacated the injunction to the extent it applied to defendants Corizon, Howard Yordy, Rona Siegert, Dr. Young, Dr. Craig, and Dr. Whinnery, in their individual capacities, in Edmo's action seeking medical treatment for gender dysphoria.

The district court concluded that Edmo had established her Eighth Amendment claim. The district court further concluded that gender confirmation surgery ("GCS") was medically necessary for Edmo, and ordered the State to provide the surgery.

The panel credited the district court's factual findings as logical and well-supported, and held that the responsible prison authorities were deliberately indifferent to Edmo's gender dysphoria, in violation of the Eighth Amendment. The panel held that the record, as construed by the district court, established that Edmo had a serious medical need, that the appropriate medical treatment was GCS, and that prison authorities had not provided that treatment despite full knowledge of Edmo's ongoing and extreme suffering and medical needs. The panel rejected the State's position that there was a reasoned disagreement between qualified medical professionals. The panel emphasized that its

*** This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.

analysis was individual to Edmo, and rested on the record of this case.

Addressing further aspects of the appeal, the panel rejected the State's contention that the district court did not make the Prison Litigation Reform Act's requisite "need-narrowness-intrusiveness" findings, causing the injunction to automatically expire and mooting the appeal. The panel held that the district court's order, considered as a whole, made all the findings required by 18 U.S.C. § 3626(a)(1)(A), and Ninth Circuit precedent. The panel also held that the permanent injunction that the district court entered had not expired, and remained in place, albeit stayed. The panel accordingly denied the State's motion to dismiss.

The panel held that the district court did not err in granting a permanent injunction. Specifically, the panel held, based on the district court's factual findings, that Edmo established her Eighth Amendment claim and that she will suffer irreparable harm – in the form of ongoing mental anguish and possible physical harm – if GCS is not provided. The State did not dispute that Edmo's gender dysphoria was a sufficiently serious medical need to trigger the State's obligations under the Eighth Amendment. The panel held that the district court did not err in crediting the testimony of Edmo's experts that GCS was medically necessary to treat Edmo's gender dysphoria and that the State's failure to provide that treatment was medically unacceptable. The panel further held that the district court did not err in discrediting the State's experts because aspects of their opinions were illogical and unpersuasive. Also, the panel held that the record demonstrated that Dr. Eliason acted with deliberate indifference to Edmo's serious medical needs. The panel noted that its decision was in tension with the Fifth Circuit's decision in *Gibson v. Collier*, 920 F.3d 212 (5th

Cir. 2019), and the panel rejected that decision's categorical holding that denying GCS cannot, as a matter of law, violate the Eighth Amendment.

The panel held that the district court did not err in finding that Edmo would be irreparably harmed absent an injunction. The panel rejected the State's contentions as to why the district court erred in this finding.

The panel next considered the State's challenges to the scope of the injunction. The panel held that the injunction was properly entered against Dr. Eliason because he personally participated in the deprivation of Edmo's constitutional rights. The panel also held that because Edmo may properly pursue her Eighth Amendment claim for injunctive relief against Attencio, Zmuda and Ramirez in their official capacities, they were properly included within the scope of the district court's injunction. On remand, the district court shall amend the injunction to substitute the current warden as a party for Yordy. The panel vacated the district court's injunction to the extent it applied to Yordy, Siegert, Dr. Young, Dr. Craig, and Dr. Whinnery in their individual capacities because the evidence in the record was insufficient to conclude that they were deliberately indifferent to Edmo's serious medical needs. The panel vacated the injunction as to Corizon, and remanded with instructions to the district court to modify the injunction to exclude Corizon. Finally, the panel held that the injunctive relief ordered was not overbroad.

The panel considered the State's challenges to the procedure used by the district court. The panel rejected the State's contention that the district court erroneously converted the evidentiary hearing into a final trial on the merits without giving proper notice. The panel held that the State did receive notice, and in any event, the State had not

shown any prejudice. The panel also rejected the State's contention that the district court violated defendants' Seventh Amendment right to a jury trial by converting the evidentiary hearing into a trial on the merits. The panel held that the State's conduct waived its right to a jury trial with respect to issues common to Edmo's request for an injunction ordering GCS and her legal claims.

COUNSEL

Brady J. Hall (argued), Special Deputy Attorney General; Lawrence G. Wasden, Attorney General; Office of the Attorney General, Boise, Idaho; Marisa S. Crecelius, Moore Elia Kraft & Hall LLP, Boise, Idaho; for Defendants-Appellants Idaho Department of Corrections, Henry Atencio, Jeff Zmuda, Howard Keith Yordy, Richard Craig, and Rona Siegert.

Dylan A. Eaton (argued), J. Kevin West, and Bryce Jensen, Parsons Behle & Latimer, Boise, Idaho, for Defendants-Appellants Corizon, Inc.; Scott Eliason; Murray Young; and Catherine Whinnery.

Lori Rifkin (argued), Hadsell Stormer & Renick LLP, Emeryville, California; Dan Stormer and Shaleen Shanbhag, Hadsell Stormer & Renick LLP, Pasadena, California; Craig Durham and Deborah Ferguson, Ferguson Durham PLLC, Boise, Idaho; Amy Whelan and Julie Wilensky, National Center for Lesbian Rights, San Francisco, California; for Plaintiff-Appellee.

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Feld LLP, Dallas, Texas; for Amici Curiae Andrea Armstrong, Sharon Dolovich, Betsy Ginsberg, Michael B. Mushlin, Alexander A. Reinert, Laura Rovner, and Margo Schlanger.

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OPINION

PER CURIAM:

The Eighth Amendment prohibits “cruel and unusual punishments.” U.S. Const. amend. VIII. “The Amendment embodies broad and idealistic concepts of dignity, civilized standards, humanity, and decency” *Estelle v. Gamble*, 429 U.S. 97, 102 (1976) (quotation omitted). Our society recognizes that prisoners “retain the essence of human dignity inherent in all persons.” *Brown v. Plata*, 563 U.S. 493, 510 (2011).

Consistent with the values embodied by the Eighth Amendment, for more than 40 years the Supreme Court has held that “deliberate indifference to serious medical needs” of prisoners constitutes cruel and unusual punishment. *Estelle*, 429 U.S. at 106. When prison authorities do not abide by their Eighth Amendment duty, “the courts have a responsibility to remedy the resulting . . . violation.” *Brown*, 563 U.S. at 511. We do so here.

Adree Edmo (formerly Mason Dean Edmo) is a male-to-female transgender prisoner in the custody of the Idaho Department of Correction (“IDOC”). Edmo’s sex assigned at birth (male) differs from her gender identity (female). The incongruity causes Edmo to experience persistent distress so severe it limits her ability to function. She has twice attempted self-castration to remove her male genitalia, which cause her profound anguish.

Both sides and their medical experts agree: Edmo suffers from gender dysphoria, a serious medical condition. They also agree that the appropriate benchmark regarding treatment for gender dysphoria is the World Professional Association of Transgender Health Standards of Care for the

Health of Transsexual, Transgender, and Gender Nonconforming People (“WPATH Standards of Care”). And the State¹ does not seriously dispute that in certain circumstances, gender confirmation surgery (“GCS”) can be a medically necessary treatment for gender dysphoria. The parties’ dispute centers around whether GCS is medically necessary for Edmo—a question we analyze with deference to the district court’s factual findings.

Following four months of intensive discovery and a three-day evidentiary hearing, the district court concluded that GCS is medically necessary for Edmo and ordered the State to provide the surgery. Its ruling hinged on findings individual to Edmo’s medical condition. The ruling also rested on the finding that Edmo’s medical experts testified persuasively that GCS was medically necessary, whereas testimony from the State’s medical experts deserved little weight. In contrast to Edmo’s experts, the State’s witnesses lacked relevant experience, could not explain their deviations from generally accepted guidelines, and testified illogically and inconsistently in important ways.

The district court’s detailed factual findings were amply supported by its careful review of the extensive evidence and testimony. Indeed, they are essentially unchallenged. The appeal boils down to a disagreement about the implications of the factual findings.

Crediting, as we must, the district court’s logical, well-supported factual findings, we hold that the responsible

¹ In addition to IDOC, Edmo sued Corizon, Inc. (a private for-profit corporation that provides health care to inmates in IDOC custody) and various employees of IDOC and Corizon. The defendants briefed the case jointly, and for ease of reference we refer to them collectively as “the State.”

prison authorities have been deliberately indifferent to Edmo's gender dysphoria, in violation of the Eighth Amendment. The record before us, as construed by the district court, establishes that Edmo has a serious medical need, that the appropriate medical treatment is GCS, and that prison authorities have not provided that treatment despite full knowledge of Edmo's ongoing and extreme suffering and medical needs. In so holding, we reject the State's portrait of a reasoned disagreement between qualified medical professionals. We also emphasize that the analysis here is individual to Edmo and rests on the record in this case. We do not endeavor to project whether individuals in other cases will meet the threshold to establish an Eighth Amendment violation. The district court's order entering injunctive relief for Edmo is affirmed, with minor modifications noted below.

Our opinion proceeds as follows. In Part I, we provide background on gender dysphoria, the standard of care, and the evidence considered and factual findings made by the district court. Part II explains why this appeal complies with the Prison Litigation Reform Act ("PLRA") and is not moot. In Part III, we turn to the gravamen of the appeal: Edmo's Eighth Amendment claim and showing of irreparable injury. Part IV addresses the State's challenges to the injunction's scope and narrows the injunction as to certain defendants. Part V rejects the State's objections to the procedure employed by the district court. We conclude in Part VI.

I. Background²

A. Gender Dysphoria and its Treatment

Transgender individuals have a “[g]ender identity”—a “deeply felt, inherent sense” of their gender—that does not align with their sex assigned at birth.³ Am. Psychol. Ass’n, *Guidelines for Psychological Practice with Transgender and Gender Nonconforming People*, 70 Am. Psychologist 832, 834 (2015). Recent estimates suggest that approximately 1.4 million transgender adults live in the United States, or 0.6 percent of the adult population. Andrew R. Flores et al., The Williams Inst., *How Many Adults Identify as Transgender in the United States?*, at 2 (2016), <http://williamsinstitute.law.ucla.edu/wp-content/uploads/How-Many-Adults-Identify-as-Transgender-in-the-United-States.pdf>.

Gender dysphoria⁴ is “[d]istress that is caused by a discrepancy between a person’s gender identity and that person’s sex assigned at birth (and the associated gender role and/or primary and secondary sex characteristics).” World Prof’l Ass’n for Transgender Health, *Standards of Care for the Health of Transsexual, Transgender, and Gender-*

² The following sections are derived from the district court’s factual findings and the record on appeal.

³ At birth, infants are classified as male or female based on visual observation of their external genitalia. This is a person’s “sex assigned at birth,” but it may not be the person’s gender identity.

⁴ Until recently, the medical community commonly referred to gender dysphoria as “gender identity disorder.” See *Kosilek v. Spencer*, 774 F.3d 63, 68 n.1 (1st Cir. 2014).

Nonconforming People 2 (7th ed. 2011) (hereinafter “WPATH SOC”). The Fifth Edition of the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (“DSM-5”) sets forth two conditions that must be met for a person to be diagnosed with gender dysphoria.⁵

First, there must be “[a] marked incongruence between one’s experienced/expressed gender and assigned gender, of at least 6 months’ duration, as manifested by at least two of the following”:

- (1) “a marked incongruence between one’s experienced/expressed gender and primary and/or secondary sex characteristics”;
- (2) “a strong desire to be rid of one’s primary and/or secondary sex characteristics because of a marked incongruence with one’s experienced/expressed gender”;
- (3) “a strong desire for the primary and/or secondary sex characteristics of the other gender”;
- (4) “a strong desire to be of the other gender”;
- (5) “a strong desire to be treated as the other gender”; or

⁵ Each expert in the case used these criteria to determine whether Edmo has gender dysphoria.

(6) “a strong conviction that one has the typical feelings and reactions of the other gender.”

Am. Psychiatric Ass’n, *Diagnostic and Statistical Manual of Mental Disorders* 452 (5th ed. 2013) (hereinafter “DSM-5”). Second, the person’s condition must be associated with “clinically significant distress”—*i.e.*, distress that impairs or severely limits the person’s ability to function in a meaningful way and has reached a threshold that requires medical or surgical intervention, or both. *Id.* at 453, 458. Not every transgender person has gender dysphoria, and not every gender dysphoric person has the same medical needs.

Gender dysphoria is a serious but treatable medical condition. Left untreated, however, it can lead to debilitating distress, depression, impairment of function, substance use, self-surgery to alter one’s genitals or secondary sex characteristics, self-injurious behaviors, and even suicide.

The district court found that the World Professional Association of Transgender Health Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People (“WPATH Standards of Care”)⁶ “are the internationally recognized guidelines for the treatment of individuals with gender dysphoria.” *Edmo v. Idaho Dep’t of Corr.*, 358 F. Supp. 3d 1103, 1111 (D. Idaho 2018). Most courts agree. *See, e.g., De’lonta v. Johnson*, 708 F.3d 520, 522–23 (4th Cir. 2013); *Keohane v. Jones*, 328 F. Supp. 3d 1288, 1294 (N.D. Fla. 2018), *appeal filed*,

⁶ The WPATH Standards of Care were formerly referred to as the “Harry Benjamin Standards of Care” and were promulgated by WPATH under its former name, the “Harry Benjamin International Gender Dysphoria Association.” *Kosilek*, 774 F.3d at 70 & n.3.

No. 18-14096 (11th Cir. 2018); *Norsworthy v. Beard*, 87 F. Supp. 3d 1164, 1170 (N.D. Cal.), *appeal dismissed & remanded*, 802 F.3d 1090 (9th Cir. 2015); *Soneeya v. Spencer*, 851 F. Supp. 2d 228, 231–32 (D. Mass. 2012). *But see Gibson v. Collier*, 920 F.3d 212, 221 (5th Cir. 2019) (“[T]he WPATH Standards of Care reflect not consensus, but merely one side in a sharply contested medical debate over [GCS].”); *cf. Kosilek*, 774 F.3d at 76–79 (recounting testimony questioning the WPATH Standards of Care). And many of the major medical and mental health groups in the United States—including the American Medical Association, the American Medical Student Association, the American Psychiatric Association, the American Psychological Association, the American Family Practice Association, the Endocrine Society, the National Association of Social Workers, the American Academy of Plastic Surgeons, the American College of Surgeons, Health Professionals Advancing LGBTQ Equality, the HIV Medicine Association, the Lesbian, Bisexual, Gay and Transgender Physician Assistant Caucus, and Mental Health America—recognize the WPATH Standards of Care as representing the consensus of the medical and mental health communities regarding the appropriate treatment for transgender and gender dysphoric individuals.

Each expert in this case relied on the WPATH Standards of Care in rendering an opinion. As the State acknowledged to the district court, the WPATH Standards of Care “provide the best guidance,” and “are the best standards out there.” “There are no other competing, evidence-based standards that are accepted by any nationally or internationally recognized medical professional groups.” *Edmo*, 358 F. Supp. 3d at 1125.

“[B]ased on the best available science and expert professional consensus,” the WPATH Standards of Care provide “flexible clinical guidelines” “to meet the diverse health care needs of transsexual, transgender, and gender nonconforming people.” WPATH SOC at 1–2. Treatment under the WPATH Standards of Care must be individualized: “[w]hat helps one person alleviate gender dysphoria might be very different from what helps another person.” *Id.* at 5. “Clinical departures from the [WPATH Standards of Care] may come about because of a patient’s unique anatomic, social, or psychological situation; an experienced health professional’s evolving method of handling a common situation; a research protocol; lack of resources in various parts of the world; or the need for specific harm reduction strategies.” *Id.* at 2.

The WPATH Standards of Care identify the following evidence-based treatment options for individuals with gender dysphoria:

- (1) “changes in gender expression and role (which may involve living part time or full time in another gender role, consistent with one’s gender identity)”;
- (2) “psychotherapy (individual, couple, family, or group) for purposes such as exploring gender identity, role, and expression[,] addressing the negative impact of gender dysphoria and stigma on mental health[,] alleviating internalized transphobia[,] enhancing social and peer support[,] improving body image[,] or promoting resilience”;

(3) “hormone therapy to feminize or masculinize the body”; and

(4) “surgery to change primary and/or secondary sex characteristics (e.g., breasts/chest, external and/or internal genitalia, facial features, body contouring).”

Id. at 10. The WPATH Standards of Care state that many individuals “find comfort with their gender identity, role, and expression without surgery.” *Id.* at 54. For others, however, “surgery is essential and medically necessary to alleviate their gender dysphoria.” *Id.* That group cannot achieve “relief from gender dysphoria . . . without modification of their primary and/or secondary sex characteristics to establish greater congruence with their gender identity.” *Id.* at 55; *see also* Jae Sevelius & Valerie Jenness, *Challenges and Opportunities for Gender-Affirming Healthcare for Transgender Women in Prison*, 13 Int’l J. Prisoner Health 32, 36 (2017) (“Negative outcomes such as genital self-harm, including autocastration and/or autopenectomy, can arise when gender-affirming surgeries are delayed or denied.”); George R. Brown & Everett McDuffie, *Health Care Policies Addressing Transgender Inmates in Prison Systems in the United States*, 15 J. Corr. Health Care 280, 287–88 (2009) (describing the authors’ “firsthand knowledge of completed autocastration and/or autopenectomy in six facilities in four states”).

The weight of opinion in the medical and mental health communities agrees that GCS is safe, effective, and medically necessary in appropriate circumstances. *See, e.g.*, U.S. Dep’t of Health & Human Servs., No. A-13-87, Decision No. 2576, (Dep’t Appeals Bd. May 30, 2014); Randi Ettner, et al., *Principles of Transgender Medicine and*

Surgery 109–11 (2d ed. 2016); Jordan D. Frey, et al., *A Historical Review of Gender-Affirming Medicine: Focus on Genital Reconstruction Surgery*, 14 *J. Sexual Med.* 991, 991 (2017); Cynthia S. Osborne & Anne A. Lawrence, *Male Prison Inmates With Gender Dysphoria: When Is Sex Reassignment Surgery Appropriate?*, 45 *Archives of Sexual Behav.* 1649, 1651–53 (2016); see also *De'lonta*, 708 F.3d at 523 (“Pursuant to the Standards of Care, after at least one year of hormone therapy and living in the patient’s identified gender role, sex reassignment surgery may be necessary for some individuals for whom serious symptoms persist. In these cases, the surgery is not considered experimental or cosmetic; it is an accepted, effective, medically indicated treatment for [gender dysphoria].”).

The WPATH criteria for genital reconstruction surgery in male-to-female patients include the following:

- (1) “persistent, well documented gender dysphoria”;
- (2) “capacity to make a fully informed decision and to consent for treatment”;
- (3) “age of majority in a given country”;
- (4) “if significant medical or mental health concerns are present, they must be well controlled”;
- (5) “12 continuous months of hormone therapy as appropriate to the patient’s gender goals”; and

(6) “12 continuous months of living in a gender role that is congruent with their gender identity.”

WPATH SOC at 60. The parties’ dispute focuses on whether Edmo satisfied the fourth and sixth criteria.

With respect to the fourth criterion, the WPATH Standards of Care provide that coexisting medical or mental health concerns unrelated to the person’s gender dysphoria do not necessarily preclude surgery. *Id.* at 25. But those concerns need to be managed prior to, or concurrent with, treatment of a person’s gender dysphoria. *Id.* Coexisting medical or mental health issues resulting from a person’s gender dysphoria are not an impediment under the fourth criterion. It may be difficult to determine, however, whether mental or medical health concerns result from the gender dysphoria or are unrelated.

The WPATH Standards of Care explain that the sixth criterion—living for 12 months in an identity-congruent role—is intended to ensure that the person experiences the full range of “different life experiences and events that may occur throughout the year.” *Id.* at 61. During that time, the patient should present consistently in her desired gender role. *Id.*

Scientific studies show that the regret rate for individuals who undergo GCS is low, in the range of one to two percent. *See, e.g.,* Osborne & Lawrence, *Male Prison Inmates With Gender Dysphoria*, 45 *Archives of Sexual Behav.* at 1660; William Byne, et al., *Report of the American Psychiatric Association Task Force on Treatment of Gender Identity Disorder*, 41 *Archives of Sexual Behav.* 759, 780–81 (2012). The district court found, and the State does not dispute on appeal, that Edmo does not have any of the risk

factors that would make her likely to regret GCS. *See Edmo*, 358 F. Supp. 3d at 1121.

The WPATH Standards of Care apply equally to all individuals “irrespective of their housing situation” and explicitly state that health care for transgender individuals “living in an institutional environment should mirror that which would be available to them if they were living in a non-institutional setting within the same community.” WPATH SOC at 67. The next update to the WPATH Standards of Care will likewise apply equally to incarcerated persons. The National Commission on Correctional Health Care (“NCCHC”), a leading professional organization in health care delivery in the correctional context, endorses the WPATH Standards of Care as the accepted standards for the treatment of transgender prisoners.

In summary, the broad medical consensus in the area of transgender health care requires providers to individually diagnose, assess, and treat individuals’ gender dysphoria, including for those individuals in institutionalized environments. Treatment can and should include GCS when medically necessary. Failure to follow an appropriate treatment plan can expose transgender individuals to a serious risk of psychological and physical harm. The State does not dispute these points; it contends that GCS is not medically necessary for Edmo.

B. Edmo’s Treatment

Edmo is a transgender woman in IDOC custody. Her sex assigned at birth was male, but she identifies as female. In her words, “my brain typically operates female, even though my body hasn’t corresponded with my brain.”

Edmo has been incarcerated since pleading guilty in 2012 to sexual abuse of a 15-year-old male at a house party. Edmo was 21 years old at the time of the criminal offense. Edmo is currently incarcerated at the Idaho State Correctional Institution (“ISCI”). At the time of the evidentiary hearing, she was 30 years old and due to be released from prison in 2021.

Edmo has viewed herself as female since age 5 or 6. She struggled with her gender identity as a child and teenager, presenting herself intermittently as female, but around age 20 or 21 she began living fulltime as a woman.

Although she identified as female from an early age, Edmo first learned the term “gender dysphoria” and the contours of that diagnosis around the time of her incarceration. Shortly thereafter, Corizon psychiatrist Dr. Scott Eliason diagnosed her with “gender identity disorder,” now referred to as gender dysphoria. Corizon psychologist Dr. Claudia Lake confirmed that diagnosis.

While incarcerated, Edmo has changed her legal name to Adree Edmo and the sex on her birth certificate to “female” to affirm her gender identity. Throughout her incarceration, Edmo has consistently presented as female, despite receiving many disciplinary offense reports for doing so. For example, when able to do so, Edmo has worn her hair in feminine hairstyles and worn makeup, for which she has received multiple disciplinary offense reports.⁷ Medical providers have documented Edmo’s feminine presentation since 2012.

⁷ Before the evidentiary hearing, Edmo tried to receive access to female commissary items, such as women’s underwear. Most of her requests were denied. On the eve of the evidentiary hearing, IDOC

Neither the parties nor their experts dispute that Edmo suffers from gender dysphoria. That dysphoria causes Edmo to feel “depressed,” “disgusting,” “tormented,” and “hopeless.”

To alleviate Edmo’s gender dysphoria, prison officials have, since 2012, provided hormone therapy. Edmo has followed and complied with her hormone therapy regimen, which helps alleviate her gender dysphoria to some extent. The hormones “clear[] [her] mind” and have resulted in breast growth, body fat redistribution, and changes in her skin. Today, Edmo is hormonally confirmed, which means that she has the hormones and secondary sex characteristics (characteristics, such as women’s breasts, that appear during puberty but are not part of the reproductive system) of an adult female. Edmo has gained the maximum physical changes associated with hormone treatment.

Hormone therapy has not completely alleviated Edmo’s gender dysphoria. Edmo continues to experience significant distress related to gender incongruence. Much of that distress is caused by her male genitalia. Edmo testified that she feels “depressed, embarrassed, [and] disgusted” by her male genitalia and that this is an “everyday reoccurring thought.” Her medical records confirm her disgust, noting repeated efforts by Edmo to purchase underwear to keep, in Edmo’s words, her “disgusting penis” out of sight.

In addition to her gender dysphoria, Edmo suffers from major depressive disorder with anxiety and drug and alcohol addiction, although her addiction has been in remission

amended its policy concerning the treatment of gender dysphoric prisoners to increase transgender women’s access to female commissary items.

while incarcerated. Edmo has taken her prescribed medications for depression and anxiety. Prison officials have also provided Edmo mental health treatment to help her work through her serious underlying mental health issues and a pre-incarceration history of trauma, abuse, and suicide attempts. Edmo sees her psychiatrist when scheduled. But Edmo does not see her treating clinician, Krina Stewart, because Edmo does not believe Stewart is qualified to treat her gender dysphoria. Edmo has attended group therapy sessions inconsistently.

In September 2015, Edmo attempted to castrate herself for the first time using a disposable razor blade.⁸ Before doing so, she left a note to alert officials that she was not “trying to commit suicide,” and was instead “only trying to help [her]self.” Edmo did not complete the castration, though she continued to report thoughts of self-castration in the following months.

On April 20, 2016, Dr. Eliason evaluated Edmo for GCS. At the time, IDOC’s policy concerning the treatment of gender dysphoric prisoners provided that GCS “will not be considered for individuals within [IDOC], unless determined medically necessary by” the treating physician.⁹ Corizon’s policy does not mention GCS.

In his evaluation, Dr. Eliason noted that Edmo reported she was “doing alright.” He also noted that Edmo had been on hormone replacement therapy for the last year and a half, but that she felt she needed more. He reported that Edmo

⁸ She had previously reported thoughts of self-castration to clinicians.

⁹ IDOC revised its policy shortly before the evidentiary hearing, but its revised policy contains functionally identical language.

had stated that hormone replacement therapy helped alleviate her gender dysphoria, but she remained frustrated with her male anatomy.

Dr. Eliason indicated that Edmo appeared feminine in demeanor and interaction style. He also indicated that Edmo had previously attempted to “mutilate her genitalia” because of the severity of her distress. Dr. Eliason later testified that, at the time of his evaluation, he felt that Edmo’s gender dysphoria “had risen to another level,” as evidenced by her self-castration attempt.

But Dr. Eliason also flagged that he had spoken to prison staff about Edmo’s behavior and they explained it was “notable for animated affect and no observed distress.” He similarly noted that he had personally observed Edmo and did not see significant dysphoria; instead, she “looked pleasant and had a good mood.”

As to GCS, Dr. Eliason explained in his notes that while medical necessity for GCS is “not very well defined and is constantly shifting,” in his view, GCS would be medically necessary in at least three situations: (1) “congenital malformations or ambiguous genitalia,” (2) “severe and devastating dysphoria that is primarily due to genitals,” or (3) “some type of medical problem in which endogenous sexual hormones were causing severe physiological damage.” Dr. Eliason concluded that Edmo “does not meet any of those . . . criteria” and, for that reason, GCS is not medically necessary for her.

Dr. Eliason instead concluded that hormone therapy and supportive counseling suffice to treat Edmo’s gender dysphoria for the time being, despite recognizing that Edmo had attempted self-castration on that regimen. Dr. Eliason

indicated that he would continue to monitor and assess Edmo.

Dr. Eliason staffed Edmo's evaluation with Dr. Jeremy Stoddart, Dr. Murray Young, and Jeremy Clark, who all agreed with his assessment. They did not observe Edmo; rather, they agreed with Dr. Eliason's recommended treatment as he presented it to them. The record is sparse on the qualifications of Dr. Stoddart and Dr. Young, but Clark has never personally treated anyone with gender dysphoria and was not qualified under IDOC policy to assess whether GCS would be appropriate for Edmo.

Dr. Eliason also discussed his evaluation with IDOC's Management and Treatment Committee ("MTC"), a multi-disciplinary team composed of medical providers, mental health clinicians, IDOC's Chief Psychologist, and prison leadership. The MTC meets periodically to evaluate and address the unique medical, mental health, and housing needs of prisoners with gender dysphoria. The committee "does not make any individual treatment decisions regarding" treatment for inmates with gender dysphoria. "Those determinations are made by the individual clinicians or the medical staff employed by Corizon." The MTC agreed with Dr. Eliason's assessment.

Although not mentioned in his April 20, 2016 notes, Dr. Eliason testified at the evidentiary hearing that he considered the WPATH Standards of Care when determining Edmo's treatment. Citing those standards, Dr. Eliason testified that he did not believe GCS was appropriate for two reasons: (1) because mental health issues separate from Edmo's gender dysphoria were not "fully in adequate control" and (2) because Edmo had not lived in her identified gender role for 12 months outside of prison. He explained that Edmo needed to experience

“living as a woman” around “her real social network – her family and friends on the outside” so that she could “determine whether or not she felt like that was her real identity.”

Edmo was never evaluated for GCS again, but the MTC considered her gender dysphoria and treatment plan during later meetings. The MTC continues to believe that GCS is not medically necessary or appropriate for Edmo.

In December 2016, Edmo tried to castrate herself for the second time. A medical note from the incident reports that Edmo said she no longer wanted her testicles. Edmo reported to medical providers that she was “feeling angry/frustrated that [she] was not receiving the help desired related to [her] gender dysphoria. Inmate Edmo’s actions were reported as a method to stop/cease testosterone production in Edmo’s body. Edmo denied suicidal ideation”

Edmo’s second attempt was more successful than the first. She was able to open her testicle sac with a razor blade and remove one testicle. She abandoned her attempt, however, when there was too much blood to continue. She then sought medical assistance and was transported to a hospital, where her testicle was repaired. Edmo was receiving hormone therapy both times she attempted self-castration.

Edmo testified that she was disappointed in herself for coming so close but failing to complete her self-castration attempts. She also testified that she continues to actively think about self-castration. To avoid acting on those thoughts and impulses, Edmo “self-medicate[s]” by cutting her arms with a razor. She says that the physical pain helps

to ease the “emotional torment” and mental anguish her gender dysphoria causes her.

Edmo further testified that she expects GCS to help alleviate some of her gender dysphoria. In particular, she testified that she expects GCS to help her avoid having “as much depression about myself and my physical body. I don’t think I will be so anxious that people are always knowing I’m different” Edmo recognizes, however, that GCS “is not a fix-all”: “[i]t’s not a magic operation. . . . I’m still going to have to face the same stressors that we all face in everyday life”

C. Initiation of this Action

Edmo filed a *pro se* complaint on April 6, 2017. She also moved for a temporary restraining order, a preliminary injunction, and the appointment of counsel.

Edmo’s motion for appointment of counsel was granted in part, and counsel for Edmo appeared in June and August 2017. Counsel withdrew Edmo’s *pro se* motion for preliminary injunction shortly thereafter.

On September 1, 2017, Edmo filed an amended complaint asserting claims under 42 U.S.C. § 1983, the Eighth Amendment, the Fourteenth Amendment, the Americans with Disabilities Act, the Affordable Care Act, and for common law negligence. She named as defendants IDOC, Henry Atencio (Director of IDOC), Jeff Zmuda (Deputy Director of IDOC), Howard Keith Yordy (former Warden of ISCI), Dr. Richard Craig (Chief Psychologist at ISCI), Rona Siegert (Health Services Director at ISCI), Corizon, Dr. Eliason, Dr. Young, and Dr. Catherine Whinnery (Corizon employee).

Through counsel, Edmo filed a renewed motion for a preliminary injunction on June 1, 2018. Among other relief, Edmo sought an order requiring the State to provide her with a referral to a qualified surgeon and access to GCS.

The State moved to extend the time to respond to Edmo's motion. After a status conference, the district court set an evidentiary hearing for October 10, 11, and 12, 2018. The court permitted the parties to undertake four months of extensive fact and expert discovery in preparation for the hearing.

D. The Evidentiary Hearing

At the evidentiary hearing, each side had eight hours to present its case. The district court heard live testimony from seven witnesses over three days. It also considered thousands of pages of exhibits, including Edmo's medical records. With the parties' agreement, the court also permitted the State to submit declarations in lieu of live testimony and permitted Edmo to impeach the declarations with deposition testimony.

At the outset of the hearing, the district court noted that "[w]e're here on a hearing for a temporary injunction," but it explained that "it's hard for me to envision this hearing being anything but a hearing on a final injunction[,] at least as to" the injunctive relief ordering GCS. The court stated that it was unsure whether that made a difference, and it asked the parties to address at some point whether the hearing was for a preliminary injunction or a permanent injunction. Notably, the State did not do so.

The district court heard testimony from three percipient witnesses: Edmo, Dr. Eliason (the Corizon physician), and Jeremy Clark (an IDOC clinician who did not meet IDOC's

criteria to assess Edmo for GCS). Their relevant testimony is largely recounted above.

It also heard testimony from four expert witnesses, two each for Edmo and the State. Dr. Randi Ettner, Ph.D. in psychology, testified first for Edmo. Dr. Ettner is one of the authors of the current (seventh) version of the WPATH Standards of Care. She has been a WPATH member since 1993 and chairs its Institutionalized Persons Committee. Dr. Ettner has authored or edited many peer-reviewed publications on the treatment of gender dysphoria and transgender health care more broadly, including the leading textbook used in medical schools on the subject. She also trains medical and mental health providers on treating people with gender dysphoria. Dr. Ettner has been retained as an expert witness on gender dysphoria and its treatment in many court cases, and she has been appointed as an independent expert by one federal court to evaluate an incarcerated person for GCS.

Dr. Ettner has evaluated, diagnosed, and treated between 2,500 and 3,000 individuals with gender dysphoria. She has referred about 300 people for GCS. She has also refused to recommend surgery for some patients who have requested it. She believes that not everyone who has gender dysphoria needs GCS. Dr. Ettner also has “[e]xtensive experience” treating and providing post-operative care for patients who have undergone GCS.

Dr. Ettner has assessed approximately 30 incarcerated individuals with gender dysphoria for GCS and other medical care, but she has not treated incarcerated patients. She has not worked in a prison and she is not a Certified Correctional Healthcare Professional.

Based on her evaluation of Edmo and a review of Edmo's medical records, Dr. Ettner diagnosed Edmo with gender dysphoria, depressive disorder, anxiety, and suicidal ideation. In Dr. Ettner's opinion, GCS is medically necessary for Edmo and should be immediately performed. She explained that most patients with gender dysphoria do not require GCS, but Edmo requires it because hormone therapy has been inadequate for her and Edmo has attempted to remove her own testicles. Dr. Ettner further explained that GCS would give Edmo congruent genitalia, eliminating the severe distress Edmo experiences due to her male anatomy.

Dr. Ettner further opined that Edmo meets the WPATH criteria for GCS. She explained that Edmo has "persistent and well-documented long-standing gender dysphoria"; Edmo "has no thought disorders and no impaired reality testing"; Edmo is the age of majority in this country; although Edmo has depression and anxiety, those conditions do not "impair her ability to undergo surgery" because they are "as controlled as [they] can be"; Edmo has had six years of hormone therapy; and Edmo has lived for more than one year "as a woman to the best of her ability in a male prison."

More specifically, as to the fourth criterion, Dr. Ettner opined that Edmo does not have mental health concerns that would preclude GCS. She explained that Edmo's depression and anxiety are as "controlled as can be" because Edmo "is taking the maximum amount of medication that controls depression." Dr. Ettner noted that Edmo has complied with taking her prescribed medications and that psychotherapy is not "a precondition for surgery" under the WPATH Standards of Care. She also flagged that Edmo has the capacity to comply with her postsurgical treatment, as evidenced by her compliance with her hormone therapy to date.

As to the clinical significance of Edmo's self-castration attempts and cutting behaviors, Dr. Ettner explained that neither behavior indicates that Edmo has inadequately controlled mental health concerns. Rather, those behaviors indicate "the need for treatment for gender dysphoria." Dr. Ettner explained that

when an individual who is not psychotic or delusional attempts what we call surgical self-treatment – because we don't regard removal of the testicles or attempted removal of the testicles as either mutilation or self-harm – we regard it as an intentional attempt to remove the target organ that produces testosterone, which, in fact, is the cure for gender dysphoria.

In Dr. Ettner's opinion, Edmo's depression and anxiety "will be attenuated post surgery."

Dr. Ettner opined that Edmo satisfies the sixth criterion because she has lived "as a woman to the best of her ability in a male prison." Dr. Ettner based her opinion on Edmo's "appearance . . . , her disciplinary records, which indicated that she had attempted to wear her hair in a feminine hairstyle and to wear makeup even though that was against the rules and she was – received some sort of disciplinary action for that, and her – the way that she was receiving female undergarments and had developed the stigma of femininity, the secondary sex characteristics, breast development, et cetera."

Dr. Ettner opined that if Edmo does not receive GCS, "[t]he risks would be, as typical in inadequately treated or untreated gender dysphoria, either surgical self-treatment, emotional decompensation, or suicide." Dr. Ettner

explained that Edmo “is at particular risk of suicide given that she has a high degree of suicide ideation.” If, on the other hand, Edmo receives surgery, Dr. Ettner opined that

[i]t would eliminate the gender dysphoria. It would provide a level of wellbeing that she hasn’t had previously. It would eliminate 80 percent of the testosterone in her body, necessitating a lower dose of hormones going forward, which would be particularly helpful given that she has elevated liver enzymes. And it would, I believe, eliminate much of the depression and the attendant symptoms that she is experiencing.

Dr. Ryan Gorton, M.D., also testified for Edmo. Dr. Gorton is an emergency medicine physician. He also works pro bono at a clinic serving uninsured patients or those with Medicare or Medicaid. Many of those patients have mental health conditions or have been in prison. He has published peer-reviewed articles on the treatment of gender dysphoria, and he has been qualified as an expert witness in cases involving transgender health care. Dr. Gorton also provides training on transgender health care issues to many groups, is a member of WPATH, and serves on WPATH’s Transgender Medicine and Research Committee and its Institutionalized Persons Committee.

Dr. Gorton has been the primary care physician for about 400 patients with gender dysphoria. At the time of the evidentiary hearing, Dr. Gorton was treating approximately 100 patients with gender dysphoria. Dr. Gorton has assessed patients for gender dysphoria, initiated and monitored hormone treatment, referred patients for mental health treatment, and determined the appropriateness of GCS. At

the time of the evidentiary hearing, Dr. Gorton was providing follow-up care for about 30 patients who had vaginoplasty. Dr. Gorton has no experience treating transgender inmates and is not a Certified Correctional Healthcare Professional.

Based on his review of Edmo's medical records and his in-person evaluation of Edmo, Dr. Gorton opined that GCS is medically necessary for Edmo and that she meets the WPATH criteria for GCS. He explained that Edmo has "persistent well-documented gender dysphoria," as shown in her prison medical records; she has the capacity "to make a fully informed decision and to consent for treatment" because "she didn't seem at all impaired in her decision-making capacity"; she is the age of majority; she has depression and anxiety, "but they are not to a level that would preclude her getting [GCS]"; she had 12 consecutive months of hormone therapy; and she has been living in her "target gender role . . . despite an environment that's very hostile to that and some negative consequences that she has experienced because of that."

Dr. Gorton further opined that if Edmo "is not provided surgery, there is a very substantial chance she will try to attempt self-surgery again. And that's especially worrisome given her attempts have been progressive. . . . So I think she might be successful" on her next attempt. He predicted that there is little chance that Edmo's gender dysphoria will improve without surgery. Conversely, Dr. Gorton anticipated that Edmo is unlikely to regret surgery because "her gender dysphoria is very genital-focused" and regret rates among GCS patients are very low.

Dr. Gorton also opined that Edmo's self-castration attempts demonstrate "that she has severe genital-focused gender dysphoria and that she is not getting the medically

necessary treatment to alleviate that.” He elaborated that Edmo’s depression and anxiety are not driving Edmo’s self-castration attempts: “there [are] a lot of people with depression and anxiety who don’t remove their testicles.”

Finally, Dr. Gorton criticized Dr. Eliason’s evaluation of Edmo. He explained that he disagreed with Dr. Eliason’s conclusion that Edmo does not need GCS and he also disagreed with the three “criteria” Dr. Eliason gave for when GCS would be necessary. Dr. Gorton criticized Dr. Eliason’s first criterion—that GCS could be needed where there is “congenital malformation or ambiguous genitalia”—because that situation “isn’t even germane to transgender people”; rather, it relates to “people with intersex conditions.” As to the second criterion—that GCS could be needed when a patient is suffering from “severe and devastating gender dysphoria that is primarily due to genitals”—Dr. Gorton pointed out that the WPATH Standards of Care for surgery require only “clear and significant dysphoria.” And even applying Dr. Eliason’s higher bar, Dr. Gorton explained that Edmo would still qualify for GCS because she has twice attempted self-castration, demonstrating “severe genital-focused dysphoria.” Finally, Dr. Gorton characterized Dr. Eliason’s third criterion—that GCS could be needed in situations when “endogenous sexual hormones were causing severe physiological damage”—as “bizarre.” Dr. Gorton could not conjure “a clinical circumstance where that would be the case that your hormones that your body produces are attacking you I just don’t understand what [Dr. Eliason] is talking about there.”

Dr. Keelin Garvey, M.D., testified for the State. Dr. Garvey is a psychiatrist and Certified Correctional Healthcare Professional. As the former Chief Psychiatrist of

the Massachusetts Department of Corrections, Dr. Garvey chaired the Gender Dysphoria Treatment Committee. She directly treated a “couple of patients” with gender dysphoria earlier in her career as Deputy Medical Director, but she has not done so in recent years. Prior to evaluating Edmo, Dr. Garvey had never evaluated a patient in person to determine whether that person needed GCS. Dr. Garvey has never recommended a patient for GCS, and she has not done follow-up care with a person who has received GCS.

Based on her evaluation of Edmo and a review of Edmo’s medical records, Dr. Garvey diagnosed Edmo with gender dysphoria, major depressive disorder, alcohol use disorder, stimulant use disorder, and opioid use disorder. She explained that the latter three are in remission.

Relying on the WPATH Standards of Care, Dr. Garvey opined that GCS is not medically necessary for Edmo.¹⁰ Dr. Garvey first explained that Edmo does not meet the first WPATH Standards of Care criterion—“persistent, well documented gender dysphoria”—because of a lack of evidence in pre-incarceration medical records that Edmo presented as female before her time in prison. Dr. Garvey acknowledged, however, that Edmo has been presenting as female since 2012 and that she has been diagnosed with gender dysphoria since that time.

Dr. Garvey then explained that Edmo does not meet the fourth criterion—“medical/mental health concerns must be well controlled”—because Edmo “is actively self-injuring.” Dr. Garvey elaborated that “self-injury in any form is never

¹⁰ Dr. Garvey testified that she relies on the WPATH Standards of Care and the NCCHC guidelines adopting those standards when treating inmates with gender dysphoria.

considered a healthy or productive coping mechanism” and that she would like to see Edmo “develop further coping skills that she would be able to use following surgery so that she is not engaging in self-injury after surgery.” Dr. Garvey’s concern is that GCS is a “stressful undertaking” and Edmo lacks “effective coping strategies” to deal with the stress.

Finally, Dr. Garvey testified that Edmo does not meet the sixth criterion—“12 continuous months of living in a gender role that is congruent with gender identity”—because Edmo has not presented as female outside of prison and “there [are] challenges to using her time in a men’s prison as this real-life experience because it doesn’t offer her the opportunity to actually experience all those things she is going to go through on the outside.”

Dr. Joel Andrade, Ph.D. in social work, also testified for the State. He is a licensed clinical social worker and is a Certified Correctional Healthcare Professional with an emphasis in mental health. Dr. Andrade has over a decade of experience providing and supervising the provision of correctional mental health care, including directing and overseeing the treatment of inmates diagnosed with gender dysphoria in the custody of the Massachusetts Department of Corrections in his roles as clinical director, chair of the Gender Dysphoria Supervision Group, and member of the Gender Dysphoria Treatment Committee.

As a member of the Gender Dysphoria Treatment Committee, Dr. Andrade recommended GCS for two inmates. But the recommendations were contingent on the inmates living in a women’s prison for approximately 12 months before the surgery. The Massachusetts Department of Corrections, like IDOC, houses prisoners

according to their genitals, so the inmates had not been moved (nor had their surgery occurred).

Dr. Andrade has never directly treated patients with gender dysphoria, nor has he been a treating clinician for a patient who has had GCS. His “experience with gender dysphoria comes almost exclusively from [his] participation on the Massachusetts Department of Corrections['] Gender Dysphoria Treatment Committee and Supervision Group.” Dr. Andrade did not qualify, under the IDOC gender dysphoria policy in effect at the time of his assessment of Edmo, to assess a person for GCS because he is neither a psychologist nor a physician.

Based on his evaluation of Edmo and a review of her medical records, Dr. Andrade diagnosed Edmo with “major depressive disorder, recurrent, in partial remission,” “generalized anxiety disorder,” “alcohol use disorder, severe,” and gender dysphoria. Dr. Andrade also diagnosed Edmo with borderline personality disorder. The district court did not credit this diagnosis, however, because no other person (including the State’s other expert, Dr. Garvey) has ever diagnosed Edmo with borderline personality disorder and Dr. Andrade was unable to identify his criteria for this diagnosis. *Edmo*, 358 F. Supp. 3d at 1120. The record amply supports the district court’s finding in this respect.

Dr. Andrade opined that Edmo does not meet the WPATH criteria for GCS. He explained that, based on his review of Edmo’s pre-incarceration records, Edmo did not present as female or discuss her gender dysphoria before incarceration. Dr. Andrade testified that he would like to see Edmo live as female outside of a correctional setting before receiving GCS, or, at the least, live in a women’s prison first. IDOC, however, houses prisoners according to their genitals. Dr. Andrade also explained that Edmo needs to

work through some of her trauma, particularly sexual abuse that she suffered, and other mental health concerns before receiving surgery. Dr. Andrade opined that Edmo's mental health issues will not be cured by GCS.

At the close of the hearing, the district court reiterated that it was unsure "how we can hear [Edmo's request for GCS] on a preliminary injunction. . . . [I]f I order it, then it's done." The court further suggested that the request for GCS could "only be resolved in a final hearing" and noted that it had, in effect, "treated this hearing as [a] final hearing on the issue."

The court, as it had done at the outset of the hearing, asked the parties to address whether the hearing was for a preliminary or permanent injunction. In response, Edmo contended that the court could order GCS in a preliminary injunction. The State did not address the court's question. It instead contended that the standard for a mandatory injunction—which can be preliminary or permanent—should apply.

E. The District Court's Decision

The district court rendered its decision on December 13, 2018. After recounting the evidence and making extensive factual findings, the district court began its analysis by noting that it was unsure whether the standard for a preliminary injunction or the standard for a permanent injunction applied. The court noted that "the nature of the relief requested in this case, coupled with the extensive evidence presented by the parties over a 3-day evidentiary hearing, [may have] effectively converted these proceedings into a final trial on the merits of the plaintiff's request for permanent injunctive relief." *Edmo*, 358 F. Supp. 3d at 1122 n.1. It also indicated that "both parties appear to have treated

the evidentiary hearing” as a final trial on the merits. *Id.* The district court explained that the difference was immaterial, however, because Edmo was entitled to relief under either standard. *Id.*

On the merits, the district court concluded that Edmo had established her Eighth Amendment claim. The district court first held that Edmo suffers from gender dysphoria, which is undisputedly “a serious medical condition.” *Id.* at 1124.

It then concluded that GCS is medically necessary to treat Edmo’s gender dysphoria. *See id.* at 1124–26. In a carefully considered, 45-page opinion, the district court specifically found “credible the testimony of Plaintiff’s experts Drs. Ettner and Gorton, who have extensive personal experience treating individuals with gender dysphoria both before and after receiving gender confirmation surgery,” and who opined that GCS was medically necessary. *Id.* at 1125. The court rejected the contrary opinions of the State’s experts because “neither Dr. Garvey nor Dr. Andrade has any direct experience with patients receiving gender confirmation surgery or assessing patients for the medical necessity of gender confirmation surgery,” and neither of the State’s experts had meaningful “experience treating patients with gender dysphoria other than assessing them for the existence of the condition.” *Id.* The district court also noted that the State’s “experts appear to misrepresent the WPATH Standards of Care by concluding that Ms. Edmo, despite presenting as female since her incarceration in 2012, cannot satisfy the WPATH criteria because she has not presented as female outside of the prison setting.” *Id.* As the district court noted, “there is no requirement in the WPATH Standards of Care that a patient live for twelve months in his or her gender role outside of prison before becoming eligible for” GCS. *Id.* (quotation omitted).

Finally, the district court explained that the State was deliberately indifferent to Edmo's gender dysphoria because it "fail[ed] to provide her with available treatment that is generally accepted in the field as safe and effective, despite her actual harm and ongoing risk of future harm including self-castration attempts, cutting, and suicidal ideation." *Id.* at 1126–27. The district court also stated that the evidence "suggest[ed] that Ms. Edmo has not been provided gender confirmation surgery because Corizon and IDOC have a *de facto* policy or practice of refusing this treatment for gender dysphoria to prisoners," which amounts to deliberate indifference. *Id.* at 1127.

After analyzing the merits, the district court concluded that Edmo satisfied the other prerequisites to injunctive relief. *Id.* at 1127–28. The district court found that, given Edmo's continuing emotional distress and self-castration attempts, "Edmo is at serious risk of life-threatening self-harm" if she does not receive GCS. *Id.* at 1128. The State, on the other hand, had not shown that it would be harmed if ordered to provide GCS, so the equities favored Edmo. *Id.*

Having concluded that Edmo was entitled to an injunction, the court ordered the State "to provide Plaintiff with adequate medical care, including gender confirmation surgery." *Id.* at 1129. It ordered the State to "take all actions reasonably necessary to provide Ms. Edmo gender confirmation surgery as promptly as possible and no later than six months from the date of this order." *Id.*

F. Appellate Proceedings

The State filed timely notices of appeal on January 9, 2019. It also asked the district court to stay its order pending appeal. The district court denied the State's motion on March 4.

The State then filed in this court a motion to stay pending appeal. A motions panel granted that motion. Edmo subsequently moved to amend the stay to allow her to undergo a previously scheduled pre-surgery consultation. The motions panel granted that motion and amended the stay.

On April 3, the State filed an “urgent motion” to dismiss this appeal as moot. We indicated on April 5 that our court would consider that motion with the merits, not on an urgent basis.

After hearing oral argument on May 16, we ordered a limited remand to the district court to clarify three points. Relevant here, we asked the district court to clarify whether it granted Edmo a permanent injunction in its December 13, 2018 order. The district court clarified that it “granted permanent injunctive relief.” *Edmo v. Idaho Dep’t of Corr.*, No. 1:17-CV-00151-BLW, 2019 WL 2319527, at *2 (D. Idaho May 31, 2019). We also asked the district court to clarify whether it had concluded that Edmo had succeeded on the merits of her Eighth Amendment claim. The district court responded that it had. *Id.*

Having received the district court’s response to our limited remand order, we proceed to the issues on appeal. The State challenges the district court’s grant of injunctive relief to Edmo on multiple grounds. It contends that this appeal is moot because the injunction did not comply with the PLRA and has, for that reason, automatically expired. It contends that the decision not to provide GCS to Edmo reflects a difference of prudent medical opinion and cannot support an Eighth Amendment claim. It contends that Edmo will not be irreparably harmed absent an injunction. It contends that the injunction is overbroad. Finally, it contends that, to the extent the district court converted the

evidentiary hearing into a final trial on the merits of Edmo's request for GCS, it was provided inadequate notice and the court violated its right to a jury trial.

II. Mootness

“We first address, as we must, the question of mootness” *Shell Offshore Inc. v. Greenpeace, Inc.*, 815 F.3d 623, 628 (9th Cir. 2016). An appeal is moot “[w]hen events change such that the appellate court can no longer grant ‘any effectual relief whatever to the prevailing party.’” *Id.* (quoting *City of Erie v. Pap’s A.M.*, 529 U.S. 277, 287 (2000)). In those circumstances, we “lack[] jurisdiction and must dismiss the appeal.” *Id.*

The State contends that the injunction does not comply with provisions of the PLRA and, for that reason, has automatically expired under the terms of the statute. Relevant here, the PLRA provides that a

court shall not grant or approve any prospective relief unless the court finds that such relief is narrowly drawn, extends no further than necessary to correct the violation of the Federal right, and is the least intrusive means necessary to correct the violation of the Federal right. The court shall give substantial weight to any adverse impact on public safety or the operation of a criminal justice system caused by the relief.

18 U.S.C. § 3626(a)(1)(A). Courts often refer to this provision as the “need-narrowness-intrusiveness” inquiry. *Graves v. Arpaio*, 623 F.3d 1043, 1048 n.1 (9th Cir. 2010) (per curiam) (quoting *Pierce v. County of Orange*, 526 F.3d 1190, 1205 (9th Cir. 2008)). The PLRA further provides that

any “[p]reliminary injunctive relief shall automatically expire on the date that is 90 days after its entry, unless the court makes the findings required under subsection (a)(1) [quoted above] for the entry of prospective relief and makes the order final before the expiration of the 90-day period.” 18 U.S.C. § 3626(a)(2).

The State contends that the district court did not make the PLRA’s requisite need-narrowness-intrusiveness findings or make its order final within 90 days, causing the injunction to expire under 18 U.S.C. § 3626(a)(2). Generally, the expiration of an injunction challenged on appeal moots the appeal. *See Kitlutsisti v. ARCO Alaska, Inc.*, 782 F.2d 800, 801 (9th Cir. 1986); *see also United States v. Sec’y, Fla. Dep’t of Corr.*, 778 F.3d 1223, 1228–29 (11th Cir. 2015). The State asserts separate, albeit overlapping, contentions in their motion to dismiss this appeal and in their briefing. We reject those arguments.

A. Need-Narrowness-Intrusiveness Findings

The State first contends that the district court did not make the PLRA’s need-narrowness-intrusiveness findings, causing the injunction to automatically expire and mooting this appeal.¹¹ As we have explained in prior decisions, the PLRA “has not substantially changed the threshold findings and standards required to justify an injunction.” *Gomez v. Vernon*, 255 F.3d 1118, 1129 (9th Cir. 2001). When “determining the appropriateness of the relief ordered,” appellate “courts must do what they have always done”:

¹¹ We question whether the State’s need-narrowness-intrusiveness challenge, properly understood, implicates mootness. But because the result is the same, we accept the State’s framing for purposes of our analysis.

“consider the order as a whole.” *Armstrong v. Schwarzenegger*, 622 F.3d 1058, 1070 (9th Cir. 2010). District courts must make need-narrowness-intrusiveness “findings sufficient to allow a ‘clear understanding’ of the ruling,” but they need not “make such findings on a paragraph by paragraph, or even sentence by sentence, basis.” *Id.* (quotation omitted). “What is important, and what the PLRA requires, is a finding that the set of reforms being ordered—the ‘relief’—corrects the violations of prisoners’ rights with the minimal impact possible on defendants’ discretion over their policies and procedures.” *Id.*

Here, the district court made the necessary need-narrowness-intrusiveness findings. At the start of its December 13, 2018 order, the district court explained that any injunction must meet the PLRA’s need-narrowness-intrusiveness requirement. *See Edmo*, 358 F. Supp. 3d at 1122. The district court then explained how the relief being ordered, GCS, “corrects the violations of” Edmo’s rights. *See Armstrong*, 622 F.3d at 1071. Specifically, the district court explained that GCS is medically necessary to alleviate Edmo’s gender dysphoria and that the State’s denial of GCS amounts to deliberate indifference in violation of the Eighth Amendment. *See Edmo*, 358 F. Supp. 3d at 1116–21, 1123–27, 1129. The district court limited the relief ordered to have “the minimal impact possible on [the State’s] discretion over their policies and procedures.” *See Armstrong*, 622 F.3d at 1071. Specifically, the district court limited the relief to “actions reasonably necessary” to provide GCS, cautioned that its conclusion is based on “the unique facts and circumstances presented” by Edmo, and noted that its “decision is not intended, and should not be construed, as a general finding that all inmates suffering from gender dysphoria are entitled to [GCS].” *Edmo*, 358 F. Supp. 3d at

1110, 1129. Finally, the district court rejected the notion that injunctive relief would have “any adverse impact on public safety or the operation of a criminal justice system.” 18 U.S.C. § 3626(a)(1)(A). It explained that the State had “made no showing that an order requiring them to provide” GCS to Edmo “causes them injury.” *Edmo*, 358 F. Supp. 3d at 1128. The district court’s order, considered as a whole, made all the findings required by 18 U.S.C. § 3626(a)(1)(A) and our precedent. *See Armstrong*, 622 F.3d at 1070.

B. Finality

The State next argues that the injunction has automatically expired under the PLRA because the district court did not make its order “final” within 90 days of entering injunctive relief. *See* 18 U.S.C. § 3626(a)(2); *see also Sec’y, Fla. Dep’t of Corr.*, 778 F.3d at 1228–29 (holding that an appeal of a preliminary injunction was moot because the district court “did not issue an order finalizing its [preliminary-injunction] order,” and “[a]s a result, the preliminary injunction expired by operation of law” 90 days later). The PLRA provision cited by the State applies to preliminary injunctive relief, not permanent injunctive relief. *See* 18 U.S.C. § 3626(a)(2). The permanent injunction that the district court entered has not expired. *See Edmo*, 358 F. Supp. 3d at 1122 n.1 (concluding that Edmo is “entitled to relief” under the permanent injunction standard); *see also Edmo*, 2019 WL 2319527, at *2 (clarifying on limited remand that the district court granted Edmo a permanent injunction). It remains in place, albeit stayed.

There is a live controversy on appeal.¹² We accordingly **DENY** the State’s motion to dismiss and proceed to the merits of the appeal.

III. Challenges to the District Court’s Grant of Injunctive Relief

An injunction is an “extraordinary remedy never awarded as of right.” *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 24 (2008). “To be entitled to a permanent injunction, a plaintiff must demonstrate: (1) actual success on the merits; (2) that it has suffered an irreparable injury; (3) that remedies available at law are inadequate; (4) that the balance of hardships justify a remedy in equity; and (5) that the public interest would not be disserved by a permanent injunction.”¹³ *Indep. Training & Apprenticeship Program*

¹² Even construed as a preliminary injunction, the district court’s December 13, 2018 order is not moot. On May 31, 2019, the district court, incorporating its previous findings, renewed the injunction. *See Edmo*, 2019 WL 2319527, at *2. Because the district court renewed the injunction, we can consider its merits. *See Mayweathers v. Newland*, 258 F.3d 930, 935–36 (9th Cir. 2001) (holding that district courts may renew preliminary injunctions under the PLRA while an appeal is pending, and considering the merits of the renewed injunction). And we have jurisdiction under 28 U.S.C. § 1292(a)(1) regardless of whether the district court’s order is considered a preliminary or permanent injunction. *See Hendricks v. Bank of Am., N.A.*, 408 F.3d 1127, 1131 (9th Cir. 2005) (preliminary injunction); *TransWorld Airlines, Inc. v. Am. Coupon Exch., Inc.*, 913 F.2d 676, 680–81 (9th Cir. 1990) (permanent injunction where the “district court retained jurisdiction to determine damages” and to adjudicate a separate claim).

¹³ We agree with the State that the injunction is mandatory, as opposed to prohibitory, because it requires the State to act. Based on that distinction, the State argues that Edmo must satisfy a higher burden of

v. Cal. Dep't of Indus. Relations, 730 F.3d 1024, 1032 (9th Cir. 2013) (citing *eBay Inc. v. MercExch., L.L.C.*, 547 U.S. 388, 391 (2006)).

We review for abuse of discretion the district court's decision to grant a permanent injunction. *Ariz. Dream Act Coal. v. Brewer*, 855 F.3d 957, 965 (9th Cir. 2017). We

proof to be entitled to injunctive relief, and that the district court failed to hold Edmo to that burden. On that point, we disagree.

The State errs by relying on cases that concern mandatory preliminary injunctions. Because mandatory preliminary injunctions go “well beyond simply maintaining the status quo [p]endente lite,” they are “particularly disfavored” and “are not issued in doubtful cases.” *Marlyn Nutraceuticals, Inc. v. Mucos Pharma GmbH & Co.*, 571 F.3d 873, 879 (9th Cir. 2009) (alteration in original) (quoting *Anderson v. United States*, 612 F.2d 1112, 1114–15 (9th Cir. 1980)). The calculus is different in the context of permanent injunctions. A plaintiff must show actual success on the merits, *see Amoco Prod. Co. v. Village of Gambell*, 480 U.S. 531, 546 n.12 (1987), so there is no concern that a mandatory permanent injunction will upset the status quo only for a later trial on the merits to show that the plaintiff was not entitled to equitable relief. As a result, a plaintiff need not show that “extreme or very serious damage will result,” as is required for mandatory preliminary injunctions.

As we have explained, the district court granted Edmo injunctive relief under both the preliminary and permanent injunction standards. *See Edmo*, 358 F. Supp. 3d at 1122 n.1; *see also Edmo*, 2019 WL 2319527, at *2. Because the standard for granting permanent injunctive relief is higher (in that it requires actual success on the merits) and the State contends in its opening brief that we should review the injunction as a permanent injunction, we consider whether the district court erred in granting Edmo permanent injunctive relief. But we would also affirm under the mandatory preliminary injunction standard, because the district court correctly applied the proper standard for mandatory preliminary injunctive relief, and not the lower standard for prohibitory preliminary injunctions. *See Edmo*, 358 F. Supp. 3d at 1122, 1128.

review “any determination underlying the grant of an injunction by the standard that applies to that determination.” *Ting v. AT&T*, 319 F.3d 1126, 1134–35 (9th Cir. 2003). Accordingly, the district court’s factual findings on Edmo’s Eighth Amendment claim are reviewed for clear error. *See Graves*, 623 F.3d at 1048. Clear error exists if the finding is “illogical, implausible, or without support in inferences that may be drawn from the facts in the record.” *La Quinta Worldwide LLC v. Q.R.T.M., S.A. de C.V.*, 762 F.3d 867, 879 (9th Cir. 2014) (quoting *Herb Reed Enters., LLC v. Florida Entm’t Mgmt., Inc.*, 736 F.3d 1239, 1247 (9th Cir. 2013)). We review de novo the district court’s “conclusion that the facts . . . demonstrate an Eighth Amendment violation.” *Hallett v. Morgan*, 296 F.3d 732, 744 (9th Cir. 2002).

The State contends that the district court erred in granting an injunction because (1) Edmo’s Eighth Amendment claim fails and (2) Edmo has not shown that she will suffer irreparable injury in the absence of an injunction.¹⁴ We disagree. We hold, based on the district court’s factual findings, that Edmo established her Eighth Amendment claim and that she will suffer irreparable harm—in the form of ongoing mental anguish and possible physical harm—if GCS is not provided.

A. The Merits of Edmo’s Eighth Amendment Claim

“[D]eliberate indifference to serious medical needs of prisoners” violates the Eighth Amendment. *Estelle*, 429 U.S. at 104. Because “society takes from prisoners the means to provide for their own needs,” *Brown*, 563 U.S.

¹⁴ Because the State does not contest the other injunction factors, we do not address them.

at 510, the government has an “obligation to provide medical care for those whom it is punishing by incarceration,” *Estelle*, 429 U.S. at 103.

To establish a claim of inadequate medical care, a prisoner must first “show a ‘serious medical need’ by demonstrating that ‘failure to treat a prisoner’s condition could result in further significant injury or the ‘unnecessary and wanton infliction of pain.’” *Jett v. Penner*, 439 F.3d 1091, 1096 (9th Cir. 2006) (quoting *McGuckin v. Smith*, 974 F.2d 1050, 1059 (9th Cir. 1991), *overruled on other grounds by WMX Techs., Inc. v. Miller*, 104 F.3d 1133 (9th Cir. 1997) (en banc)). Serious medical needs can relate to “physical, dental and mental health.” *Hoptowit v. Ray*, 682 F.2d 1237, 1253 (9th Cir. 1982), *abrogated on other grounds by Sandin v. Conner*, 515 U.S. 472 (1995).

The State does not dispute that Edmo’s gender dysphoria is a sufficiently serious medical need to trigger the State’s obligations under the Eighth Amendment. Nor could it. Gender dysphoria is a “serious . . . medical condition” that causes “clinically significant distress”—distress that impairs or severely limits an individual’s ability to function in a meaningful way. DSM-5 at 453, 458. As Edmo testified, her gender dysphoria causes her to feel “depressed,” “disgusting,” “tormented,” and “hopeless,” and it has caused past efforts and active thoughts of self-castration. As this and many other courts have recognized, Edmo’s gender dysphoria is a sufficiently serious medical need to implicate the Eighth Amendment. *See Rosati v. Igbinoso*, 791 F.3d 1037, 1039–40 (9th Cir. 2015); *Kosilek*, 774 F.3d at 86; *De’lonta*, 708 F.3d at 525; *Battista v. Clarke*, 645 F.3d 449, 452 (1st Cir. 2011); *Allard v. Gomez*, 9 F. App’x 793, 794 (9th Cir. 2001); *White v. Farrier*, 849 F.2d 322, 325 (8th Cir. 1988); *Meriwether v. Faulkner*, 821 F.2d 408, 412 (7th Cir.

1987) (and cases cited therein); *Norsworthy*, 87 F. Supp. 3d at 1187; *Konitzer v. Frank*, 711 F. Supp. 2d 874, 905 (E.D. Wis. 2010).

If, as here, a prisoner establishes a sufficiently serious medical need, that prisoner must then “show the [official’s] response to the need was deliberately indifferent.” *Jett*, 439 F.3d at 1096. An inadvertent or negligent failure to provide adequate medical care is insufficient to establish a claim under the Eighth Amendment. *Estelle*, 429 U.S. at 105–06; *see also Farmer v. Brennan*, 511 U.S. 825, 835 (1994) (“ordinary lack of due care” is insufficient to establish an Eighth Amendment claim). In other words, “[m]edical malpractice does not become a constitutional violation merely because the victim is a prisoner.” *Estelle*, 429 U.S. at 106. To “show deliberate indifference, the plaintiff must show that the course of treatment the [official] chose was medically unacceptable under the circumstances and that the [official] chose this course in conscious disregard of an excessive risk to the plaintiff’s health.” *Hamby v. Hammond*, 821 F.3d 1085, 1092 (9th Cir. 2016) (quoting *Snow v. McDaniel*, 681 F.3d 978, 988 (9th Cir. 2012), *overruled in part on other grounds by Peralta v. Dillard*, 744 F.3d 1076 (9th Cir. 2014) (en banc)).

1. The Medical Necessity of GCS for Edmo

The crux of the State’s appeal is that it provided adequate and medically acceptable care to Edmo.

Accepted standards of care and practice within the medical community are highly relevant in determining what care is medically acceptable and unacceptable. *See Allard v. Baldwin*, 779 F.3d 768, 772 (8th Cir. 2015); *Henderson v. Ghosh*, 755 F.3d 559, 566 (7th Cir. 2014) (per curiam). Typically, “[a] difference of opinion between a physician

and the prisoner—or between medical professionals—concerning what medical care is appropriate does not amount to deliberate indifference.” *Snow*, 681 F.3d at 987; *see also Gibson*, 920 F.3d at 220. But that is true only if the dueling opinions are medically acceptable under the circumstances. *See Toguchi v. Chung*, 391 F.3d 1051, 1058 (9th Cir. 2004) (a mere “difference of medical opinion . . . [is] insufficient, as a matter of law, to establish deliberate indifference,” but not if the “chosen course of treatment ‘was medically unacceptable under the circumstances’” (alterations in original) (quoting *Jackson v. McIntosh*, 90 F.3d 330, 332 (9th Cir. 1996))).

“In deciding whether there has been deliberate indifference to an inmate’s serious medical needs, we need not defer to the judgment of prison doctors or administrators.” *Hunt v. Dental Dep’t*, 865 F.2d 198, 200 (9th Cir. 1989). Nor does it suffice for “correctional administrators wishing to avoid treatment . . . simply to find a single practitioner willing to attest that some well-accepted treatment is not necessary.” *Kosilek*, 774 F.3d at 90 n.12. In the final analysis under the Eighth Amendment, we must determine, considering the record, the judgments of prison medical officials, and the views of prudent professionals in the field, whether the treatment decision of responsible prison authorities was medically acceptable.

Reviewing the record and the district court’s extensive factual findings, we conclude that Edmo has established that the “course of treatment” chosen to alleviate her gender dysphoria “was medically unacceptable under the circumstances.” *Hamby*, 821 F.3d at 1092 (quoting *Snow*, 681 F.3d at 988). This conclusion derives from the district court’s factual findings, which are not “illogical, implausible, or without support in inferences that may be

drawn from the facts in the record.” *La Quinta Worldwide LLC*, 762 F.3d at 879 (quotation omitted).

In particular, and as we will explain, this is not a case of dueling experts, as the State paints it. The district court permissibly credited the opinions of Edmo’s experts that GCS is medically necessary to treat Edmo’s gender dysphoria and that the State’s failure to provide that treatment is medically unacceptable. Edmo’s experts are well-qualified to render such opinions, and they logically and persuasively explained the necessity of GCS and applied the WPATH Standards of Care—the undisputed starting point in determining the appropriate treatment for gender dysphoric individuals. On the other side of the coin, the district court permissibly discredited the contrary opinions of the State’s treating physician and medical experts. Those individuals lacked expertise and incredibly applied (or did not apply, in the case of the State’s treating physician) the WPATH Standards of Care. In other words, the district court did not clearly err in making its credibility determinations, so it is not our role to reevaluate them. The credited testimony establishes that GCS is medically necessary.

a. Expert Testimony

Turning first to the expert testimony offered, the district court credited the testimony of Edmo’s experts that GCS is medically necessary to treat Edmo’s gender dysphoria and that the State’s failure to provide that treatment is medically unacceptable. *See Edmo*, 358 F. Supp. 3d at 1120–21, 1125. Dr. Ettner and Dr. Gorton opined that GCS is medically necessary because Edmo’s current treatment has been inadequate, as evidenced by her self-castration attempts. They also opined that if Edmo does not receive GCS, there is little chance that her gender dysphoria will improve and she is at risk of committing self-surgery again, suicide, and

further emotional decompensation. On the other hand, providing GCS to Edmo would, in the opinions of Dr. Ettner and Dr. Gorton, align Edmo's genitalia with her gender identity, thereby eliminating the severe distress Edmo experiences from her male genitalia.

In sharp contrast, the district court gave “virtually no weight” to the opinions of the State's experts. *Edmo*, 358 F. Supp. 3d at 1126. Dr. Garvey and Dr. Andrade, who purported to rely on the WPATH Standards of Care, opined that GCS is not medically necessary for Edmo.

The district court did not err in crediting the testimony of Edmo's experts and discounting the testimony of the State's experts. Dr. Ettner and Dr. Gorton are well-qualified to opine on the medical necessity of GCS. Both have substantial experience treating individuals with gender dysphoria. Dr. Ettner has evaluated, diagnosed, and treated between 2,500 and 3,000 individuals with gender dysphoria, while Dr. Gorton has been the primary care physician for approximately 400 patients with gender dysphoria. Both have substantial experience evaluating whether GCS is medically necessary for patients. Dr. Ettner has evaluated hundreds of people for GCS, referring approximately 300 while refusing others, and Dr. Gorton routinely determines the appropriateness of GCS for patients. They also have experience providing follow-up care for patients who have undergone GCS. And both have published peer-reviewed articles concerning the treatment of gender dysphoria.

The State's experts, by contrast, have substantial experience providing health care in institutional settings, but lack meaningful experience directly treating people with gender dysphoria. Dr. Garvey directly treated a “couple of patients” with gender dysphoria early in her career, while Dr. Andrade has never provided direct treatment for patients

with gender dysphoria. Moreover, prior to evaluating Edmo, neither had ever evaluated someone in person to determine the medical necessity of GCS. Relatedly, Dr. Garvey and Dr. Andrade have never provided follow-up care for a person who has received GCS. Indeed, Dr. Andrade did not even qualify under IDOC policy to assess a person for GCS. And neither Dr. Garvey nor Dr. Andrade has published a peer-reviewed article concerning the treatment of gender dysphoria.

Neither Dr. Ettner nor Dr. Gorton have treated prisoners with gender dysphoria, nor are they Certified Correctional Healthcare Professionals. But both serve on WPATH's Institutionalized Persons Committee, which "looks at the care and the assessment of individuals who are incarcerated and develops standards for treatment" of such individuals. They are thus familiar with medical treatment in prison settings. Moreover, Dr. Ettner has assessed approximately 30 incarcerated persons with gender dysphoria for GCS and other medical care.

More to the point, the more relevant experience for determining the medical necessity of GCS is having treated individuals with gender dysphoria, having evaluated individuals for GCS, and having treated them post-operatively. Such experience lends itself to fundamental knowledge of whether GCS is necessary and the potential risks of providing or foregoing the surgery. Edmo's experts have the requisite experience; the State's experts do not. For that reason alone, the district court did not clearly err in crediting the opinions of Edmo's experts over those of the State.¹⁵ *See Caro v. Woodford*, 280 F.3d 1247, 1253 (9th

¹⁵ The State contends that neither Dr. Ettner nor Dr. Gorton was qualified to offer expert opinions as to the appropriate medical care for

Cir. 2002) (explaining that we “must afford the District Court considerable deference in its determination that the witnesses were qualified to draw [their] conclusions”).

Independent of the experts’ qualifications, the district court did not err in crediting the opinions of Edmo’s experts over those of the State because aspects of Dr. Garvey’s and Dr. Andrade’s opinions ran contrary to the established standards of care in the area of transgender health care—the WPATH Standards of Care—which they purported to apply.¹⁶ *See Edmo*, 358 F. Supp. 3d at 1125.

Edmo because neither is a psychiatrist. So far as we can discern, the argument is that because a psychiatrist (Dr. Eliason) evaluated Edmo for GCS, only other psychiatrists are qualified to opine as to the medical necessity of GCS and to contradict his assessment. *See Oral Arg.* at 10:00–10:30. We reject that contention. Edmo’s experts, as explained, have significant experience evaluating patients for GCS—precisely what Dr. Eliason did. On the basis of their medical experience treating persons with gender dysphoria, they are well-qualified to render an opinion on the medical necessity of GCS and whether failure to provide the surgery is medically acceptable. *See Fed. R. Evid.* 702.

¹⁶ The State contends that the district court erred in requiring strict adherence to the flexible WPATH Standards of Care and in concluding that any deviation from those standards is medically unacceptable. But the district court correctly recognized that the WPATH Standards of Care are flexible, *see Edmo*, 358 F. Supp. 3d at 1111, and it appropriately used them as a starting point to gauge the credibility of each expert’s testimony, *see id.* at 1125–26. Tellingly, each expert for Edmo and the State likewise used the WPATH Standards of Care as a starting point. As the district court recognized: “There are no other competing, evidence-based standards that are accepted by any nationally or internationally recognized medical professional groups.” *Id.* at 1125. And as the State acknowledged at the evidentiary hearing, the “WPATH standards of care in the seventh edition do provide the best guidance” and “are the best standards out there.” For these reasons, the WPATH Standards of Care establish a useful starting point for analyzing the

For example, both Dr. Garvey and Dr. Andrade expressed the view that Edmo does not meet the sixth WPATH criterion, “12 continuous months of living in a gender role that is congruent with gender identity.” WPATH SOC at 60. They pointed out that Edmo has not presented as female outside of prison and urged that she needs real-life experiences in the community before undergoing GCS.

These opinions run head-on into the WPATH Standards of Care. The WPATH standards, which the NCCCHC endorses as the accepted standards for the treatment of transgender inmates, apply

in their entirety . . . to all transsexual, transgender, and gender nonconforming people, irrespective of their housing situation. People should not be discriminated against in their access to appropriate health care based on where they live, including institutional environments such as prisons Health care for transsexual, transgender, and gender nonconforming people living in an institutional environment should mirror that which would be available to them if they were living in a non-institutional setting within the same community.

credibility and weight to be given to each expert’s opinion and whether that opinion was consistent with established standards of care. The State does not contest the district court’s finding that the WPATH Standards of Care are the “internationally recognized guidelines for the treatment of individuals with gender dysphoria.” *Id.* at 1111. They are the gold standard on this issue.

All elements of assessment and treatment as described in the [Standards of Care] can be provided to people living in institutions. Access to these medically necessary treatments should not be denied on the basis of institutionalization or housing arrangements.

WPATH SOC at 67. Dr. Garvey and Dr. Andrade’s view—that GCS cannot be medically indicated for transgender inmates who did not present in a gender-congruent manner before incarceration—contradicts these accepted standards. Dr. Garvey and Dr. Andrade would deny GCS to a class of people because of their “institutionalization,” which the WPATH Standards of Care explicitly disavow. They provide no persuasive explanation for their deviation.¹⁷ And nothing in the WPATH Standards of Care or the law supports excluding an entire class of gender dysphoric individuals from eligibility for GCS.

Both Dr. Garvey and Dr. Andrade also relied on Edmo’s failure to attend psychotherapy sessions as an indication that her mental health concerns are not well controlled. But psychotherapy is not a precondition for surgery under the WPATH Standards of Care. WPATH SOC at 28–29.

We acknowledge that the WPATH Standards of Care are flexible, and a simple deviation from those standards does not alone establish an Eighth Amendment claim. But the

¹⁷ In concluding that Edmo does not meet the sixth WPATH criterion, Dr. Garvey expressed concern that there is a lack of evidence regarding GCS in prison settings. That rationale acts as self-fulfilling prophecy. If prisons and prison officials deny GCS to prisoners because of a lack of data, the data will never be generated, and the cycle will continue.

State's experts purported to be applying those standards and yet did so in a way that directly contradicted them. These unsupported and unexplained deviations offer a further reason why the district court did not clearly err in discounting the testimony of the State's experts. *See Caro*, 280 F.3d at 1253.

Finally, the district court did not err in discrediting the State's experts because aspects of their opinions were illogical and unpersuasive. For example, Dr. Garvey and Dr. Andrade expressed the view that Edmo does not meet the first WPATH criterion—"persistent, well documented gender dysphoria," WPATH SOC at 60—because of a lack of evidence from pre-incarceration records of Edmo presenting as female. But both experts acknowledged that Edmo has been diagnosed with and treated for gender dysphoria since 2012—*i.e.*, for six years as of the evidentiary hearing. Neither Dr. Garvey nor Dr. Andrade questioned Edmo's diagnosis, and both agree that she currently suffers gender dysphoria. There can be no doubt that Edmo has "persistent, well documented gender dysphoria," so their opinion is inexplicable.

Dr. Garvey's and Dr. Andrade's opinions on this point also ignore that individuals with gender dysphoria do not always experience symptoms early in life or throughout their life, or do not identify them as such. As Dr. Ettner testified, "gender dysphoria intensifies with age." And as with treatment for any other medical condition, treatment for gender dysphoria must be based on a patient's current situation.

The opinions of Edmo's experts are notably devoid of these flaws. Dr. Ettner and Dr. Gorton cogently and persuasively explained why GCS is medically necessary for Edmo and why Edmo meets the WPATH criteria for GCS.

For example, consistent with the WPATH Standards of Care, Dr. Ettner explained that Edmo has lived for “12 continuous months . . . in a gender role that is congruent with gender identity” (the sixth WPATH criterion) because she has lived “as a woman to the best of her ability in a male prison.” In support of her opinion, Dr. Ettner cited Edmo’s “appearance . . . , her disciplinary records, which indicated that she had attempted to wear her hair in a feminine hairstyle and to wear makeup even though that was against the rules and she was – received some sort of disciplinary action for that, and her – the way that she was receiving female undergarments and had developed the stigma of femininity, the secondary sex characteristics, breast development, et cetera.” Dr. Gorton similarly explained that Edmo satisfies the sixth WPATH criterion because she has lived for years in her “target gender role . . . despite an environment that’s very hostile to that and some negative consequences that she has experienced because of that.”

Moreover, both Dr. Ettner and Dr. Gorton offered reasoned explanations tying Edmo’s self-castration attempts to her severe gender dysphoria. Dr. Ettner explained that doctors regard “surgical self-treatment . . . as an intentional attempt to remove the target organ that produces testosterone, which, in fact, is the cure for gender dysphoria.” As Dr. Gorton elaborated, Edmo’s self-castration attempts demonstrate deficient treatment for “severe genital-focused gender dysphoria.” He rejected the notion that Edmo’s depression and anxiety drove her self-castration attempts: “there [are] a lot of people with depression and anxiety who don’t remove their testicles.”

In light of the experts’ backgrounds and experience, and the reasonableness, consistency, and persuasiveness of their opinions, the district court did not err in crediting the

opinions of Edmo's experts and giving little weight to those of the State's experts. The district court carefully examined the voluminous record, extensive testimony, and conflicting expert opinions in this case and set forth clear reasons, supported by the record, for relying on the testimony of Edmo's experts. *See La Quinta Worldwide*, 762 F.3d at 879 (a factual finding is clear error if it is "illogical, implausible, or without support in inferences that may be drawn from the facts in the record"); *Caro*, 280 F.3d at 1253; *Beech Aircraft Corp. v. United States*, 51 F.3d 834, 838 (9th Cir. 1995) (per curiam). The credited expert testimony established that GCS is medically necessary to alleviate Edmo's gender dysphoria.

b. Dr. Eliason's Assessment

Turning from the expert testimony offered, the State contends that Edmo's experts, at most, created a dispute of professional judgment with Edmo's treating psychiatrist, Dr. Eliason, who it urges reasonably concluded that GCS is inappropriate for Edmo. If that is the case, the argument goes, then Edmo's Eighth Amendment claim fails because the dispute is merely a "difference of opinion . . . between medical professionals" about "what medical care is appropriate." *Snow*, 681 F.3d at 987. The problem for the State is that Dr. Eliason's decision "was medically unacceptable under the circumstances." *Toguchi*, 391 F.3d at 1058 (quoting *Jackson*, 90 F.3d at 332).

In particular, as the district court found, Dr. Eliason did not follow accepted standards of care in the area of transgender health care. *See Edmo*, 358 F. Supp. 3d at 1126. Dr. Eliason explained in his notes that, in his view, GCS is medically necessary in three situations: "congenital malformation or ambiguous genitalia," "severe and devastating dysphoria that is primarily due to genitals," or "some type of medical problem in which endogenous sexual

hormones were causing severe physiological damage.” The conclusion of his notes—“[t]his inmate does not meet any of those [three] criteria”—suggests that he views those as the *only* three scenarios in which GCS would be medically necessary, an impression he did not dispel during his testimony. Those “criteria” (Dr. Eliason’s term), however, bear little resemblance to the widely accepted, evidence-based criteria set out in the WPATH’s Standards of Care. As Dr. Eliason acknowledged, the NCCHC endorses the WPATH Standards of Care as the accepted standards for the treatment of transgender prisoners. And as the district court found and the State does not contest, “[t]here are no other competing, evidence-based standards that are accepted by any nationally or internationally recognized medical professional groups.” *Id.* at 1125. Dr. Eliason did not follow these standards in rendering his decision.

The State challenges the district court’s finding that Dr. Eliason “did not apply the WPATH Criteria,” *id.* at 1126, on two grounds. First, citing Dr. Eliason’s testimony at the evidentiary hearing, it urges that Dr. Eliason concluded that GCS was not medically necessary for Edmo because Edmo’s mental health issues were not well controlled (the fourth WPATH criterion) and she had not consistently presented as female outside of prison (the sixth).

The district court’s rejection of this post hoc explanation was not clear error. Neither of the explanations offered by Dr. Eliason during the evidentiary hearing appears in Dr. Eliason’s notes. Nor did he give these reasons during his deposition. Their absence is conspicuous, given that Dr. Eliason took the time to indicate instances where, in his opinion, GCS is appropriate and to explain that Edmo did not satisfy his “criteria.”

Second, the State highlights that Dr. Eliason's notes recommend further "supportive counseling" for Edmo and indicate that Edmo was up for parole. The State construes these notes as shorthand for the fourth and sixth WPATH criteria, respectively. The State's proposed reading of Dr. Eliason's notes is unreasonable. His notes are clear that GCS is not needed because Edmo did not meet his three "criteria," and the district court was well within its factfinding discretion in rejecting the State's strained reading. We therefore conclude that the district court reasonably found that Dr. Eliason "did not rely upon any finding that Ms. Edmo did not meet the WPATH criteria in concluding in his April 2016 assessment that she did not meet the criteria for gender confirmation surgery." *Id.* at 1120.

Notably, neither Dr. Eliason nor the State has offered any explanation or support for Dr. Eliason's "criteria." Dr. Eliason testified that he could not recall where he came up with them.

Nor has Dr. Eliason or the State contended that Dr. Eliason's criteria were a reasonable deviation or modification of the WPATH Standards of Care. In any event, we could not accept that argument. Dr. Eliason's criteria—apparently invented out of whole cloth—are so far afield from the WPATH standards that we cannot characterize his decision as a flexible application of or deviation from those standards. Indeed, as Dr. Gorton explained, two of Dr. Eliason's criteria are inapplicable to the care of transgender individuals. Dr. Eliason's criterion of "congenital malformation or ambiguous genitalia" "isn't . . . germane to transgender people." His statement that GCS could be needed when "endogenous sexual hormones were causing severe physiological damage," is, in Dr. Gorton's

words, “bizarre. I can’t think of a clinical circumstance where . . . your hormones that your body produces are attacking you I just don’t understand what [Dr. Eliason] is talking about there.”

Dr. Eliason, in short, did not follow the accepted standards of care in the area of transgender health care, nor did he reasonably deviate from or flexibly apply them. Dr. Eliason did not apply the established standards, even as a starting point, in his evaluation.

Putting to the side Dr. Eliason’s failure to follow or reasonably deviate from the accepted standards of care, his decision was internally contradictory in an important way. His notes reflect that GCS would be medically necessary if a person is suffering “severe and devastating gender dysphoria that is primarily due to genitals.” At his deposition, Dr. Eliason conceded that self-castration could show gender dysphoria sufficiently severe to satisfy that criterion. And at the evidentiary hearing, he acknowledged that Edmo “does primarily meet that criteri[on].” Thus, even under Dr. Eliason’s own criteria, Edmo should have been provided GCS. Neither Dr. Eliason nor the State has reconciled this important contradiction between Dr. Eliason’s criteria and his determination.

In sum, Dr. Eliason’s evaluation was not an exercise of medically acceptable professional judgment. Dr. Eliason’s decision was based on inexplicable criteria far afield from the recognized standards of care and, even applying Dr. Eliason’s criteria, Edmo qualifies for GCS. Given the credited expert testimony that GCS is necessary to treat Edmo’s gender dysphoria, Dr. Eliason’s contrary

determination was “medically unacceptable under the circumstances.”¹⁸ *Snow*, 681 F.3d at 988.

2. Deliberate Indifference

The State next contends that even if the treatment provided Edmo was medically unacceptable, no defendant acted “in conscious disregard of an excessive risk to [Edmo’s] health.” *Hamby*, 821 F.3d at 1092 (quoting *Snow*, 681 F.3d at 988). We disagree.

The record demonstrates that Dr. Eliason acted with deliberate indifference to Edmo’s serious medical needs. Dr. Eliason knew, as of the time of his evaluation, that Edmo had attempted to castrate herself. He also knew that Edmo suffers from gender dysphoria; he knew she experiences “clinically significant” distress that impairs her ability to function. He acknowledged that Edmo’s self-castration attempt was evidence that Edmo’s gender dysphoria, in his words, “had risen to another level.” Dr. Eliason nonetheless continued with Edmo’s ineffective treatment plan.

Edmo then tried to castrate herself a second time, in December 2016. Dr. Eliason knew of that nearly

¹⁸ Dr. Eliason was not alone in his decision. Dr. Stoddart, Dr. Young, and Jeremy Clark agreed with his assessment, as did the MTC. The State contends that such general agreement demonstrates that Dr. Eliason’s decision was reasonable. But general agreement in a medically unacceptable form of treatment does not somehow make it reasonable. This is especially so in light of the limited review those individuals performed: Dr. Stoddard, Dr. Young, and Jeremy Clark agreed with Dr. Eliason’s recommended treatment as *he* presented it to them and without personally evaluating Edmo, and the MTC “does not make any individual treatment decisions regarding [gender dysphoric] inmates. Those determinations are made by the individual clinicians or the medical staff employed by Corizon,” like Dr. Eliason.

catastrophic event, but he did not reevaluate or recommend a change to Edmo's treatment plan, despite indicating in his April 2016 evaluation that he would continue to monitor and assess Edmo's condition. Dr. Eliason continued to see Edmo after that time, and he considered Edmo's treatment as a member of the MTC. At no point did Dr. Eliason change his mind or the treatment plan regarding surgery. Under these circumstances, we conclude that Dr. Eliason knew of and disregarded the substantial risk of severe harm to Edmo. *Farmer*, 511 U.S. at 837.

The State urges that neither Dr. Eliason nor any other defendant acted with deliberate indifference because none acted with "malice, intent to inflict pain, or knowledge that [the] recommended course of treatment was medically inappropriate." The State misstates the standard. A prisoner "must show that prison officials 'kn[e]w [] of and disregard[ed]' the substantial risk of harm,' but the officials need not have intended any harm to befall the inmate; 'it is enough that the official acted or failed to act despite his knowledge of a substantial risk of serious harm.'" *Lemire v. Cal. Dep't of Corr. & Rehab.*, 726 F.3d 1062, 1074 (9th Cir. 2013) (alterations in original) (quoting *Farmer*, 511 U.S. at 837, 842). Neither the Supreme Court nor this court has ever required a plaintiff to show a "sinister [prison official] with improper motives," as the State would require. It is enough that Dr. Eliason knew of and disregarded an excessive risk to Edmo's health by rejecting her request for GCS and then never re-evaluating his decision despite ongoing harm to Edmo.

The State also contends that because the defendants provided some care to Edmo, no defendant could have been deliberately indifferent. The provision of some medical treatment, even extensive treatment over a period of years,

does not immunize officials from the Eighth Amendment's requirements. *See Lopez v. Smith*, 203 F.3d 1122, 1132 (9th Cir. 2000) (en banc) (explaining that “[a] prisoner need not prove that he was completely denied medical care” to make out an Eighth Amendment claim); *see also De'lonta*, 708 F.3d at 526 (“[J]ust because [officials] have provided De'lonta with some treatment consistent with the GID Standards of Care, it does not follow that they have necessarily provided her with constitutionally adequate treatment.”). As the Fourth Circuit has aptly analogized,

imagine that prison officials prescribe a painkiller to an inmate who has suffered a serious injury from a fall, but that the inmate's symptoms, despite the medication, persist to the point that he now, by all objective measure, requires evaluation for surgery. Would prison officials then be free to deny him consideration for surgery, immunized from constitutional suit by the fact they were giving him a painkiller? We think not.

De'lonta, 708 F.3d at 526. Here, although the treatment provided Edmo was important, it stopped short of what was medically necessary.

3. Out-of-Circuit Precedent

Our decision cleaves to settled Eighth Amendment jurisprudence, which requires a fact-specific analysis of the record (as construed by the district court) in each case. *See Patel v. Kent Sch. Dist.*, 648 F.3d 965, 975 (9th Cir. 2011) (“Deliberate-indifference cases are by their nature highly fact-specific”); *see also Rachel v. Troutt*, 820 F.3d 390, 394 (10th Cir. 2016) (“Each step of this [deliberate

indifference] inquiry is fact-intensive.” (quoting *Hartsfield v. Colburn*, 491 F.3d 394, 397 (8th Cir. 2007)); *Roe v. Elyea*, 631 F.3d 843, 859 (7th Cir. 2011) (“[I]nmate medical care decisions must be fact-based with respect to the particular inmate, the severity and stage of his condition, the likelihood and imminence of further harm and the efficacy of available treatments.”); *Youmans v. Gagnon*, 626 F.3d 557, 564 (11th Cir. 2010) (“Judicial decisions addressing deliberate indifference to a serious medical need, like decisions in the Fourth Amendment search-and-seizure realm, are very fact specific.”); *Chance v. Armstrong*, 143 F.3d 698, 703 (2d Cir. 1998) (“Whether a course of treatment was the product of sound medical judgment, negligence, or deliberate indifference depends on the facts of the case.”).

Several years ago, the First Circuit, sitting en banc, employed that fact-based approach to evaluate a gender dysphoric prisoner’s Eighth Amendment claim seeking GCS. The First Circuit confronted the following record: credited expert testimony disagreed as to whether GCS was medically necessary; the prisoner’s active treatment plan, which did not include GCS, had “led to a significant stabilization in her mental state”; and a report and testimony from correctional officials detailed significant security concerns that would arise if the prisoner underwent GCS. *Kosilek*, 774 F.3d at 86–96. “After carefully considering the community standard of medical care, the adequacy of the provided treatment, and the valid security concerns articulated by the DOC,” a 3–2 majority of the en banc court concluded that the plaintiff had not demonstrated GCS was medically necessary treatment for her gender dysphoria. *Id.* at 68.

Our approach mirrors the First Circuit's, but the important factual differences between cases yield different outcomes. Notably, the security concerns in *Kosilek*, which the First Circuit afforded "wide-ranging deference," are completely absent here. *Id.* at 92. The State does not so much as allude to them. The medical evidence also differs. In *Kosilek*, qualified and credited experts disagreed about whether GCS was necessary. *Id.* at 90. As explained above, the district court's careful factual findings admit of no such disagreement here. Rather, they unequivocally establish that GCS is the safe, effective, and medically necessary treatment for Edmo's severe gender dysphoria.

We recognize, however, that our decision is in tension with *Gibson v. Collier*. In that case, the Fifth Circuit held, in a split decision, that "[a] state does not inflict cruel and unusual punishment by declining to provide [GCS] to a transgender inmate." 920 F.3d at 215. It did so on a "sparse record"—which included only the WPATH Standards of Care and was notably devoid of "witness testimony or evidence from professionals in the field"—compiled by a *pro se* plaintiff. *Id.* at 220. Despite the sparse record, a 2–1 majority of the *Gibson* panel concluded that "there is no consensus in the medical community about the necessity and efficacy of [GCS] as a treatment for gender dysphoria. . . . This on-going medical debate dooms Gibson's claim." *Id.* at 221.

We respectfully disagree with the categorical nature of our sister circuit's holding. Most fundamentally, *Gibson* relies on an incorrect, or at best outdated, premise: that "[t]here is no medical consensus that [GCS] is a necessary or even effective treatment for gender dysphoria." *Id.* at 223.

As the record here demonstrates and the State does not seriously dispute, the medical consensus is that GCS is

effective and medically necessary in appropriate circumstances. The WPATH Standards of Care—which are endorsed by the American Medical Association, the American Medical Student Association, the American Psychiatric Association, the American Psychological Association, the American Family Practice Association, the Endocrine Society, the National Association of Social Workers, the American Academy of Plastic Surgeons, the American College of Surgeons, Health Professionals Advancing LGBTQ Equality, the HIV Medicine Association, the Lesbian, Bisexual, Gay and Transgender Physician Assistant Caucus, and Mental Health America—recognize this fact. WPATH SOC at 54–55. Each expert in this case agrees. As do others in the medical community. *See, e.g.*, U.S. Dep’t of Health & Human Servs., No. A-13-87, Decision No. 2576; Bao Ngoc N. Tran, et al., *Gender Affirmation Surgery: A Synopsis Using American College of Surgeons National Surgery Quality Improvement Program and National Inpatient Sample Databases*, 80 *Annals Plastic Surgery* S229, S234 (2018); Frey, *A Historical Review of Gender-Affirming Medicine*, 14 *J. Sexual Med.* at 991; *see also* What We Know Project, Ctr. for the Study of Inequality, Cornell Univ., *What Does the Scholarly Research Say About the Effect of Gender Transition on Transgender Well-Being?*, <https://whatweknow.inequality.cornell.edu/topics/lgbt-equality/what-does-the-scholarly-research-say-about-the-well-being-of-transgender-people/> (last visited July 10, 2019) (reviewing the available literature and finding “a robust international consensus in the peer-reviewed literature that gender transition, including medical treatments such as hormone therapy and surgeries, improves the overall well-being of transgender individuals”). The Fifth Circuit is the outlier.

Gibson's broad holding stemmed from a dismaying disregard for procedure. As noted, the "sparse" summary judgment record that the *pro se* plaintiff developed included "only the WPATH Standards of Care." *Gibson*, 920 F.3d at 221. Perhaps that factual deficiency doomed *Gibson*'s Eighth Amendment claim. *See id.* at 223–24. But to reach its broader holding that denying GCS cannot, as a matter of law, violate the Eighth Amendment—in other words, to reject every conceivable Eighth Amendment claim based on the denial of GCS—the Fifth Circuit coopted the record from *Kosilek*, a First Circuit decision that predates *Gibson* by four years. *Id.* at 221–23. We doubt the analytical value of such an anomalous procedural approach.

Worse yet, the medical opinions from *Kosilek* do not support the Fifth Circuit's categorical holding. Dr. Chester Schmidt's and Dr. Stephen Levine's testimony in *Kosilek*, which the Fifth Circuit relied on, do not support the proposition that GCS is never medically necessary. Dr. Schmidt and Dr. Levine testified that GCS was not necessary in the factual circumstances of that case, that is, based on the unique medical needs of the prisoner at issue. *See Kosilek*, 774 F.3d at 76–79.

The only suggestion in *Kosilek* that GCS is never medically necessary is in the First Circuit's recitation of the testimony of Dr. Cynthia Osborne. *See Gibson*, 920 F.3d at 221. The First Circuit recounted that Dr. Osborne testified that she "did not view [GCS] as medically necessary in light of the 'whole continuum from noninvasive to invasive' treatment options available to individuals with" gender dysphoria. *Kosilek*, 774 F.3d at 77. To the extent this vague portrait of Dr. Osborne's testimony conveys her belief that GCS is never medically necessary, she has apparently changed her view in the more than ten years since she

testified in *Kosilek*. Like both sides and all four medical experts who testified here, Dr. Osborne now agrees that GCS “can be medically necessary for some, though not all, persons with [gender dysphoria], including some prison inmates.” Osborne & Lawrence, *Male Prison Inmates With Gender Dysphoria*, 45 Archives of Sexual Behav. at 1651. In her and her co-author’s words, “[GCS] is a safe, effective, and widely accepted treatment for [gender dysphoria]; disputing the medical necessity of [GCS] based on assertions to the contrary is unsupportable.” *Id.* The predicate medical opinions that *Gibson* is premised upon, then, do not support the Fifth Circuit’s view that GCS is never medically necessary. The consensus is that GCS is effective and medically necessary in appropriate circumstances.¹⁹

Gibson is unpersuasive for several additional reasons. It directly conflicts with decisions of this circuit, the Fourth

¹⁹ We do not suggest that every member of the medical and mental health communities agrees that GCS may be medically necessary. There are outliers. But when the medical consensus is that a treatment is effective and medically necessary under the circumstances, prison officials render unacceptable care by following the views of outliers without offering a credible medical basis for deviating from the accepted view. See *Kosilek*, 774 F.3d at 90 n.12 (explaining that it is not enough for “correctional administrators wishing to avoid treatment . . . simply to find a single practitioner willing to attest that some well-accepted treatment is not necessary”); *Hamilton v. Endell*, 981 F.2d 1062, 1067 (9th Cir. 1992) (“By choosing to rely upon a medical opinion which a reasonable person would likely determine to be inferior, the prison officials took actions which may have amounted to the denial of medical treatment, and the unnecessary and wanton infliction of pain.” (quotation omitted)), *overruled in part on other grounds as recognized in Snow*, 681 F.3d at 986; *cf. also Bragdon v. Abbott*, 524 U.S. 624, 650 (1998) (“A health care professional who disagrees with the prevailing medical consensus may refute it by citing a credible scientific basis for deviating from the accepted norm.”).

Circuit, and the Seventh Circuit, all of which have held that denying surgical treatment for gender dysphoria can pose a cognizable Eighth Amendment claim. *Rosati*, 791 F.3d at 1040 (alleged blanket ban on GCS and denial of GCS to plaintiff with severe symptoms, including repeated self-castration attempts, states an Eighth Amendment claim); *Fields v. Smith*, 653 F.3d 550, 552–53, 558–59 (7th Cir. 2011) (law banning hormone treatment and GCS, even if medically necessary, violates the Eighth Amendment); *De'lonta*, 708 F.3d at 525 (alleged denial of an evaluation for GCS states an Eighth Amendment claim).²⁰ Relatedly, *Gibson* eschews Eighth Amendment precedent requiring a case-by-case determination of the medical necessity of a particular treatment. See, e.g., *Colwell v. Bannister*, 763 F.3d 1060, 1068 (9th Cir. 2014) (holding that the “blanket, categorical denial of medically indicated surgery solely on the basis of an administrative policy . . . is the paradigm of deliberate indifference” (quotation omitted)); *Roe*, 631 F.3d at 859.

In this latter respect, *Gibson* also contradicts and misconstrues the precedent it purports to follow: *Kosilek*. According to the *Gibson* majority, “the majority in *Kosilek* effectively allowed a blanket ban on sex reassignment surgery.” 920 F.3d at 216. Not so. The First Circuit did precisely what we do here: assess whether the record before it demonstrated deliberate indifference to the plaintiff’s

²⁰ The Fifth Circuit unpersuasively attempted to reconcile its decision with *Rosati* and *De'lonta*, pointing out that those decisions “allowed Eighth Amendment claims for [GCS] to survive motions to dismiss, without addressing the merits.” *Gibson*, 920 F.3d at 223 n.8. But if *Gibson* is correct that failing to provide GCS cannot amount to deliberate indifference, then a plaintiff cannot state an Eighth Amendment claim based on the denial of GCS. *Rosati* and *De'lonta* would necessarily have been decided differently under *Gibson*’s holding.

gender dysphoria. On the record before it, the First Circuit determined that either of two courses of treatment (one included GCS and one did not) were medically acceptable. *Kosilek*, 774 F.3d at 90. In light of those medically acceptable alternatives, the First Circuit explained that it was not its place to “second guess medical judgments or to require that the DOC adopt the more compassionate of two adequate options.” *Id.* (quotation omitted). It expressly cautioned that the opinion should not be read to “create a de facto ban against [GCS] as a medical treatment for any incarcerated individual,” as “any such policy would conflict with the requirement that medical care be individualized based on a particular prisoner’s serious medical needs.” *Id.* at 91 (citing *Roe*, 631 F.3d at 862–63). The Fifth Circuit disregarded these words of warning.²¹

* * *

In summary, Edmo has established that she suffers from a “serious medical need,” *Jett*, 439 F.3d at 1096, and that the treatment provided was “medically unacceptable under the circumstances” and chosen “in conscious disregard of an excessive risk” to her health, *Hamby*, 821 F.3d at 1092. She established her Eighth Amendment claim of deliberate indifference as to Defendant-Appellant Dr. Eliason.

²¹ *Gibson*’s final, originalist rationale—that it cannot be cruel and *unusual* to deny a surgery that has only once been provided to an inmate, 920 F.3d at 226–28—warrants little discussion. *Gibson*’s originalist understanding of the Eighth Amendment does not control; *Estelle* does, and under *Estelle* a plaintiff establishes an Eighth Amendment claim by demonstrating that prison officials were deliberately indifferent to a serious medical need. 429 U.S. at 106. This standard protects the evolving standards of decency enshrined in the Eighth Amendment.

B. Irreparable Harm

The State next contends that the district court erred in finding that Edmo would be irreparably harmed absent an injunction.

In reaching its conclusion, the district court found that Edmo experiences ongoing “clinically significant distress,” meaning “the distress impairs or severely limits [her] ability to function in a meaningful way.” *Edmo*, 358 F. Supp. 3d at 1110–11. This finding is supported by Edmo’s testimony that her gender dysphoria causes her to feel “depressed,” “disgusting,” “tormented,” and “hopeless”; that she actively experiences thoughts of self-castration; and that she “self-medicate[s]” by cutting her arms with a razor to avoid acting on those thoughts and impulses. The district court also found that in the absence of surgery, Edmo “will suffer serious psychological harm and will be at high risk of self-castration and suicide.” *Id.* at 1128. This finding is supported by the credited expert testimony of Dr. Ettner and Dr. Gorton, who detailed the escalating risks of self-surgery, suicide, and emotional decompensation should Edmo be denied surgery.

It is no leap to conclude that Edmo’s severe, ongoing psychological distress and the high risk of self-castration and suicide she faces absent surgery constitute irreparable harm. *See Stanley v. Univ. of S. Cal.*, 13 F.3d 1313, 1324 n.5 (9th Cir. 1994); *Thomas v. County of Los Angeles*, 978 F.2d 504, 511 (9th Cir. 1992); *Chalk v. U.S. Dist. Ct. Cent. Dist. of Cal.*, 840 F.2d 701, 709 (9th Cir. 1988). Moreover, the deprivation of Edmo’s constitutional right to adequate medical care is sufficient to establish irreparable harm. *See Nelson v. NASA*, 530 F.3d 865, 882 (9th Cir. 2008) (“Unlike monetary injuries, constitutional violations cannot be adequately remedied through damages and therefore

generally constitute irreparable harm.”), *rev’d and remanded on other grounds*, 562 U.S. 134 (2011).

The State offers three contentions as to why the district court erred in finding that Edmo would be irreparably injured in the absence of an injunction. None is persuasive.

First, the State argues that the “long delay” of “nearly a year” between Edmo filing her Amended Complaint and her preliminary injunction motion “implies a lack of urgency and irreparable harm.” We disagree. The procedural history demonstrates that Edmo did not sit on her rights. Proceeding *pro se*, Edmo moved for preliminary injunctive relief when she filed her original complaint. The court then appointed counsel for Edmo, and shortly after appearing, appointed counsel withdrew Edmo’s motion and filed an amended complaint. To assess the urgency of surgery, Edmo’s counsel promptly sought access to Edmo’s medical records, which the State did not produce until more than six months later. Edmo moved for injunctive relief shortly thereafter. During that time, Edmo and her counsel diligently investigated and compiled the necessary record to move for injunctive relief. That it took them months to do their diligence does not suggest that Edmo will not be harmed absent an injunction.

Second, the State contends that Edmo has not established irreparable injury because both she and her expert, Dr. Gorton, agree that GCS is not an emergency surgery and that the State should have six months to provide such surgery. The State’s argument would preclude courts from ordering non-emergent medical care, even if the Eighth Amendment demands it. That is untenable. The State also ignores the rationale for the six-month time period. As Dr. Gorton explained, all patients who receive GCS “are seen, they are evaluated, there is a process you have to go

through.” In his experience, that process typically concludes within six months. That Edmo requested relief on a reasonable timeline, based on the medical evidence, does not undermine the strong evidence of irreparable injury.

Third, the State contends that Edmo has not established irreparable harm because she “has not attempted suicide or self-castration for years.” That argument overlooks the profound, persistent distress Edmo’s gender dysphoria causes, as well as the credited expert testimony that absent GCS, Edmo is at risk of further attempts at self-castration, and possibly suicide. The district court did not err in finding that Edmo would be irreparably harmed in the absence of an injunction.

IV. Challenges to the Scope of the Injunction

We turn to the State’s contentions that the district court’s injunction was overbroad.

A. Individual Defendants

The State contends that the injunction should not apply to Atencio, Zmuda, Yordy, Siegert, Dr. Young, Dr. Craig, Dr. Eliason, or Dr. Whinnery because the district court did not find that they, individually, were deliberately indifferent to Edmo’s medical needs.

As explained in Section III.A, Edmo has established that Dr. Eliason was deliberately indifferent to her serious medical needs. The injunction was properly entered against him because he personally participated in the deprivation of Edmo’s constitutional rights. *See Colwell*, 763 F.3d at 1070.

Edmo sued Attencio, Zmuda, and Yordy in their official capacities. An official-capacity suit for injunctive relief is

properly brought against any persons who “would be responsible for implementing any injunctive relief.” *Pouncil v. Tilton*, 704 F.3d 568, 576 (9th Cir. 2012). The State does not contest that Attencio, as Director of IDOC, and Zmuda, as Deputy Director of IDOC, would be responsible for implementing any injunctive relief ordered. Edmo properly named them as defendants to her Eighth Amendment claim for injunctive relief, regardless of their personal involvement. *See Colwell*, 763 F.3d at 1070–71 (director of a state correctional system is a proper defendant in an official-capacity suit seeking injunctive relief for Eighth Amendment violations). Yordy is no longer the Warden of ISCI, but, by operation of the Federal Rules, his successor, Al Ramirez, is “automatically substituted as party” in his official capacity. Fed. R. Civ. P. 25(d). Ramirez is properly a defendant to Edmo’s Eighth Amendment claim for injunctive relief, regardless of his personal involvement. *See Colwell*, 763 F.3d at 1070–71 (warden is a proper defendant in an official-capacity suit seeking injunctive relief for Eighth Amendment violations). Because Edmo may properly pursue her Eighth Amendment claim for injunctive relief against Attencio, Zmuda, and Ramirez in their official capacities, they are properly included within the scope of the district court’s injunction. On remand, the district court shall amend the injunction to substitute Al Ramirez (or the then-current Warden of ISCI) as a party for Yordy.

Edmo also named Yordy as a defendant in his individual capacity. She likewise named Siegert, Dr. Young, Dr. Craig, and Dr. Whinnery as defendants in their individual capacities (though she does not argue on appeal that the injunction properly included them). We hold that the evidence in the current record is insufficient to conclude that they were deliberately indifferent to Edmo’s serious medical needs. In particular, the record does not show what they

knew about Edmo's condition and what role they played in her treatment or lack thereof. Edmo has not established their liability, and the district court improperly included them within the scope of the injunction. We vacate the district court's injunction to the extent it applies to Yordy, Siegert, Dr. Young, Dr. Craig, and Dr. Whinnery in their individual capacities. *See California v. Azar*, 911 F.3d 558, 585 (9th Cir. 2018) (vacating in part an overbroad injunction and remanding to the district court). On remand, the district court shall modify the injunction to exclude those defendants from its scope.

B. Corizon

The State also contends that the injunction should not apply to Corizon. It urges that Corizon does not have a policy barring GCS and argues that such a policy is a prerequisite to liability under *Monell v. Department of Social Services*, 436 U.S. 658 (1978). We have not yet determined whether *Monell* applies "to private entities acting on behalf of state governments," such as Corizon. *Oyenik v. Corizon Health Inc.*, 696 F. App'x 792, 794 n.1 (9th Cir. 2017). We leave that issue for another day. Instead, we vacate the injunction as to Corizon and remand with instructions to the district court to modify the injunction to exclude Corizon. *See Azar*, 911 F.3d at 585. Doing so still provides Edmo the relief she seeks at this stage.²²

²² For similar reasons, we need not reach Edmo's contention and the district court's finding that "Corizon and IDOC have a *de facto* policy or practice of refusing" GCS to prisoners. *Edmo*, 358 F. Supp. 3d at 1127.

C. Relief Ordered

The State next contends that the injunctive relief ordered is overbroad because it requires the State to provide Edmo all “adequate medical care.” The State misconstrues the district court’s order. The order, read in context, requires defendants to provide GCS, as well as “adequate medical care” that is “reasonably necessary” to accomplish that end—not every conceivable form of adequate medical care. *Edmo*, 358 F. Supp. 3d at 1129; *see also id.* at 1109 (“Plaintiff Adree Edmo alleges that prison authorities violated her Eighth Amendment rights by refusing to provide her with gender confirmation surgery. For the reasons explained below, the Court agrees and will order defendants to provide her with this procedure, a surgery which is considered medically necessary under generally accepted standards of care.”); *id.* at 1110 (“[F]or the reasons explained in detail below, IDOC and Corizon will be ordered to provide Ms. Edmo with gender confirmation surgery.”).

The State similarly contends that the injunctive relief ordered is overbroad because it requires the State to provide Edmo surgery even though the defendants are not surgeons and no surgeon has evaluated Edmo. We reject this obtuse reading of the district court’s order. The district court ordered the State to “take all actions reasonably necessary to provide Ms. Edmo gender confirmation surgery.” *Edmo*, 358 F. Supp. 3d at 1129. That means that the State must take steps within its power to provide GCS to Edmo, such as finding a surgeon and scheduling a surgical evaluation. Indeed, we modified our stay of the district court’s order to permit a surgical consultation, which went forward in April 2019. Oral Arg. at 12:00–12:10. The State cannot reasonably understand the district court’s December 13, 2018 order to require that the defendants themselves provide

surgery. To the extent there are issues arising from a surgical evaluation, the State can raise those issues with the district court.²³

V. Challenges to the Procedure Used by the District Court

Finally, the State contends that the district court improperly converted an evidentiary hearing on a preliminary injunction into a final trial on the merits of Edmo's Eighth Amendment claim for GCS without giving them adequate notice and in violation of their Seventh Amendment right to a jury trial. We address and reject each contention.

A. Notice

We first address the State's contention that the district court erroneously converted the evidentiary hearing into a final trial on the merits without giving the State "clear and unambiguous notice." Under Federal Rule of Civil Procedure 65(a)(2), "[a] district court may consolidate a preliminary injunction hearing with a trial on the merits, but only when it provides the parties with clear and unambiguous notice [of the intended consolidation] either before the hearing commences or at a time which will afford

²³ The State contends for the first time in its reply brief that the injunctive relief ordered was inappropriate because the WPATH Standards of Care require two referrals from qualified mental health professionals who have independently assessed the patient before GCS may be provided. It similarly contends for the first time in its reply in support of its motion to dismiss that the order is overbroad because it does not specify the type of GCS ordered. Because the State did not present these arguments in its opening brief, we do not consider them. *See Smith v. Marsh*, 194 F.3d 1045, 1052 (9th Cir. 1999).

the parties a full opportunity to present their respective cases.” *Isaacson v. Horne*, 716 F.3d 1213, 1220 (9th Cir. 2013) (second alteration in original) (quotation omitted). “What constitutes adequate notice depends upon the facts of the case.” *Michenfelder v. Sumner*, 860 F.2d 328, 337 (9th Cir. 1988).

A party challenging consolidation must show not only inadequate notice, but also “substantial prejudice in the sense that [it] was not allowed to present material evidence.” *Michenfelder*, 860 F.2d at 337; *see also* 11A Charles Alan Wright et al., *Federal Practice and Procedure* § 2950 (3d ed. Apr. 2019 update). “We have on occasion upheld a district court’s failure to give any notice whatsoever before finally determining the merits after only a preliminary injunction hearing, where the complaining party has failed to show how additional evidence could have altered the outcome.” *Michenfelder*, 860 F.2d at 337.

At the outset, we note that the State was provided notice, twice, that the district court considered the evidentiary hearing a final trial on the merits of Edmo’s request for GCS. At the beginning of the hearing, the district court explained “it’s hard for me to envision this hearing being anything but a hearing on a final injunction at least as to that part of the relief requested [GCS],” and it asked the parties to address by the end of the hearing whether it was for a permanent injunction. At the close of the hearing, the district court again questioned whether it could order GCS in a preliminary injunction. It explained that it had, in effect, “kind of treated this hearing as the final hearing” on Edmo’s request for GCS, and it again asked the parties to address in their oral closings or written briefs whether the hearing was one for a permanent injunction. The State never answered the court’s question or objected to consolidation, despite the

district court specifically noting it had treated the hearing as final. *Cf. Reilly v. United States*, 863 F.2d 149, 160 (1st Cir. 1988) (“[W]hen a trial judge announces a proposed course of action which litigants believe to be erroneous, the parties detrimentally affected must act expeditiously to call the error to the judge’s attention or to cure the defect, not lurk in the bushes waiting to ask for another trial when their litigatory milk curdles.”). This is not a case where the district court gave no notice whatsoever.

Regardless, the State has not shown any prejudice. With full awareness of the stakes, the district court permitted the parties four months of discovery and held a three-day evidentiary hearing. The parties called seven witnesses, submitted declarations in lieu of live testimony for other witnesses, and submitted thousands of pages of exhibits and extensive pre- and post-trial briefing. Most importantly, both parties put on extensive evidence concerning the treatment provided to and withheld from Edmo and why it was or was not appropriate—the key issue at the hearing.

When it comes to identifying prejudice, the State is tellingly short on specifics. It indicates that it “would have objected” to consolidation, but it failed to do so despite repeated invitations—indeed, directives—to address the issue. The State also urges that it would have requested that the named defendants be able to testify live, but it stipulated—knowing full well the stakes of the hearing—to submit certain testimony via declaration “[i]n lieu of and/or in addition to live testimony.” Moreover, the State fails to identify what testimony those witnesses would have offered or explain how presenting that testimony live, instead of via declaration, “could have altered the outcome.” *Michenfelder*, 860 F.2d at 337. The district court did not

commit reversible error in consolidating the evidentiary hearing with a trial on the merits of Edmo's request for GCS.

B. Seventh Amendment

We turn to the State's related contention that the district court violated the defendants' Seventh Amendment right to a jury trial by converting the evidentiary hearing into a trial on the merits. We review that contention de novo. *Palmer v. Valdez*, 560 F.3d 965, 968 (9th Cir. 2009).

The Seventh Amendment guarantees the right to a trial by jury "[i]n Suits at common law, where the value in controversy shall exceed twenty dollars." U.S. Const. amend. VII. In a case such as this, where legal claims are joined with equitable claims, a party "has a right to jury consideration of all legal claims, as well as all issues common to both claims." *Plummer v. W. Int'l Hotels Co.*, 656 F.2d 502, 504 n.6 (9th Cir. 1981) (citing *Curtis v. Loether*, 415 U.S. 189, 196 n.11 (1974)). "Otherwise, the court might limit the parties' opportunity to try to a jury every issue underlying the legal claims by affording preclusive effect to its own findings of fact on questions that are common to both the legal and equitable claims." *Lacy v. Cook County*, 897 F.3d 847, 858 (7th Cir. 2018).

Like other constitutional rights, the right to a jury trial in civil suits can be waived. *See United States v. Moore*, 340 U.S. 616, 621 (1951). It is well established that "[a] failure to object to a proceeding in which the court sits as the finder of fact waives a valid jury demand as to any claims decided in that proceeding, at least where it was clear that the court intended to make fact determinations." *Fillmore v. Page*, 358 F.3d 496, 503 (7th Cir. 2004) (quotation omitted); *see also* 9 Wright & Miller, *Federal Practice and Procedure* § 2321 ("The right to jury trial also may be waived as it has

in many, many cases, by conduct, such as failing to object to or actually participating in a bench trial . . .”).

For example, in *White v. McGinnis*, we held that “[a] party’s vigorous participation in a bench trial, without so much as a mention of a jury, . . . can only be ascribed to knowledgeable relinquishment of the prior jury demand.” 903 F.2d 699, 703 (9th Cir. 1990) (en banc). We explained that where a party chooses “to argue his case fully before the district judge[,] it is not unjust to hold him to that commitment.” *Id.* By contrast, we have held that “[w]hen a party participates in [a] bench trial ordered by the trial court while continuing to demand a jury trial, his ‘continuing objection’ is ‘sufficient to preserve his right to appeal the denial of his request for a jury.’” *Solis v. County of Los Angeles*, 514 F.3d 946, 957 (9th Cir. 2008) (quoting *United States v. Nordbrock*, 941 F.2d 947, 950 (9th Cir. 1991)). “This is because the party in such a case is not seeking ‘two bites at the procedural apple’ Rather, when a trial court denies a party a jury trial despite the party’s continuing demand, the party has little choice but to accede to the trial court’s ruling and participate in the bench trial.” *Id.* (citation omitted); see also *Lovelace v. Dall*, 820 F.2d 223, 228 (7th Cir. 1987) (“Another policy justifying the jury demand waiver rule is the view that it is unfair to permit a party to have a trial, discover that it has lost, and then raise the jury issue because it is unsatisfied with the result of the trial.”).

The State seeks a second bite at the apple. It vigorously participated in the evidentiary hearing without ever raising the right to a jury trial. The State remained silent in the face of statements from the district court that it was considering treating, and then that it had treated, the hearing as a final trial on the merits, which made it clear that the court “intended to make fact determinations.” *Fillmore*, 358 F.3d

at 503. It also remained silent despite the district court asking twice whether the hearing was one for a permanent injunction—as clear a time as any to raise any concerns about a jury trial.

The State raised the issue of a jury trial for the first time on appeal, after the district court ruled against it. Even after the district court’s ruling, the State made no objection or claim to a jury trial. This conduct waived the State’s right to a jury trial with respect to issues common to Edmo’s request for an injunction ordering GCS and her legal claims.

VI. Conclusion

We apply the dictates of the Eighth Amendment today in an area of increased social awareness: transgender health care. We are not the first to speak on the subject, nor will we be the last. Our court and others have been considering Eighth Amendment claims brought by transgender prisoners for decades. During that time, the medical community’s understanding of what treatments are safe and medically necessary to treat gender dysphoria has changed as more information becomes available, research is undertaken, and experience is gained. The Eighth-Amendment inquiry takes account of that developing understanding. *See Estelle*, 429 U.S. at 102–03.

We hold that where, as here, the record shows that the medically necessary treatment for a prisoner’s gender dysphoria is gender confirmation surgery, and responsible prison officials deny such treatment with full awareness of the prisoner’s suffering, those officials violate the Eighth Amendment’s prohibition on cruel and unusual punishment.

* * *

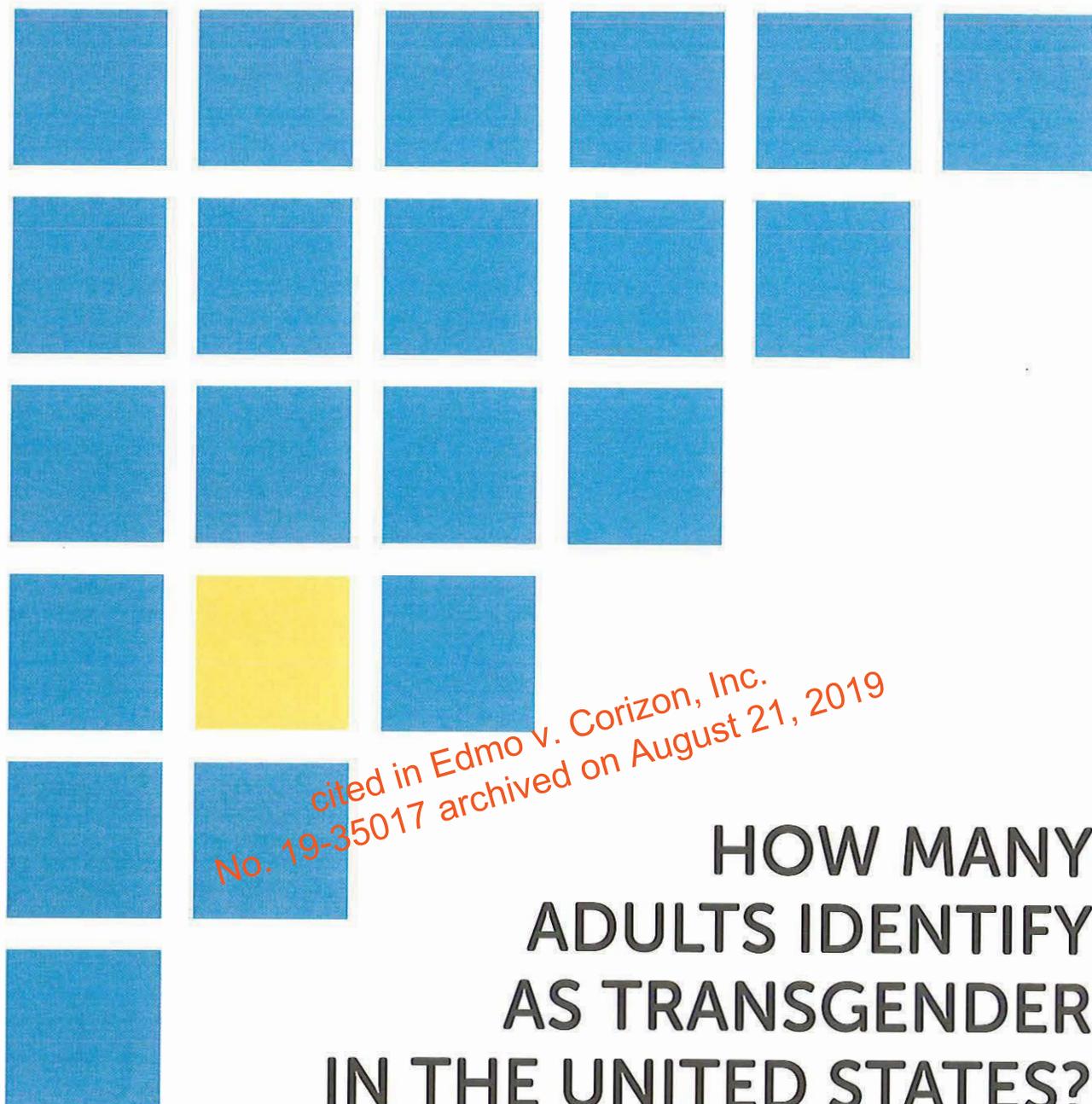
We affirm the district court's entry of an injunction for Edmo. However, we vacate the injunction to the extent it applies to Corizon, Yordy, Siegert, Dr. Young, Dr. Craig, and Dr. Whinnery, in their individual capacities, and remand to the district court to modify the injunction accordingly. The district court shall also modify the injunction to substitute Al Ramirez in his official capacity as Warden of ISCI for Yordy.

Although we addressed this appeal on an expedited basis, it has been more than a year since doctors concluded that GCS is medically necessary for Edmo. We urge the State to move forward. We emphatically do not speak to other cases, but the facts of this case call for expeditious effectuation of the injunction.

In light of the nature and urgency of the relief at issue, we will disfavor any motion, absent extraordinary circumstances or consent from all parties, to extend the period to petition for rehearing or rehearing en banc. Our stay of the district court's December 13, 2018 order shall automatically terminate upon issuance of the mandate.

Costs on appeal are awarded to Edmo.

AFFIRMED IN PART, VACATED IN PART, AND REMANDED.



*cited in Edmo v. Corizon, Inc.
No. 19-35017 archived on August 21, 2019*

HOW MANY ADULTS IDENTIFY AS TRANSGENDER IN THE UNITED STATES?

Andrew R. Flores, Jody L. Herman, Gary J. Gates, and Taylor N. T. Brown



JUNE 2016

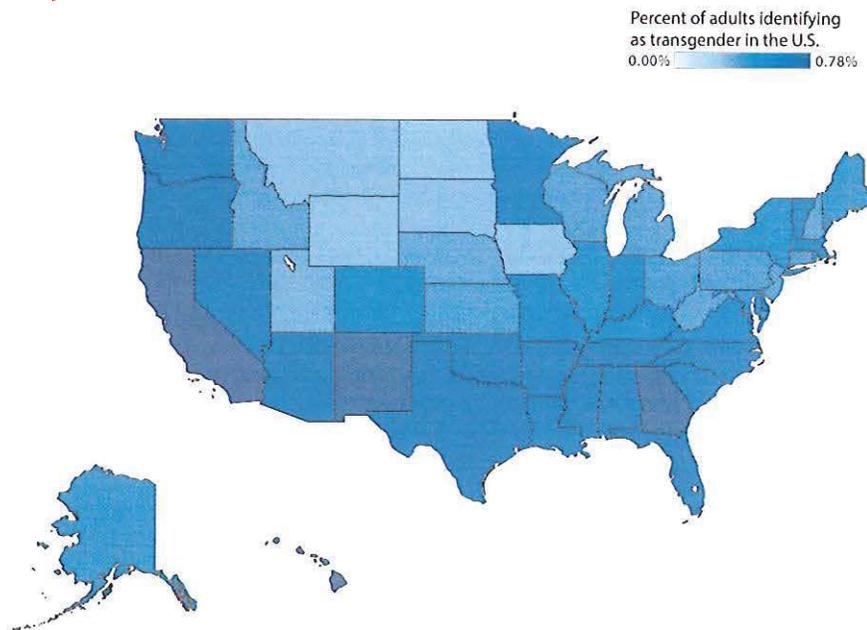
INTRODUCTION AND SUMMARY

Population-based surveys, meaning those that are designed to allow researchers to generalize findings to the population, rarely ask questions to identify transgender people and, therefore, cannot be used to provide estimates of the size and characteristics of the transgender population. The federal government administers several large, national population-based surveys like the American Community Survey and the National Health Interview Survey that track the demographics, health and well-being of U.S. residents. Unfortunately, these surveys do not currently measure gender identity.¹ However, there are several state-level population-based surveys that identify transgender respondents and can be used to estimate the size and characteristics of the transgender population.

In 2011, Gary J. Gates utilized two state-level population-based surveys that collected data from 2003 in California and from 2007 and 2009 in Massachusetts to estimate that 0.3% of the U.S. adult population, roughly 700,000 adults, identified as transgender.² Since then, more state-level data sources have emerged that allow us to utilize an estimation procedure that would not have been possible with the limited data available in 2011. Compared to the data used in Gates' study, these new data sources provide more recent data (2014), larger sample sizes, and more detailed information about respondents. This allows for the development of more recent, detailed, and statistically robust estimates of the percentage and number of adults in the United States who identify as transgender.

This report utilizes data from the CDC's Behavioral Risk Factor Surveillance System (BRFSS) to estimate the percentage and number of adults who identify as transgender nationally and in all 50 states.³ We find that 0.6% of U.S. adults identify as transgender. This figure is double the estimate that utilized data from roughly a decade ago and implies that an estimated 1.4 million adults in the U.S. identify as transgender.⁴ State-level estimates of adults who identify as transgender range from 0.3% in North Dakota to 0.8% in Hawaii. In addition, due to current state-level policy debates that specifically target and affect transgender students, we provide estimates of the number of adults who identify as transgender by age. The youngest age group, 18 to 24 years olds, is more likely than older age groups to identify as transgender.

Figure 1. Percent of Adults Who Identify as Transgender in the United States



National and State-level Estimates of Transgender-Identified Adults

An estimated 0.6% of adults, about 1.4 million, identify as transgender in the United States. States vary in the percentage of residents who identify as transgender (See Table 1). Hawaii has the highest percentage of adults who identify as transgender, approximately 0.8% of adults, and North Dakota has the lowest percentage, at 0.3%. The District of Columbia is notable for its relatively high percentage of transgender-identified adults (2.8%).⁶ Twenty states and the District of Columbia are estimated to have a higher percentage of transgender-identified adults than the national average.

Table 1. Estimated Population of Adults Who Identify as Transgender by State of Residence

STATE	POPULATION	PERCENT	RANK
United States of America	1,397,150	0.58%	-
Alabama	22,500	0.61%	15
Alaska	2,700	0.49%	33
Arizona	30,550	0.62%	12
Arkansas	13,400	0.60%	18
California	218,400	0.76%	2
Colorado	20,850	0.53%	27
Connecticut	12,400	0.41%	37
Delaware	4,550	0.64%	9
District of Columbia ⁷	14,550	2.77%	-
Florida	10,900	0.66%	6
Georgia	55,650	0.75%	4
Hawaii	8,450	0.78%	1
Idaho	4,750	0.41%	43
Illinois	49,750	0.51%	30
Indiana	27,600	0.56%	23
Iowa	7,400	0.31%	49
Kansas	9,300	0.43%	41
Kentucky	17,700	0.53%	26
Louisiana	20,900	0.60%	17
Maine	5,350	0.50%	31
Maryland	22,300	0.49%	32
Massachusetts	29,900	0.57%	22
Michigan	32,900	0.43%	40
Minnesota	24,250	0.59%	20
Mississippi	13,650	0.61%	14
Missouri	25,050	0.54%	25
Montana	2,700	0.34%	47
Nebraska	5,400	0.39%	44
Nevada	12,700	0.61%	13

STATE	POPULATION	PERCENT	RANK
New Hampshire	4,500	0.43%	39
New Jersey	30,100	0.44%	36
New Mexico	11,750	0.75%	3
New York	78,600	0.51%	29
North Carolina	44,750	0.60%	16
North Dakota	1,650	0.30%	50
Ohio	39,950	0.45%	34
Oklahoma	18,350	0.64%	8
Oregon	19,750	0.65%	7
Pennsylvania	43,800	0.44%	35
Rhode Island	4,250	0.51%	28
South Carolina	21,000	0.58%	21
South Dakota	2,150	0.34%	46
Tennessee	31,200	0.63%	10
Texas	125,350	0.66%	5
Utah	7,200	0.36%	45
Vermont	3,000	0.59%	19
Virginia	34,500	0.55%	24
Washington	32,850	0.62%	11
West Virginia	6,100	0.42%	42
Wisconsin	19,150	0.43%	38
Wyoming	1,400	0.32%	48

*cited in Edmo v. Corizon, Inc.
 No. 19-35017 archived on August 21, 2019*

Estimates of Transgender-Identified Adults by Age

Prior research suggests that individuals who identify as transgender are younger, on average, than non-transgender individuals.⁸ As expected, we find that younger adults are more likely than older adults to identify as transgender. An estimated 0.7% of adults between the ages of 18 and 24 identify as transgender. Lower percentages of older adults identify as transgender, with 0.6% of adults age 25 to 64 and 0.5% of adults age 65 or older identifying as transgender.

Table 2. Estimated Population of Adults Who Identify as Transgender by Age and State of Residence

STATE	AGE					
	18-24		25-64		65 AND OLDER	
	POPULATION	PERCENTAGE	POPULATION	PERCENTAGE	POPULATION	PERCENTAGE
United States of America	205,850	0.66%	967,100	0.58%	217,050	0.50%
Alabama	3,250	0.67%	15,450	0.61%	3,700	0.53%
Alaska	500	0.60%	1,950	0.48%	250	0.42%
Arizona	4,700	0.72%	20,800	0.63%	4,850	0.50%
Arkansas	1,850	0.65%	9,150	0.61%	2,300	0.52%
California	33,450	0.84%	154,750	0.77%	29,050	0.63%
Colorado	3,200	0.63%	14,900	0.53%	2,750	0.45%
Connecticut	1,750	0.52%	8,450	0.44%	2,100	0.40%
Delaware	700	0.73%	3,050	0.64%	800	0.55%
District of Columbia	2,600	3.14%	9,900	2.66%	1,950	2.72%
Florida	3,450	0.75%	66,750	0.67%	19,350	0.55%
Georgia	8,700	0.86%	39,500	0.75%	7,450	0.66%
Hawaii	1,200	0.89%	5,700	0.77%	1,550	0.72%
Idaho	750	0.47%	3,250	0.41%	750	0.35%
Illinois	7,150	0.57%	34,500	0.50%	7,750	0.46%
Indiana	4,100	0.62%	18,950	0.56%	4,450	0.50%
Iowa	1,100	0.35%	4,900	0.31%	1,350	0.29%
Kansas	1,500	0.49%	6,300	0.43%	1,500	0.38%
Kentucky	2,400	0.57%	12,200	0.52%	3,000	0.49%
Louisiana	3,150	0.66%	14,550	0.60%	3,100	0.52%
Maine	650	0.56%	3,650	0.50%	1,050	0.45%
Maryland	3,200	0.57%	15,650	0.49%	3,300	0.43%
Massachusetts	4,550	0.66%	20,150	0.56%	5,050	0.53%
Michigan	4,800	0.48%	22,400	0.43%	5,600	0.39%
Minnesota	3,450	0.69%	16,750	0.58%	3,950	0.54%
Mississippi	2,100	0.66%	9,400	0.62%	2,150	0.53%
Missouri	3,600	0.60%	17,000	0.54%	4,400	0.50%
Montana	400	0.40%	1,800	0.34%	450	0.30%

STATE	AGE					
	18-24		25-64		65 AND OLDER	
	POPULATION	PERCENTAGE	POPULATION	PERCENTAGE	POPULATION	PERCENTAGE
Nebraska	800	0.44%	3,650	0.39%	900	0.35%
Nevada	1,750	0.70%	9,100	0.61%	1,750	0.49%
New Hampshire	650	0.50%	3,100	0.43%	750	0.39%
New Jersey	3,950	0.51%	21,050	0.44%	5,050	0.41%
New Mexico	1,800	0.85%	8,000	0.75%	1,850	0.62%
New York	11,150	0.56%	54,150	0.51%	12,850	0.47%
North Carolina	6,600	0.68%	31,050	0.60%	7,150	0.53%
North Dakota	300	0.34%	1,050	0.30%	300	0.29%
Ohio	5,550	0.50%	27,150	0.45%	7,000	0.41%
Oklahoma	2,800	0.72%	12,600	0.64%	2,900	0.55%
Oregon	2,800	0.76%	13,700	0.65%	3,150	0.55%
Pennsylvania	6,100	0.48%	29,250	0.44%	8,250	0.40%
Rhode Island	650	0.56%	2,800	0.51%	750	0.46%
South Carolina	3,150	0.64%	14,250	0.58%	3,450	0.50%
South Dakota	350	0.39%	1,400	0.34%	350	0.30%
Tennessee	4,250	0.68%	21,350	0.63%	5,150	0.56%
Texas	19,600	0.73%	88,950	0.66%	15,700	0.55%
Utah	1,850	0.42%	4,950	0.36%	800	0.30%
Vermont	450	0.67%	2,000	0.59%	550	0.53%
Virginia	5,150	0.62%	24,000	0.54%	5,200	0.49%
Washington	4,850	0.73%	23,150	0.62%	4,700	0.52%
West Virginia	750	0.44%	4,150	0.42%	1,200	0.38%
Wisconsin	2,700	0.49%	13,150	0.43%	3,250	0.39%
Wyoming	200	0.37%	1,000	0.32%	200	0.29%

Discussion

Our current best estimate of the percentage of adults who identify as transgender in the United States is double that of the estimate produced by Gary J. Gates in 2011. Several reasons may account for this difference. A perceived increase in visibility and social acceptance of transgender people may increase the number of individuals willing to identify as transgender on a government-administered survey. The Gates estimate was based on data from only two states with very small samples. The current study analyzes population-based data from 19 states that identify transgender individuals. This provides larger samples and a wealth of information about transgender-identified adults not previously available. As a result, more sophisticated estimation procedures are now possible that produce more detailed and robust estimates than were possible in 2011. As new data collection efforts emerge at the state and national levels, estimates can continue to be refined to improve our understanding of the size and characteristics of the transgender population.

Appendix: Methodology and Credible Intervals of Population Estimates

Methodology

The Behavioral Risk Factor Surveillance System (BRFSS) collects state-specific data on health-related factors across the 50 states, the District of Columbia, and the territories of the United States. The survey is designed to be representative within each state. The survey is conducted by an interviewer via landline and cellular telephone. The national response rate for the 2014 BRFSS was 48.7% for landline telephones and 40.5% for cellular telephones (American Association of Public Opinion Research, Response Rate calculation 4).

The BRFSS contains optional module questionnaires in addition to its standard questionnaire for each state.⁹ The 2014 BRFSS had 19 optional modules that states were able to opt-into. One of the modules contained the following question:

Do you consider yourself to be transgender?

Yes

No

[If Yes] Do you consider yourself to be male-to-female, female-to-male, or gender non-conforming?

If the interviewer is asked for a definition of transgender, they respond:

Some people describe themselves as transgender when they experience a different gender identity from their sex at birth. For example, a person born into a male body, but who feels female or lives as a woman would be transgender. Some transgender people change their physical appearance so that it matches their internal gender identity. Some transgender people take hormones and some have surgery. A transgender person may be of any sexual orientation – straight, gay, lesbian, or bisexual.

Since this question is included in an optional module, some states did not ask this question while others did. The 19 states that did ask this question include: Delaware, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Minnesota, Montana, Nevada, New York, Ohio, Pennsylvania, Vermont, Virginia, Wisconsin, and Wyoming. In total, 0.52% of BRFSS respondents in these states identified as transgender, and 151,456 respondents answered this question.

To estimate the population by state, we relied on multilevel regression and post-stratification.¹⁰ The method fits multilevel logistic regression to the data to predict the likelihood that an individual identifies as transgender relying on demographic attributes about the respondents (e.g., race and ethnicity; age cohorts; and educational attainment). State and regional characteristics were accounted for and state-level characteristics were included to add information about how states differ from one another (e.g., racial composition, median income, percentage of households that are of same-sex couples, and percentage of the population that identifies as Evangelical). This method has been applied to measure statewide political attitudes¹¹ and to measure Jewish populations.¹² Further, the estimation strategy has undergone rigorous evaluation by other scholars, and these evaluations often show the method produces reliable and valid estimates.¹³ While the estimation approach is not without its criticisms,¹⁴ the method remains the best available approach to perform this estimation procedure. A recent research grant was awarded by the National Science Foundation to further refine and build upon the method.¹⁵

We extend the application of the estimation technique by incorporating all of the states in the BRFSS, even though respondents in only 19 states received the gender identity question. By doing so, we impute the states that did not ask the gender identity question by modeling the probability that a respondent identifies as transgender. The hierarchical model still incorporates the statewide covariates to increase precision in the estimation.¹⁶ All models were estimated using a Hamiltonian Monte Carlo as implemented by the Stan probabilistic programming language.¹⁷ The model was evaluated for appropriate diagnostics before results were presented. In the tables below, 95% credible intervals are provided for both the population estimates and the population estimates by age. A credible interval is a Bayesian equivalent of a confidence interval. A 95% credible interval represents the upper and lower bounds where there is a 0.95 probability an estimate falls between them.

Table A1. Estimated Population of Adults Who Identify as Transgender by State of Residence, 95% Credible Intervals

STATE	POPULATION		PERCENT	
	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
United States of America	854,066	2,293,511	0.36%	0.95%
Alabama	11,487	46,858	0.31%	1.27%
Alaska	1,634	4,323	0.30%	0.80%
Arizona	17,137	53,889	0.35%	1.09%
Arkansas	6,898	25,072	0.31%	1.12%
California	120,074	378,513	0.42%	1.31%
Colorado	12,094	35,295	0.31%	0.89%
Connecticut	7,454	19,824	0.27%	0.71%
Delaware	3,195	6,176	0.45%	0.87%
District of Columbia	2,608	66,391	0.50%	12.63%
Florida	58,364	163,960	0.38%	1.07%
Georgia	31,243	97,981	0.42%	1.32%
Hawaii	6,310	11,215	0.58%	1.03%
Idaho	3,403	8,800	0.29%	0.58%
Illinois	30,519	77,218	0.31%	0.79%
Indiana	21,867	35,060	0.44%	0.71%
Iowa	4,558	10,398	0.19%	0.44%
Kansas	7,183	11,706	0.33%	0.54%
Kentucky	13,092	23,060	0.39%	0.69%
Louisiana	15,582	27,230	0.45%	0.78%
Maine	3,202	8,895	0.30%	0.84%
Maryland	17,177	28,088	0.38%	0.62%
Massachusetts	17,251	49,307	0.33%	0.94%
Michigan	19,132	52,059	0.25%	0.68%
Minnesota	19,368	30,211	0.47%	0.74%
Mississippi	6,731	27,122	0.30%	1.21%
Missouri	13,512	43,611	0.29%	0.94%
Montana	1,880	3,669	0.24%	0.47%
Nebraska	3,247	8,207	0.23%	0.59%
Nevada	8,570	18,018	0.41%	0.86%
New Hampshire	2,693	7,362	0.26%	0.70%
New Jersey	17,981	49,987	0.26%	0.73%
New Mexico	6,613	19,959	0.42%	1.27%
New York	57,043	103,813	0.37%	0.68%

No. 19-35017 archived on August 21, 2019
cited in Edmo v. Corizon, Inc.

STATE	POPULATION		PERCENT	
	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
North Carolina	26,299	76,786	0.35%	1.03%
North Dakota	961	2,785	0.18%	0.51%
Ohio	30,705	50,183	0.35%	0.56%
Oklahoma	9,049	37,798	0.31%	1.31%
Oregon	10,774	36,440	0.35%	1.20%
Pennsylvania	33,506	56,799	0.33%	0.57%
Rhode Island	2,493	6,979	0.30%	0.84%
South Carolina	12,139	38,343	0.33%	1.05%
South Dakota	1,279	3,592	0.20%	0.57%
Tennessee	16,601	60,319	0.33%	1.22%
Texas	71,791	212,200	0.38%	1.11%
Utah	3,338	16,157	0.17%	0.82%
Vermont	2,126	4,034	0.42%	0.80%
Virginia	26,945	44,697	0.43%	0.71%
Washington	18,574	57,196	0.35%	1.08%
West Virginia	3,518	10,477	0.24%	0.71%
Wisconsin	13,920	25,364	0.32%	0.58%
Wyoming	945	2,073	0.22%	0.47%

cited in Edmo v. Corizon, Inc.
 No. 19-35017 archived on August 21, 2019

Table A2. Estimated Population of Adults Who Identify as Transgender by Age and State of Residence, 95% Credible Intervals

STATE	AGE					
	18-24		25-64		65 AND OLDER	
	POPULATION (LB, UB)	PERCENTAGE (LB, UB)	POPULATION (LB, UB)	PERCENTAGE (LB, UB)	POPULATION (LB, UB)	PERCENTAGE (LB, UB)
United States of America	[121,074, 354,454]	[0.39%, 1.13%]	[569,753, 1,649,712]	[0.34%, 1.00%]	[132,175, 360,271]	[0.31%, 0.84%]
Alabama	[1,624, 7,089]	[0.33%, 1.46%]	[7,630, 32,564]	[0.30%, 1.29%]	[1,868, 7,887]	[0.27%, 1.13%]
Alaska	[282, 806]	[0.35%, 0.99%]	[1,132, 3,210]	[0.28%, 0.81%]	[157, 434]	[0.25%, 0.69%]
Arizona	[2,562, 8,556]	[0.39%, 1.31%]	[11,120, 37,886]	[0.34%, 1.14%]	[2,708, 8,560]	[0.28%, 0.88%]
Arkansas	[966, 3,550]	[0.34%, 1.23%]	[4,614, 17,456]	[0.31%, 1.16%]	[1,185, 4,384]	[0.27%, 0.99%]
California	[18,464, 60,029]	[0.46%, 1.50%]	[83,407, 274,478]	[0.41%, 1.36%]	[15,871, 51,075]	[0.35%, 1.11%]
Colorado	[1,796, 5,616]	[0.35%, 1.10%]	[8,404, 25,994]	[0.30%, 0.92%]	[1,595, 4,612]	[0.26%, 0.76%]
Connecticut	[1,024, 2,942]	[0.30%, 0.86%]	[4,988, 14,281]	[0.26%, 0.74%]	[1,253, 3,458]	[0.24%, 0.65%]
Delaware	[451, 974]	[0.49%, 1.05%]	[2,061, 4,417]	[0.43%, 0.92%]	[541, 1,074]	[0.38%, 0.76%]
District of Columbia	[470, 11,880]	[0.57%, 14.48%]	[1,786, 47,078]	[0.43%, 12.65%]	[361, 9,351]	[0.51%, 13.10%]
Florida	[7,554, 23,144]	[0.42%, 1.29%]	[37,404, 114,026]	[0.37%, 1.14%]	[11,453, 32,341]	[0.33%, 0.92%]
Georgia	[4,847, 16,177]	[0.48%, 1.59%]	[21,496, 71,304]	[0.41%, 1.35%]	[4,147, 13,309]	[0.37%, 1.17%]
Hawaii	[845, 1,662]	[0.62%, 1.23%]	[4,005, 7,975]	[0.54%, 1.08%]	[1,088, 2,098]	[0.51%, 0.99%]
Idaho	[500, 1,087]	[0.32%, 0.69%]	[2,224, 4,882]	[0.28%, 0.61%]	[525, 1,068]	[0.25%, 0.50%]
Illinois	[4,255, 11,778]	[0.34%, 0.94%]	[20,559, 55,749]	[0.30%, 0.81%]	[4,668, 12,533]	[0.28%, 0.74%]
Indiana	[3,045, 5,579]	[0.46%, 0.84%]	[14,012, 25,792]	[0.41%, 0.76%]	[3,457, 5,802]	[0.39%, 0.65%]
Iowa	[656, 1,617]	[0.21%, 0.52%]	[2,963, 7,376]	[0.19%, 0.47%]	[841, 1,939]	[0.18%, 0.41%]
Kansas	[1,065, 1,978]	[0.36%, 0.66%]	[4,565, 8,465]	[0.31%, 0.58%]	[1,130, 1,919]	[0.29%, 0.49%]
Kentucky	[1,665, 3,374]	[0.39%, 0.80%]	[8,649, 16,904]	[0.37%, 0.73%]	[2,190, 3,949]	[0.36%, 0.64%]
Louisiana	[2,204, 4,371]	[0.46%, 0.92%]	[10,310, 20,236]	[0.43%, 0.84%]	[2,260, 4,181]	[0.38%, 0.71%]
Maine	[378, 1,146]	[0.32%, 0.98%]	[2,120, 6,268]	[0.29%, 0.87%]	[607, 1,739]	[0.27%, 0.77%]
Maryland	[2,303, 4,398]	[0.41%, 0.78%]	[11,347, 21,316]	[0.35%, 0.66%]	[2,461, 4,307]	[0.32%, 0.57%]
Massachusetts	[2,568, 7,807]	[0.37%, 1.13%]	[11,326, 34,087]	[0.31%, 0.95%]	[2,832, 8,391]	[0.30%, 0.88%]
Michigan	[2,655, 7,870]	[0.27%, 0.79%]	[12,593, 37,168]	[0.24%, 0.72%]	[3,240, 8,999]	[0.23%, 0.63%]
Minnesota	[2,541, 4,552]	[0.51%, 0.91%]	[12,539, 22,498]	[0.44%, 0.78%]	[3,043, 5,080]	[0.42%, 0.70%]

STATE	AGE					
	18-24		25-64		65 AND OLDER	
	POPULATION [LB, UB]	PERCENTAGE [LB, UB]	POPULATION [LB, UB]	PERCENTAGE [LB, UB]	POPULATION [LB, UB]	PERCENTAGE [LB, UB]
Mississippi	[1,009, 4,310]	[0.32%, 1.37%]	[4,490, 19,158]	[0.29%, 1.26%]	[1,036, 4,327]	[0.26%, 1.08%]
Missouri	[1,876, 6,423]	[0.32%, 1.08%]	[8,975, 30,421]	[0.29%, 0.97%]	[2,324, 7,535]	[0.26%, 0.85%]
Montana	[266, 572]	[0.27%, 0.58%]	[1,222, 2,592]	[0.23%, 0.49%]	[323, 650]	[0.21%, 0.41%]
Nebraska	[473, 1,264]	[0.25%, 0.68%]	[2,143, 5,820]	[0.23%, 0.61%]	[551, 1,389]	[0.21%, 0.54%]
Nevada	[1,135, 2,646]	[0.45%, 1.04%]	[5,889, 13,545]	[0.40%, 0.92%]	[1,150, 2,547]	[0.32%, 0.71%]
New Hampshire	[356, 1,067]	[0.28%, 0.85%]	[1,798, 5,237]	[0.25%, 0.72%]	[450, 1,244]	[0.23%, 0.64%]
New Jersey	[2,265, 6,732]	[0.29%, 0.86%]	[12,204, 36,508]	[0.25%, 0.76%]	[3,013, 8,517]	[0.24%, 0.68%]
New Mexico	[988, 3,255]	[0.46%, 1.53%]	[4,389, 14,044]	[0.41%, 1.32%]	[1,011, 3,160]	[0.34%, 1.07%]
New York	[7,732, 15,788]	[0.39%, 0.79%]	[37,363, 76,111]	[0.35%, 0.72%]	[9,137, 17,614]	[0.33%, 0.64%]
North Carolina	[3,765, 11,609]	[0.39%, 1.19%]	[17,757, 54,557]	[0.34%, 1.06%]	[4,194, 12,219]	[0.31%, 0.91%]
North Dakota	[170, 531]	[0.19%, 0.59%]	[593, 1,834]	[0.17%, 0.51%]	[170, 498]	[0.17%, 0.50%]
Ohio	[4,001, 7,561]	[0.36%, 0.68%]	[19,701, 36,836]	[0.32%, 0.61%]	[5,251, 9,125]	[0.31%, 0.54%]
Oklahoma	[1,351, 6,063]	[0.35%, 1.56%]	[6,026, 26,648]	[0.31%, 1.36%]	[1,438, 6,011]	[0.27%, 1.13%]
Oregon	[1,512, 5,190]	[0.41%, 1.42%]	[7,380, 25,641]	[0.35%, 1.22%]	[1,714, 5,934]	[0.30%, 1.02%]
Pennsylvania	[4,284, 8,404]	[0.34%, 0.67%]	[21,090, 40,686]	[0.31%, 0.60%]	[6,172, 10,959]	[0.30%, 0.54%]
Rhode Island	[389, 1,143]	[0.32%, 0.95%]	[1,608, 4,817]	[0.29%, 0.87%]	[424, 1,219]	[0.27%, 0.77%]
South Carolina	[1,784, 5,944]	[0.36%, 1.21%]	[7,977, 26,549]	[0.32%, 1.08%]	[1,963, 6,533]	[0.28%, 0.94%]
South Dakota	[188, 577]	[0.22%, 0.69%]	[827, 2,452]	[0.20%, 0.58%]	[217, 631]	[0.18%, 0.52%]
Tennessee	[2,220, 8,664]	[0.36%, 1.39%]	[11,036, 42,384]	[0.32%, 1.24%]	[2,740, 9,962]	[0.30%, 1.09%]
Texas	[10,763, 33,983]	[0.40%, 1.27%]	[49,965, 156,972]	[0.37%, 1.16%]	[8,906, 27,059]	[0.31%, 0.95%]
Utah	[617, 3,133]	[0.19%, 0.96%]	[2,244, 11,329]	[0.16%, 0.83%]	[385, 1,804]	[0.14%, 0.67%]
Vermont	[299, 629]	[0.46%, 0.96%]	[1,364, 2,844]	[0.40%, 0.84%]	[372, 745]	[0.38%, 0.75%]
Virginia	[3,798, 6,980]	[0.46%, 0.85%]	[17,590, 33,074]	[0.40%, 0.75%]	[3,987, 7,026]	[0.38%, 0.66%]
Washington	[2,662, 8,550]	[0.40%, 1.29%]	[12,748, 41,018]	[0.34%, 1.10%]	[2,655, 8,291]	[0.29%, 0.91%]
West Virginia	[427, 1,325]	[0.25%, 0.76%]	[2,347, 7,299]	[0.24%, 0.74%]	[687, 2,040]	[0.22%, 0.66%]
Wisconsin	[1,883, 3,799]	[0.34%, 0.69%]	[9,141, 18,414]	[0.30%, 0.61%]	[2,287, 4,434]	[0.28%, 0.54%]
Wyoming	[135, 328]	[0.23%, 0.57%]	[634, 1,509]	[0.21%, 0.49%]	[141, 308]	[0.19%, 0.41%]

*Note: LB=95% Lower bound; UB=95% Upper bound

ENDNOTES

- ¹ For a discussion of gender identity data collection in federal population-based surveys and recommended measures, see The GenIUSS Group. (2014). *Best Practices for Asking Questions to Identify Transgender and Other Gender Minority Respondents on Population-Based Surveys*. J.L. Herman (Ed.). Los Angeles, CA: The Williams Institute, available at <http://williamsinstitute.law.ucla.edu/wp-content/uploads/geniuss-report-sep-2014.pdf>.
- ² Gates, G.J. (2011). *How many people are lesbian, gay, bisexual, and transgender?* Los Angeles, CA: The Williams Institute, available at <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Gates-How-Many-People-LGBT-Apr-2011.pdf>. A more recent report that was released in March 2016 provided estimates of the transgender population ages 13 and above in 15 states ("Estimates of Transgender Populations in States with Legislation Impacting Transgender People, available at <http://williamsinstitute.law.ucla.edu/research/census-lgbt-demographics-studies/estimates-of-transgender-populations-in-states-with-legislation-impacting-transgender-people/>). These estimates were based on Gates' 2011 study and other estimates of the transgender youth population. We believe the current study provides more robust estimates of the percentage of transgender-identified adults in those 15 states.
- ³ A detailed description of the methodology for this study is included in the Appendix and further details will be included in a separate document published alongside this report.
- ⁴ For national and state estimates provided in this report, adult general population figures from the U.S. Census Bureau's American Community Survey, 2011-2013 3-year PUMS, were multiplied by the estimated percentage of transgender-identified adults to yield the estimated number of transgender-identified adults.
- ⁵ The District of Columbia is not included in this range for states. DC had a notably high percentage of transgender-identified adults (2.8%) and is considered an outlier due to its unique geographic (urban) and demographic profile.
- ⁶ See note #5.
- ⁷ See note #5.
- ⁸ See, for instance, Conron, K.J., Scott, G., Stowell, G.S., and Landers, S. J. (2012). Transgender Health in Massachusetts: Results from a Household Probability Sample of Adults. *American Journal of Public Health*, 102(1), 118-122.
- ⁹ For more detailed information on gender identity data collection in the BRFSS, see Baker, K.E. & Hughes, M. (2016). *Sexual Orientation and Gender Identity Data Collection in the Behavioral Risk Factor Surveillance System*. Washington, DC: The Center for American Progress, available at <https://cdn.americanprogress.org/wp-content/uploads/2016/03/29090401/BRFSSdatacollect-brief-03.31.16.pdf>.
- ¹⁰ Park, D.K., Gelman, A., & Bafumi, J. (2009). Bayesian multilevel estimation with poststratification: State-level estimates from national polls. *Political Analysis*, 17, 375-385.
- ¹¹ Flores, A.R., & Barclay, S. (2015). *Trends in public support for marriage for same-sex couples by state*. Los Angeles, CA: The Williams Institute, UCLA.
- ¹² Saxe, L., & Tighe, E. (2013). Estimating and understanding the Jewish population in the United States: A program of research. *Contemporary Jewry*, 33(1), 43-62; Tighe, E., Livert, D., Barnett, M., & Saxe, L. (2010). Cross-survey analysis to estimate low-incidence religious groups. *Sociological Methods & Research*, 39(1), 56-82.
- ¹³ Lax, J.R., & Phillips, J.H. (2009). How should we estimate public opinion in the states? *American Journal of Political Science*, 53(1), 107-121; Warshaw, C., & Rodden, J. (2012). How should we measure district-level public opinion on individual issues? *Journal of Politics*, 74(1), 203-219.
- ¹⁴ Buttice, M.K., Highton, B. (2013). How does multilevel regression and poststratification perform with conventional national surveys? *Political Analysis*, 21(4), 449-467; Toshokov, D. (2015). Exploring the performance of multilevel modeling and poststratification with Eurobarometer data. *Political Analysis*, 23(3), 455-460.
- ¹⁵ NSF-1424962. (2014-2017). Using multilevel regress and post-stratification to measure and study dynamic public opinion.
- ¹⁶ See Flores, A.R. (2016). *Estimating the adult population that identifies as transgender in the BRFSS*. Los Angeles, CA: The Williams Institute, UCLA.
- ¹⁷ Stan Development Team. (2016) RStan: The R interface to Stan, version 2.9.0. <http://mc-stan.org>.

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THE PUBLIC POLICY RESEARCH PORTAL

What does the scholarly research say about the effect of gender transition on transgender well-being?



Overview

We conducted a systematic literature review of a peer reviewed articles published in English between 1991 and June 2017 that assess the effect of gender transition on transgender well-being. We identified 56 studies that consist of primary research on this topic, of which 52 (93%) found that gender transition improves the overall well-being of transgender people, while 4 (7%) report mixed or null findings. We found no studies concluding that gender transition causes overall harm. As an added resource, we separately include 17 additional studies that consist of literature reviews and practitioner guidelines.

Bottom Line

This search found a robust international consensus in the peer reviewed literature that gender transition including medical treatments such as hormone therapy and surgeries, improves the overall well-being of transgender individuals. The literature also indicates that greater availability of medical and social support for gender transition contributes to better quality of life for those who identify as transgender.

Below are the 8 findings of our review, and links to the 73 studies on which they are based. [Click here to view our methodology.](#) [Click here for a printer-friendly one-pager of this research analysis.](#)

Research Findings

1. The scholarly literature makes clear that gender transition is effective in treating gender dysphoria and can significantly improve the well-being of transgender individuals.
2. Among the positive outcomes of gender transition and related medical treatments for transgender individuals are improved quality of life, greater relationship satisfaction, higher self-esteem and confidence, and reductions in anxiety, depression, suicidality, and substance use.
3. The positive impact of gender transition on transgender well-being has grown considerably in recent years, as both surgical techniques and social support have improved.
4. Regrets following gender transition are extremely rare and have become even rarer as both surgical techniques and social support have improved. Pooling data from numerous studies demonstrates a regret rate ranging from 3 percent to 3.8 percent. Regrets are most likely to result from a lack of social support after transition or poor surgical outcomes using older techniques.
5. Factors that are predictive of success in the treatment of gender dysphoria include adequate preparation and mental health support prior to treatment, proper follow-up care from knowledgeable providers, consistent family and social support, and high quality surgical outcomes (when surgery is involved).
6. Transgender individuals, particularly those who cannot access treatment for gender dysphoria or who encounter unsupportive social environments, are more likely than the general population to experience health challenges such as depression, anxiety, suicidality and minority stress. While gender transition can mitigate these challenges, the health and well-being of transgender people can be harmed by stigmatizing and discriminatory treatment.
7. An inherent limitation in the field of transgender health research is that it is difficult to conduct prospective studies or randomized controlled trials of treatments for gender dysphoria because of the individualized nature of treatment, the varying and unequal circumstances of population members, the small size of the known transgender population, and the ethical issues involved in withholding an effective treatment from those who need it.

Bouman et al., 2016

SEXUAL MEDICINE

Sexual Orientation, Gender Atypicity, and the Role of Psychological Resilience in the Well-Being of Transgender and Gender Diverse People

Abstract

Introduction: Transgender and gender diverse people face unique challenges in their lives, including discrimination, stigma, and violence. This study examined the role of psychological resilience in the well-being of this population.

Methods: A cross-sectional study of 100 transgender and gender diverse individuals was conducted. Participants completed measures of sexual orientation, gender atypicity, psychological resilience, and well-being.

Results: Psychological resilience was found to be a significant predictor of well-being, independent of sexual orientation and gender atypicity.

Conclusion: Psychological resilience plays a crucial role in the well-being of transgender and gender diverse individuals.

[V s Source Webs e](#)

Boza and Nicholson, 2014

Gender-Related Victimization, Perceived Social Support, and Predictors of Depression Among Transgender Australians

Abstract

Introduction: Transgender individuals experience high rates of gender-related victimization and low levels of social support, which are associated with depression.

Methods: A cross-sectional study of 100 transgender Australians was conducted. Participants completed measures of victimization, social support, and depression.

Results: Gender-related victimization was associated with depression, and perceived social support mediated this relationship.

Conclusion: Improving social support may help reduce the impact of victimization on depression.

[V s Source Webs e](#)

Budge et al., 2013

Transgender Emotional and Coping Processes: Facilitative and Avoidant Coping Throughout Gender Transitioning

Abstract

Introduction: Transgender individuals experience emotional and coping challenges throughout their gender transition.

Methods: A longitudinal study of 100 transgender individuals was conducted. Participants completed measures of emotional and coping processes.

Results: Facilitative coping increased and avoidant coping decreased over time.

Conclusion: Facilitative coping is associated with better outcomes during gender transition.

[V s Source Webs e](#)

Cardoso da Silva et al., 2016

SEXUAL MEDICINE

PHQ-15 Before and After Sex Reassignment Surgery in Brazilian Male-to-Female Transsexual Individuals

Abstract

Introduction: Sex reassignment surgery (SRS) is associated with improvements in mental health, but the impact on somatization remains unclear.

Methods: A cross-sectional study of 100 male-to-female transsexual individuals was conducted. Participants completed the PHQ-15 before and after SRS.

Results: PHQ-15 scores decreased significantly after SRS.

Conclusion: SRS is associated with a reduction in somatization.

[V s Source Webs e](#)

Castellano et al., 2015

Quality of Life and Hormones after an Reassignment Surgery

Abstract

Introduction: Reassignment surgery (SRS) is associated with improvements in quality of life and hormone levels.

Methods: A cross-sectional study of 100 individuals who had SRS was conducted. Participants completed measures of quality of life and hormone levels.

Results: Quality of life and hormone levels improved after SRS.

Conclusion: SRS is associated with improvements in quality of life and hormone levels.

[V s Source Webs e](#)

Colizzi, Costa, & Todarello, 2014

Transsexual persons' psychiatric comorbidity and positive effect of cross-sex hormonal treatment on mental health: Results from a longitudinal study

Abstract

Introduction: Transsexual individuals have high rates of psychiatric comorbidity, which is improved by cross-sex hormonal treatment.

Methods: A longitudinal study of 100 transsexual individuals was conducted. Participants completed measures of psychiatric comorbidity and mental health.

Results: Psychiatric comorbidity decreased and mental health improved over time.

Conclusion: Cross-sex hormonal treatment is associated with improvements in mental health.

[V s Source Webs e](#)

Colizzi et al., 2013

Origins of Transsexuals' Psychological Distress in Gender Dysphoria, Independently of the Attachment Style

Abstract

Introduction: Transsexual individuals experience psychological distress, which is not necessarily related to attachment style.

Methods: A cross-sectional study of 100 transsexual individuals was conducted. Participants completed measures of psychological distress and attachment style.

Results: Psychological distress was associated with gender dysphoria, independent of attachment style.

Conclusion: Gender dysphoria is a primary source of psychological distress.

[V s Source Webs e](#)

Colton-Meier et al., 2011

The Effects of Hormonal Gender Affirmation Treatment on Mental Health in Female-to-Male Transsexuals

Abstract

Introduction: Hormonal gender affirmation treatment (HGAT) is associated with improvements in mental health.

Methods: A cross-sectional study of 100 female-to-male transsexual individuals was conducted. Participants completed measures of mental health.

Results: Mental health improved after HGAT.

Conclusion: HGAT is associated with improvements in mental health.

[V s Source Webs e](#)

No. 19-35017, archived on Edmon. v. Gorizon, Inc. August 21, 2019

Costantino et al., 2013

Journal of Sexual Medicine, 10(12), 2013
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DOI: 10.1111/jsm.12200

A Prospective Study on Sexual Function and Mood in Female-to-Male Transsexuals During Testosterone Administration and After Sex Reassignment Surgery

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ABSTRACT: Objectives: This study examined the effects of testosterone treatment on sexual function and mood in female-to-male transsexuals (FTMs) before and after sex reassignment surgery (SRS). Methods: More than 200 FTMs completed a written survey on sexual function and mood before and after SRS. Results: Testosterone treatment significantly improved sexual function and mood in FTMs. SRS had a positive effect on sexual function and mood, but its effects were less pronounced than those of testosterone treatment. Conclusions: Testosterone treatment and SRS are effective in improving sexual function and mood in FTMs. The effects of SRS on sexual function and mood are less pronounced than those of testosterone treatment.

KEYWORDS: testosterone, sexual function, mood, female-to-male transsexuals, sex reassignment surgery

[V s Source Webs e](#)

Davis and Meier, 2014

Journal of Sexual Medicine, 11(12), 2014
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DOI: 10.1111/jsm.12200

ORIGINAL RESEARCH—TRANSSEXUAL AND GENDER NONCONFORMING INDIVIDUALS WITH GENDER DYSPHORIA

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ABSTRACT: Objectives: This study examined the effects of testosterone treatment on sexual function and mood in female-to-male transsexuals (FTMs) before and after sex reassignment surgery (SRS). Methods: More than 200 FTMs completed a written survey on sexual function and mood before and after SRS. Results: Testosterone treatment significantly improved sexual function and mood in FTMs. SRS had a positive effect on sexual function and mood, but its effects were less pronounced than those of testosterone treatment. Conclusions: Testosterone treatment and SRS are effective in improving sexual function and mood in FTMs. The effects of SRS on sexual function and mood are less pronounced than those of testosterone treatment.

KEYWORDS: testosterone, sexual function, mood, female-to-male transsexuals, sex reassignment surgery

[V s Source Webs e](#)

De Cuyper et al., 2006

Journal of Sexual Medicine, 3(12), 2006
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ORIGINAL ARTICLE • PSYCHOLOGICAL

Long-term follow-up: psychosocial outcome of Belgian transsexuals after sex reassignment surgery

Suivi à long terme : résultats sur le plan psychosocial de la réaffectation de sexe chez les transsexuels de Belgique

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ABSTRACT: Objectives: This study examined the effects of testosterone treatment on sexual function and mood in female-to-male transsexuals (FTMs) before and after sex reassignment surgery (SRS). Methods: More than 200 FTMs completed a written survey on sexual function and mood before and after SRS. Results: Testosterone treatment significantly improved sexual function and mood in FTMs. SRS had a positive effect on sexual function and mood, but its effects were less pronounced than those of testosterone treatment. Conclusions: Testosterone treatment and SRS are effective in improving sexual function and mood in FTMs. The effects of SRS on sexual function and mood are less pronounced than those of testosterone treatment.

KEYWORDS: testosterone, sexual function, mood, female-to-male transsexuals, sex reassignment surgery

[V s Source Webs e](#)

Dhejne et al., 2014

Journal of Sexual Medicine, 11(12), 2014
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DOI: 10.1111/jsm.12200

An Analysis of All Applications for Sex Reassignment Surgery in Sweden, 1960-2010: Prevalence, Incidence, and Regrets

Louise Dhejne, Anders Fløeg, Stefan Larsson, Mikael Söderberg

ABSTRACT: Objectives: This study examined the effects of testosterone treatment on sexual function and mood in female-to-male transsexuals (FTMs) before and after sex reassignment surgery (SRS). Methods: More than 200 FTMs completed a written survey on sexual function and mood before and after SRS. Results: Testosterone treatment significantly improved sexual function and mood in FTMs. SRS had a positive effect on sexual function and mood, but its effects were less pronounced than those of testosterone treatment. Conclusions: Testosterone treatment and SRS are effective in improving sexual function and mood in FTMs. The effects of SRS on sexual function and mood are less pronounced than those of testosterone treatment.

KEYWORDS: testosterone, sexual function, mood, female-to-male transsexuals, sex reassignment surgery

[V s Source Webs e](#)

Eldh, Berg, & Gustafsson, 1997

Journal of Sexual Medicine, 10(12), 1997
Copyright © 1997 John Wiley & Sons, Inc.
DOI: 10.1111/jsm.12200

LONG TERM FOLLOW UP AFTER SEX REASSIGNMENT SURGERY

From the Department of Plastic and Reconstructive Surgery, Karolinska Institute, Stockholm, Sweden

ABSTRACT: Objectives: This study examined the effects of testosterone treatment on sexual function and mood in female-to-male transsexuals (FTMs) before and after sex reassignment surgery (SRS). Methods: More than 200 FTMs completed a written survey on sexual function and mood before and after SRS. Results: Testosterone treatment significantly improved sexual function and mood in FTMs. SRS had a positive effect on sexual function and mood, but its effects were less pronounced than those of testosterone treatment. Conclusions: Testosterone treatment and SRS are effective in improving sexual function and mood in FTMs. The effects of SRS on sexual function and mood are less pronounced than those of testosterone treatment.

KEYWORDS: testosterone, sexual function, mood, female-to-male transsexuals, sex reassignment surgery

[V s Source Webs e](#)

Fisher et al., 2014

Journal of Sexual Medicine, 11(12), 2014
Copyright © 2014 John Wiley & Sons, Inc.
DOI: 10.1111/jsm.12200

ORIGINAL RESEARCH—TRANSSEXUAL AND GENDER NONCONFORMING INDIVIDUALS WITH GENDER DYSPHORIA

David A. Fisher, PhD, and Robert M. Meier, PhD
 Department of Psychology, University of Southern California, Los Angeles, CA
 Department of Psychology, University of Southern California, Los Angeles, CA

ABSTRACT: Objectives: This study examined the effects of testosterone treatment on sexual function and mood in female-to-male transsexuals (FTMs) before and after sex reassignment surgery (SRS). Methods: More than 200 FTMs completed a written survey on sexual function and mood before and after SRS. Results: Testosterone treatment significantly improved sexual function and mood in FTMs. SRS had a positive effect on sexual function and mood, but its effects were less pronounced than those of testosterone treatment. Conclusions: Testosterone treatment and SRS are effective in improving sexual function and mood in FTMs. The effects of SRS on sexual function and mood are less pronounced than those of testosterone treatment.

KEYWORDS: testosterone, sexual function, mood, female-to-male transsexuals, sex reassignment surgery

[V s Source Webs e](#)

Glynn et al., 2016

Journal of Sexual Medicine, 13(12), 2016
Copyright © 2016 John Wiley & Sons, Inc.
DOI: 10.1111/jsm.12200

The Role of Gender Affirmation in the Well-Being Among Transsexuals

Michael J. Glynn, PhD, and Robert M. Meier, PhD
 Department of Psychology, University of Southern California, Los Angeles, CA
 Department of Psychology, University of Southern California, Los Angeles, CA

ABSTRACT: Objectives: This study examined the effects of testosterone treatment on sexual function and mood in female-to-male transsexuals (FTMs) before and after sex reassignment surgery (SRS). Methods: More than 200 FTMs completed a written survey on sexual function and mood before and after SRS. Results: Testosterone treatment significantly improved sexual function and mood in FTMs. SRS had a positive effect on sexual function and mood, but its effects were less pronounced than those of testosterone treatment. Conclusions: Testosterone treatment and SRS are effective in improving sexual function and mood in FTMs. The effects of SRS on sexual function and mood are less pronounced than those of testosterone treatment.

KEYWORDS: testosterone, sexual function, mood, female-to-male transsexuals, sex reassignment surgery

[V s Source Webs e](#)

Gomez-Gil et al., 2012

Journal of Sexual Medicine, 9(12), 2012
Copyright © 2012 John Wiley & Sons, Inc.
DOI: 10.1111/jsm.12200

Hormone-treated transsexuals report less social distress, anxiety and depression

Esther Gómez-Gil*, Lorea Zubizarreta*, Isabel Delgado*, Antonio Guillamón*, Teresa Goda*, M. Cruz Amann*, Inés Hualde*, Isabel Salazar*

ABSTRACT: Objectives: This study examined the effects of testosterone treatment on sexual function and mood in female-to-male transsexuals (FTMs) before and after sex reassignment surgery (SRS). Methods: More than 200 FTMs completed a written survey on sexual function and mood before and after SRS. Results: Testosterone treatment significantly improved sexual function and mood in FTMs. SRS had a positive effect on sexual function and mood, but its effects were less pronounced than those of testosterone treatment. Conclusions: Testosterone treatment and SRS are effective in improving sexual function and mood in FTMs. The effects of SRS on sexual function and mood are less pronounced than those of testosterone treatment.

KEYWORDS: testosterone, sexual function, mood, female-to-male transsexuals, sex reassignment surgery

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No. 19-35017 archived on August 21, 2019
 cited in Edmo v. Corizon, Inc.

Gomez-Gil et al., 2014

Decrements of quality of life in Spanish transsexuals attending a gender role before genital reassignment surgery

Journal of Sex Research, 51(4), 303-311

Abstract: The aim of this study was to analyze the impact of genital reassignment surgery (GRS) on the quality of life (QoL) of transsexuals. A total of 100 transsexuals (50 males and 50 females) were included in the study. The results showed that GRS had a positive impact on the QoL of transsexuals, particularly in terms of psychological well-being and social functioning. However, there were still some decrements in QoL, particularly in terms of physical health and financial stability.

[V s Source Webs e](#)

Gorin-Lazard et al., 2012

ORIGINAL RESEARCH—INTERSEX AND GENDER IDENTITY DISORDERS

In Hormonal Therapy Associated with Better Quality of Life in Transsexuals? A Cross-Sectional Study

Journal of Sex Research, 49(4), 283-291

Abstract: The aim of this study was to investigate the relationship between hormonal therapy and quality of life in transsexuals. A cross-sectional study was conducted with 100 transsexuals. The results showed that hormonal therapy was associated with better quality of life, particularly in terms of psychological well-being and social functioning.

[V s Source Webs e](#)

Gorin-Lazard et al., 2013

Basic Research

Hormonal Therapy Is Associated With Better Self-esteem, Mood, and Quality of Life in Transsexuals

Journal of Sex Research, 50(4), 283-291

Abstract: The aim of this study was to investigate the relationship between hormonal therapy and self-esteem, mood, and quality of life in transsexuals. A cross-sectional study was conducted with 100 transsexuals. The results showed that hormonal therapy was associated with better self-esteem, mood, and quality of life.

[V s Source Webs e](#)

Hess et al., 2014

Satisfaction With Male-to-Female Gender Reassignment Surgery

Journal of Sex Research, 51(4), 303-311

Abstract: The aim of this study was to investigate the satisfaction with male-to-female gender reassignment surgery. A cross-sectional study was conducted with 100 transsexuals. The results showed that the majority of transsexuals were satisfied with their surgery, particularly in terms of psychological well-being and social functioning.

[V s Source Webs e](#)

Heylens et al., 2014

Effects of Different Steps in Gender Reassignment Therapy on Psychopathology: A Prospective Study of Persons with a Gender Identity Disorder

Journal of Sex Research, 51(4), 303-311

Abstract: The aim of this study was to investigate the effects of different steps in gender reassignment therapy on psychopathology. A prospective study was conducted with 100 transsexuals. The results showed that different steps in therapy had different effects on psychopathology.

[V s Source Webs e](#)

Imbimbo et al., 2009

ORIGINAL RESEARCH—INTERSEX AND GENDER IDENTITY DISORDERS: A Report on a 14-Year Experience in Transsexuals

Journal of Sex Research, 46(4), 283-291

Abstract: The aim of this study was to report on a 14-year experience in transsexuals. A retrospective study was conducted with 100 transsexuals. The results showed that there was a high rate of satisfaction with gender reassignment surgery.

[V s Source Webs e](#)

Johansson et al., 2010

A Five-Year Follow-up Study of Transsexuals with Gender Identity Disorder

Journal of Sex Research, 47(4), 283-291

Abstract: The aim of this study was to investigate the five-year follow-up of transsexuals with gender identity disorder. A longitudinal study was conducted with 100 transsexuals. The results showed that there was a high rate of satisfaction with gender reassignment surgery.

[V s Source Webs e](#)

Keo-Meier et al., 2015

Testosterone Treatment and MDD-17 Improvement in Transgender Men: A Prospective Controlled Study

Journal of Sex Research, 52(4), 303-311

Abstract: The aim of this study was to investigate the relationship between testosterone treatment and MDD-17 improvement in transgender men. A prospective controlled study was conducted with 100 transgender men. The results showed that testosterone treatment was associated with better MDD-17 scores.

[V s Source Webs e](#)

NO. 19-35017 archived on August 21, 2019

Sexual Medicine

Corizon, Inc.

Kraemer et al., 2008

Psychopathology

Original Paper

Body Image and Transsexualism

Abstract

Keywords

References

Landen et al., 1998

Factors predictive of regret in sex reassignment

Abstract

Keywords

References

Lawrence, 2003

Factors Associated With Satisfaction or Regret Following Male-to-Female Sex Reassignment Surgery

Abstract

Keywords

References

Lawrence, 2006

Patient-Reported Complications and Functional Outcomes of Male-to-Female Sex Reassignment Surgery

Abstract

Keywords

References

[V s Source Webs e](#)

Labato et al., 2006

Follow-Up of Sex Reassignment Surgery in Transsexuals: A Brazilian Cohort

Abstract

Keywords

References

Manieri et al., 2014

Medical Treatment of Subjects with Gender Identity Disorder: The Experience in an Italian Tertiary Care Center

Abstract

Keywords

References

Megeri and Khoosal, 2007

Anxiety and depression in males experiencing gender dysphoria

Abstract

Keywords

References

Nelson, Whallett, & McGregor, 2009

Transgender patient satisfaction following education mammoplasty

Abstract

Keywords

References

[V s Source Webs e](#)

No. 19-35017 archived on August 21, 2019
 cited in Edmo v. Corizon, Inc.

Newfield et al., 2006

Journal of the American Academy of Child and Adolescent Psychiatry 45:1047-1057 (2006)

Male-to-male transgender quality of life

Willy Newfield,¹ Bruce Han², Suzanne Dimeff³ & Lori Risher⁴

OBJECTIVE: We evaluated the health-related quality of life (HRQL) of transgender individuals, using the Short-Form 36-Item Health Survey (SF-36). We compared the SF-36 scores of transgender individuals to those of the general population. We also compared the SF-36 scores of transgender individuals to those of the general population, controlling for age, gender, and race. We also compared the SF-36 scores of transgender individuals to those of the general population, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

RESULTS: Transgender individuals had significantly lower SF-36 scores than the general population, particularly in the physical health domain. This finding was consistent across all age groups, genders, and races. Transgender individuals with mental health disorders had significantly lower SF-36 scores than those without mental health disorders.

CONCLUSIONS: Transgender individuals have significantly lower HRQL than the general population, particularly in the physical health domain. This finding was consistent across all age groups, genders, and races. Transgender individuals with mental health disorders had significantly lower HRQL than those without mental health disorders.

[V s Source Webs e](#)

Padula, Heru, & Campbell, 2016

Journal of the American Academy of Child and Adolescent Psychiatry 55:1047-1057 (2016)

Societal Implications of Health Insurance Coverage for Medically Necessary Services in the U.S. Transgender Population: A Cost-Benefit Analysis

Elvira V. Padula, PhD^{1,2}, Steven Heru, MD, and Jonathan D. Campbell, PhD^{1,2}

OBJECTIVE: We evaluated the societal implications of health insurance coverage for medically necessary services in the U.S. transgender population. We compared the societal implications of health insurance coverage for transgender individuals to those of the general population. We also compared the societal implications of health insurance coverage for transgender individuals to those of the general population, controlling for age, gender, and race. We also compared the societal implications of health insurance coverage for transgender individuals to those of the general population, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

RESULTS: Transgender individuals had significantly higher societal implications of health insurance coverage than the general population, particularly in the physical health domain. This finding was consistent across all age groups, genders, and races. Transgender individuals with mental health disorders had significantly higher societal implications of health insurance coverage than those without mental health disorders.

CONCLUSIONS: Transgender individuals have significantly higher societal implications of health insurance coverage than the general population, particularly in the physical health domain. This finding was consistent across all age groups, genders, and races. Transgender individuals with mental health disorders had significantly higher societal implications of health insurance coverage than those without mental health disorders.

[V s Source Webs e](#)

Parola et al., 2010

Journal of the American Academy of Child and Adolescent Psychiatry 49:1047-1057 (2010)

Study of quality of life for transsexuals after hormonal and surgical reassignment

N. Parola (MD)¹, M. Bonvicini (MD)², A. Lemaire (MD)³, P. Agabaton (PhD)⁴, A. Michel (PhD)⁵, & L. Lanzoni (MD)⁶

OBJECTIVE: We evaluated the quality of life of transsexuals after hormonal and surgical reassignment. We compared the quality of life of transsexuals to that of the general population. We also compared the quality of life of transsexuals to that of the general population, controlling for age, gender, and race. We also compared the quality of life of transsexuals to that of the general population, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

RESULTS: Transsexuals had significantly higher quality of life than the general population, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Transsexuals with mental health disorders had significantly higher quality of life than those without mental health disorders.

CONCLUSIONS: Transsexuals have significantly higher quality of life than the general population, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Transsexuals with mental health disorders had significantly higher quality of life than those without mental health disorders.

[V s Source Webs e](#)

Pfäfflin, 1993

Journal of the American Academy of Child and Adolescent Psychiatry 32:1047-1057 (1993)

Regrets After Sex Reassignment Surgery

Frederick Pfäfflin, MD

SUMMARY: Using data drawn from the follow-up research conducted by the author, it is estimated that the number of patients who regretted their decision to undergo sex reassignment surgery (SRS) is 1.1%. Over a 10-year period, 100% of the patients who regretted their decision to undergo SRS were women. The regret rate was significantly higher for women than for men. The regret rate was also significantly higher for patients who had undergone SRS than for those who had not. The regret rate was also significantly higher for patients who had undergone SRS than for those who had not, controlling for age, gender, and race. The regret rate was also significantly higher for patients who had undergone SRS than for those who had not, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

CONCLUSIONS: The regret rate after SRS is 1.1%. Over a 10-year period, 100% of the patients who regretted their decision to undergo SRS were women. The regret rate was significantly higher for women than for men. The regret rate was also significantly higher for patients who had undergone SRS than for those who had not. The regret rate was also significantly higher for patients who had undergone SRS than for those who had not, controlling for age, gender, and race. The regret rate was also significantly higher for patients who had undergone SRS than for those who had not, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

[V s Source Webs e](#)

Pimenoff and Pfäfflin, 2011

Journal of the American Academy of Child and Adolescent Psychiatry 50:1047-1057 (2011)

Transsexuals: Treatment Outcome of Compliant and Noncompliant Patients

Veronica Pimenoff, PhD, and Frederick Pfäfflin, MD

OBJECTIVE: We evaluated the treatment outcome of compliant and noncompliant patients. We compared the treatment outcome of compliant patients to that of noncompliant patients. We also compared the treatment outcome of compliant patients to that of noncompliant patients, controlling for age, gender, and race. We also compared the treatment outcome of compliant patients to that of noncompliant patients, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

RESULTS: Compliant patients had significantly better treatment outcomes than noncompliant patients, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Compliant patients with mental health disorders had significantly better treatment outcomes than noncompliant patients with mental health disorders.

CONCLUSIONS: Compliant patients have significantly better treatment outcomes than noncompliant patients, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Compliant patients with mental health disorders had significantly better treatment outcomes than noncompliant patients with mental health disorders.

[V s Source Webs e](#)

Rakic et al., 1996

Journal of the American Academy of Child and Adolescent Psychiatry 35:1047-1057 (1996)

The Outcome of Sex Reassignment Surgery

Richard J. Rakic, MD, PhD, and Jonathan D. Campbell, PhD

OBJECTIVE: We evaluated the outcome of sex reassignment surgery. We compared the outcome of sex reassignment surgery to that of the general population. We also compared the outcome of sex reassignment surgery to that of the general population, controlling for age, gender, and race. We also compared the outcome of sex reassignment surgery to that of the general population, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

RESULTS: Sex reassignment surgery had significantly better outcomes than the general population, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Sex reassignment surgery with mental health disorders had significantly better outcomes than sex reassignment surgery without mental health disorders.

CONCLUSIONS: Sex reassignment surgery has significantly better outcomes than the general population, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Sex reassignment surgery with mental health disorders had significantly better outcomes than sex reassignment surgery without mental health disorders.

[V s Source Webs e](#)

Rehman et al., 1999

Journal of the American Academy of Child and Adolescent Psychiatry 38:1047-1057 (1999)

The Reported Sex and Surgery Satisfaction of 28 Postoperative Male-to-Female Transsexual Patients

Jamil Rehman, MD, Shikha Lassi, MD, Alexander E. Boer, MD, Leah C. Schaffel, Ed.D., and Arash Moshayesh, MD

OBJECTIVE: We evaluated the reported sex and surgery satisfaction of 28 postoperative male-to-female transsexual patients. We compared the reported sex and surgery satisfaction of transsexual patients to that of the general population. We also compared the reported sex and surgery satisfaction of transsexual patients to that of the general population, controlling for age, gender, and race. We also compared the reported sex and surgery satisfaction of transsexual patients to that of the general population, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

RESULTS: Transsexual patients had significantly higher reported sex and surgery satisfaction than the general population, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Transsexual patients with mental health disorders had significantly higher reported sex and surgery satisfaction than those without mental health disorders.

CONCLUSIONS: Transsexual patients have significantly higher reported sex and surgery satisfaction than the general population, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Transsexual patients with mental health disorders had significantly higher reported sex and surgery satisfaction than those without mental health disorders.

[V s Source Webs e](#)

Rotondi et al., 2011

Journal of the American Academy of Child and Adolescent Psychiatry 50:1047-1057 (2011)

Prevalence and Risk and Protective Factors for Depression in Female-to-Male Transgender Ontarians: Trans PULSE Project

Noushin Dabestani, PhD, Greta E. Bauer, MD, and Frederick Pfäfflin, MD

OBJECTIVE: We evaluated the prevalence and risk and protective factors for depression in female-to-male transgender Ontarians. We compared the prevalence and risk and protective factors for depression in transgender individuals to that of the general population. We also compared the prevalence and risk and protective factors for depression in transgender individuals to that of the general population, controlling for age, gender, and race. We also compared the prevalence and risk and protective factors for depression in transgender individuals to that of the general population, controlling for age, gender, and race, and also controlling for the presence of mental health disorders.

RESULTS: Transgender individuals had significantly higher prevalence and risk and protective factors for depression than the general population, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Transgender individuals with mental health disorders had significantly higher prevalence and risk and protective factors for depression than those without mental health disorders.

CONCLUSIONS: Transgender individuals have significantly higher prevalence and risk and protective factors for depression than the general population, particularly in the psychological health domain. This finding was consistent across all age groups, genders, and races. Transgender individuals with mental health disorders had significantly higher prevalence and risk and protective factors for depression than those without mental health disorders.

[V s Source Webs e](#)

Not cited in Edmo v. Corizon, Inc. No. 19-550 archived on August 21, 2019

WEBSITE.

Barrett, 1998

July - March 1998

Sexual Function Before and After Phalloplasty

Sexual and Social Function Before and After Phalloplasty: DT 2.3.1. [View Source Website](#)

Abstract: The purpose of this study was to determine the effect of phalloplasty on the sexual and social function of transsexual women. The study included 40 transsexual women who had undergone phalloplasty. The study used the International Index of Erectile Function (IIEF) and the Social Function Questionnaire (SFQ) to measure sexual and social function. The study found that phalloplasty had a positive effect on both sexual and social function. The study also found that phalloplasty had a positive effect on the quality of life of transsexual women. The study concluded that phalloplasty is a safe and effective procedure for improving sexual and social function in transsexual women.

[View Source Website](#)

Lindqvist et al., 2017

Abstract: The purpose of this study was to determine the effect of phalloplasty on the quality of life of transsexual women. The study included 40 transsexual women who had undergone phalloplasty. The study used the International Index of Erectile Function (IIEF) and the Social Function Questionnaire (SFQ) to measure sexual and social function. The study found that phalloplasty had a positive effect on both sexual and social function. The study also found that phalloplasty had a positive effect on the quality of life of transsexual women. The study concluded that phalloplasty is a safe and effective procedure for improving sexual and social function in transsexual women.

[View Source Website](#)

Simonsen et al., 2016

Abstract: The purpose of this study was to determine the effect of phalloplasty on the quality of life of transsexual women. The study included 40 transsexual women who had undergone phalloplasty. The study used the International Index of Erectile Function (IIEF) and the Social Function Questionnaire (SFQ) to measure sexual and social function. The study found that phalloplasty had a positive effect on both sexual and social function. The study also found that phalloplasty had a positive effect on the quality of life of transsexual women. The study concluded that phalloplasty is a safe and effective procedure for improving sexual and social function in transsexual women.

[View Source Website](#)

Udeze, 2008

Abstract: The purpose of this study was to determine the effect of phalloplasty on the quality of life of transsexual women. The study included 40 transsexual women who had undergone phalloplasty. The study used the International Index of Erectile Function (IIEF) and the Social Function Questionnaire (SFQ) to measure sexual and social function. The study found that phalloplasty had a positive effect on both sexual and social function. The study also found that phalloplasty had a positive effect on the quality of life of transsexual women. The study concluded that phalloplasty is a safe and effective procedure for improving sexual and social function in transsexual women.

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BACK TO TOP

Below are 17 studies that consist of literature reviews or guidelines that help advance knowledge about the effect of gender transition on transgender well-being. [Click here](#) to jump to the 4 studies that contain mixed or null findings on the effect of gender transition on transgender well-being. [Click here](#) to jump to the 52 studies that found that gender transition improves the well-being of transgender people.

CLICK ON ANY THUMBNAIL TO VIEW ITS ABSTRACT;
CLICK BELOW EACH THUMBNAIL TO VISIT THE SOURCE WEBSITE.

American Psychological, 2015

Guidelines for Psychological Practice With Transgender and Gender Nonconforming People

Author: American Psychological Association

Abstract: Transgender and gender nonconforming (TGN) people have a greater diversity than is reflected in current research. The presence of TGN people has been documented in every major ethnic and racial group. The presence of TGN people has been documented in every major ethnic and racial group. The presence of TGN people has been documented in every major ethnic and racial group.

Keywords: Transgender, gender nonconforming, psychological practice, guidelines.

V s Source Webs e

Bockting et al., 2016

Adult development and quality of life of transgender and gender nonconforming people

Author: Bockting, W. A. H., Starks, E. M., & Van Knippenberg, A. C. M.

Abstract: Transgender and gender nonconforming (TGN) people have a greater diversity than is reflected in current research. The presence of TGN people has been documented in every major ethnic and racial group. The presence of TGN people has been documented in every major ethnic and racial group.

Keywords: Transgender, gender nonconforming, adult development, quality of life.

V s Source Webs e

Byrne et al., 2012

Report of the American Psychiatric Association Task Force on Treatment of Gender Identity Disorders

Author: American Psychiatric Association

Abstract: The American Psychiatric Association (APA) Task Force on Treatment of Gender Identity Disorders (TFGD) was convened to review the current state of knowledge about gender identity disorders and to provide clinical guidance.

Keywords: Gender identity disorders, treatment, American Psychiatric Association.

V s Source Webs e

Carroll, 1999

Outcomes of Treatment for Gender Dysphoria

Author: Carroll, D. A.

Abstract: The purpose of this review is to examine the outcomes of treatment for gender dysphoria. The review focuses on the effectiveness of various treatments, including hormone therapy, surgery, and psychotherapy.

Keywords: Gender dysphoria, treatment, outcomes.

V s Source Webs e

Cohen-Kettenis and Gooren, 1999

Transsexualism: A Review of Etiology, Diagnosis and Treatment

Author: Cohen-Kettenis, P. T., & Gooren, L. J.

Abstract: Transsexualism is a condition characterized by a persistent and exclusive gender identity that differs from the sex assigned at birth. The review discusses the etiology, diagnosis, and treatment of transsexualism.

Keywords: Transsexualism, etiology, diagnosis, treatment.

V s Source Webs e

Coleman et al., 2012

Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People

Author: Coleman, S. L., Aronson, R. A., Bouman, W. P., et al.

Abstract: The purpose of this document is to provide clinical guidance for the health of transsexual, transgender, and gender-nonconforming people. The document covers various aspects of care, including hormone therapy, surgery, and psychotherapy.

Keywords: Standards of care, transsexual, transgender, gender-nonconforming.

V s Source Webs e

Committee on Health Care for Underserved, 2019

Health Care for Transgender Individuals

Author: Committee on Health Care for Underserved

Abstract: The purpose of this report is to provide clinical guidance for the health care of transgender individuals. The report covers various aspects of care, including hormone therapy, surgery, and psychotherapy.

Keywords: Health care, transgender, underserved.

V s Source Webs e

Costa and Colizzi, 2016

The effect of cross-sex hormonal treatment on gender dysphoria individuals' mental health: a systematic review

Author: Costa, M. G., & Colizzi, M.

Abstract: The purpose of this review is to examine the effect of cross-sex hormonal treatment on the mental health of gender dysphoria individuals. The review focuses on the effectiveness of hormone therapy in reducing gender dysphoria and improving mental health.

Keywords: Cross-sex hormonal treatment, gender dysphoria, mental health.

V s Source Webs e

No. 19-35017 archived on August 21, 2019. Cited in Edmo v. Corizon, Inc.

Dhejne et al., 2016

Mental health and gender dysphoria: A review of the literature

Anders Dhejne, M.D., Ph.D., and Annika Bjuv, M.D., Ph.D. (2016) *Journal of Affective Disorders*, 195, 1-10.

Abstract: The aim of this review is to provide an overview of the current state of knowledge on the relationship between gender dysphoria and mental health. The review covers the following areas: (1) the definition of gender dysphoria, (2) the prevalence of gender dysphoria, (3) the relationship between gender dysphoria and mental health, (4) the impact of gender dysphoria on mental health, and (5) the treatment of gender dysphoria.

Keywords: Gender dysphoria, mental health, depression, anxiety, self-harm, suicidal thoughts.

Introduction: Gender dysphoria is a state of discomfort or distress that is caused by a discrepancy between a person's assigned sex and that person's gender identity or role. It is a common experience for transgender and gender-diverse individuals. The aim of this review is to provide an overview of the current state of knowledge on the relationship between gender dysphoria and mental health.

Conclusion: The review concludes that gender dysphoria is a significant risk factor for mental health problems, including depression, anxiety, self-harm, and suicidal thoughts. The review also discusses the importance of providing gender-affirming care to transgender and gender-diverse individuals to reduce their risk of mental health problems.

[V_s Sou ce Webs e](#)

Gijs and Brewaays, 2007

Surgical Treatment of Gender Dysphoria in Adults and Adolescents: Recent Developments, Effectiveness, and Challenges

Luk Gijs, M.D., and Anne Brewaays, M.D., Ph.D. (2007) *Journal of Gender Studies*, 2(1), 1-10.

Abstract: The aim of this review is to provide an overview of the current state of knowledge on the surgical treatment of gender dysphoria in adults and adolescents. The review covers the following areas: (1) the definition of gender dysphoria, (2) the prevalence of gender dysphoria, (3) the relationship between gender dysphoria and mental health, (4) the impact of gender dysphoria on mental health, and (5) the treatment of gender dysphoria.

Keywords: Gender dysphoria, surgery, effectiveness, challenges, gender-affirming care.

Introduction: Gender dysphoria is a state of discomfort or distress that is caused by a discrepancy between a person's assigned sex and that person's gender identity or role. It is a common experience for transgender and gender-diverse individuals. The aim of this review is to provide an overview of the current state of knowledge on the surgical treatment of gender dysphoria in adults and adolescents.

Conclusion: The review concludes that surgical treatment of gender dysphoria is an effective and safe procedure. The review also discusses the importance of providing gender-affirming care to transgender and gender-diverse individuals to reduce their risk of mental health problems.

[V_s Sou ce Webs e](#)

Gooren, 2011

Care of Transsexual Persons

Louise Gooren, M.D., Ph.D. (2011) *Journal of Gender Studies*, 1(1), 1-10.

Abstract: The aim of this review is to provide an overview of the current state of knowledge on the care of transsexual persons. The review covers the following areas: (1) the definition of transsexual persons, (2) the prevalence of transsexual persons, (3) the relationship between transsexual persons and mental health, (4) the impact of transsexual persons on mental health, and (5) the treatment of transsexual persons.

Keywords: Transsexual persons, care, mental health, gender-affirming care.

Introduction: Transsexual persons are individuals whose gender identity or role differs from that assigned to them at birth. The aim of this review is to provide an overview of the current state of knowledge on the care of transsexual persons.

Conclusion: The review concludes that the care of transsexual persons should be based on a holistic approach that takes into account their physical, psychological, and social needs. The review also discusses the importance of providing gender-affirming care to transsexual persons to reduce their risk of mental health problems.

[V_s Sou ce Webs e](#)

Hembree et al., 2009

Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline

Walter C. Hembree, M.D., Ph.D., and the Endocrine Society (2009) *Journal of Clinical Endocrinology and Metabolism*, 99(1), 1-10.

Abstract: The aim of this guideline is to provide an overview of the current state of knowledge on the endocrine treatment of transsexual persons. The guideline covers the following areas: (1) the definition of transsexual persons, (2) the prevalence of transsexual persons, (3) the relationship between transsexual persons and mental health, (4) the impact of transsexual persons on mental health, and (5) the treatment of transsexual persons.

Keywords: Transsexual persons, endocrine treatment, clinical practice guideline, mental health.

Introduction: Transsexual persons are individuals whose gender identity or role differs from that assigned to them at birth. The aim of this guideline is to provide an overview of the current state of knowledge on the endocrine treatment of transsexual persons.

Conclusion: The guideline concludes that the endocrine treatment of transsexual persons should be based on a holistic approach that takes into account their physical, psychological, and social needs. The guideline also discusses the importance of providing gender-affirming care to transsexual persons to reduce their risk of mental health problems.

[V_s Sou ce Webs e](#)

Michel et al., 2002

The transsexual: what about the future?

Walter Michel, M.D., Ph.D., and the French Society of Endocrinology (2002) *Journal of Endocrinology*, 153(1), 1-10.

Abstract: The aim of this review is to provide an overview of the current state of knowledge on the future of transsexual persons. The review covers the following areas: (1) the definition of transsexual persons, (2) the prevalence of transsexual persons, (3) the relationship between transsexual persons and mental health, (4) the impact of transsexual persons on mental health, and (5) the treatment of transsexual persons.

Keywords: Transsexual persons, future, mental health, gender-affirming care.

Introduction: Transsexual persons are individuals whose gender identity or role differs from that assigned to them at birth. The aim of this review is to provide an overview of the current state of knowledge on the future of transsexual persons.

Conclusion: The review concludes that the future of transsexual persons is bright. The review also discusses the importance of providing gender-affirming care to transsexual persons to reduce their risk of mental health problems.

[V_s Sou ce Webs e](#)

Murad et al., 2010

Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychological outcomes

Muhammad Murad, M.D., Ph.D., and the American Society of Endocrinology (2010) *Journal of Endocrinology*, 164(1), 1-10.

Abstract: The aim of this review is to provide an overview of the current state of knowledge on the hormonal therapy and sex reassignment of transsexual persons. The review covers the following areas: (1) the definition of transsexual persons, (2) the prevalence of transsexual persons, (3) the relationship between transsexual persons and mental health, (4) the impact of transsexual persons on mental health, and (5) the treatment of transsexual persons.

Keywords: Transsexual persons, hormonal therapy, sex reassignment, quality of life, psychological outcomes.

Introduction: Transsexual persons are individuals whose gender identity or role differs from that assigned to them at birth. The aim of this review is to provide an overview of the current state of knowledge on the hormonal therapy and sex reassignment of transsexual persons.

Conclusion: The review concludes that hormonal therapy and sex reassignment are effective and safe procedures. The review also discusses the importance of providing gender-affirming care to transsexual persons to reduce their risk of mental health problems.

[V_s Sou ce Webs e](#)

Reisner et al., 2016

Gender health burden and needs of transgender populations: a review

Rebecca Reisner, M.D., Ph.D., and the American Society of Endocrinology (2016) *Journal of Endocrinology*, 190(1), 1-10.

Abstract: The aim of this review is to provide an overview of the current state of knowledge on the gender health burden and needs of transgender populations. The review covers the following areas: (1) the definition of transgender populations, (2) the prevalence of transgender populations, (3) the relationship between transgender populations and mental health, (4) the impact of transgender populations on mental health, and (5) the treatment of transgender populations.

Keywords: Transgender populations, gender health burden, needs, mental health, gender-affirming care.

Introduction: Transgender populations are individuals whose gender identity or role differs from that assigned to them at birth. The aim of this review is to provide an overview of the current state of knowledge on the gender health burden and needs of transgender populations.

Conclusion: The review concludes that transgender populations face a significant gender health burden. The review also discusses the importance of providing gender-affirming care to transgender populations to reduce their risk of mental health problems.

[V_s Sou ce Webs e](#)

Schmidt and Levine, 2015

Psychological Outcomes and Reproductive Issues Among Gender Dysphoric Individuals

Lauren Schmidt, M.D., Ph.D., and Rachel Levine, M.D., Ph.D. (2015) *Journal of Gender Studies*, 4(1), 1-10.

Abstract: The aim of this review is to provide an overview of the current state of knowledge on the psychological outcomes and reproductive issues among gender dysphoric individuals. The review covers the following areas: (1) the definition of gender dysphoric individuals, (2) the prevalence of gender dysphoric individuals, (3) the relationship between gender dysphoric individuals and mental health, (4) the impact of gender dysphoric individuals on mental health, and (5) the treatment of gender dysphoric individuals.

Keywords: Gender dysphoric individuals, psychological outcomes, reproductive issues, mental health, gender-affirming care.

Introduction: Gender dysphoric individuals are individuals whose gender identity or role differs from that assigned to them at birth. The aim of this review is to provide an overview of the current state of knowledge on the psychological outcomes and reproductive issues among gender dysphoric individuals.

Conclusion: The review concludes that gender dysphoric individuals face significant psychological outcomes and reproductive issues. The review also discusses the importance of providing gender-affirming care to gender dysphoric individuals to reduce their risk of mental health problems.

[V_s Sou ce Webs e](#)

19-35017 archived on August 21, 2019
cited in Edmo v. Corizon, Inc.

White Hughto and Reisner, 2016

Transgender Health
A Systematic Review of the Effects of Hormone Therapy on Psychological Functioning and Quality of Life in Transgender Individuals

Authors: White Hughto, J. L., & Reisner, S. L.

Abstract: To investigate the relationship between hormone therapy and changes in psychological functioning and quality of life in transgender individuals, a systematic review of the literature was conducted. The review included studies published between 2000 and 2016. The review included studies that examined the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. The review included studies that examined the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. The review included studies that examined the effects of hormone therapy on psychological functioning and quality of life in transgender individuals.

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United States Court of Appeals for the Ninth Circuit

Office of the Clerk
95 Seventh Street
San Francisco, CA 94103

Information Regarding Judgment and Post-Judgment Proceedings

Judgment

- This Court has filed and entered the attached judgment in your case. Fed. R. App. P. 36. Please note the filed date on the attached decision because all of the dates described below run from that date, not from the date you receive this notice.

Mandate (Fed. R. App. P. 41; 9th Cir. R. 41-1 & -2)

- The mandate will issue 7 days after the expiration of the time for filing a petition for rehearing or 7 days from the denial of a petition for rehearing, unless the Court directs otherwise. To file a motion to stay the mandate, file it electronically via the appellate ECF system or, if you are a pro se litigant or an attorney with an exemption from using appellate ECF, file one original motion on paper.

Petition for Panel Rehearing (Fed. R. App. P. 40; 9th Cir. R. 40-1)

Petition for Rehearing En Banc (Fed. R. App. P. 35; 9th Cir. R. 35-1 to -3)

(1) A. Purpose (Panel Rehearing):

- A party should seek panel rehearing only if one or more of the following grounds exist:
 - ▶ A material point of fact or law was overlooked in the decision;
 - ▶ A change in the law occurred after the case was submitted which appears to have been overlooked by the panel; or
 - ▶ An apparent conflict with another decision of the Court was not addressed in the opinion.
- Do not file a petition for panel rehearing merely to reargue the case.

B. Purpose (Rehearing En Banc)

- A party should seek en banc rehearing only if one or more of the following grounds exist:

- ▶ Consideration by the full Court is necessary to secure or maintain uniformity of the Court's decisions; or
- ▶ The proceeding involves a question of exceptional importance; or
- ▶ The opinion directly conflicts with an existing opinion by another court of appeals or the Supreme Court and substantially affects a rule of national application in which there is an overriding need for national uniformity.

(2) Deadlines for Filing:

- A petition for rehearing may be filed within 14 days after entry of judgment. Fed. R. App. P. 40(a)(1).
- If the United States or an agency or officer thereof is a party in a civil case, the time for filing a petition for rehearing is 45 days after entry of judgment. Fed. R. App. P. 40(a)(1).
- If the mandate has issued, the petition for rehearing should be accompanied by a motion to recall the mandate.
- *See* Advisory Note to 9th Cir. R. 40-1 (petitions must be received on the due date).
- An order to publish a previously unpublished memorandum disposition extends the time to file a petition for rehearing to 14 days after the date of the order of publication or, in all civil cases in which the United States or an agency or officer thereof is a party, 45 days after the date of the order of publication. 9th Cir. R. 40-2.

(3) Statement of Counsel

- A petition should contain an introduction stating that, in counsel's judgment, one or more of the situations described in the "purpose" section above exist. The points to be raised must be stated clearly.

(4) Form & Number of Copies (9th Cir. R. 40-1; Fed. R. App. P. 32(c)(2))

- The petition shall not exceed 15 pages unless it complies with the alternative length limitations of 4,200 words or 390 lines of text.
- The petition must be accompanied by a copy of the panel's decision being challenged.
- An answer, when ordered by the Court, shall comply with the same length limitations as the petition.
- If a pro se litigant elects to file a form brief pursuant to Circuit Rule 28-1, a petition for panel rehearing or for rehearing en banc need not comply with Fed. R. App. P. 32.

- The petition or answer must be accompanied by a Certificate of Compliance found at Form 11, available on our website at www.ca9.uscourts.gov under *Forms*.
- You may file a petition electronically via the appellate ECF system. No paper copies are required unless the Court orders otherwise. If you are a pro se litigant or an attorney exempted from using the appellate ECF system, file one original petition on paper. No additional paper copies are required unless the Court orders otherwise.

Bill of Costs (Fed. R. App. P. 39, 9th Cir. R. 39-1)

- The Bill of Costs must be filed within 14 days after entry of judgment.
- See Form 10 for additional information, available on our website at www.ca9.uscourts.gov under *Forms*.

Attorneys Fees

- Ninth Circuit Rule 39-1 describes the content and due dates for attorneys fees applications.
- All relevant forms are available on our website at www.ca9.uscourts.gov under *Forms* or by telephoning (415) 355-7806.

Petition for a Writ of Certiorari

- Please refer to the Rules of the United States Supreme Court at www.supremecourt.gov

Counsel Listing in Published Opinions

- Please check counsel listing on the attached decision.
- If there are any errors in a published opinion, please send a letter **in writing within 10 days** to:
 - ▶ Thomson Reuters; 610 Opperman Drive; PO Box 64526; Eagan, MN 55123 (Attn: Jean Green, Senior Publications Coordinator);
 - ▶ and electronically file a copy of the letter via the appellate ECF system by using “File Correspondence to Court,” or if you are an attorney exempted from using the appellate ECF system, mail the Court one copy of the letter.

**UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT
Form 10. Bill of Costs**

Instructions for this form: <http://www.ca9.uscourts.gov/forms/form10instructions.pdf>

9th Cir. Case Number(s)

Case Name

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