

TRANSGENDER HEALTH

POSITION STATEMENT

INTRODUCTION

Over the last few decades, there has been a rapid expansion in the understanding of gender identity along with the implications for the care of transgender and gender diverse individuals. In parallel with the greater societal awareness of transgender individuals, evidence-based practices in caring for pediatric and adult transgender patients have been developed in response to scientific research. While there continue to be gaps in knowledge about the optimal care for transgender individuals, the framework for providing care is increasingly well-established as is the recognition of needed policy changes.

BACKGROUND

The medical consensus in the late 20th century was that transgender and gender incongruent individuals suffered a mental health disorder termed “gender identity disorder.” Gender identity was considered malleable and subject to external influences. Today, however, this attitude is no longer considered valid. Considerable scientific evidence has emerged demonstrating a durable biological element underlying gender identity.^{1,2} Individuals may make choices due to other factors in their lives, but there do not seem to be external forces that genuinely cause individuals to change gender identity.

Although the specific mechanisms guiding the biological underpinnings of gender identity are not entirely understood, there is evolving consensus that being transgender is not a mental health disorder. Such evidence stems from scientific studies suggesting that: 1) attempts to change gender identity in intersex patients to match external genitalia or chromosomes are typically unsuccessful^{1,2}; 2) identical twins (who share the exact same genetic background) are more likely to both experience transgender identity as compared to fraternal (non-identical) twins³; 3) among individuals with female chromosomes (XX), rates of male gender identity are higher for those exposed to higher

levels of androgens *in utero* relative to those without such exposure, and male (XY)-chromosome individuals with complete androgen insensitivity syndrome typically have female gender identity⁴; and 4) there are associations of certain brain scan or staining patterns with gender identity rather than external genitalia or chromosomes.^{1,2}

CONSIDERATIONS

Transgender individuals are often denied insurance coverage for appropriate medical and psychological treatment. Those gender diverse youth who have barriers to accessing adequate healthcare have poorer overall physical and mental health compared to their cisgender peers.⁵ Over the last decade, there has been considerable research on and development of evidence-based standards of care that have proven to be both safe and efficacious for the treatment of gender dysphoria/gender incongruence in youth and adults. There is also a growing understanding of the positive impact that increased access to such treatments can have on the mental health of these individuals.

The Endocrine Society’s Clinical Practice Guideline on gender dysphoria/gender incongruence⁶ provides the standard of care for supporting transgender individuals. The guideline establishes a methodical, conservative framework for gender-affirming care, including pubertal suppression, hormones and surgery and standardizes terminology to be used by healthcare professionals. These recommendations include evidence that treatment of gender dysphoria/incongruence is medically necessary and should be covered by insurance.

Despite increased awareness, many barriers to improving the health and well-being of transgender youth and adults remain. Oftentimes, medical treatment for gender dysphoria/gender incongruence is considered elective by insurance companies, which fail to provide coverage for physician-prescribed treatment. Access to appropriately trained healthcare professionals can also be challenging as there

¹Saraswat A, Weinand JD, Safer JD. Evidence supporting the biologic nature of gender identity. *Endocr Pract.* Feb 2015;21(2):199-204. doi:10.4158/ep14351.ra

²Rosenthal SM. Approach to the patient: transgender youth: endocrine considerations. *J Clin Endocrinol Metab.* Dec 2014;99(12):4379-89. doi:10.1210/jc.2014-1919

³Heylens G, De Cuyper G, Zucker KJ, et al. Gender identity disorder in twins: a review of the case report literature. *J Sex Med.* Mar 2012;9(3):751-7. doi:10.1111/j.1743-6109.2011.02567.x

⁴Dessens AB, Slijper FM, Drop SL. Gender dysphoria and gender change in chromosomal females with congenital adrenal hyperplasia. *Arch Sex Behav.* Aug 2005;34(4):389-97. doi:10.1007/s10508-005-4338-5

⁵Rider GN, McMorris BJ, Gower AL, Coleman E, Eisenberg ME. Health and Care Utilization of Transgender and Gender Nonconforming Youth: A Population-Based Study. *Pediatrics.* 2018;141(3):e20171683. doi:10.1542/peds.2017-1683

⁶Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine Treatment of Gender-Dysphoric/ Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab.* Nov 1 2017;102(11):3869-3903. doi:10.1210/jc.2017-01658



is a lack of formal education on gender dysphoria/gender incongruence among clinicians trained in the United States. A 2016 survey of endocrinologists, the physicians most likely to care for these patients, found that over 80% have never received training on care of transgender patients.⁷

This can have an adverse impact on patient outcomes, particularly in rural and underserved areas. In fact, studies have indicated that 70% of transgender individuals have experienced maltreatment by medical providers, including harassment and violence.⁷ Many transgender individuals have been subjected to conversion therapy, or efforts to change a transgender person's gender identity using psychological interventions; this is known to be associated with adverse mental health outcomes, including suicidality, and is banned in 20 states and the District of Columbia.⁸

Transgender individuals who have been denied care show an increased likelihood of dying by suicide and engaging in self-harm.⁷ Transgender/gender incongruent youth who had access to pubertal suppression, a treatment which is fully reversible and prevents development of secondary sex characteristics not in alignment with their gender identity, have lower lifetime odds of suicidal ideation compared to those youth who desired pubertal suppression but did not have access to such treatment.⁹ Youth who are able to access gender-affirming care, including pubertal suppression, hormones and surgery based on conservative medical guidelines and consultation from medical and mental health experts, experience significantly improved mental health outcomes over time, similar to their cis-gender peers.¹⁰⁻¹² Pre-pubertal youth who are supported and affirmed in their social transitions long before medical interventions are indicated, experience no elevation in depression compared to their cis-gender peers.¹² It is critical that transgender individuals have access to the appropriate treatment and care to ensure their health and well-being.

FUTURE CONSIDERATIONS

While the data are strong for both a biological underpinning to gender identity and the relative safety of hormone treatment (when appropriately monitored medically), there are gaps in knowledge that are necessary to address in order to optimize care. Comparative effectiveness research

in hormone regimens is needed to determine: the best endocrine and surgical protocols¹³, as it is not yet known if certain regimens are safer or more effective than others; the degree of improvement as a result of the intervention (e.g. decrease in mental health diagnoses); the need for training of health care providers and the most effective training methods; and to build the body of evidence pertaining to cardiovascular, malignancy, or other long-term risks from hormone interventions, particularly as the transgender individual ages. Additional studies are needed to elucidate the biological processes underlying gender identity; such studies may lead to destigmatization and may also decrease health disparities for gender minorities. In addition, further studies are needed to determine strategies for fertility preservation and to investigate long-term outcomes of early medical intervention, including pubertal suppression, gender-affirming hormones and gender-affirming surgeries for transgender/gender incongruent youth. To successfully establish and enact these protocols requires long-term, large-scale studies across countries that employ similar care protocols.

POSITIONS

- There is a durable biological underpinning to gender identity that should be considered in policy determinations.
- Medical intervention for transgender youth and adults (including puberty suppression, hormone therapy and medically indicated surgery) is effective, relatively safe (when appropriately monitored), and has been established as the standard of care.⁶ Federal and private insurers should cover such interventions as prescribed by a physician as well as the appropriate medical screenings that are recommended for all body tissues that a person may have.
- Increased funding for national pediatric and adult transgender health research programs is needed to close the gaps in knowledge regarding transgender medical care and should be made a priority.

⁷Davidge-Pitts C, Nippoldt TB, Danoff A, Radziejewski L, Natt N. Transgender Health in Endocrinology: Current Status of Endocrinology Fellowship Programs and Practicing Clinicians. *J Clin Endocrinol Metab.* Apr 1 2017;102(4):1286-1290. doi:10.1210/jc.2016-3007

⁸Turban JL, Beckwith N, Reinsner SL, Keuroghlian AS. Association Between Recalled Exposure to Gender Identity Conversion Efforts and Psychological Distress and Suicide Attempts Among Transgender Adults. *JAMA Psychiatry.* Sep 11 2019;77(1):1-9. doi:10.1001/jamapsychiatry.2019.2285

⁹Turban JL, King D, Carswell JM, Keuroghlian AS. Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation. *Pediatrics.* Feb 2020;145(2)doi:10.1542/peds.2019-1725

¹⁰de Vries AL, McGuire JK, Steensma TD, Wagenaar EC, Doreleijers TA, Cohen-Kettenis PT. Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics.* Oct 2014;134(4):696-704. doi:10.1542/peds.2013-2958

¹¹Kuper LE, Stewart S, Preston S, Lau M, Lopez X. Body Dissatisfaction and Mental Health Outcomes of Youth on Gender-Affirming Hormone Therapy. *Pediatrics.* Apr 2020;145(4)doi:10.1542/peds.2019-3006

¹²Achille C, Taggart T, Eaton NR, et al. Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: preliminary results. *Int J Pediatr Endocrinol.* 2020;2020:8. doi:10.1186/s13633-020-00078-2

¹³Safer JD, Tangpricha V. Care of the Transgender Patient. *Ann Intern Med.* Jul 2 2019;171(1):itc1-itc16. doi:10.7326/aitc201907020