



Medical Literature Review: Facial Gender Confirmation Surgery

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Re: Medical Necessity of Facial Gender Confirmation Surgery for Transgender Women and Non-binary people

- I. Facial gender confirmation surgery (FGCS)¹ is provided for the treatment, cure or relief of gender dysphoria.

Facial gender confirmation surgery is a range of procedures that changes facial features from male-typical characteristics to female-typical characteristics for the purpose of treating gender dysphoria.² The “procedures focus on the areas of the face that exhibit the greatest sexual dimorphism—forehead, orbits, nose, jaw, chin, and thyroid cartilage.”³ Gender confirmation of the face has been shown to be highly effective in treating gender dysphoria.⁴

Facial gender confirmation surgeries can include the following:⁵

- hairline lowering surgery
- forehead reduction and contouring
- brow lift (browplasty)
- nasal bone surgery (rhinoplasty)
- cheek alterations (augmentation and reduction)
- lip lift and lip filling
- chin contouring (genioplasty)
- jaw contouring, and
- tracheal shave (laryngeal chondroplasty).

This is not an exhaustive list and a number of procedures may be recommended by a provider to help alleviate gender dysphoria.

¹ Facial gender confirmation surgery means surgeries that change typically male secondary sex characteristics into typically female secondary sex characteristics for the purpose of treating gender dysphoria. Other terms used to refer to facial gender confirmation surgery include facial gender affirming surgery, facial feminization surgery (“FFS”), and facial sex reassignment surgery.

² Jenna Schall, *Breaking the Binary: The Identification of Trans-Women in Forensic Anthropology*, 309 FORENSIC SCI. INT’L 110220 (2020).

³ Mark Fisher, *Facial Feminization Surgery Changes Perception of Patient Gender*, 40 AESTHETIC SURGERY J. 703, 704 (2019).

⁴ Shane D. Morrison et al., *Prospective Quality-of-Life Outcomes after Facial Feminization Surgery: An International Multicenter Study*, 145 PLASTIC & RECONSTRUCTIVE SURGERY 1499, 1508 (2020).

⁵ Shane D. Morrison et al., *Facial Feminization: Systematic Review of the Literature*, 137 PLASTIC & RECONSTRUCTIVE SURGERY 1759, 1762-63 (2016).

A. Gender dysphoria is a “medical condition”

Gender dysphoria, as defined by the American Psychiatric Association’s Fifth Edition of the *Diagnostic and Statistical Manual of Mental Disorders* (“DSM-5”), is a medical condition in which there is a marked incongruence between one’s experienced or expressed sex and one’s assigned sex at birth.⁶ A person diagnosed with gender dysphoria has clinically significant distress as a result of physical impairments.⁷ Affected individuals generally have “a strong desire to undergo medical and surgical treatment . . . in order to alleviate physical incongruence and gender dysphoria.”⁸

The most recent, Eleventh Revision of the WHO’s *International Classification of Diseases* has a physical diagnosis parallel to the DSM-V, called “gender incongruence” (HA60).⁹ The diagnosis was placed in a new section of the ICD: Conditions Related to Sexual Health.¹⁰ The ICD defines it as a “marked and persistent incongruence between an individual’s experienced gender and the assigned sex, which often leads to a desire to ‘transition’, in order to live and be accepted as a person of the experienced gender, through hormonal treatment, surgery or other health care services to make the individual’s body align, as much as desired and to the extent possible, with the experienced gender.”¹¹

⁶ See AM. PSYCH. ASS’N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS: DSM-5, 451-53 (5th ed. 2013).

⁷ *Id.*

⁸ Ebba Lundqvist et al., *Quality of Life Improves Early after Gender Reassignment Surgery in Transgender Women*, 40 EUR. J. PLASTIC SURGERY 223 (2017).

⁹ ICD-11 for Mortality and Morbidity Statistics: Gender Incongruence (2021), <https://icd.who.int/browse11/l-m/en#/http%3a%2f%2fid.who.int%2fid%2fentity%2f411470068> (last visited Sep 11, 2023).

¹⁰ World Health Organization, *Gender Incongruence and Transgender Health in the ICD*, <https://www.who.int/standards/classifications/frequently-asked-questions/gender-incongruence-and-transgender-health-in-the-icd> (last visited Sep 11, 2023) (“Inclusion of gender incongruence in the ICD should ensure transgender people’s access to gender-affirming health care, as well as adequate health insurance coverage for such services. Recognition in the ICD also acknowledges the links between gender identity, sexual behaviour, exposure to violence and sexually transmitted infections.”); WHO: REVISION OF ICD-11 (GENDER INCONGRUENCE/TRANSGENDER) - QUESTIONS AND ANSWERS (Q&A), (2018), <https://www.youtube.com/watch?v=kyCgz0z05lk> (last visited Sep 11, 2023).

¹¹ World Health Organization, *International Statistical Classification of Diseases and Related Health Problems, 11th Revision ICD-11 for Mortality and Morbidity Statistics*, HA60 GENDER INCONGRUENCE OF ADOLESCENCE OR ADULTHOOD (2021), <https://icd.who.int/browse11/l-m/en#/http://id.who.int/icd/entity/90875286> (last visited Aug 28, 2023).

B. Changing sex characteristics is the standard and appropriate treatment for gender dysphoria.

Sex is not binary but multifaceted.¹² Typically, males and females have readily apparent sex differences in genitals, reproductive organs and hormone levels, but males and females also have prominent differences in secondary sex characteristics.¹³ These differences can be seen in the breasts, facial hair, fat distribution, muscle mass, height, body odor, skin texture, body hair, baldness, voice, Adam’s apple, and facial features.

Altering physical sex characteristics to correspond with one’s identity is part of the standard treatment for gender dysphoria. According to the World Professional Association for Transgender Health (WPATH), the recognized effective treatment of gender dysphoria is a triadic approach of providing mental health treatment, hormone therapy, and surgeries. The World Professional Association for Transgender Health is recognized by the American Medical Association (“AMA”) and others as “the leading international, interdisciplinary professional organization devoted to the understanding and treatment of gender identity disorders.”¹⁴ WPATH publishes the Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People,¹⁵ which the AMA and others recognize as the “internationally accepted Standards of Care . . . recognized within the medical community to be the standard of care for treating people with” gender dysphoria.¹⁶

¹² Claire Ainsworth, *Sex Redefined*, 518 NATURE 288 (2015); see also Chapter 16: The Americans with Disabilities Act of 1990 and the Rehabilitation Act of 1973, in GENDER IDENTITY AND SEXUAL ORIENTATION DISCRIMINATION IN THE WORKPLACE (Christine Michelle Duffy & Denise M. Visconti eds., 2014) (discussing recent medical studies pointing to biological etiology for transgender identity).

¹³ Sarah Hammond, Erin Cohen, & David Rosow, *Feminization of Transgender Women with Thyroid Chondroplasty and Laryngoplasty*, 30 J. CRANIOFACIAL SURGERY 1409, 1410 (2019) (“Many individuals in the transgender community place just as much if not more importance on their transformation as effected by secondary sex characteristics, and rightly so. Humans both perceive others and present themselves through largely visual and tactile communication.”); Mohammad Ghasem Shams & Mohammad Hosein Kalantar Motamedi, *Case Report: Feminizing the Male Face*, 9 EPLASTY e2, 9 (2009) (“Despite the fact that facial features in transsexuals may seem to be of lesser importance than the reassignment of the genitalia, these are of utmost importance for passing as a member of the [sex that the individual identifies with] in public.”).

¹⁴ Am. Med. Ass’n House of Delegates, *Removing Financial Barriers to Care for Transgender Patients*, Resolution 122, ¶¶ 15-17 (2008).

¹⁵ Eli Coleman et al., *Standards of Care for the Health of Transgender and Gender Diverse People, Version 8*, 23 INT’L J. TRANSGENDER HEALTH 51 (2022).

¹⁶ Am. Med. Ass’n House of Delegates, *supra* note 14 at ¶¶ 16-20; Madeline B. Deutsch & Jamie L. Feldman, *Updated Recommendations from the World Professional Association for Transgender Health Standards of Care*, 87 AM. FAM. PHYSICIAN 89 (2013). Further, the United

The WPATH Standards of Care¹⁷ Version 8 recommends that health care systems provide medically necessary gender-affirming health care for transgender and gender diverse people and that the “medical necessity of treatment and care is clearly recognized for the many people who experience dissonance between their sex assigned at birth and their gender identity.”¹⁸

The purpose of changing sex characteristics (or preventing their change during puberty) is to treat gender dysphoria. Such treatment is therefore medically necessary—not cosmetic.¹⁹ Accordingly, facial gender confirmation is one of the primary forms of sex reassignment surgery.²⁰ Indeed, the importance of aligning one’s facial features with one’s gender identity is evident in how many

States government has in its regulatory guidance repeatedly recognized WPATH to be a leader in setting standards for transgender healthcare. 81 Fed. Reg. 31, 435 n. 263 (2016) (HHS Section 1557 regulation); 81 Fed. Reg. 39, 136 n. 166 (Department of Labor Regulation).

¹⁷ Standard of Care “refers to the degree of care a prudent and reasonable person would exercise under the circumstances.” Coleman et al., *supra* note 15 at 50-1; WPATH, *Position Statement on Medical Necessity of Treatment, Sex Reassignment, and Insurance Coverage in the U.S.A.*, (2016), https://s3.amazonaws.com/amo_hub_content/Association140/files/WPATH-Position-on-Medical-Necessity-12-21-2016.pdf.

¹⁸ Coleman et al., *supra* note 17. WPATH has consistently held this view. WPATH, *Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People, Version 7*, at 54-55 (“surgery is essential and medically necessary to alleviate their gender dysphoria . . . relief from gender dysphoria cannot be achieved without modification of their primary and/or secondary sex characteristics to establish greater congruence.”); WPATH, *Position Statement on Medical Necessity of Treatment, Sex Reassignment, and Insurance Coverage in the U.S.A.*, (2016), https://s3.amazonaws.com/amo_hub_content/Association140/files/WPATH-Position-on-Medical-Necessity-12-21-2016.pdf.

¹⁹ Hamidreza Natghian, Filip Farnebo & Kalle Conneryd Lundgren, *Management of the Midface in the Transgender Patient*, 30 J. CRANIOFACIAL SURGERY 1383, 1383 (2019) (“An important aspect when discussing FFS is the distinction between improving the appearance in terms of beauty and to feminize the face. Although the same patient may be interested in acquiring a more youthful or beautiful look as they age, that should be regarded by the surgeon as a separate entity to the feminization aspects of the face. An adequate feminization procedure of the face will allow the transgender patient to age gracefully similarly to other females. To add cosmetic procedures for aesthetic reasons is then the patients’ personal choice.”); Ara A. Salibian & Rachel Bluebond-Langner, *Lip Lift*, 27 FACIAL PLASTIC SURGERY CLINICS N. AM. 261, 264-65 (2019) (providing guidance on the distinctions between performing cosmetic lip lifts and lip lifts for feminization).

²⁰ See Coleman et al., *supra* note 17 (referring to surgery, including facial gender-affirming surgery, as being medically necessary for the treatment of gender dysphoria); Salibian and Bluebond-Langner, *supra* note 19 at 263 (observing that facial gender affirming surgeries ““are as effective in treating gender dysphoria in certain cases [as breast surgeries and genital surgeries]”); Gennaro Selvaggi, Stan Monstrey & Peter Ceulemans, *Surgery: Male-to-Female Patient*, in PRINCIPLES OF TRANSGENDER MEDICINE AND SURGERY 105 (2007) (listing the three categories of reassignment surgeries: genital surgery, breast surgery, and non-genital, non-breast surgeries including facial reassignment surgery).

transgender women “choose to undergo facial surgery either before or in lieu of genital or chest reconstruction.”²¹

II. Facial gender confirmation surgery is necessary for and appropriate to the treatment of gender dysphoria.

Typically masculine faces differ in specific, known, and measurable ways due to exposure to testosterone from typically feminine faces.²² The sex of faces can be readily recognized because human faces are sexually dimorphic, that is, faces contain significant distinguishing sex characteristics that make typically male and typically female faces readily distinguishable.²³ And “it is the skull itself that provides the architecture of facial sex difference.”²⁴ For example, the chin, nose and forehead are the primary characteristics anthropologists and forensic pathologists can use to determine the sex of a skull.²⁵ Males generally have wider

²¹ Jens Urs Berli & Eric Plemons, *The Importance of Facial Gender Confirmation Surgery*, in GENDER CONFIRMATION SURGERY: PRINCIPLES AND TECHNIQUES FOR AN EMERGING FIELD 91 (Loren S. Schechter ed., 2020), https://doi.org/10.1007/978-3-030-29093-1_11 (last visited Aug 28, 2023).

²² Jordan J. Bannister et al., *Sex Differences in Adult Facial Three-Dimensional Morphology: Application to Gender-Affirming Facial Surgery*, 24 FACIAL PLASTIC SURGERY & AESTHETIC MEDICINE S24 (2022) (using biologic data-driven approaches to demonstrate that sex accounts for 30% of facial form variation between female and male assigned individuals); see also Salibian and Bluebond-Langner, *supra* note 19 at 263 (“Male and female faces have a multitude of different distinct features that create an overall masculine or feminine appearance.”); Jens U. Berli et al., *Facial Gender Confirmation Surgery—Review of the Literature and Recommendations for Version 8 of the WPATH Standards of Care*, 18 INT’L J. TRANSGENDERISM 264 (2017); Morrison et al., *supra* note 5 at 1759.

²³ See also Marcelo Di Maggio, *Forehead and Orbital Rim Remodeling*, 27 FACIAL PLASTIC SURGERY CLINICS N. AM. 207 (2019) (Anatomic differences between female and male skulls have been evaluated and show divergence in the forehead, orbitalrim, and jaw regions.); Andrew J. O. Whitehouse et al., *Prenatal Testosterone Exposure Is Related to Sexually Dimorphic Facial Morphology in Adulthood*, 282 PROCS. ROYAL SOC’Y B: BIOLOGICAL SCIS. (2015); Rupert Dempf & Alexander W. Eckert, *Contouring the Forehead and Rhinoplasty in the Feminization of the Face in Male-to-Female Transsexuals*, 38 J. CRANIO-MAXILLO-FACIAL SURGERY 416 (2010); H. A. Wild et al., *Recognition and Sex Categorization of Adults’ and Children’s Faces: Examining Performance in the Absence of Sex-Stereotyped Cues*, 77 J. EXPERIMENTAL CHILD PSYCH. 269 (2000); J. J. Hage et al., *Gender-Confirming Facial Surgery: Considerations on the Masculinity and Femininity of Faces*, 99 PLASTIC & RECONSTRUCTIVE SURGERY 1799, 1799 (1997).

²⁴ Mirco Raffaini et al., *Evolution of Full Facial Feminization Surgery: Creating the Gendered Face With an All-in-One Procedure*, 30 J. CRANIOFACIAL SURGERY 1419 (2019) (“Surgical discourse makes it clear that skulls are not neutral structures upon which sexually differentiated soft tissues are draped.”); Rachel Gray et al., *Osseous Transformation with Facial Feminization Surgery: Improved Anatomical Accuracy with Virtual Planning*, 144 PLASTIC & RECONSTRUCTIVE SURGERY 1159 (2019) (“Osseous differences between the male and female face almost universally include the forehead, lateral supraorbital region, lateral jawline, and chin.”); Di Maggio, *supra* note 23.

²⁵ Douglas K. Ousterhout, *Dr. Paul Tessier and Facial Skeletal Masculinization*, 67 ANNALS PLASTIC SURGERY S10 (2011) (Facial masculinization surgery performed on cisgender males, “The chin

and larger noses, protruding foreheads, deeper eyes, and less prominent cheek bones.²⁶ The average male head has a more prominent nose, brow, chin, jaw and upper neck, and average females have somewhat more protrusive cheeks.²⁷

Due to testosterone, male and female faces sharply diverge at puberty when “boys’ cranial bones grow, producing heavier brow-ridges, and larger jaws, while girls’ faces grow less and retain small brows (leading to a perception of larger eyes), jaws, and noses.”²⁸ These male-typical facial changes correlate to the concentration of testosterone in the body.²⁹ But even before puberty, sex differences are evident in six-month-old infants as a result of prenatal testosterone exposure, and the differences increase during childhood.³⁰ “[A]dult facial masculinity may also be predicted well from face shape at ages 6-7.”³¹

Differences between typically female and typically male faces are summarized as follows:³²

on an average basis is 17% vertically higher in the male and there is more fullness laterally.”); Dempf and Eckert, *supra* note 23 at 417.

²⁶ Leslie Zebrowitz, *READING FACES: WINDOW TO THE SOUL?* (1997) (Citations omitted).

²⁷ David M. Whitehead & Loren S. Schechter, *Cheek Augmentation Techniques*, 27 *FACIAL PLASTIC SURGERY CLINICS N. AM.* 199 (2019); Chrisovalantis Lakhiani & Michael T. Somenek, *Gender-Related Facial Analysis*, 27 *FACIAL PLASTIC SURGERY CLINICS N. AM.* 171, 172-5 (2019); Vicki Bruce et al., *Sex Discrimination: How Do We Tell the Difference between Male and Female Faces?*, 22 *PERCEPTION* 131, 145 (1993) (3/4 of the errors were misjudging female faces. “Overall accuracy for female faces was 93.8% compared with 98.2% with the male.”).

²⁸ Lynda G Boothroyd et al., *Facial Masculinity Is Related to Perceived Age but Not Perceived Health*, 26 *EVOLUTION & HUM. BEHAV.* 417, 418 (2005) (citations omitted); Katrin Schaefer et al., *Visualizing Facial Shape Regression upon 2nd to 4th Digit Ratio and Testosterone*, 29 *COLLEGIUM ANTHROPOLOGICUM* 415, 415 (2005) (“Typical male traits develop under the influence of testosterone whereas female traits are formed under the absence of high testosterone.”).

²⁹ Whitehouse et al., *supra* note 23.

³⁰ *Id.*

³¹ Robert P. Burriss, Anthony C. Little & Emma C. Nelson, *2D:4D and Sexually Dimorphic Facial Characteristics*, 36 *ARCHIVES SEXUAL BEHAV.* 377, 378 (2007) (“Some of these differences are apparent from an early age. Male nose width, for example, is significantly greater from about age eight. Growth spurts at puberty further increase sex differences, particularly at the mandible.”).

³² Table from Schall, *supra* note 2.

Table 1: Facial Sexual Dimorphism

Heart-shaped or triangular; softer, rounded, oval with curving forms	Square and angulated with strong jaw and chin
Angle between forehead and nose is obtuse	Frontal bossing due to large frontal sinus and thick supra-orbital ridges; angle is acute
Eyebrows are arched with sit well above superior orbital rim	Eyebrows straighter and at level of the superior orbital rim
Noses are smaller and shorter with narrow bridges and narrow ala bases; upturning of tip for obtuse naso-labial angle	Noses opposite of female
Cheeks are prominent- further anterior and higher with some cheek hollowing underneath for accentuation	Cheeks are flat
Upper lips are fuller and shorter with good show of vermillion and Cupid's bow- allows more maxillary tooth show	Lips are thinner and longer
Chins are shorter, narrower, and more pointed	Chins are often long, square, and angulated
Mandible- obtuse gonial angle	Mandible has prominent angle with lipping of the bone due to masseter muscle attachments and is wider
Thyroid cartilage is less prominent; forms 120-degree angle at the notch	Thyroid cartilage very prominent with angle of 90 degrees at the notch

A. Surgery can successfully change the sex of facial features that hormones cannot.

Hormone therapy generally cannot sufficiently alter the face to alleviate the gender dysphoria caused by having male-typical facial traits.³³ The physical

³³ Bannister et al., *supra* note 22 at S29 (arguing that biologic data-driven approaches to assessing sexed variation of facial shape and form indicate that “alterations of the mandible and chin, cheek, lips, brow and forehead, and nose are potentially essential for appropriate gender transformation in [FGCS].”); See, e.g., Raffaini et al., *supra* note 24 at 1419 (explaining that soft tissue alteration is generally viewed as insufficient to feminize the face. Alteration of underlying skeletal structure is necessary.); Angela Sturm & Scott R. Chaiet, *Chondrolaryngoplasty-Thyroid Cartilage Reduction*, 27 FACIAL PLASTIC SURGERY CLINICS N. AM. 267, 267 (2019) (“Chondrolaryngoplasty, or reduction in the thyroid cartilage, is the only treatment for those with gender dysphoria due to pomus Adamus because the thyroid cartilage does not respond to gender-affirming hormone therapy such as soft tissue of the

changes from hormone therapy “are limited by the irreversible in utero and pubertal development induced by testosterone, specifically . . . bone and cartilage growth including a supraorbital ridge and prominent nasal and thyroid cartilage enlargement.”³⁴ For example, hormone therapy improves skin quality in transgender women and redistributes facial fat, but it has no effect on the shape of the nasal bone and cartilage.³⁵ Thus, surgery is required in many cases.³⁶

Studies have shown that postoperative patients who received facial gender confirmation surgery were more likely to be perceived correctly as female.³⁷ FGCS changes the social perception of a patient’s gender to more closely align with their gender identity.³⁸

Studies have strongly supported the significance of forehead modification in transgender patients.³⁹ The forehead is easily distinguishable between males and

face.”).

³⁴ Luis Capitán et al., *Facial Gender Confirmation Surgery: A Protocol for Diagnosis, Surgical Planning, and Postoperative Management*, 145 *PLASTIC & RECONSTRUCTIVE SURGERY* 818e, 820e (2020) (the growth of “the frontonaso-orbital complex, the nose, the malar region, the lower jaw, and the thyroid cartilage . . . under hormonal influence is not medically reversible, and thus these features are generally approached and modified using surgery.”); Natghian et al., *supra* note 19 at 1383 (“The start of hormonal therapy after puberty does consequently not prevent the development of the masculine facial structures.”); Kalle Conneryd Lundgren & Maarten J. Koudstaal, *Midfacial Bony Remodeling*, 27 *FACIAL PLASTIC SURGERY CLINICS N. AM.* 221, 221 (2019) (“Consequently, the start of hormonal treatment after the onset of puberty will not prevent the development of facial bony structures with a typical masculine appearance.”); *see also* Alexander R. Facque, Daniela Atencio & Loren S. Schechter, *Anatomical Basis and Surgical Techniques Employed in Facial Feminization and Masculinization*, 30 *J. CRANIOFACIAL SURGERY* 1406, 1406 (2019) (“Under the effects of masculinizing pubertal hormones, the supraorbital ridges become prominent, and the jaw widens.”); John F. Randolph, *Gender-Affirming Hormone Therapy for Transgender Females*, 61 *CLINICAL OBSTETRICS & GYNECOLOGY* 705, 713 (2018).

³⁵ Raúl J. Bellinga et al., *Technical and Clinical Considerations for Facial Feminization Surgery With Rhinoplasty and Related Procedures*, 19 *JAMA FACIAL PLASTIC SURGERY* 175 (2017).

³⁶ *See, e.g.*, Raffaini et al., *supra* note 24 at 1419 (explaining that soft tissue alteration is generally viewed as insufficient to feminize the face. Alteration of underlying skeletal structure is necessary.); Sturm and Chaiet, *supra* note 33 at 267 (“Chondrolaryngoplasty, or reduction in the thyroid cartilage, is the only treatment for those with gender dysphoria due to pomus Adamus because the thyroid cartilage does not respond to gender-affirming hormone therapy such as soft tissue of the face.”).

³⁷ Fisher, *supra* note 3 at 703-09 (“Postoperative FFS patients were gendered as female 94.27% of the time with a CM of 7.78. Ninety-five percent of patients showed a significant improvement in CM after FFS.”); *see also* Kevin Chen et al., *Facial Recognition Neural Networks Confirm Success of Facial Feminization Surgery*, 145 *PLASTIC & RECONSTRUCTIVE SURGERY* 203 (2020) (demonstrating that facial gender affirming surgery increases the likelihood that artificial intelligence will register transgender women as being women).

³⁸ Fisher, *supra* note 3; Chen et al., *supra* note 37.

³⁹ Bradley S. Eisemann et al., *Technical Pearls in Frontal and Periorbital Bone Contouring in*

females, and “[m]any of the most prominent gender differences have been found to exist in the supraorbital and frontal cranial region of the facial skeleton.”⁴⁰ The forehead plays a significant role in whether a person is recognized as male or female.⁴¹ Female foreheads generally have “less flatness, and more of a continuous mild curvature.”⁴² Female foreheads are more vertical than male foreheads, which also have a more acute nasofrontal angle.⁴³ Surgery can reduce the protrusion of the male brow ridge above the eyes, correcting the concavity of the forehead, which “eliminates the masculine characteristic and gives a continuous female curvature of the forehead.”⁴⁴ Virtually all facial gender confirmation surgery patients require forehead contouring; forehead and orbital rim remodeling is the “foundation” of facial gender confirmation surgery.⁴⁵

Gender-Affirmation Surgery, 146 *PLASTIC & RECONSTRUCTIVE SURGERY* 326e (2020); Jordan C. Deschamps-Braly, *Approach to Feminization Surgery and Facial Masculinization Surgery: Aesthetic Goals and Principles of Management*, 30 *J. CRANIOFACIAL SURGERY* 1352, 1354 (2019); Di Maggio, *supra* note 23 at 207-20; Luis Capitán et al., *Facial Feminization Surgery: The Forehead. Surgical Techniques and Analysis of Results*, 134 *PLASTIC & RECONSTRUCTIVE SURGERY* 609, 609-19 (2014).

⁴⁰ Matthew K. Lee, Osamu Sakai & Jeffrey H. Spiegel, *CT Measurement of the Frontal Sinus - Gender Differences and Implications for Frontal Cranioplasty*, 38 *J. CRANIO-MAXILLO-FACIAL SURGERY* 494, 499 (2010).

⁴¹ Deschamps-Braly, *supra* note 39 at 1354 (“Correction of the forehead may be the most important thing one can do for a transgender patient. It is the most important gender marker in a face.”); see Jeffrey H. Spiegel, *Facial Determinants of Female Gender and Feminizing Forehead Cranioplasty*, 121 *LARYNGOSCOPE* 250, 3 (2011) (“Studies documenting the differences between male and female eyes and eyebrows have shown that a man’s eyebrows are heavier, straighter, and closer to the eyes. In contrast, women’s eyebrows are more arched, rising to a peak at the lateral limbus.”); Capitán et al., *supra* note 34.

⁴² Dempf & Eckert, *supra* note 23 at 416 (“The male forehead has extensive supraorbital bossing, and above this, there is often a flat area before the convex curvature of the upper forehead begins. In the female, the degree of supraorbital bossing is considerably less, frequently non-existent, and above this, there is usually less flatness and more of a continuous mild curvature.”); Lakhiani and Somenek, *supra* note 27 at 173 (noting that a feminine forehead tends to be “less flat, with a generally continuous mild curvature that continues to the vertex”); Selvaggi, Monstrey, and Ceulemans, *supra* note 20 at 110.

⁴³ Hailey M. Juszczak et al., *An Update in Facial Gender Confirming Surgery*, 27 *CURRENT OP. OTOLARYNGOLOGY & HEAD AND NECK SURGERY* 243, 245 (2019); K. Altman, *Forehead Reduction and Orbital Contouring in Facial Feminisation Surgery for Transgender Females*, 56 *BRIT. J. ORAL & MAXILLOFACIAL SURGERY* 192 (2018).

⁴⁴ Altman, *supra* note 43; Selvaggi, Monstrey, and Ceulemans, *supra* note 20 at 111; Eisemann et al., *supra* note 39 at 3293 (“Changes made to the forehead and periorbital region can have dramatic effects in gender-affirmation surgery. The described technique of frontal and periorbital bone contouring allows for a safe and consistent surgical outcome in properly selected patients.”).

⁴⁵ Di Maggio, *supra* note 23 at 220 (“Without a doubt, the foundation of the feminization and the facial features remodeling is the forehead and orbital rim remodeling together with the remodeling of the frontonasal angle that gives continuity to the rhinoplasty. The orbital rim

Eyebrows are similarly important cues in identifying gender.⁴⁶ Measuring the gap separating the eyebrows is one of the “better discriminators of facial sex.”⁴⁷ In contrast with male faces, females tend to have thinner eyebrows that are higher above the eyes.⁴⁸ Additionally, the vertical distances between the eyelids and the eyebrows⁴⁹ and between the lid and upper eyelid crease⁵⁰ are greater in females than in males. A browlift is a common way to raise the eyebrows and the hairline⁵¹—females also have higher hairlines—and “significantly feminizes this area.”⁵² Forehead reconstruction and simultaneous hair transplant can feminize the hairline pattern, an important feature of gender identification in the upper third of the face.⁵³

remodeling surgery to change the expression of the eyes is key to obtain the best result possible.”); Bauback Safa et al., *Current Concepts in Feminizing Gender Surgery*, 143 *PLASTIC & RECONSTRUCTIVE SURGERY* 1081e, 1083e (2019) (“The forehead contour differs greatly between women and men and is treated in 95 percent of patients.”).

⁴⁶ Marcelo Ruben Di Maggio, Joaquin Nazar Anchorena & Juan Cruz Dobarro, *Surgical Management of the Nose in Relation With the Fronto-Orbital Area to Change and Feminize the Eyes’ Expression*, 30 *J. CRANIOFACIAL SURGERY* 1376, 1378 (2019) (“The male eyebrows are heavier, straighter, and closer to the eyes. In contrast, a woman’s eyebrows are more arched.”); Melody Scheefer Van Boerum et al., *Chest and Facial Surgery for the Transgender Patient*, 8 *TRANSLATIONAL ANDROLOGY & UROLOGY* 219, 223 (2019) (“Differences in the upper-third of the face are most notable with regards to forehead contour, hairline and brow position.”); Masami K. Yamaguchi, Tatsu Hirukawa & So Kanazawa, *Judgment of Gender through Facial Parts*, 24 *PERCEPTION* 563, 574 (1995).

⁴⁷ Bruce et al., *supra* note 27.

⁴⁸ Jean-Yves Baudouin & Mathieu Gallay, *Is Face Distinctiveness Gender Based?*, 32 *J. EXPERIMENTAL PSYCH.: HUM. PERCEPTION & PERFORMANCE* 789, 790 (2006); *see also* Altman, *supra* note 43.

⁴⁹ Jean Yves Baudouin & Guy Tiberghien, *Gender Is a Dimension of Face Recognition*, 28 *J. EXPERIMENTAL PSYCH.: LEARNING, MEMORY & COGNITION* 362, 363 (2002).

⁵⁰ Lakhiani and Somenek, *supra* note 27 at 173 (“The male upper eyelid crease is generally positioned lower, with a minimum of 8 mm above the lid margin, compared with a maximum of 12 mm for women.”).

⁵¹ Altman, *supra* note 43 at 192-97.

⁵² Douglas K. Ousterhout, *FACIAL FEMINIZATION SURGERY: A GUIDE FOR THE TRANSGENDERED WOMAN* 11, 15, 22 (2009); Deschamps-Braly, *supra* note 36 at 1353 (“Altering the hairline is of significant importance in feminizing the face. Female hairlines fall between 5.5 and 5.8 cm above the brows in females and significantly higher in males”).

⁵³ David W. Chou et al., *Initial Facial Feminization Surgery Experience in a Multicenter Integrated Health Care System*, 163 *OTOLARYNGOLOGY- HEAD & NECK SURGERY* 737 (2020) (reporting Kaiser Permanente patients most commonly undergo surgery to address the upper third of the face); Anthony Bared & Jeffrey S. Epstein, *Hair Transplantation Techniques for the Transgender Patient*, 27 *FACIAL PLASTIC SURGERY CLINICS N. AM.* 227, 232 (2019) (“Hairline patterns and facial hair distribution can be gender-identifying traits. Women tend to have a lower and more rounded hairline than men as well as having more arched brows, whereas men have a prevalence of facial hair.”); Luis Capitán et al., *The Upper Third in Facial Gender Confirmation Surgery: Forehead and Hairline*, 30 *J. CRANIOFACIAL SURGERY* 1393, 1394

Likewise, rhinoplasty is another common feminizing procedure. Female noses are smaller and have a less angular nasal tip than male noses.⁵⁴ Male noses are “more protrusive, ranging from a straight to a convex profile, whereas the female nose tends to range from a straight to a somewhat concave profile.”⁵⁵ A smaller and lower nose with a greater nasal tip projection can help create a female countenance in transgender women.⁵⁶ And changing the shape of the nose “can have significant effects on the apparent masculinity of the face.”⁵⁷ “The nose is a prominent feature on the face, and its refinement can significantly improve gender recognition.”⁵⁸ The feminizing effects of rhinoplasty are often more pronounced when accompanied by other procedures such as brow ridge reduction and correcting the jaw and chin.⁵⁹

Furthermore, females tend to have heart-shaped or triangular faces,⁶⁰ as well as prominent cheekbones.⁶¹ Cheek implants or autologous fat grafting can help to achieve that overall female shape and are “paramount in certain cases.”⁶² The size and placement of the mouth can signify gender as well. Females tend to have fuller lips and “a shorter distance between the subnasale and the vermillion

(2019) (“In terms of gender, the male hairline tends to have an M-shaped pattern with recessions at the temples. The hairline of women usually has a rounded shape . . . and, proportionally, the hairline implantation is higher in the center than with men.”); Van Boerum et al., *supra* note 46 (“Differences in the upper-third of the face are most notable with regards to forehead contour, hairline and brow position.”); Luis Capitán et al., *Facial Feminization Surgery: Simultaneous Hair Transplant during Forehead Reconstruction*, 139 PLASTIC & RECONSTRUCTIVE SURGERY 573 (2017).

⁵⁴ Capitán et al., *supra* note 34 at 820e; Di Maggio, Nazar Anchorena, and Dobarro, *supra* note 46 at 1377; Deschamps-Braly, *supra* note 39 at 1356; Safa et al., *supra* note 45 at 1084e; Selvaggi, Monstrey, and Ceulemans, *supra* note 20 at 111; J. J. Hage, M. Vossen & A. G. Becking, *Rhinoplasty as Part of Gender-Confirming Surgery in Male Transsexuals: Basic Considerations and Clinical Experience*, 39 ANNALS PLASTIC SURGERY 266, 266 (1997).

⁵⁵ Zebrowitz, *supra* note 26 at 17.

⁵⁶ Tony Roberts & Vicki Bruce, *Feature Saliency in Judging the Sex and Familiarity of Faces*, 17 PERCEPTION 475, 477 (1988).

⁵⁷ Bruce et al., *supra* note 27 at 150.

⁵⁸ Bellinga et al., *supra* note 35.

⁵⁹ Hage, Vossen, and Becking, *supra* note 54 at 270; see Natghian, Farnebo, and Lundgren, *supra* note 19 at 1383 (“[T]he relations between specific parts of the patients [sic] skeletal face will determine whether the face is perceived as feminine or masculine.”).

⁶⁰ K. Altman, *Facial Feminization Surgery: Current State of the Art*, 41 INT’L J. ORAL & MAXILLOFACIAL SURGERY 885, 885 (2012).

⁶¹ Zebrowitz, *supra* note 26.

⁶² Capitán et al., *Facial Gender Confirmation Surgery*, *supra* note 34 at 820e; Juszczak et al., *supra* note 43 at 247.

border” of the upper lip.⁶³ And whereas females tend to show their upper teeth when their mouths are slightly open, males “have a large relative amount of lower tooth show when their mouths are slightly open.”⁶⁴

Males and females also have marked differences in the structures of the chin, which is “a significant marker of gender.”⁶⁵ Females tend to have more “pointed, narrow and vertically shorter,” chins while male chins are wider and vertically higher.⁶⁶ A chin implant can feminize the face.⁶⁷ The aim of feminizing genioplasty is to “reduce the chin height and width by cutting the anterior portion of the mandible ... and then removing/repositioning segments in order to give the chin a shorter, rounder appearance.”⁶⁸

In addition, the angle of a jaw is sexually dimorphic with females having a more angled jaw and males having a squared off, flat jaw.⁶⁹ Surgery to reduce this angle will make the face appear more feminine as jaw development and brow ridge development are two factors that disproportionately allow for classification of faces as male or female.⁷⁰

Finally, a prominent Adam’s apple is “an extremely masculine characteristic”⁷¹ that is “easily identified” as such.⁷² Both functionally and visually, an Adam’s

⁶³ Facque, Atencio, and Schechter, *supra* note 34 at 1406.

⁶⁴ Jordan Deschamps-Braly, *Feminization of the Chin: Genioplasty Using Osteotomies*, 27 FACIAL PLASTIC SURGERY CLINICS N. AM. 243, 249 (2019) (concluding that this can be addressed through a sliding genioplasty procedure, which reduces the height of the bone of the chin and allows for a smaller show of the lower teeth).

⁶⁵ Selvaggi, Monstrey, and Ceulemans, *supra* note 20 at 113; Bruce et al., *Sex Discrimination*, *supra* note 27 at 150; Capitán et al., *supra* note 34 at 820e; Safa et al., *supra* note 45 at 1084e.

⁶⁶ Deschamps-Braly, *supra* note 39 at 1356 (“The male chin is more square and elongated than the female chin. The chin is approximately 20% shorter in females than in natal males.”); Selvaggi, Monstrey, and Ceulemans, *supra* note 20 at 113; Raffaini et al., *supra* note 24 at 1421 (“A pointed chin is recognized as feminine, whereas a square chin is considered masculine.”).

⁶⁷ Selvaggi, Monstrey, and Ceulemans, *supra* note 20.

⁶⁸ Schall et al., *supra* note 2.

⁶⁹ Capitán et al., *supra* note 34 at 820e; Shane D. Morrison & Thomas Satterwhite, *Lower Jaw Recontouring in Facial Gender-Affirming Surgery*, 27 FACIAL PLASTIC SURGERY CLINICS N. AM. 233 (2019); Safa et al., *supra* note 45 at 1084e; Burriss, Little, and Nelson, *supra* note 31 at 379; A. G. Becking et al., *Facial Corrections in Male to Female Transsexuals: A Preliminary Report on 16 Patients*, 54 J. ORAL & MAXILLOFACIAL SURGERY 413, 559 (1996).

⁷⁰ Randy Thornhill & Steven W. Gangestad, *Facial Sexual Dimorphism, Developmental Stability, and Susceptibility to Disease in Men and Women*, 27 EVOLUTION AND HUM. BEHAVIOR 131, 135 (2006).

⁷¹ Altman, *supra* note 60 at 886.

⁷² Hammond, Cohen, & Rosow, *supra* note 13 at 1409; Capitán et al., *supra* note 34 at 820e

apple is unaffected by hormone therapy.⁷³ A chondrolaryngoplasty (tracheal shave) is a safe and effective procedure to eliminate this sex-specific characteristic that otherwise makes transgender women appear male.⁷⁴

B. Peer-reviewed literature demonstrates that facial gender confirmation successfully alleviates gender dysphoria and facilitates a patient’s social transition.

Facial gender confirmation surgery is appropriate with regard to standards of good clinical practice and generally recognized as effective by the relevant scientific community, evidence-based medicine, and professional standards of care.⁷⁵ There is a significant body of research documenting the safety,⁷⁶ efficacy,⁷⁷ and medical

(“The larynx structure generally has a greater volume and is larger [greater in diameter and more prominent] in men.”).

⁷³ Sarah Hammond, Erin Cohen, and David Rosow, *supra* note 13 at 1410 (“While androgen use can lower the voice in female-to-male transgender patients, estrogens have no significant effect on the physical properties of the vocal folds or the laryngeal framework, and thus more extensive interventions must be performed.”); Sturm and Chaïet, *supra* note 33 (“Chondrolaryngoplasty, or reduction in the thyroid cartilage, is the only treatment for those with gender dysphoria due to pomus Adamus because the thyroid cartilage does not respond to gender-affirming hormone therapy such as soft tissue of the face.”).

⁷⁴ Altman, *supra* note 60 at 893; Sarah Hammond, Erin Cohen, and David Rosow, *supra* note 13; Jeffrey H. Spiegel & Gerardo Rodriguez, *Chondrolaryngoplasty under General Anesthesia Using a Flexible Fiberoptic Laryngoscope and Laryngeal Mask Airway*, 134 ARCH OTOLARYNGOL HEAD NECK SURG 704 (2008); Safa et al., *supra* note 45 at 1084e.

⁷⁵ Altman, *supra* note 60 at 893; Becking et al., *supra* note 69 at 413-8.

⁷⁶ Abigail R. Tirrell et al., *Facial Feminization Surgery: A Systematic Review of Perioperative Surgical Planning and Outcomes*, 10 PLAST RECONSTR SURG GLOB OPEN e4210, 1 (2022) (concluding, from a review of 22 papers and 1302 patients, that FGCS is safe and effective); David W. Chou et al., *Initial Facial Feminization Surgery Experience in a Multicenter Integrated Health Care System*, 163 OTOLARYNGOL HEAD NECK SURG 737, 4 (2020); Parag Shashank Telang, *Facial Feminization Surgery: A Review of 220 Consecutive Patients*, 53 INDIAN J PLAST SURG 244, 249 (2020) (“All 220 patients in this series had an uneventful recovery . . .”); Nikita Gupta, Jacqueline Wulu & Jeffrey H. Spiegel, *Safety of Combined Facial Plastic Procedures Affecting Multiple Planes in a Single Setting in Facial Feminization for Transgender Patients*, 43 AESTH PLAST SURG 993 (2019) (Boston Medical Center surgeons reporting that it is safe to perform multiple facial procedures in multiple planes in a single setting); Shane D. Morrison et al., *Facial Feminization: Systematic Review of the Literature*, 137 PLAST RECONSTR SURG 1759, 1769 (2016) (reviewing 15 studies involving 1121 patients and finding FGCS to be a safe medical intervention).

⁷⁷ David P. Alper et al., *Quantifying Facial Feminization Surgery’s Impact: Focus on Patient Facial Satisfaction*, 11 PLAST RECONSTR SURG GLOB OPEN e5366, 7 (2023) (finding that FGCS, especially in younger patients, resulted in significantly improved quality of life); Devin Coon et al., *Facial Gender Surgery: Systematic Review and Evidence-Based Consensus Guidelines from the International Facial Gender Symposium*, 149 PLASTIC AND RECONSTRUCTIVE SURGERY 212, 213 (2022) (aggregating data from seven studies and explaining that “235 of 295 patients [80 percent] reported feeling more feminine as a result of [facial gender confirmation] surgery . . .”); Telang, *supra* note 76 at 249 (explaining that, in a study involving 220

necessity of facial gender confirmation surgery.⁷⁸ One study found that “facial feminization is a key element in the treatment of gender dysphoria and that it can be more important from the patient’s psychological point of view” than genital reassignment.⁷⁹ This is unsurprising because, “[i]f the ultimate goal of [male-to-female] transition is for the patient to be recognized by others as a woman, then the most profound change can be achieved by focusing on what others see the most—the face.”⁸⁰

In a prospective study of 66 consecutive patients, researchers concluded that the “study supports the efficacy of facial gender confirmation surgery in improving quality of life for transgender women; enacting objective cephalometric changes; and achieving high satisfaction, feminine gender appearance, and good overall aesthetics with minimal complications.”⁸¹ Another study concluded that “[genital reassignment surgery] affects one’s ability to function in an intimate relationship, while FFS has the same impact on social interactions and therefore may have a far greater implication for one’s quality of life.”⁸²

Given the critical role of faces in social functioning, there is growing recognition that facial gender confirmation surgery is an essential and effective treatment for gender dysphoria in transgender women. Di Maggio et al. recently observed:

Genital surgery can be an important part of gender reassignment, but it is not a major factor in a transgender person having difficulty obtaining social acceptance as a member of the opposite sex ... Facial surgery plays an increasingly important role in the gender

patients, all patients “reported significant improvement in their feeling of gender incongruence,” the ICD label for gender dysphoria.); Shane D. Morrison et al., *supra* note 4 at 1508 (finding significant immediate and long-term quality of life improvements following facial gender affirming surgery).

⁷⁸ Berli et al., *supra* note 22.

⁷⁹ Capitán et al., *supra* note 34; Salibian and Bluebond-Langner, *supra* note 19 (noting that facial surgeries “are as effective in treating gender dysphoria in certain cases [as breast surgeries and genital surgeries]”); Cf. Berli and Plemons, *supra* note 21 (“FGCS patients frequently reported that they choose to undergo facial surgery either before or in lieu of genital or chest reconstruction...”).

⁸⁰ Alex Dubov & Liana Fraenkel, *Facial Feminization Surgery: The Ethics of Gatekeeping in Transgender Health*, 18 AM J BIOETH 3, 5 (2018).

⁸¹ Shane D. Morrison et al., *supra* note 4 at 1505; Fisher, *supra* note 3 (“Patients after FFS are more likely to be identified as female and with greater confidence than before surgery. This is despite preoperative female hormone therapy, and nonsurgical methods that patients use to feminize their appearance.”).

⁸² Alex Dubov & Liana Fraenkel, *Facial Feminization Surgery: The Ethics of Gatekeeping in Transgender Health*, 18 AM J BIOETH 3, 3-9 (2018) (Further concluding that, “FFS is a cost-effective intervention that needs to be covered by insurance policies. The benefits of such coverage far exceed the insignificant costs.”) (spelling corrected).

reassignment process, particularly in male-to-female transgender [women] with a strong masculine appearance who may benefit from [facial surgery].⁸³

In fact, “[t]he increasing prevalence of gender affirmation surgery reveals a shift in therapeutic treatments for gender dysphoria from being focused on the genitalia as the location of bodily sex toward an understanding of sex as a product of social recognition.”⁸⁴ Consistent with this understanding of both the internal and societal challenges of treating gender dysphoria, one group of researchers recently reported that for their patients, “if the mirror reflects a masculine face, then any genital surgery will be inadequate, or even potentiate dysphoria.”⁸⁵ Without facial surgery, their patients frequently state that they “do not feel safe to transition either socially or emotionally.”⁸⁶

For many transgender women, facial surgery is necessary to present as female.⁸⁷ Feminizing the face “has a significant impact in determining the gender of the patient.”⁸⁸ Surgery results in the loss of masculine features, and gender dysphoria is reduced.⁸⁹ The results are stable in long-term follow-ups and desired shape is achieved immediately after surgery.⁹⁰

Studies have shown results that preoperative facial surgery transgender patients, even those who are on hormone therapy for an extended time and who use hair and makeup to feminize their faces, are only correctly gendered about half the time; whereas after surgery, patients are correctly perceived as female 94-98% of the time.⁹¹ Feminizing the forehead results in the likelihood that the patient will

⁸³ Di Maggio, Nazar Anchorena, and Dobarro, *supra* note 46 at 1377; see also Chen et al., *supra* note 37 (“In these daily interactions the face is the main visible feature determining gender and frequently, despite years of hormonal therapy and expert application of makeup, hair, or wigs, patients are often still misidentified as male.”).

⁸⁴ Lakhiani and Somenek, *supra* note 27 at 171.

⁸⁵ Nick Esmonde et al., *The Role of Facial Gender Confirmation Surgery in the Treatment of Gender Dysphoria*, 30 J CRANIOFAC SURG 1387, 1387 (2019).

⁸⁶ Esmonde et al., *supra* note 85.

⁸⁷ *Id.* at 1391 (“Facial gender confirmation surgery is an essential treatment for patients with gender dysphoria related to their facial appearance.”).

⁸⁸ Spiegel, *supra* note 41 at 250.

⁸⁹ Mirco Raffaini, Alice Sara Magri & Tommaso Agostini, *Full Facial Feminization Surgery: Patient Satisfaction Assessment Based on 180 Procedures Involving 33 Consecutive Patients*, 137 PLAST RECONSTR SURG 438 (2016); Morrison et al., *supra* note 5.

⁹⁰ Johannes Franz Hoenig, *Frontal Bone Remodeling for Gender Reassignment of the Male Forehead: A Gender-Reassignment Surgery*, 35 AESTHETIC PLAST SURG 1043, 1045 (2011).

⁹¹ Chen et al., *supra* note 37 (finding that four artificial intelligence networks capable of facial recognition and gender identification misgendered preoperative patients 47% of the time, but correctly identified postoperative patients’ gender 98% of the time); Fisher, *supra* note

be identified as a woman.⁹² Feminizing the face is more important for social recognition as female than genital reassignment surgery.⁹³

Improvement in quality of life is seen following surgical facial gender confirmation, and it should be considered an integral part of the treatment for gender dysphoria.⁹⁴ Surgery decreases body dissatisfaction and experienced dysphoria in social interactions.⁹⁵ Successful facial gender confirmation surgery “change[s] the lives of troubled individuals in a way that provides patients immeasurable relief and happiness.”⁹⁶ Patients experience significant improvements in lifestyle, social relationships, self-esteem, body image, employment status, and sexual adjustment.⁹⁷ Other studies report that patient satisfaction, including increased happiness and satisfaction with life, is high

3 (finding that in a large online survey that “that preoperative [facial surgery] transgender patients who are on hormone therapy for an extended time and use hair and makeup to feminize their faces are only correctly gendered by the public about half of the time. Whereas, after facial feminization, patients are correctly gendered as female 94% of the time.”).

⁹² Spiegel, *supra* note 41 at 257.

⁹³ Sarah Hammond, Erin Cohen, and David Rosow, *supra* note 13 (noting that transgender individuals recognize they “will only be able to truly transition in the public sphere if they are able to interact in every-day life in their chosen societal role” and reporting that “many transgender patients are satisfied with these more recognizable facial transitions and do not go on to seek bottom surgery”); Shams and Motamedi, *supra* note 13.

⁹⁴ David W. Chou et al., *Quality of Life Outcomes After Facial Feminization Surgery*, 24 FACIAL PLAST SURG AESTHET MED S44, S45-46 (2022) (finding that FGCS improves subjective and objective facial femininity and patients experienced fewer limitations in social and professional activities); Farah Sayegh et al., *Facial Masculinization Surgery and Its Role in the Treatment of Gender Dysphoria*, 30 J CRANIOFAC SURG 1339 (2019); see Tiffany A. Ainsworth & Jeffrey H. Spiegel, *Quality of Life of Individuals with and without Facial Feminization Surgery or Gender Reassignment Surgery*, 19 QUAL LIFE RES 1019, 1024 (2010) (finding that the mental health-related quality of life for transsexual women who have had feminizing facial reconstruction is significantly higher than for transsexual women who have not had feminizing facial reconstruction).

⁹⁵ Becking et al., *Facial Corrections*, *supra* note 69.

⁹⁶ Jeffrey H. Spiegel, *Challenges in Care of the Transgender Patient Seeking Facial Feminization Surgery*, 16 FACIAL PLASTIC SURGERY CLINICS OF NORTH AMERICA 233 (2008).

⁹⁷ Josef Isung et al., *Craniofacial Reconstructive Surgery Improves Appearance Congruence in Male-to-Female Transsexual Patients*, 46 ARCH SEX BEHAV 1573, 1575 (2017) (citing a 2017 study on 10 participants which found that for half of the patients, “already by the 6-month follow-up, surgery had made their life a radical turn for the better.”); S. M. Balaji, *Facial Feminization - Surgical Modification for Indian, European and African Faces*, 6 ANN MAXILLOFAC SURG 210 (2016); Shams and Motamedi, *supra* note 13 at 8-9.

following these procedures.⁹⁸ Facial surgery is successful in reducing mental health issues to typical population levels.⁹⁹

In fact, “[m]any individuals in the transgender community place just as much if not more importance on their transformation as effected by secondary sex characteristics, and rightly so”—something that is being reflected in clinical practice as well.¹⁰⁰

While facial gender confirmation surgery is undertaken primarily to help alleviate the debilitating cognitive dissonance and discomfort of gender dysphoria, there are also effects in terms of reducing negative encounters with others. Misgendering, staring and confusion by others triggers gender dysphoria and threatens the well-being and safety of transgender women. People who are visibly transgender—generally due to their secondary sex characteristics—experience more discrimination than non-visibly transgender people.¹⁰¹ People respond with a more negative assessment of transgender women with typically masculine facial features as compared to more typical female features.¹⁰² The more frequently a person is seen as transgender by others, “the more they are subject to major and

⁹⁸ Altman, *supra* note 43; Lakhiani and Somenek, *supra* note 27 at 171 (“[P]atient satisfaction levels following feminization of the male face are generally very high.”); Morrison et al., *supra* note 5; Raffaini et al., *supra* note 24; Simone La Padula et al., *One-Step Facial Feminization Surgery: The Importance of a Custom-Made Preoperative Planning and Patient Satisfaction Assessment*, 72 J PLAST RECONSTR AESTHET SURG 1694, 1698 (2019).

⁹⁹ Annelou L. C. de Vries et al., *Comparing Adult and Adolescent Transsexuals: An MMPI-2 and MMPI-A Study*, 186 PSYCHIATRY RES 414, 416 (2011) (finding the majority of adult transgender people scored “in the clinical range” on two or more clinical scales of the MMPI-2, a widely used mental health assessment questionnaire, and 35% were in the clinical range for four or more scales); Ainsworth and Spiegel, *supra* note 94 at 1021; Max Mandelbaum, Chrisovalantis Lakhiani & Jerry W. Chao, *A Novel Application of Virtual Surgical Planning to Facial Feminization Surgery*, 30 J CRANIOFAC SURG 1347 (2019) (“Facial feminization surgery [FFS] provides significant improvements in transgender women’s physical, mental, and psychosocial quality of life that may approach that of the general female population.”).

¹⁰⁰ Sarah Hammond, Erin Cohen, and David Rosow, *supra* note 13 at 1410 (“Humans both perceive others and present themselves through largely visual and tactile communication.”); Lakhiani and Somenek, *supra* note 27 (“The increasing prevalence of gender affirmation surgery reveals a shift in therapeutic treatments for gender dysphoria from being focused on the genitalia as the location of bodily sex toward an understanding of sex as a product of social recognition.”).

¹⁰¹ Lisa R. Miller & Eric Anthony Grollman, *The Social Costs of Gender Nonconformity for Transgender Adults: Implications for Discrimination and Health*, 30 SOCIOLOGICAL FORUM 809 (2015); e.g., Sturm and Chaiet, *supra* note 33 (“Pomus Adams can not only be a large contributor to gender dysphoria but may also put that patient at risk for physical harm.”).

¹⁰² Kelly R. Gerhardstein & Veanne N. Anderson, *There’s More than Meets the Eye: Facial Appearance and Evaluations of Transsexual People*, 62 SEX ROLES: A JOURNAL OF RESEARCH 361, 370 (2010); Walter O. Bockting et al., *Stigma, Mental Health, and Resilience in an Online Sample of the US Transgender Population*, 103 AM J PUBLIC HEALTH 943 (2013).

day-to-day discriminatory treatment.”¹⁰³ Experiencing transgender-related discrimination, verbal or physical harassment, which is more likely when people are visibly transgender, specifically increases suicide risk.¹⁰⁴ In this context, “facial feminization can be a life-saving procedure, protecting the patient from assault, bullying and alleviating gender dysphoria”¹⁰⁵ In addition, being visibly transgender results in a greater likelihood of attempted drug/alcohol abuse and smoking.¹⁰⁶ Facial gender confirmation surgery thus creates health gains beyond alleviating gender dysphoria and attendant depression and anxiety.

Facial gender confirmation surgery “changes the social perception of a patient’s gender” even in the absence of hormone therapy and nonsurgical feminization methods.¹⁰⁷ The “gendering” of other people has important social functions, not just in reproduction, but in social interactions in general.¹⁰⁸ As one surgeon notes, “it is greatly distressing to be identified by others as a member of the opposite sex” in conflict to your own deeply held sense of self.¹⁰⁹ Outside of being misgendered, there is also internal distress associated with experiencing one’s own body as being drastically incongruent. As J. Joris Hage, MD, et al note:

In most human relationships, the face represents the most important expression between people. It reflects our personality and emotions and is intimately connected with both verbal and nonverbal communication. The head and face are commonly considered to be the location of the “self.” Because of this psychological and social significance, anything that appears abnormal in the face has a direct influence on one’s self-confidence. An individual with a noticeable deformity or incongruity of the face may be the object of visual and verbal aggression, leading to feelings of shame, impotence, anger,

¹⁰³ Miller and Grollman, *supra* note 101 at 826.

¹⁰⁴ Kristen Clements-Nolle, Rani Marx & Mitchell Katz, *Attempted Suicide among Transgender Persons: The Influence of Gender-Based Discrimination and Victimization*, 51 J HOMOSEX 53, 59 (2006).

¹⁰⁵ Van Boerum et al., *supra* note 46 at 223.

¹⁰⁶ Miller and Grollman, *supra* note 101 at 826.

¹⁰⁷ Fisher, *supra* note 3.

¹⁰⁸ Accordingly, researchers have advised that facial gender affirmation surgery be considered in all male to female patients to facilitate social transitioning. See Capitán et al., *supra* note 39 at 618.

¹⁰⁹ Spiegel, *supra* note 41 at 260; Facque, Atencio, and Schechter, *supra* note 34 at 1406 (“In aligning one’s body with their identity, the influence of social recognition and acceptance should not be underestimated. As such; facial gender confirmation surgery has the potential for relieving gender dysphoria and facilitating social transition and recognition.”).

and even humiliation. An example of such an incongruity may be masculine features found in a female face....¹¹⁰

Faces are so important as a social tool that the brain has an area “exclusively dedicated to the identification of gender, identity, age, and race at a single glance.”¹¹¹ Even infants have the ability to process male and female faces differently.¹¹² Male or female faces can be categorized by sex reliably using one or a small number of facial features.¹¹³ When a transgender woman is classified as female, this reduces negative encounters with others.¹¹⁴

While these classifications are often highly accurate, most errors are made in the direction of judging female faces as male.¹¹⁵ That is, transgender women who have ambiguous faces or some male facial qualities are likely to be perceived by others as male. Moreover, the top part of the face is categorized first, so if there is a prominent brow ridge, for example, that will override the rest of the face, and the person will be classified as male.¹¹⁶ Furthermore, other prominently masculine facial features “can impede a successful social acceptance” as a woman, and there is little way to hide the whole face in social interactions.¹¹⁷

When a transgender woman is correctly classified as female, this reduces negative social encounters. People who are visibly transgender—generally due to their

¹¹⁰ Hage et al., *supra* note 23 at 1799; Esmonde et al., *supra* note 85 at 1387 (“[E]ven when dysphoria is less pronounced insofar as one’s view of self, facial appearance—as it related to ‘not passing’ and thus becoming a target for violence or aggression—may be distressing and can lead to the desire for facial gender confirmation surgery [FGCS] in order to feel less vulnerable.”); Sarah Hammond, Erin Cohen, and David Rosow, *supra* note 13 at 1410 (“Humans both perceive others and present themselves through largely visual and tactile communication.”); Yamaguchi, Hirukawa, and Kanazawa, *supra* note 46 at 563 (“In social settings, the “face plays the most important role in transmitting visual information from one person to another.”).

¹¹¹ Juszczak et al., *supra* note 43 at 243.

¹¹² Zebrowitz, *supra* note 26 at 18.

¹¹³ Wild et al., *supra* note 23 at 2.

¹¹⁴ See Miller and Grollman, *supra* note 101 (“the more frequently trans people are read as transgender or gender nonconforming by others, the more they are subject to major and day-to-day discriminatory treatment.”).

¹¹⁵ Bruce et al., *supra* note 27 (3/4 of the errors were misjudging female faces. “Overall accuracy for female faces was 93.8% compared with 98.2% with the male.”).

¹¹⁶ Jean-Yves Baudouin & Glyn W. Humphreys, *Configural Information in Gender Categorisation*, 35 PERCEPTION 531, 539 (2006) (studying categorization by “aligning the top half of one face with the bottom half of another. The two faces had the same or different genders.”).

¹¹⁷ Natghian, Farnebo, and Lundgren, *supra* note 19 at 1383 (“The face, and in particular the midface, is highly exposed and can hardly be covered by clothing or by a wig as can be done with the upper part of the skull or a scarf to cover the neck and the lower face.”).

secondary sex characteristics—experience more discrimination than non-visibly transgender people.¹¹⁸ People respond with a more negative assessment of transgender women with masculine facial features as compared to more typical female features.¹¹⁹ The more frequently a person is seen as transgender by others, “the more they are subject to major and day-today discriminatory treatment.”¹²⁰ Experiencing transgender-related discrimination, verbal or physical harassment, which is more likely when people are visibly transgender, specifically increases suicide risk.¹²¹ In this context, “facial feminization can be a life-saving procedure, protecting the patient from assault, bullying and alleviating gender dysphoria . . .”¹²² In addition, being visibly transgender results in a greater likelihood of attempted drug/alcohol abuse and smoking.¹²³ Facial gender confirmation surgery thus creates health gains beyond alleviating gender dysphoria and attendant depression and anxiety.

III. Facial gender confirmation surgery is provided in accordance with generally accepted standards of medical care in the community.

A. Medical opinions of professional societies and standards of care hold facial gender confirmation surgery in transgender women to be appropriate medical treatment.

Internationally recognized medical associations and accepted standards of care acknowledge the medical necessity of facial reassignment. The WPATH Standards of Care consider facial gender affirming surgeries to be medically necessary.¹²⁴ Recent peer-reviewed publications similarly conclude that facial gender confirmation surgery is medically necessary in many cases.¹²⁵

WPATH also released a statement on medically necessary treatment for transgender people under insurance plans that specifically listed facial gender

¹¹⁸ Miller and Grollman, *supra* note 101; e.g., Sturm and Chaiet, *supra* note 33 (“Pomus Adams can not only be a large contributor to gender dysphoria but may also put that patient at risk for physical harm.”).

¹¹⁹ Gerhardstein and Anderson, *supra* note 102 at 370; Bockting et al., *supra* note 102.

¹²⁰ Miller and Grollman, *supra* note 101 at 826.

¹²¹ Clements-Nolle, Marx, and Katz, *supra* note 104 at 59.

¹²² Van Boerum et al., *supra* note 46 at 223.

¹²³ Miller and Grollman, *supra* note 101 at 826.

¹²⁴ Coleman et al., *supra* note 15.

¹²⁵ E.g., Dong Li et al., *Necessity of Facial Contouring in Feminization Surgery for Chinese Transgender Females*, 9 ANNALS TRANSLATIONAL MEDICINE 603 (2021) (discussing the benefits of FGCS in treating gender dysphoria and concluding it is it “is imperative that [FGCS] should be considered as the necessary gender-confirming surgery”).

confirmation procedures as medically necessary surgeries.¹²⁶ WPATH notes that, “[n]on-genital surgical procedures are routinely performed . . . notably, . . . facial feminization surgery,” and that “[t]hese surgical interventions are often of greater practical significance in the patient’s daily life than reconstruction of the genitals.”¹²⁷ WPATH also specifically recommends, based on the Standards of Care, that facial gender affirming surgery should be covered by insurance plans.¹²⁸

The Endocrine Society—the world’s oldest, largest, and most active organization devoted to research on hormones and the clinical practice of endocrinology—has published clinical guidelines for treatment of gender dysphoric people, which provide detailed guidance for treatment consistent with the WPATH Standards of Care.¹²⁹ The guidelines note that masculinization of the face is one of the things puberty suppression treatment in transgender adolescents is designed to prevent,¹³⁰ and notes the increased use of facial surgeries.¹³¹

B. Other insurers and external reviewers find facial gender confirmation surgery to be medically necessary.

The fact that a categorical ban on facial gender confirmation surgery is not in alignment with prevailing medical opinion is also reflected in that public and private insurers routinely cover facial gender confirmation procedures and regard them as medically necessary.¹³² Government health plans such as Medicaid and

¹²⁶ Loren S. Schechter & Jens U. Berli, *Gender Affirming Surgery: WPATH Training on Current Standards in Surgical Treatment for Gender Dysphoria Associated with Gender Incongruence*, 6 (2021), <https://wpath.org/media/cms/Documents/Insurance%20Training/WPATH%20HPP%20Surger%20for%20Handouts.pdf>; WPATH: Position Statement, *supra* note 17.

¹²⁷ Coleman et al., *supra* note 15 at 3 (quoting Selvaggi, Monstrey, and Ceulemans, *supra* note 20).

¹²⁸ WPATH, *Transgender Medical Benefits*, (2018), https://www.wpath.org/media/cms/Documents/Public%20Policies/2018/6_June/Transgender%20Medical%20Benefits.pdf.

¹²⁹ Wylie C Hembree et al., *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society* Clinical Practice Guideline*, 102 THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM 3869 (2017).

¹³⁰ *Id.* at 13.

¹³¹ *Id.* at 26.

¹³² Allison C. Hu et al., *Facial Feminization Surgery under Insurance: The University of California Los Angeles Experience*, 9 PLAST RECONSTR SURG GLOB OPEN e3572, e3572 (2021) (“An estimated 90% of all patient consults were approved for FFS under insurance.”); see, e.g., BlueCross BlueShield of Minnesota, *Gender Affirming Procedures*, (2023), <https://securecms.bluecrossmnonline.com/content/medpolicy/en/minnesota/core/all/policies/Surgery/IV-123/IV-123-011.html> (last visited Dec 4, 2023); Health Care Service Corporation, *Active Policies*, GENDER ASSIGNMENT SURGERY AND GENDER REASSIGNMENT SURGERY WITH RELATED SERVICES, POLICY NO. SUR717.001 (2023),

Medicare also do.¹³³ External reviewers routinely overturn denials of facial gender confirmation. For example, California’s Department of Managed Care’s Independent Medical Review program reversed 26 out of 33 denials appealed from 2020-late September, 2023.¹³⁴ During the same period, New York State partially or totally reversed 17 out of 27 denials appealed.¹³⁵

Furthermore, many insurance companies have removed exclusions from their health plans.¹³⁶ The federal Office of Personnel Management, which oversees the nation’s largest health plan—the Federal Employee Health Benefit Plan, providing healthcare coverage to over 8 million civilian federal employees, retirees, and their families¹³⁷—instructed insurance carriers that no FEHB Carrier may

policies.html?category=surgery&corpEntCd=HCSC (last visited Dec 14, 2023); Elevance Health, *Gender Affirming Surgery*, No. CG-SURG-27, <https://files.providernews.anthem.com/2715/CG-SURG-27.pdf>; Blue Cross Blue Shield of Massachusetts, *Gender Affirming Services (Transgender Services)*, <https://www.bluecrossma.org/medical-policies/sites/g/files/csphws2091/files/acquiadam-assets/189%20Gender%20Affirming%20Services%20%28Transgender%20Services%29%20prn.pdf>; Kaiser Permanente, *Gender-Affirming Facial Procedures Medical Necessity Criteria*, No. UR 75 (2022), <https://healthy.kaiserpermanente.org/content/dam/kporg/final/documents/health-plan-documents/coverage-information/clinical-review-gender-affirming-facial-procedures-nw.pdf> (last visited Dec 13, 2023).

¹³³ See, e.g., Husky Health Connecticut, *Gender Affirmation Surgery*, (2023), https://www.huskyhealthct.org/providers/provider_postings/policies_procedures/Gender_Affirmation_Surgery.pdf; Colorado Dep’t of Regulatory Agencies, *Gender-Affirming Care Coverage Guide | DORA Division of Insurance*, (2023), <https://doi.colorado.gov/for-consumers/consumer-resources/special-insurance-topics/lgbtq-health-care-rights/gender-affirming> (last visited Dec 4, 2023); Washington Admin. Code 182- 531-1675 (2016); NYCRR § 505.2; *Cruz v. Zucker*, 195 F. Supp. 3d 554 (S.D.N.Y. 2016), on reconsideration, 218 F. Supp. 3d 246 (S.D.N.Y. 2016), and appeal withdrawn, (Dec. 30, 2016) (holding that a categorical ban on facial gender confirmation violates the federal Medicaid Act’s Availability Provision). Medicare and the Oregon Health Plan have also covered facial gender reassignment surgeries (information on file with TLDEF). Cf. Isung et al., *supra* note 93 at 1573 (noting that as early as April 2015, the Swedish National Board of Health and Welfare’s national guidelines for care for patients with gender dysphoria “concluded that FFS could be deployed as part of the gender confirming health care, within the public health system”).

¹³⁴ California Department of Managed Health Care, INDEPENDENT MEDICAL REVIEW SEARCH, <https://wpso.dmhc.ca.gov/imr/default.aspx> (last visited Sep 25, 2023) (e.g., overturning MN20-33069, MN20- 32799, MN20-32708, MN20-32691, MN20-32360, MN19-32294, MN19-32241; upholding MN20-32808 on the basis that the surgery was to counteract the effects of aging).

¹³⁵ External Appeals Searchable Archive, NEW YORK STATE DEPARTMENT OF FINANCIAL SERVICES, <https://www.dfs.ny.gov/public-appeal/search> (last visited Sep 25, 2023).

¹³⁶ Hu et al., *supra* note 132 (“An estimated 90% of all patient consults were approved for FFS under insurance.”).

¹³⁷ Federal Employees Health Benefits, DCPAS, <https://dcpas.osd.mil/> (last visited Dec 4, 2023).

categorically exclude from coverage services related to gender affirming care, such as . . . facial gender affirming surgeries” and reiterated that coverage must be based on up-to-date standards of care.¹³⁸

IV. The best available evidence supports covering facial gender confirmation surgeries.

Evidence-based medicine is the practical—not theoretical—application of “current best evidence in making decisions about the care of individual patients.”¹³⁹ As discussed in Section II, the best available evidence supports the safety and efficacy of gender affirming facial surgery as a treatment for gender dysphoria.

Arguments to the contrary are ideologically driven, rather than evidence-based. For example, opponents of the practice of evidence-based medicine in the provision of gender-affirming care frequently cite proprietary, non-peer-reviewed surveys that have called into question the efficacy of facial gender confirmation surgery (without even making a summary their methods, results, or conclusions available to the public for review),¹⁴⁰ it is impossible to determine whether such reports are evidence-based, so they cannot form the basis of a non-discriminatory reason for denying coverage.

Moreover, while the literature on the efficacy of facial gender confirmation surgery for treating gender dysphoria does not include randomized control trials, this does not suggest that the evidence is untrustworthy.¹⁴¹ Indeed, only 18% of

¹³⁸ U.S. Office of Personnel Management, *Technical Guidance and Instructions for 2024 Benefit Proposals, Letter Number 2023-06, 26* (2023), <https://www.opm.gov/healthcare-insurance/healthcare/carriers/2023/2023-06.pdf>; U.S. Office of Personnel Management, *Coverage for Gender Affirming Care and Services*, (2023), <https://www.opm.gov/healthcare-insurance/carriers/feh/2023/2023-12.pdf>.

¹³⁹ David L. Sackett et al., *Evidence Based Medicine: What It Is and What It Isn't*, 312 *BMJ* 71 (1996).

¹⁴⁰ See, e.g., *Sex Reassignment Surgery for the Treatment of Gender Dysphoria*, HAYES, NOW A PART OF SYMPLR (2018), <https://www.hayesinc.com/publications/evidence-analysis/health-technology-assessment/sex-reassignment-surgery-for-the-treatment-of-gender-dysphoria/dir-sex707/> (last visited Sep 11, 2023) (claiming there is debate on the efficacy of sex reassignment surgery). This report is generally not available to be critically evaluated by medical scientists and clinicians. Notably, Hayes Inc. does not permit the public to purchase access to the report directly under its Report Sale Policy. *Id.* (“Hayes will review your request to purchase a report and respond to you. Individuals requesting reports due to a payment denial should contact the involved health insurer for details and information.”) (emphasis added). Moreover, it is not possible to evaluate bias, financial interests or academic credentials of the actual authors as they are not known.

¹⁴¹ Cf. Simon Day, *Evidence-Based Medicine and Rare Diseases*, 686 *ADV EXP MED BIOL* 41 (2010) (explaining that, in some cases, like rare diseases, it is very difficult or impossible to do “high quality” studies, and that “lower quality” studies form the basis of evidence-based medicine in these instances).

studies in 2018 published in the flagship journal of the American Society of Plastic Surgeons were randomized control trials.¹⁴² That same year, 84.1% of the published articles in the journal were evidence level 3 or lower (low or lower quality evidence).¹⁴³ This includes expert opinion (the lowest level of evidence, level 5), observational studies (level 4), and non-randomized clinical control trials (level 3).¹⁴⁴ Given the extreme rarity of facial gender confirmation surgeries (relative to other plastic surgery procedures, like breast reconstruction or aesthetic procedures), it is unsurprising that the best current evidence comes from observational studies (e.g., cohort studies) and expert opinion. Additionally, as a federal court noted, the absence of randomized control trials and reviews of such trials on the efficacy of facial gender affirmation surgery “does not change the fact that the larger medical community considers [such] treatments to be acceptable.”¹⁴⁵ Ultimately, evidence-based medicine requires only that the best currently available evidence be used to make medical decisions—and this evidence strongly indicates that facial gender affirmation surgery is medically necessary for treating some cases of gender dysphoria.¹⁴⁶

V. A cosmetic exclusion is inapplicable because facial gender confirmation surgery is not designed to improve appearance, but rather to change the secondary sex characteristics of the face.

Exclusions for facial gender confirmation surgery may rest on the incorrect assumption that the surgery is “cosmetic.”¹⁴⁷ However, this surgery is not

¹⁴² Conor M. Sugrue, Cormac W. Joyce & Sean M. Carroll, *Levels of Evidence in Plastic and Reconstructive Surgery Research: Have We Improved Over the Past 10 Years?*, 7 *PLAST RECONSTR SURG GLOB OPEN* e2408, e2409 (2019).

¹⁴³ Sugrue, Joyce, and Carroll, *supra* note 142.

¹⁴⁴ *Cf. Id.* at e2408-9 (“Within these categories, evidence was ranked from 1 to 5 mirroring the hierarchal research pyramid. This ranking is based upon the probability that the research design has reduced the potential bias. Highest quality evidence [level 1] is produced from randomized control trials or systematic reviews/meta-analysis of these. Articles of limited study design with biases, such as expert opinions, are ranked the lowest [level 5].”).

¹⁴⁵ *Flack v. Wisconsin Dep’t of Health Servs.*, 395 F. Supp. 3d 1001, 1013-4 (W.D. Wis. 2019) (noting that “whatever the evidentiary value these private [Hayes] analyses may have, it pales in comparison to that of the peer reviewed studies they purport to criticize, and, more importantly, to the consensus of medical professionals as to the efficacy and safety of gender-confirming surgery” and “[Hayes’s] ‘opinions’ are entirely unhelpful to the issue of fact here: whether gender-confirming surgery and related hormones are now a generally accepted form of medical treatment for gender dysphoria.”).

¹⁴⁶ Li et al., *supra* note 125; Louis J. Gooren, *Care of Transsexual Persons*, *NEW ENGLAND J. OF MEDICINE* (2011), <https://www.nejm.org/doi/pdf/10.1056/NEJMcp1008161> (last visited Aug 29, 2023) (recommending sex reassignment even in the face of research limitations and questions about long-term risks).

¹⁴⁷ Contrary to the mistaken view of FGCS as a cosmetic intervention, surgeons with expertise in cosmetic procedures generally require additional guidance on how to perform facial

undertaken to “improve appearance,” but rather to change the sex of an individual’s face to conform with their internal sense of gender.¹⁴⁸ Indeed, facial gender affirmation surgery has been called “the necessary first step” for many transgender people “to be able to embark on [their] transition.”¹⁴⁹

Covering facial gender confirmation surgery for transgender patients is consistent with providing other treatments for gender dysphoria. These procedures cannot be viewed outside of the context in which they are provided: treating gender dysphoria by aligning the secondary sex characteristics of the face with the patients’ internal sense of gender. Unlike cosmetic procedures performed solely to improve appearance, transgender patients typically must provide the surgeon with a letter from a mental health provider documenting their diagnosis of gender dysphoria.¹⁵⁰ Surgeons often plan facial gender confirmation surgeries for transgender women by using virtual modeling on a female skull,¹⁵¹ something that would be inappropriate for a person assigned male at birth who seeks simply to approve their appearance.

Covering this surgery for gender dysphoria does not mean that cisgender members can seek coverage for cosmetic facial surgery. Although the surgeries performed may use some of the same surgical techniques in cisgender and transgender people, the purposes are fundamentally different.¹⁵² Cisgender people seeking cosmetic facial surgeries are not seeking treatment for a diagnosed medical condition.¹⁵³ A cosmetic brow bone reduction, for example, is not a recognized

gender-affirming care procedures because their purposes often differ drastically from cosmetic procedures. *See, e.g., Morrison et al., supra* note 5 at 1768 (stating that, despite using many of the same methods as cosmetic surgery, “[f]acial feminization surgery is a significant part of gender transition and, although gender norms exist for facial aesthetics, there is limited evidence to guide clinical practice of facial feminization surgery.”); Shams and Motamedi, *supra* note 13 at 9 (offering technical guidance and protocols to adapt methods used in cosmetic surgeries to achieve facial feminization).

¹⁴⁸ *See Esmonde et al., supra* note 85 at 1389.

¹⁴⁹ Esmonde et al., *supra* note 85.

¹⁵⁰ *See* Troy A. Pittman & James M. Economides, *Preparing for Facial Feminization Surgery: Timing*, 27 FACIAL PLAST SURG CLIN NORTH AM 191, 197 (2019).

¹⁵¹ Han Hoang et al., *Simplifying Facial Feminization Surgery Using Virtual Modeling on the Female Skull*, 8 PLAST RECONSTR SURG GLOB OPEN e2618 (2020).

¹⁵² *Cf.* Spiegel and Rodriguez, *supra* note 74 (discussing the frequency in which transgender women seek chondrolaryngoplasty to treat gender dysphoria compared to the relatively low number of cisgender women who seek out the procedure for cosmetic reasons); Salibian and Bluebond-Langner, *supra* note 19 at 264-5 (detailing the distinct goals of lip lifts for treating gender dysphoria as compared to cosmetic lip lifts).

¹⁵³ *Cf.* Arushi Gulati, P. Daniel Knott & Rahul Seth, *Sex-Related Characteristics of the Face*, 55 OTOLARYNGOL CLIN NORTH AM 775, 781 (2022) (indicating that there are objectively identifiable ways that faces can be feminized without reference to aesthetic enhancement).

treatment for depression or anxiety. In contrast, when a transgender woman seeks surgery, it is to “improve psychiatric distress and quality of life.”¹⁵⁴

A. Medical researchers agree facial gender confirmation surgery is not cosmetic.

Researchers conclude that “data support that facial feminization surgery may be considered medically necessary for many patients.”¹⁵⁵ Studies demonstrate that these procedures “[are] not merely cosmetic and that [they] clearly target[] gender dysphoria to achieve improved quality of life.”¹⁵⁶ The purpose of this surgery is to “alter typically male facial features to make them similar in terms of shape and size to typical female facial features.”¹⁵⁷ It is not undertaken to improve appearance, but rather “to alter the perceived gender of an individual’s face.”¹⁵⁸

A patient with gender dysphoria does not seek facial gender confirmation in order to look beautiful, but rather to look like herself. That is, simply to look female—what she would have looked like had she not gone through male puberty and watched her face masculinize.¹⁵⁹ This goal is distinct from the beautification goals of cosmetic surgery and the metric for a successful facial gender confirmation surgery is likewise different.¹⁶⁰ The fact that some of the surgeries used to treat gender dysphoria are commonly used as aesthetic procedures does not negate their importance in treating gender dysphoria.¹⁶¹ Even if there were an incidental

¹⁵⁴ Isung et al., *supra* note 97 at 1575; See also, Ledibabari M. Ngaage et al., *Gender Surgery Beyond Chest and Genitals: Current Insurance Landscape*, 40 AESTHET SURG J NP202, 7 (2020) (“most of the distress revolves around incongruent appearance and social implications, further emphasizing the importance of ancillary procedures that alter these secondary sexual characteristics.”).

¹⁵⁵ Shane D. Morrison et al., *supra* note 4 at 1508.

¹⁵⁶ Shane D. Morrison et al., *supra* note 4.

¹⁵⁷ La Padula et al., *supra* note 98 at 1995; Spiegel, *Challenges in Care*, *supra* note 96 at 233.

¹⁵⁸ Spiegel, *Challenges in Care*, *supra* note 96 at 233; see also Esmonde et al., *supra* note 85 at 1389 (“For a trans-patient who requires FGCS to treat gender dysphoria, their facial appearance functions to convey their gender identity.”).

¹⁵⁹ See, e.g., Jens Urs Berli & Myriam Loyo, *Gender-Confirming Rhinoplasty*, 27 FACIAL PLAST SURG CLIN NORTH AM 251, 252 (2019) (recommending that for transidentified patients seeking gender-confirming rhinoplasty, “the conversation around goals starts with the current anatomy and potentially involves photographs of female family members); Berli and Plemons, *supra* note 21 at 92 (asserting that patients “wanted to look at themselves in the mirror and see a woman looking back at them.”); see also Hage et al., *supra* note 23 (explaining that sexed variations of facial features can be distinguished from the “ever-changing ideals of beauty.”).

¹⁶⁰ Berli and Loyo, *supra* note 159 at 253 (“Going unrecognized in society as being the opposite gender assigned at birth is probably the most important outcome parameter of FGCS.”).

¹⁶¹ Di Maggio, Nazar Anchorena, and Dobarro, *supra* note 46 at 1379 (“The main goal of rhinoplasty in FFS is to change masculine nasal features to feminine ones by performing

effect of improving appearance, that does not bar coverage because the primary purpose is to alter the sex of the face to treat gender dysphoria, not improve appearance.

Surgical specialists in the field reflect this same understanding in their distinct approaches to cosmetic and gender-affirming procedures. For example, in contrast to purely cosmetic lip surgeries, the surgical intervention in gender-affirming lip lifts “primarily focus on shortening the nasal base-to-vermilion border distance” rather than lip augmentation “because this has been found to be the significant difference between male and female upper lip anthropometric proportions.”¹⁶²

Finally, WPATH explains that “gender-affirming interventions are based on decades of clinical experience and research; therefore, they are not considered experimental, cosmetic, or for the mere convenience of a patient.”¹⁶³ The AMA has also stated that sex reassignment procedures are not cosmetic.¹⁶⁴

B. Legal authorities conclude that facial gender confirmation surgery is medically necessary, not cosmetic.

Courts have long ruled that facial gender confirmation surgery is medically necessary, not cosmetic. When rejecting the idea that a transgender woman who had undergone facial gender confirmation surgery had a propensity for cosmetic surgery, the U.S. Tax Court noted that “there is substantial evidence that such surgery [facial gender confirmation] may have served the same therapeutic purposes of [genital] sex reassignment surgery and hormone therapy; namely, effecting a female appearance in a genetic male.”¹⁶⁵ This medical necessity has been reflected in other legal contexts as well with a jury awarding damages for facial gender confirmation surgery that was excluded under insurance.¹⁶⁶ The

dorsal reduction, tip refinement, and narrowing the nasal bones”); Schall, *supra* note 2 (“Although rhinoplasty may be a common aesthetic procedure, it is also one of the most important procedures of [facial gender confirmation surgery].”).

¹⁶² Salibian and Bluebond-Langner, *Lip Lift*, *supra* note 17 at 265.

¹⁶³ Coleman et al., *supra* note 15 at S18.

¹⁶⁴ Am. Med. Ass’n House of Delegates, *supra* note 14 at ¶¶22-8 (“Health experts in [gender dysphoria], including WPATH, have rejected the myth that such treatments are ‘cosmetic’ or ‘experimental’ and have recognized that these treatments can provide safe and effective treatment for a serious health condition.”); Ngaage et al., *supra* note 154 (“Reevaluation of ancillary transition-related procedures from cosmetic to medically necessary based on clinical judgement or establishment of defined coverage criteria may augment coverage and better address the needs of transgender patients.”).

¹⁶⁵ *O’Donnabhain v. C.I.R.*, 134 T.C. 34, 61 (U.S.T.C. 2010) (holding that genital reassignment surgery is not cosmetic, but a tax-deductible treatment for a disease).

¹⁶⁶ Stenographic Transcript of Second Day of Jury Trial Held Before U.S. District Judge William

Connecticut Commission on Human Rights and Opportunities found that insurance plans with clinical policy excluding coverage for facial gender confirmation surgeries is unlawful discrimination,¹⁶⁷ and an employer and self-funded plan settled for \$345,000 in damages where a clinical policy excluded coverage for facial gender confirmation surgery, and the insurer paid an additional \$60,000 in damages.¹⁶⁸ In 2021, The ACLU of Missouri sued on behalf of another transgender woman who was denied FGCS and allege discrimination under Title VII, the ADA, and the Missouri Human Rights Act.¹⁶⁹ The parties settled.¹⁷⁰

Courts similarly find that state Medicaid plans cannot categorically ban facial gender confirmation surgery when it is medically necessary. For example, in *Cruz v. Zucker*, the District Court for the Southern District of New York held that a categorical ban on so-called “cosmetic” procedures was in violation of Medicaid regulations because it prevented transgender plaintiffs from receiving medically necessary facial feminization procedures.¹⁷¹ Similarly, when transgender plaintiffs challenged a state ban on facial gender confirmation surgery (and other forms of gender-affirming care), the District Court for the Western District of Wisconsin stated that “any attempt . . . to contend that

M. Conley at 144-145, *Boyden v. Wisconsin*, No. 17-CV-264-WMC (D. Wisc. Jun. 7, 2019), ECF No. 261, <http://files.eqcf.org/cases/317-cv-00264-261> (awarding \$780,500 in damages to two plaintiffs, including for reimbursement of facial gender confirmation surgery).

¹⁶⁷ State of Connecticut Commission on Human Rights and Opportunities, *Declaratory Ruling on Petition Regarding Health Insurers’ Categorization of Certain Gender-Confirming Procedures as Cosmetic*, (2020), <https://www.glad.org/cases/challenging-insurance-exclusions-for-gender-affirming-medical-care> (“Dr. Randi Ettner, Ph.D. flatly opined in an affidavit submitted to the Commission that ‘[n]o treatment for gender dysphoria can be deemed cosmetic.’ Ettner Aff., ¶ 7. This is because procedures altering the appearance of transgender patients for treatment of gender dysphoria are not for the purpose of ‘enhancing’ cosmetic beauty—they are medically indicated for the purpose of bringing a transgender patient’s appearance in accordance with their gender identity to eliminate the stress caused by incongruence of the same. *Id.*, at ¶ 16 [the goal is ‘to modify ... characteristics from [one sex to another] in order to allow a person to live and function in their affirmed gender, thereby reducing or eliminating their gender dysphoria.’”].).

¹⁶⁸ Parties Settle Landmark Lawsuit by Transgender Employee Who Was Unlawfully Denied Medically Necessary Care, NATIONAL CENTER FOR LESBIAN RIGHTS (2020), <https://www.nclrights.org/about-us/press-release/parties-settle-landmark-lawsuit-by-transgender-employee-who-was-unlawfully-denied-medically-necessary-care/> (last visited Sep 11, 2023); *Ketcham v. Regence BlueCross BlueShield of Oregon*, No. 19CV31838 (Or. Cir. Ct., July 18, 2019); Email to TLDEF from NCLR (Sept. 2, 2020).

¹⁶⁹ *Duncan v. Jack Henry & Associates, Inc.*, No. 6:21-cv-03280 (W.D. Mo. filed Oct. 26, 2021)

¹⁷⁰ *Duncan v. Jack Henry & Associates, Inc. et al.*, No. 6:21-cv-03280 (W.D. Mo. 2021), Notice of Settlement, ECF No. 115.

¹⁷¹ *Cruz v. Zucker*, 195 F. Supp. 3d 554, 572 (S.D.N.Y. 2016), *on reconsideration*, 218 F. Supp. 3d 246 (S.D.N.Y. 2016), and *appeal withdrawn*, (Dec. 30, 2016), 572 (finding that facial gender confirmation surgery, while labelled cosmetic, can be medically necessary and thus cannot be excluded categorically from state Medicaid plans).

gender-confirming care—including surgery—is inappropriate, unsafe, and ineffective is unreasonable, in the face of the existing medical consensus.”¹⁷² The Court permanently enjoined the state from enforcing the challenged exclusion.¹⁷³

VI. Conclusion

Facial gender confirmation surgery goes far beyond any incidental improvement in appearance and affects something far more fundamental: how the world perceives a person’s gender and how an individual’s body can be aligned with their gender identity.

Peer-reviewed medical literature, opinions of professional societies, evidence-based professional standards of care, and the law all concur that facial gender confirmation surgery is safe, effective, and medically necessary for treating gender dysphoria.

¹⁷² *Flack v. Wisconsin Dep’t of Health Servs.*, 395 F. Supp. 3d 1001, 1018 (W.D. Wis. 2019); see also, *Dekker v. Weida*, No. 4:22CV325-RH-MAF, 2023 WL 4102243 at *15 (N.D. Fla. June 21, 2023) (“the fact that research-generated evidence supporting these treatments gets classified as ‘low’ or ‘very low’ quality on the GRADE scale does not mean the evidence is not persuasive, or that it is not the best available research-generated evidence on the question of how to treat gender dysphoria, or that medical treatments should not be provided consistent with the research results and clinical evidence.”).

¹⁷³ *Flack v. Wisconsin Dep’t of Health Servs.*, 395 F. Supp. 3d 1001, 1022 (W.D. Wis. 2019).