## EMERGENCY RULE Title 15 – ELECTED OFFICIALS Division 60 – Attorney General Chapter 17 – Gender Transition Interventions

## **EMERGENCY RULE**

## 15 CSR 60-17.010 Experimental Interventions to Treat Gender Dysphoria

**PURPOSE:** The attorney general administers and enforces the provisions of the Merchandising Practices Act, Chapter 407, RSMo. The attorney general may make rules necessary to the administration and enforcement of the provisions of Chapter 407, RSMo, and, in order to provide notice to the public, may specify the meaning of terms whether or not used in the Act. This rule specifies the meanings of certain terms used in the enforcement of the Act and provides notice to the public of their application. This rule does not contain an exhaustive list of practices that violate the Act. Instead, this rule identifies certain specific practices that violate section 407.020, RSMo.

EMERGENCY STATEMENT: Individuals of any age experiencing gender dysphoria or related conditions should be able to and are able to obtain care in Missouri. Often this care takes the form of psychotherapy, also known as talk therapy, rather than any chemical or surgical intervention. As the World Professional Association for Transgender Health has previously put it, this therapy often involves exploring the many influences on a person's gender identity, including "peer and other social relationships," and ensuring that "gender dysphoria is not secondary to, or better accounted for, by other diagnoses." WPATH, which describes itself as an organization "committed to advocacy" for certain "changes in public policies," has been criticized as an organization far too quick to recommend chemical or surgical intervention. Even still, the organization has "highly recommended" psychotherapy because psychotherapy can "greatly facilitate the resolution of gender dysphoria" and because, through this therapy, many "individuals integrate their trans- or cross-gender feelings into the gender role they were assigned at birth and do not feel the need to feminize or masculinize their body."<sup>2</sup>

But in recent years, the use of other forms of interventions, often without any talk therapy at all, has accelerated exponentially. These include life-altering pubertal suppression, cross-sex hormone therapy, and gender transition surgery—all of which pose very serious side effects.

Many medical organizations have determined that these interventions—as currently practiced—lack solid evidentiary support. For example, Sweden's National Board of Health and Welfare recently declared that there is a "lack of reliable scientific evidence concerning the efficacy and the safety" of pubertal suppression and cross-sex hormone therapy and that "the risks" of these interventions "currently outweigh the possible benefits." Similarly, the U.S. Agency for Healthcare Research and Quality recently determined that "[t]here is a lack of current evidence-based guidance for the care of children and adolescents who identify as transgender, particularly regarding the benefits and harms of pubertal suppression, medical affirmation with hormone therapy, and surgical affirmation." And

Finland has openly declared these interventions to be "an experimental practice." Because these gender transition interventions lack a solid evidentiary foundation and pose very serious side effects, they are unlawful under Missouri law absent sufficiently protective guardrails.

Part of the reason for the growing awareness of the lack of solid evidence is that many clinics have adopted practices that deviate substantially from the studies on which they say they rely. For example, although many clinics say that they rely on two Dutch studies to justify their practices, participants in those studies all received psychotherapy, and the studies excluded individuals with mental health comorbidities. Despite these and other limitations of the Dutch studies, some clinics have begun offering interventions to persons who would have been excluded from the Dutch protocol—such as persons experiencing significant mental health comorbidities—all without a comprehensive individualized assessment and often without any therapy at all directed at the patient's comorbidities. Even WPATH acknowledges the problem. Although WPATH is "committed to advocacy" of the "least restrictive" policies and "hope[s] that future research will explore the effectiveness of this model," it admits that "[t]here are no studies of the long-term outcomes of gender-related medical treatments for youth who have not undergone a comprehensive assessment."

This emergency rule is necessary to protect the public health, safety, and welfare, and also to protect a compelling governmental interest as the attorney general is charged with protecting consumers, including minors, from harm and investigating fraud and abuse in the state's health care payment system. Among other reasons, the recent immense increase in the use of these life-altering interventions, which have serious side effects, as well as the recent acknowledgment that these interventions are used in circumstances not supported by solid evidence, makes this issue time sensitive. Further, and independently, a whistleblower has issued a sworn affidavit, alleging that a prominent provider of these interventions in Missouri is systemically failing to comply with the medical standard of care, and an investigation has revealed that some providers in Missouri prescribe gender transition interventions without any individualized assessment, contrary to safeguards established in scientific literature and by medical organizations.

As a result, the attorney general finds that this emergency action is needed because of a compelling governmental interest and a need to protect the public health, safety, and welfare. The scope of this emergency rule is limited to the circumstances creating the emergency and complies with the protections extended in the Missouri and United States Constitutions. The Attorney General believes this emergency rule is fair to all interested persons and parties under the circumstances. This emergency rule was filed April 13, 2023, becomes effective April 27, 2023, and expires February 6, 2024.

(1) "Covered Gender Transition Intervention" or "Intervention" means the provision or prescription of any puberty-blocking drugs, cross-sex hormones, or surgery, for the purpose of transitioning gender, decreasing gender incongruence, or treating gender dysphoria, and does not include:

- (A) treatment for a genetically or biochemically verifiable disorder of sex development such as 46, XX DSD; 46, XY DSD; sex chromosome DSDs; XX or XY sex reversal; or Ovotesticular disorder;
- (B) treatment for precocious puberty; or
- (C) for subparagraphs (2)(C)–(K), continuing prescription or provision of a specific intervention that has already begun, so long as the person or health organization promptly seeks to initiate the treatments and assessments called for by these subparagraphs.
- (2) It is an unfair, deceptive, fraudulent, or otherwise unlawful practice for any person or health organization to provide a covered gender transition intervention to a patient (or refer a patient for such an intervention) if the person or health organization:
  - (A) Fails to assess (at least annually) whether the patient continues to have gender dysphoria;
  - (B) Fails to obtain informed consent by disclosing conspicuously—on its website, physically in writing, and orally in person by the prescribing provider—to the patient and (if the patient is a minor) to the patient's parents or legal guardians, by means of information that includes language materially identical to each point below, that:
    - 1. The use of puberty blocker drugs or cross-sex hormones to treat gender dysphoria has been described as experimental by researchers and is not approved by the Food and Drug Administration (FDA):<sup>8</sup>
    - 2. The use of puberty blocker drugs or cross-sex hormones to treat gender dysphoria has been recognized by medical authorities in Europe, after independent reviews, to be experimental or lacking sufficient evidence and has been substantially restricted in countries such as Sweden, Finland, Norway, and the United Kingdom;<sup>9</sup>
    - 3. The U.S. Agency for Healthcare Research and Quality has determined, "There is a lack of current evidence-based guidance for the care of children and adolescents who identify as transgender, particularly regarding the benefits and harms of pubertal suppression, medical affirmation with hormone therapy, and surgical affirmation";10
    - 4. A study spanning 5 decades of almost 5,000 transgender people who had received cross-sex hormones, regardless of treatment type, nevertheless showed a "two-fold increased mortality risk," which "did not decrease over time";<sup>11</sup>
    - 5. An article in the *International Review of Psychiatry* found that, according to ten different studies, the vast majority of children, 85.2%, experiencing gender dysphoria grew to become comfortable with their natal sex, and the Endocrine Society found that "the large majority (about 85%) of prepubertal children with a childhood diagnosis did not remain GD/gender incongruent in adolescence";<sup>12</sup>
    - 6. A scientific article in the *Journal of Infant, Child, and Adolescent Psychotherapy* concluded that "encouraging mastectomy, ovariectomy, uterine extirpation, penile disablement, tracheal shave, the prescription of hormones which are out of line with the genetic make-up of the child, or puberty blockers, are all clinical practices which run an unacceptably high risk of doing harm";<sup>13</sup>

- 7. Sweden's National Board of Health and Welfare ("NBHW") recently declared that, at least for minors, "the risks of puberty suppressing treatment with GnRH-analogues and gender-affirming hormonal treatment currently outweigh the possible benefits";<sup>14</sup>
- 8. A systematic review of the evidence by researchers in Europe regarding natal boys concluded that there is "insufficient evidence to determine the efficacy or safety of hormonal treatment" and that certain hormonal interventions can potentially cause or worsen depression;<sup>15</sup>
- 9. One scientific study noted that an individual whose friend identifies as transgender is "more than 70 times" as likely to similarly identify as transgender, suggesting that many individuals may "incorrectly believe themselves to be transgender and in need of transition" because of social factors": 16
- 10. A follow-up study recently determined, "Youths with a history of mental health issues were especially likely to have taken steps to socially and medically transition";<sup>17</sup>
- 11. A study of 1,655 parental reports found that "parents tended to rate their children as worse off after transition" and "that parents believed gender clinicians and clinics pressured the families toward transition";<sup>18</sup>
- 12. The FDA has issued a warning that puberty blockers can lead to brain swelling and blindness;<sup>19</sup>
- 13. Puberty is associated with profound developmental maturation of the brain, and researchers have expressed concern that interruption of normally timed puberty may therefore be harmful to the brain;<sup>20</sup>
- 14. Multiple observational studies conclude that nearly all children prescribed puberty blockers for gender dysphoria have later been prescribed cross-sex hormones. For example, an independent review of gender transition interventions based on data from multiple countries determined that "almost all children and young people who are put on puberty blockers go on to sex hormone treatment":<sup>21</sup>
- 15. After performing a systematic review, the Endocrine Society was unable to draw any conclusions on whether hormone therapy reduces death by suicide among individuals identifying as transgender;<sup>22</sup>
- 16. A summary of available evidence written by medical societies "from around the globe" found that "there are no proven methods to preserve fertility in early pubertal transgender adolescents";<sup>23</sup>
- 17. Researchers have suggested that allowing a child to go through puberty without medical intervention may resolve gender dysphoria, whereas puberty suppression may improperly influence and worsen gender dysphoria;<sup>24</sup>
- 18. Puberty suppression presents a risk of stunted growth and failure to attain normal peak bone density;<sup>25</sup>
- 19. There is a lack of understanding in the medical community of the causes of gender dysphoria, as well as an admission that more research is needed to fully understand the effects, especially long-term effects, of puberty suppression and cross-sex hormone treatment;<sup>26</sup>

- 20. A significant number of children and adolescents who begin gender transition interventions desist in their desire to transition, although the actual number is unknown because of low rates of follow up;<sup>27</sup>
- 21. The Endocrine Society has acknowledged that children experiencing gender dysphoria are more likely to identify with their natal sex if they do not socially transition;<sup>28</sup>
- 22. The World Professional Association for Transgender Health ("WPATH") has acknowledged, "In most children, gender dysphoria will disappear before, or early in, puberty";<sup>29</sup> and
- 23. Many medical, hormonal, or surgical transition interventions are irreversible.<sup>30</sup>
- (C) Fails to ensure that, for at least the 3 most recent consecutive years, the patient has exhibited a medically documented, long-lasting, persistent and intense pattern of gender dysphoria;<sup>31</sup>
- (D) Fails to ensure that the patient has received a full psychological or psychiatric assessment, consisting of not fewer than 15 separate, hourly sessions (at least 10 of which must be with the same therapist) over the course of not fewer than 18 months to explore the developmental influences on the patient's current gender identity and to determine, among other things, whether the person has any mental health comorbidities;<sup>32</sup>
- (E) Fails to ensure that any psychiatric symptoms from existing mental health comorbidities of the patient have been treated and resolved;<sup>33</sup>
- (F) Fails to ensure that the patient has received a comprehensive screening to determine whether the patient has autism;<sup>34</sup>
- (G) Fails, with respect to a patient who is a minor, to ensure that the patient has received a comprehensive screening (at least annually) for social media addiction or compulsion and has not, for at least the six months prior to beginning any intervention, suffered from social media addiction or compulsion;<sup>35</sup>
- (H) Fails to ensure (at least annually) that the patient is not experiencing social contagion with respect to the patient's gender identity;<sup>36</sup>
- (I) Fails to adopt and follow a procedure to track all adverse effects (both expected and unexpected) that arise from any course of covered gender transition intervention for all patients beginning the first day of intervention and continuing for a period of not fewer than 15 years;<sup>37</sup>
- (J) Fails to maintain data about adverse effects in a form that can be accessed readily for systematic study; or
- (K) Fails to obtain and keep on file informed written consent from the patient and (if the patient is a minor) from all parents or guardians who have authority to consent to medical intervention, as to each requirement of this section. Such written consent shall be obtained for each intervention after the disclosures required by subsection (2)(B) and renewed not less than quarterly for the first 3 years of such intervention (or until the age of majority for a patient less than 15 years old when such intervention begins), and not less than twice a year thereafter.<sup>38</sup>
- (3) Any person or health organization providing a covered gender transition intervention to a patient (or referring a patient for such an intervention) shall document and retain in

- such patient's records a detailed description of compliance with the provisions of section (2).
- (4) If any application of any provision, word, or clause to any person or circumstances is found by a court to be invalid, that application alone shall be severed and the remaining possible applications of every provision, word, and clause to all other persons and circumstances shall remain in force.

AUTHORITY: sections 407.020, RSMo (Supp. 2022), 407.145, RSMo (2016). Emergency rule filed April 13, 2023, effective April 27, 2023, expires February 6, 2024.

PUBLIC COST: This emergency rule will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the time the emergency is effective.

PRIVATE COST: This emergency rule will cost private entities less than \$599,400 to \$699.300 in the time the emergency is effective.

<sup>&</sup>lt;sup>1</sup> Coleman et al., Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People, World Professional Association for Transgender Health (WPATH), Intern. J. of Transgenderism, 13(4), 165-232, 2012, pp. 15, 24.

<sup>&</sup>lt;sup>2</sup> Id. at pp. 2, 8, 25, 28.

<sup>&</sup>lt;sup>3</sup> Socialstyrelsen NBHW, "Care of Children and Adolescents With Gender Dysphoria," 2022, p. 3, https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/kunskapsstod/2022-3-7799.pdf.

<sup>&</sup>lt;sup>4</sup> Gean, "Topic Brief: Treatments for Gender Dysphoria in Transgender Youth," AHRQ, Nom. No. 0928, Jan. 8, 2021, p. 2, <a href="https://effectivehealthcare.ahrq.gov/get-involved/nominated-topics/treatments-gender-dysphoria-transgender-youth">https://effectivehealthcare.ahrq.gov/get-involved/nominated-topics/treatments-gender-dysphoria-transgender-youth</a>.

<sup>&</sup>lt;sup>5</sup> "Recommendation of the Council for Choices in Health Care in Finland (PALKO/COHERE Finland): Medical Treatment Methods for Dysphoria Related to Gender Variance In Minors," PALVELUVALIKOIMA, p. 8.

<sup>&</sup>lt;sup>6</sup> See generally, Abbruzzese et al., "The Myth of 'Reliable Research' in Pediatric Gender Medicine: A Critical Evaluation of the Dutch Studies—And Research That Has Followed," J. of Sex & Marital Therapy, Jan. 2, 2023.

 $<sup>^7</sup>$  Coleman et al., Standards of Care for the Health of Transgender and Gender Diverse People, Version 8, WPATH, Intern. J. of Transgender Health, 23:sup1, S1-S259, 2022, pp. S5, S33, S39, S51.

<sup>&</sup>lt;sup>8</sup> Baker et al., Hormone Therapy, Mental Health, and Quality of Life Among Transgender People: A Systematic Review, J. of the Endocrine Soc., 2021, Vol. 5, No. 4, 1-16, pp. 12-13 (acknowledging the systematic review was hindered by "[u]ncontrolled confounding," "potential bias," absence of specific validation for measuring psychological outcomes, "[i]nconsistency in identification of appropriate general population norms," "publication bias," omission of certain "potentially relevant studies," and inability to "quantitatively pool[] results" leading to the conclusion "[m]ore research is needed"); Coleman et al., SOC 7, p. 20 (WPATH noting "the long-term effects" of puberty suppression "can only be determined when the earliest-treated patients reach the appropriate age"); see also Hruz et al., Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria, The New Atlantis, Number 52, Spring 2017 pp. 6-7, 14-15, 18 (noting "whether blocking puberty is the best way to treat gender dysphoria in children remains far from settled...a drastic and experimental measure...not well founded on evidence"); Abbruzzese et al., p. 2 (noting the "key problem" is "not the lack of research rigor in the past—it is the field's present-day denial of the profound problems in the existing research, and an unwillingness to engage in high quality research requisite in evidence-based medicine").

<sup>&</sup>lt;sup>9</sup> See e.g., Gauffin et al., "Guideline Regarding Hormonal Treatment of Minors with Gender Dysphoria at Tema Barn - Astrid Lindgren Children's Hospital (ALB)," 2021, (citing SBU (Swedish Agency for Health and Technology Assessment and Assessment of Social Services), "Gender Dysphoria in Children and Adolescents -

An inventory of the literature" report 307, Record Number SBU 2019/427) (noting "low quality evidence" and "very little knowledge" about effects and safety); "Recommendation of the Council for Choices in Health Care in Finland (PALKO/COHERE Finland): Medical Treatment Methods for Dysphoria Related to Gender Variance In Minors," p. 6 (noting "as far as minors are concerns, there are no medical treatment that can be considered evidence-based"); Debra Soh, "Norway offers a step forward in eliminating gender ideology," Washington Examiner, March 13, 2023, https://www.msn.com/en-us/health/other/norway-offers-a-step-forward-ineliminating-gender-ideology/ar-AA18vJkN (noting Norwegian Healthcare Investigation Board no longer considers its guidelines for "gender-affirming care" for minors to be evidence-based); Biggs, "The Tavistock's Experiment with Puberty Blockers," version 1.0.1, July 29, 2019, p. 3 (noting puberty suppressing drugs have "never been licensed for [gender dysphoria] anywhere in the world"); see "Medicine and Gender Transidentity in Children and Adolescents," French National Academy of Medicine, Feb. 25, 2022 (French National Academy of Medicine noting "a great medical caution must be taken in children and adolescents, given the vulnerability, particularly psychological...and the many undesirable effects, even serious complications, that some of the available therapies can cause"); see also Abbruzzese et al., p. 1 (noting the field of youth gender-affirming care tends to exaggerate what is known about the benefits of care while "downplaying the serious health risks and uncertainties," which narrative has "failed to withstand scientific scrutiny internationally, with public health authorities in Sweden, Finland, and most recently England doing a U-turn on pediatric gender transitions").

## <sup>10</sup> AHRQ, p. 2.

- <sup>11</sup> JM de Blok et al., "Mortality Trends Over Five Decades In Adult Transgender People Receiving Hormone Treatment: A Report From the Amsterdam Cohort of Gender Dysphoria," Lancet Diabetes Endocrinol., 2021 Oct., Vol. 9(10),pp. 663-670; see Dhejne et al., "Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden," PLoS ONE, 6(2): e16885, 2011, p. 7 (finding "substantially higher rates" of overall mortality, including from cardiovascular disease and suicide, and psychiatric hospitalizations in sex-reassigned transsexual individuals); Asscheman, "A Long-Term Follow-Up Study of Mortality in Transsexuals Receiving Treatment with Cross-Sex Hormones," Euro. J. of Endocrinol., 2011, 164, 635-642, pp. 639-40 (finding 51% increased mortality rate in male-to-female transsexual subjects despite having treated with cross-sex hormones, as compared to the general male population, including due to suicide); Jackson et al., "Analysis of Mortality Among Transgender and Gender Diverse Adults in England," JAMA Network Open, 2023, Vol. 6(1), e2253687, p. 7 (finding transgender and gender diverse individuals have "increased risk of overall mortality, ranging from 34% to 75%").
- <sup>12</sup> Ristori et al., "Gender Dysphoria in Childhood," Intern. Rev. of Psychiatry, 2016, p. 3; see also Hruz et al., p. 19 (observing "most children who identify as the opposite sex will not persist in these feelings and will eventually come to identify as their biological sex"); Hembree et al., Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, J. Clin. Endocrinol. Metab., November 2017, p. 3879 (noting "the large majority (about 85%) of prepubertal children with a childhood diagnosis did not remain GD/gender incongruent in adolescence").
- <sup>13</sup> Schwartz, "Clinical and Ethical Considerations in the Treatment of Gender Dysphoric Children and Adolescents: When Doing Less is Helping More," J. of Infant, Child, and Adolescent Psychotherapy, Vol. 20, No. 4, 439-449, 2021, p. 442.
- <sup>14</sup> Socialstyrelsen NBHW, p. 3.
- <sup>15</sup> Haupt et al., "Antiandrogen or estradiol treatment or both during hormone therapy in transitioning transgender women (Review)," Cochrane Library: Cochrane Database of Systematic Reviews, 2020, Issue 11, Art. No. CD013138, pp. 2, 4.
- <sup>16</sup> Littman, "Parent Reports of Adolescent and Young Adults Perceived to Show Signs of a Rapid Onset of Gender Dysphoria," PLoS ONE, 13(8), 2018, pp. 33-34.
- $^{17}$  Diaz et al., "Rapid Onset Gender Dysphoria: Parent Reports on 1655 Possible Cases," Archives of Sexual Behavior, 2023, p. 11.

<sup>19</sup> FDA, "Risk of pseudotumor cerebri added to labeling for gonadotropin-releasing hormone agonists," American Academy of Pediatrics, AAP News, July 1, 2022.

- <sup>20</sup> Biggs, p. 3 (quoting researcher who acknowledged "we really don't know what suppressing puberty does to your brain development"); Hruz et al., pp. 10, 24 (noting study suggesting sex hormones may contribute to organizational effects in the brain during puberty, and noting suspicion puberty suppression may have negative consequences for neurological development and spatial memory); "Recommendation of the Council for Choices in Health Care in Finland (PALKO/COHERE Finland): Medical Treatment Methods for Dysphoria Related to Gender Variance In Minors," p. 7 ("It is not known how the hormonal suppression of puberty affects young people's judgement and decision-making."); Cass, "Independent Review of Gender Identity Services for Children and Young People: Interim Report," Feb. 2022, p. 38 ("It is known that adolescence is a period of significant changes in brain structure, function, and connectivity" including development of frontal lobe functions which control "decision making, emotional regulation, judgement and planning ability").
- <sup>21</sup> Cass, p. 38 (noting "96.5% and 98%" rates); *see also* Kelleher, "The Dutch Model Is Falling Apart," Genspect, Jan. 2, 2023, <a href="https://genspect.org/the-dutch-model-is-falling-apart/">https://genspect.org/the-dutch-model-is-falling-apart/</a> (quoting Dutch journalists that "puberty blockers are not a "pause button" but a self-fulfilling prophecy. Almost all treated children move from puberty blockers to cross-sex hormones at 16. In practice, puberty blockers do not appear to be a pause button for reflection, but the start button for transition.").
- <sup>22</sup> Baker et al., p. 12; see also Hruz et al., p. 6 ("the evidence for the safety and efficacy of puberty suppression is thin").
- <sup>23</sup> Krishna et al., "Use of Gonadotropin-Releasing Hormone Analogs in Children: Update by an International Consortium," Horm. Res. Paediatr., 91:357-372, 2019, p. 365; Coleman et al., SOC 8, pp. S256-S257 (WPATH criteria for both puberty blockers and hormone therapy for adolescents include provision that adolescent be informed on "potential loss of fertility and the available options to preserve fertility"); see also Hruz et al., pp. 24-25 (noting infertility to be major side effect of puberty suppression—cross-sex hormone—surgical reassignment treatment course).
- <sup>24</sup> "Recommendation of the Council for Choices in Health Care in Finland (PALKO/COHERE Finland): Medical Treatment Methods for Dysphoria Related to Gender Variance In Minors," p. 7 (noting possibility hormone therapy may work to consolidate a gender identity that would have otherwise changed in some adolescents, and recommending no decisions be made that could permanently alter a still-maturing minor's mental and physical development); Hruz et al., pp. 22-23 ("one would expect that the development of natural sex characteristics might contribute to the natural consolidation of one's gender identity," and noting a possibility puberty suppression could interfere in that process).
- <sup>25</sup> Rafferty, Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents, American Academy of Pediatrics, Vol. 142, no. 4, Oct. 2018, p. 5 (noting research on long-term risks of puberty suppression on bone metabolism is limited with varied results); Biggs, p. 3 (quoting research proposal which acknowledged "[i]t is not clear what the long term effects of early suppression may be on bone development, height"); Hruz et al., p. 18 (noting concern about bone-mineral density for children and adolescents treated with puberty suppression); Coleman et al., SOC 7, p. 20 (WPATH acknowledging concerns about negative physical side effects of puberty suppression on bone development and height).
- <sup>26</sup> Hruz et al., p. 15 (noting a "lack of understanding of the causes of gender dysphoria in children or adults" and noting puberty suppression cannot, therefore, directly address it); Baker et al., p. 13 (admitting "[m]ore research is needed" to explore the relationship between hormone therapy and quality of life, suicide, and other psychological outcomes "especially among adolescents"); Coleman et al., SOC 7, p. 20 (WPATH admitting the "long-term effects" of puberty suppression can only be determined when the earliest-treated patients "reach the appropriate age"); Gauffin et al., p. 1 (Swedish SBU published an overview of the knowledge base which showed "a lack of evidence" for the "long-term consequences" of puberty suppression and cross-sex hormones); NICE, "Evidence Review: Gender-Affirming Hormones for Children and Adolescents with Gender Dysphoria," National Inst. For Health and Care Excellence, 2021, p. 14 (UK health agency concluding "[a]ny potential benefits of gender-affirming hormones must be weighed against the largely unknown long-term safety profile of these treatments in children and adolescents with gender dysphoria").

<sup>27</sup> Singh et al., "A Follow-Up Study of Boys With Gender Identity Disorder," Front. Psychiatry, 12:632784, March 2021, p. 12 (finding desistance from gender dysphoria to be "by far the more common outcome"); Cantor, "Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy," J. of Sex & Marital Therapy, Taylor & Francis Group, LLC, 2019, p. 1 (observing follow-up studies of gender diverse children, "without exception," found that over puberty the majority cease to want to transition); Hembree et al., p. 3876 (noting "a minority" of prepubertal children with gender incongruence persist into adolescence).

- <sup>28</sup> Hembree et al., p. 3879.
- <sup>29</sup> Coleman et al., SOC 7, p. 12.
- <sup>30</sup> Hruz et al., pp. 22-26 (noting "little sense" in describing puberty suppression as reversible, laying out potentially irreversible effects on both physical and mental health); Coleman et al., SOC 7, p. 35 (WPATH acknowledging hormone therapy "may lead to irreversible physical changes"); see also Kelleher (quoting Dutch journalists that "more is becoming known about the long-term side effects of puberty blockers. They interfere with physical sexual development, hinder the development of the bones, can cause anorgasmia and infertility and interfere with the ability to make rational decisions."); "Medicine and Gender Transidentity in Children and Adolescents" (French National Academy of Medicine noting side effects of puberty suppressants and hormone therapy include "impact on growth, bone fragility, risk of sterility, emotional and intellectual consequences and, for girls, symptoms reminiscent of menopause").
- <sup>31</sup> Coleman et al., *DRAFT Version on the Standards of Care Version 8*, p. 73 (Dec. 2021) ("[I]t is important to establish that the young person has experienced several years of persistent gender incongruence or gender diversity prior to initiating gender-affirming hormones or providing gender-affirming surgeries."); Coleman et al., SOC 7, p. 19 (WPATH listing a minimum criterion for adolescents to receive puberty suppressing hormones to be a demonstrated "long-lasting and intense pattern" of gender dysphoria); Coleman et al., SOC 8, pp. S256-S257 (WPATH criteria for both puberty blockers and hormone therapy for adolescents include provision that gender incongruence be "marked and sustained over time"); see also Cantor, p. 1 (observing follow-up studies of gender diverse children, "without exception," found that over puberty the majority cease to want to transition); Singh et al., p. 12 (noting desistance from gender dysphoria to be "by far the more common outcome").
- <sup>32</sup> Compare Bazelon, "The Battle Over Gender Therapy," The New York Times Magazine, June 15, 2022, updated March 17, 2023, https://www.nytimes.com/2022/06/15/magazine/gender-therapy.html (noting certain researchers admit and assert that only the Amsterdam clinic, "with its comprehensive assessments," has procured results showing strong psychological benefits for individuals who medically transitioned in adolescence, and observing the Amsterdam clinic currently requires "at least six monthly [mental health] sessions" following "a longer period on a waiting list" prior to beginning treatment) and Delemarre-van de Waal et al., "Clinical Management of Gender Identity Disorder in Adolescents: A Protocol on Psychological and Paediatric Endocrinology Aspects," Euro. J. of Endo., 155, S131-S137, 2006, p. S133 (Dutch protocol requiring psychological or psychiatric involvement "for a minimum period of six months" before puberty suppression in adolescents "and continuing" through treatment); compare Howard et al., "The Dose-Effect Relationship in Psychotherapy," Am. Psychologist, 41, pp. 159-64 (suggesting 26 psychotherapy sessions as a rational limit) and "PTSD Clinical Practice Guideline: How Long Will It Take For Treatment To Work?", Am. Psychological Assoc., Div. 12 Soc. of Clinical Psychology (suggesting on average 15-20 sessions for recovery from PTSD psychological injury as well as possibility for up to 18 months of treatment for patients with co-occurring conditions or certain personality difficulties); see "Medicine and Gender Transidentity in Children and Adolescents" (French National Academy of Medicine recommending "first of all" a "medical and psychological support" for children and adolescents, noting the "risk of over-diagnosis" of gender dysphoria "is real, as shown by the increasing number of transgender young adults wishing to 'detransition," and noting there is "no test to distinguish a 'structural' gender dysphoria from transient dysphoria in adolescence," concluding that "[i]t is therefore advisable to extend as much as possible the psychological support phase"); see also American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Fifth ed., Arlington, VA, 2013, pp. 458-59 (noting clinically referred adolescents with gender dysphoria appear to have comorbid mental disorders, while clinically referred children show elevated levels of emotional and behavioral problems); Rafferty, p. 3 (noting adolescents who identify as transgender have high rates of depression, anxiety, eating disorders, self-harm, and suicide); American Psychological Association, Guidelines for Psychological Practice with Transgender and Gender Nonconforming People, American Psychologist, 70 (9), 832-64, 2015, p. 845 (noting mental health problems of a transgender individual may or may not be related to the gender identity and may complicate assessment and intervention of gender-related concerns, and noting in some cases, a co-occurring condition can mimic gender

dysphoria); "Recommendation of the Council for Choices in Health Care in Finland (PALKO/COHERE Finland): Medical Treatment Methods for Dysphoria Related to Gender Variance In Minors," p. 5 (recommending the "first-line treatment for gender dysphoria" to be psychosocial support and, as necessary, psychotherapy and treatment of possible comorbid psychiatric disorders); Coleman et al., SOC 8, p. S48 (WPATH recommending a "comprehensive biopsychosocial assessment of adolescents" who present with gender identity concerns and seek transition-related care).

33 "Recommendation of the Council for Choices in Health Care in Finland (PALKO/COHERE Finland); Medical Treatment Methods for Dysphoria Related to Gender Variance In Minors," pp. 5, 10 (recommending the "firstline treatment for gender dysphoria" to be psychosocial support and, as necessary, psychotherapy and treatment of possible comorbid psychiatric disorders, and recommending patients with simultaneous psychiatric symptoms first obtain cessation of psychiatric symptoms before a gender identity assessment) ("a gender identity assessment may be considered if the need for it continues after the other psychiatric symptoms have ceased and adolescent development is progressing normally"); id., p. 7 (noting (a) a lack of recognition of comorbid psychiatric disorders can be detrimental, (b) reduction of psychiatric symptoms cannot be achieved by hormonal and surgical interventions, and (c) a young person's identity and personality development must be stable to allow genuine discussion of gender dysphoria and the need for various treatment options, and that these factors are "key reasons" for postponing "any interventions" until adulthood); id., p. 8 (noting rehabilitative interventions for autistic spectrum disorder in adolescents presenting with gender dysphoria must be properly addressed); Coleman et al., SOC 7, p. 8 ("with the help of psychotherapy, some individuals integrate their transor cross-gender feelings into the gender role they were assigned at birth and do not feel the need to feminize or masculinize their body"); id., p. 19 (WPATH recommending any coexisting psychological problems that could interfere with treatment to be addressed, such that the adolescent's situation and functioning are stable enough, prior to initiating puberty suppression); Coleman et al., SOC 8, pp. S256-S257 (WPATH criteria for both puberty blockers and hormone therapy for adolescents include provision that "[m]ental health concerns (if any) that may interfere with...gender-affirming medical treatments have been addressed; sufficiently so that gender-affirming medical treatment can be provided optimally); Hembree et al., p. 3880 (noting in some forms of gender dysphoria, psychological interventions may be "useful and sufficient"); DSM-5, p. 458 (noting schizophrenia and other psychotic disorders may co-occur with gender dysphoria, and noting in rare cases schizophrenia may cause delusions of belonging to some other gender).

<sup>34</sup> Rafferty, p. 3 (noting an identity of transgender or gender-diverse has increased prevalence among individuals with autism spectrum disorder); DSM-5, p. 459 (noting autism spectrum disorder more prevalent in clinically referred children and adolescents with gender dysphoria); Coleman et al., SOC 7, p. 12 ("The prevalence of autism spectrum disorders seems to be higher in clinically referred, gender dysphoric children"); "Recommendation of the Council for Choices in Health Care in Finland (PALKO/COHERE Finland): Medical Treatment Methods for Dysphoria Related to Gender Variance In Minors," p. 8 (noting autistic spectrum disorders are overrepresented among adolescents suffering from gender dysphoria and recommending rehabilitative interventions to address autism).

<sup>35</sup> Pantic, "Online Social Networking and Mental Health," Cyberpsychology, Behavior, and Social Networking, Vol. 17,10 (2014): 652-7, p. 652 (noting some researchers have associated online social media with several psychiatric disorders); Allen et al., "Associations Between Psychosocial Measures and Digital Media Use Among Transgender Youth: Cross-sectional Study," JMIR pediatrics and parenting, Vol. 4,3, 13 Aug. 2021, pp. 8-9 (suggesting social media offers opportunity for gender dysphoric youth to represent chosen gender identity while receiving validation, resulting in a "snowball effect" producing a "social transition machinery" encouraging gender transition); Littman, pp. 3, 5, 33 (noting question of whether social media may contribute or even drive gender dysphoria among some, and plausibility online content may encourage vulnerable individuals to believe nonspecific symptoms and vague feelings represent a transgender condition and inappropriately reject all information contrary to these beliefs); "Medicine and Gender Transidentity in Children and Adolescents" (French National Academy of Medicine recommending "vigilance" regarding children's exploration of transidentity, "underlining the addictive character of excessive consultation of social networks which is both harmful to the psychological development of young people and responsible, for a very important part, of the growing sense of gender incongruence").

<sup>36</sup> Coleman et al., SOC 7, p. 19 (WPATH recommending any coexisting social problems that could interfere with treatment to be addressed prior to initiating puberty suppression); Hruz et al., p. 26 (noting social contagion on gender dysphoric children and adolescents from those in positions of authority may affect gender identity choices).

<sup>37</sup> Hembree et al., p. 3871 (recommending regular monitoring during hormone treatment in addition to regular evaluation for "potential adverse changes" to continue "yearly"); id., p. 3876 (noting importance of mental health care before, during, and sometimes after transitioning); Coleman et al., SOC 7, pp. 16, 31 (noting mental health professionals should "strive" to maintain a therapeutic relationship with gender nonconforming children/adolescents throughout any subsequent social changes or physical interventions, and noting psychotherapy may be helpful at different times and for various issues throughout the life cycle of a patient); id., p. 20 (acknowledging long-term effects of puberty suppression can only be determined when the earliesttreated patients reach "the appropriate age"); Biggs, p. 9 (highlighting results of experiment showing a puberty suppressant exacerbated gender dysphoria); Hruz et al., p. 10 (pointing out study suggesting sex hormones may contribute to organizational effects in the brain during puberty); id., pp. 15, 18, 24 (noting whether puberty suppression is safe or effective for gender dysphoria remains unclear and unsupported by rigorous scientific evidence, and noting concerns about bone development and spatial memory, among others); Dhejne et al., p. 7 (finding "substantially higher rates" of overall mortality, including from cardiovascular disease and suicide, and psychiatric hospitalizations in sex-reassigned transsexual individuals, and suggesting post-surgical transsexuals need long-term psychiatric and somatic follow-up); id. at pp. 1-2, 5 (noting a "dearth of long term, follow-up studies after sex reassignment" and noting statistics suggesting mortality started to diverge after about 10 years and continuing to diverge 15-20 years out); Jackson et al., p. 7 (finding transgender and gender diverse individuals have "increased risk of overall mortality, ranging from 34% to 75%").

<sup>38</sup> Hembree et al., p. 3879 (consent and protocol education for young adolescents should include parents); Coleman et al., SOC 7, pp. 3, 19 ("seeking patients' informed consent before providing treatment" "undergird" the WPATH Standards of Care; and noting informed consent from adolescent and parents/guardians as part of "minimum criteria"); Coleman et al., SOC 8, pp. S256-S257 (WPATH criteria for both puberty blockers and hormone therapy for adolescents include provision that the adolescent demonstrate "the emotional and cognitive maturity required to provide informed consent"); see id. at p. S111 (WPATH recommending health care providers institute "regular clinical evaluations for physical changes and potential adverse reactions" to hormones, including laboratory monitoring "every 3 months during the first year of hormone therapy or with dose changes until stable adult dosing is reached" followed by testing "once or twice a year"); Hruz et al., p. 6 ("it is parents or guardians, not children themselves, who make decisions about medical care"); Levine et al., "Reconsidering Informed Consent for Trans-Identified Children, Adolescents, and Young Adults," J. of Sex & Marital Therapy, 2022, p. 2 (noting hormones and surgeries are "unproven in a strict scientific sense" and, to be ethical, require a "thorough and fully informed consent process"); Abbruzzese et al., p. 2 (urging clinicians to disclose the "profound uncertainties" regarding outcomes of gender-affirming care to enable patients and families to make "better-informed decisions" about their care).