Preserving the Possibility of a Future Biological Family:
State-Mandated Insurance Coverage of Fertility Preservation for Youth Patients When Primary Treatment Causes Sterility

ALLISON SMITH

ABSTRACT
This Note urges state policymakers to address the needs of youth patients who face infertility due to the medical treatment they receive for their primary diagnosis. By mandating insurance coverage of and physician-provided information on fertility preservation for this population, legislators can help ameliorate a current dilemma for many young patients: sterility that results from treatment. This Note examines youth patients being treated for gender dysphoria as a case study.

Table of Contents
INTRODUCTION ................................................................. 268
I. TREATMENT FOR GENDER DYSPHORIA ................................. 271
   A. A Standardized Medical Treatment Process ...................... 271
   B. The Fertility Implications of Gender Dysphoria Treatment .. 277
II. FERTILITY PRESERVATION FOR TRANSGENDER YOUTH ........... 278
   A. The Consequences of Physician Silence on Youth GD Patients ..................................................... 278
   B. Fertility Preservation Options Available to Youth Patients .... 280
III. INSURANCE COVERAGE OF SIDE EFFECTS .......................... 283

* B.A., Vanderbilt University, 2016; J.D., Case Western Reserve University School of Law, 2019. First, I want to thank Dean Jessica Berg for her advice, guidance, and support throughout the notewriting process. I would also like to thank Dean Jessie Hill for her feedback and lended expertise during the early brainstorming process. And finally, thank you to the editors and advisors of the Dukeminier Awards Journal for their hard work, exceptional edits, and thoughtful feedback while preparing this work for publication. I hope this piece both expands our society’s thinking and empathy and moves us forward.

© 2019 Allison Smith. All rights reserved.
Jenny always knew she was a girl, though her sex assigned at birth was male. She had been feeling distressed, being shuffled in and out of doctors’ offices with her parents many times over the years, and was unsure what normal felt like anymore. Luckily, her latest doctors had answers, and at age twelve, Jenny was finally diagnosed with gender dysphoria (GD). Additionally, the doctors confirmed there was treatment available for her condition: a gender transition with phased hormone therapy. After years of uncertainty and concern, Jenny and her family could finally breathe a sigh of relief.

Jenny began phase one of her treatment plan, which involved the use of puberty-suppressing hormones, and she immediately felt better. After four years of such treatment, Jenny’s doctors moved her onto phase two of her treatment plan: hormone replacement therapy (HRT). A seamless transition between the two phases of hormone therapy promised the best outcomes, and was presented to Jenny and her parents as the ideal approach. Phase two proceeded, again with no complications; Jenny was still living happily and healthily. Jenny continued her treatment over the next few years, attending college and marrying in the process. She and her spouse began trying to start a family, but after a year of unsuccessfully trying to conceive, Jenny learned from a new doctor that she was sterile. How? Jenny had been in doctors’ offices for most of her adoles-

1. Gender dysphoria is defined by the American Psychiatric Association as the distress, and resulting problems functioning, felt by individuals experiencing an incongruence between their experienced/expressed gender and their assigned gender. See Am. Psychiatric Ass’n, Diagnostic and Statistical Manual of Mental Disorders (DSM-5) 451–60 (5th ed. 2013) [hereinafter DSM-5]; see also Ranna Parekh, What is Gender Dysphoria?, Am. Psychiatric Ass’n (Feb. 2016), https://www.psychiatry.org/patients-families/gender-dysphoria/what-is-gender-dysphoria [https://perma.cc/MTG4-V8D2].

cence: how did no one catch this? As it turns out, Jenny’s condition did not sterilize her. Her treatment did. No one told her of this all but certain side effect until now, once it was far too late to address the issue and preserve her ability to have children.

Jenny’s experience is, unfortunately, not unique. Certain treatments for GD, like treatment for other types of conditions, can carry a high likelihood of sterility and can occur specifically when administered as Jenny’s was: in seamlessly processioning phases. Jenny’s doctors followed standard procedure, but her ability to produce children could have been saved had she been informed in time and given access to fertility preservation options prior to moving to phase two of her hormone treatment.

This Note focuses on minor GD patients and the added difficulty they are likely to face in assessing the risk of sterility that can result as a side effect of their medical treatment. It proposes new measures to ensure these minors are given relevant and necessary medical information and options in a timely fashion during treatment, something that is currently left entirely to the judgment of individual doctors rather than being required for all patients as part of this otherwise standardized treatment process. In the midst of many life-altering decisions, transgender youth receiving hormone therapy are faced with yet another enormous task because of the risk of sterility: family planning while still being teenagers. In particular, HRT, the pinnacle of primary treatment for transgender youth diagnosed with GD, carries a high risk of sterility. However, medical providers do not always inform young patients of this possible side effect, and the resulting sterility or infertility is not likely to be reversible once treatment proceeds. And even if informed, youth patients may find it difficult to utilize fertility preservation services without appropriate insurance coverage due to exceedingly high costs. Most insurers do not cover fertility preservation, even in instances where sterility is a side effect of GD treatment.

5. Id.
6. See Endocrine Soc’y, supra note 3.
7. See Endocrine Soc’y, supra note 3, at 3878.
9. See Lisa Campo-Engelstein, For the Sake of Consistency and Fairness: Why Insurance Companies Should Cover Fertility Preservation Treatment for Iatrogenic
During preadolescence and adolescence, most individuals are focused on doing well in school and being accepted by their peers. However, patients with GD have the additional concern of focusing on their treatment options and addressing their diagnoses. Families, friends, classmates, and others are not always accepting of transgender youth, which can make academic and other achievements more difficult than they otherwise would be for children their age without GD. Additionally, according to the National Center for Transgender Equality, one in five transgender individuals experience homelessness at some point.10 “Family rejection and discrimination and violence have contributed to a large number of transgender and other LGBQ-identified youth who are homeless in the United States—an estimated 20–40% of the more than 1.6 million homeless youth.”11 A lack of familial support and homelessness that can result lessen the financial and emotional resources available to many transgender youth. Without these resources, these teens may find it impractical to attempt fertility preservation, assuming they are lucky enough to be informed of the need and possibility of such treatment in the first place.

Though some transgender youth may hesitate to proceed with HRT if and when they learn of the high likelihood of sterility they face, many are unlikely to be deterred.12 Instead, it is reasonable to expect that many transgender youth will likely forego the choice of one day forming a biological family as a necessary sacrifice of receiving life-affirming medical care through GD treatment. This unfortunate dilemma is a reality for thousands of youths, but could be mitigated if options to preserve fertility are both explained to them by their doctors and also covered by their insurance.13

Three states are already addressing this issue. Connecticut,14 Rhode Island,15 and Maryland16 have enacted legislation that specifically

11. Id.
13. See Almendrala, supra note 8 (“trans people are more likely to be low-income and lacking health insurance coverage compared to the average American”).
requires insurers to cover fertility preservation for patients whose medically necessary treatment causes sterility or infertility. These pioneering states’ laws will serve as a blueprint for this Note’s argument in favor of state-mandated insurance coverage and fully informed patients. Specifically, this Note argues that state law should require that: (1) health insurers provide coverage for fertility preservation for minor patients whose treatment causes infertility or sterility; and (2) medical professionals inform minor patients of the sterility and infertility risks inherent in GD treatment, along with information on fertility preservation options. Such laws should be applied to patients of all ages facing a variety of conditions, but this Note focuses specifically on minors because sterility risks present a unique challenge for that population. Further, this Note focuses on transgender youth, who are particularly affected by this dilemma and who, like all individuals, hold a fundamental right to procreate.

I. Treatment for Gender Dysphoria

A. A Standardized Medical Treatment Process

Transgender men are “individuals who were assigned female at birth but identify as men,” while transgender women are “individuals who were assigned male at birth but identify as women.” Transgender individuals are often diagnosed with GD. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines GD as “the distress that may accompany the incongruence between one’s experienced gender and one’s assigned gender.” The DSM-5 requires that this distress last at least six months in children, adolescents, and adults alike, and that various criteria be present for a formal GD diagnosis.


18. See DSM-5, *supra* note 1 (noting that transgender individuals “transiently or persistently identify with a gender different from their natal gender . . . . Although not all individuals will experience distress as a result of such incongruence, many are distressed if the desired physical interventions by means of hormones and/or surgery are not available.”). While there is fervent debate around the diagnosis and treatment of transgender individuals, this Note assumes the legitimacy of both and deals specifically with the issue of insurance coverage for fertility preservation, an established side effect of GD treatment. This is consistent with the positions on GD taken by a number of medical professionals, including the American Medical Association, and various courts. See *infra* notes 50–52 and accompanying text.

19. *Id.*

20. For adolescents and adults, the “marked incongruence between [their] experienced/expressed gender and assigned gender” must manifest by at least two of the following:

(1) a marked incongruence between one’s experienced/expressed gender and primary and/or secondary sex characteristics;

(2) a strong desire to be rid of existing primary and/or secondary sex characteristics;
Upon diagnosing an individual with GD, physicians are advised to refer to the Standards of Care created by the World Professional Association for Transgender Health (WPATH),\(^\text{21}\) as well as the clinical practice guidelines promulgated by the Endocrine Society,\(^\text{22}\) to develop an effective individualized treatment plan for their patient.\(^\text{23}\) Said plan generally involves some combination of “triadic therapy” methods, including a social transition, various types of hormone therapy, and/or gender-affirming surgery.\(^\text{24}\)

A “social transition” is generally the first step recommended for GD patients, particularly for youth, as it is an easily reversible form of intervention for their dysphoria.\(^\text{25}\) A social transition allows individuals to live “partially or completely in the[ir] preferred gender role by adapting hairstyle, clothing, pronouns, and possibly assuming a new name. Social transition also may include wearing make-up or clothing modification to hide the effects of puberty . . . and using devices that permit urination while standing (for affirmed males)."\(^\text{26}\) Of course, a social transition may not sufficiently relieve the distressing effects of GD on an individual, and in some cases can lead them to further assert a need for a more permanent form of treatment.\(^\text{27}\)

(3) a strong desire for the primary and/or secondary sex characteristics of another gender;
(4) a strong desire to be of another gender;
(5) a strong desire to be treated as another gender; and
(6) a strong conviction that one has feelings and reactions typical of that other gender.

\textit{Id.}


22. Endocrine Soc’y, supra note 3.


25. \textit{See} WPATH, supra note 21, at 17.


27. \textit{See, e.g.}, Diane Chen & Lisa Simons, \textit{Ethical Considerations in Fertility Preservation for Transgender Youth: A Case Illustration}, 6 \textsc{Clinical Prac. Pediatric Psychol.} 93, 96–97 (2018) (noting that for one sixteen-year-old profiled by the authors, plans to commence hormone treatment after high school graduation moved up to an
Prior to initiating gender-affirming surgery, seen as the most permanent form of intervention, GD patients are advised to undergo hormone therapy. Two types of hormone therapy are generally utilized: the first seeks to suppress pubertal development with relation to the patient’s assigned gender, while the second works to affirm the patient by facilitating the development of primary and secondary sex characteristics traditionally associated with their expressed gender. While hormone therapy for youth patients with GD has become fairly standardized, the specifics of treatment—namely, whether one will begin with pubertal suppression or will skip straight to gender affirmation via HRT—change based on the patient’s pubertal development, gender identity, and life circumstances.

Pubertal development is measured by “Tanner staging,” a classification system that tracks the “development and sequence of secondary sex characteristics of children during puberty.”\(^{28}\) Tanner stages from 1 (no development) through 5 (full development commonly associated with adulthood) exist to measure the development of (1) public hair in all children, (2) breast development for assigned females, and (3) external genitalia development for assigned males.\(^{29}\) Reaching Tanner stage 5 means that an individual has developed certain irreversible sex characteristics, including “breasts, female body habitus, and in some cases, relative short stature[]” for assigned females and “a prominent Adam’s apple; low voice; male bone configuration, such as a large jaw, big feet and hands, and tall stature; and male hair pattern on the face and extremities[]” for assigned males.\(^{30}\) For transgender individuals, the development of these characteristics can mean a lifetime of continued dysphoria that even continued hormone therapy and gender-affirming surgery may be unable to address. As such, for many youth, beginning GD treatment before or during the onset of puberty via puberty-suppressing hormone therapy is an essential step of the transition process.

For those who do begin their therapy with puberty-suppressing hormones, it is important to note that such treatment provides only a temporary solution for GD by design. The Endocrine Society currently recommends that long-acting analogues of gonadotropin-releasing hormone (GnRH) agonists\(^{31}\) be utilized to suppress the naturally occurring


\(^{29}\) See id.

\(^{30}\) Endocrine Soc’y, supra note 3, at 3881.

\(^{31}\) Agonists are chemical substances capable of combining with a specific receptor on a cell and initiating the same reaction or activity typically produced by the binding endogenous substance. _Agonist_, Merriam-Webster, https://www.merriam-webster.com/dictionary/agonist [https://perma.cc/QFS4-B6NZ].
pubertal hormones of GD patients.\textsuperscript{32} Such analogues are a “class of drugs, which, when chronically administered, result in marked reductions in blood levels of testosterone and estrogen.”\textsuperscript{33} These puberty blockers allow patients and their families to initiate and maintain gender-affirming care without the development of distressing secondary sex characteristics, allowing additional time to evaluate the gravity of and appropriate time for proceeding with more permanent treatment.\textsuperscript{34} Additionally, the use of GnRH analogues is seen as an ideal intervention for GD youth because of the treatment’s reversibility; upon ceasing their use, “spontaneous pubertal development [consistent with the patient’s assigned gender] has been shown to resume.”\textsuperscript{35} However, GnRH analogues are not without their drawbacks. Specifically, this form of treatment not only blocks the development of distressing sex characteristics, like facial hair and breasts, but also maturation of the brain and bone growth.\textsuperscript{36} This means that, inherently, patients can only rely on puberty-suppressing hormone therapy as a temporary solution for their GD.

The more permanent form of hormone therapy is known as HRT.\textsuperscript{37} Traditionally, physicians were advised to begin this treatment only after patients reached their respective Tanner stage 2 (i.e., upon having begun some form of pubertal development) and after reaching 16 years of age, when most are considered to have the capacity for informed consent.\textsuperscript{38} However, the Endocrine Society has since modified its guidelines, citing “compelling reasons[,]” to allow the use of gender-affirming hormones before an individual reaches this point.\textsuperscript{39} Therefore, it is important to consider the needs of children younger than age 16 when developing policy related to HRT and GD treatment generally.

HRT differs for transgender boys and girls. Exogenous testosterone is given to transgender boys to induce the development of male physical sex characteristics, and to “suppress feminizing characteristics.”\textsuperscript{40} Notably, “the hormone regimen for transgender females is more

\begin{footnotesize}
\begin{enumerate}
\item[32.] See Endocrine Soc’y, \textit{supra} note 3, at 3881.
\item[34.] See WPATH, \textit{supra} note 21, at 12.
\item[35.] Endocrine Soc’y, \textit{supra} note 3, at 3881–82.
\item[36.] See id. Other possible side effects include arterial hypertension, hot flashes, fatigue, and mood alterations, with “no consensus on treatment of these side effects in this context.” \textit{Id.} at 3882.
\item[37.] See Endocrine Soc’y, \textit{supra} note 3, at 3886.
\item[38.] See id. at 3869–70.
\item[39.] See \textit{id.} at 3883. Similarly, the Endocrine Society now also allows the use of GnRH analogs to suppress puberty in GD-diagnosed children before they reach Tanner stage 2 and begin their pubertal development, but beginning such treatment at Tanner stage 2 is still seen as the “optimal time” to start pubertal suppression. \textit{See id.} at 3881.
\item[40.] Unger, \textit{supra} note 17.
\end{enumerate}
\end{footnotesize}
complex than the transgender male regimen[.]”41 For transgender girls, “exogenous estrogen is used to help feminize patients, and anti-andro gens [and occasionally, GnRH agonists42] are used as adjuncts to help suppress masculinizing features.”43 HRT ultimately aims to “make [GD patients] more comfortable” with themselves, decreasing the mental distress that they face by allowing them to bring their bodies more in line with their expressed gender.44 For example, HRT for transgender boys generally leads to “increased muscle mass and decreased fat mass, increased facial hair and acne, male pattern baldness . . . increased sexual desire . . . deepening of the voice . . . and a significant increase in body hair[.]”45 Similarly, HRT for transgender girls can lead to “decreased sexual desire, decreased spontaneous erections, decreased facial and body hair (usually mild), decreased oiliness of skin, increased breast tissue growth, and redistribution of fat mass[.]”46 Physicians therefore consider the administration of HRT medically necessary for many transgender GD patients because of this significant impact.47

Medical necessity is “a technical term used by the insurance industry describing treatment that a physician considers to be vital for a particular patient.”48 Insurance policies generally cover treatments considered “medically necessary.”49 The medical community has long recognized the effectiveness of the aforementioned GD treatment protocol;50 the

---

41. Endocrine Soc’y, supra note 3, at 3887.
42. Id.
43. Unger, supra note 17.
45. Endocrine Soc’y, supra note 3, at 3887.
46. Id. at 3888.
47. See WPATH, supra note 21, at 8; see, e.g., Corporate Medical Policy—Gender Confirmation Surgery and Hormone Therapy, BLUECROSS BLUESHIELD of N.C. 4, 6, https://www.bluecrossnc.com/sites/default/files/document/attachment/services/public/pdfs/medicalpolicy/gender_confirmation_surgery_and_hormone_therapy.pdf (last updated June 2019) (outlining the criteria that need to be met for hormone treatment for GD patients to be covered as medically necessary under one specific insurer’s policy); Know Your Rights: Medicare, Nat’l Ctr. for Transgender Equality, https://transequality.org/know-your-rights/medicare [https://perma.cc/SET2-DDQW] (noting that Medicare covers medically necessary hormone therapy and gender-affirming surgery for GD patients).
48. Lambda Legal, supra note 24; see also Barry D. Alexander et al., Fundamentals of Health Law 1, 25 (5th ed. 2011) (defining medical necessity as a “[t]erm used by insurers to describe medical treatment that is appropriate and rendered in accordance with generally accepted standards of medical practice.”).
50. These treatment protocols are outlined in the Standards of Care published by WPATH. See WPATH, supra note 21; see also Lambda Legal, supra note 24.
American Medical Association’s 2008 resolution recognized that “an established body of medical research demonstrates the effectiveness and medical necessity” of this triadic therapy method of care for GD.51 Beyond the medical community’s consensus, numerous courts have ruled that GD treatments are medically necessary, and have recognized GD as a legitimate medical condition constituting a “serious medical need.”52

As a result, insurers have little argument against the coverage of treatment for GD, and generally, they do cover GD primary treatment. Major insurers such as Aetna, BlueCross BlueShield, and Tricare all provide coverage for hormone therapy.53 However, coverage for primary GD treatment addresses only part of the issue: coverage for fertility preservation would attend to a common side effect of treatment for GD.


52. Fields v. Smith, 653 F.3d 550, 555 (7th Cir. 2011) (noting that, at the district court level, it was held that GD constitutes a “serious medical need”); see, e.g., Flack v. Wis. Dep’t of Health Servs., No. 18-cv-309-wmc, 2019 U.S. Dist. LEXIS 139388, at *44 (W.D. Wis. Aug. 16, 2019) (“the medical consensus is that gender-confirming treatment, including surgery, is accepted, safe, and effective in the treatment of gender dysphoria, meaning that the denial of Medicaid benefits for needed medical treatment completely fails to protect the public health.”); Boyden v. Conlin, 341 F. Supp. 3d 979, 997 (W.D. Wis. 2018) (finding that the state’s exclusion of GD-related care for its employees will lead “some portion of that population [to] suffer from profound and debilitating gender dysphoria without the necessary medical transition.”); Good v. Iowa Dep’t of Human Servs., No. CV/CV054956, slip op. at 28 (Iowa Dist. June 6, 2018), aff’d, 924 N.W.2d. 853 (Iowa 2019) (holding that “the medical consensus has shifted since . . . 1995 . . . the medical consensus now holds that sex reassignment surgery is sometimes medically necessary and addresses far more than just the psychological aspects of Gender Dysphoria.”).

B. The Fertility Implications of Gender Dysphoria Treatment

HRT carries high risks of infertility. For example, research has suggested that transgender women are at risk of testicular damage resulting from prolonged estrogen exposure, a component of HRT for these women. Likewise, their ability to restore sperm production is left uncertain. Similarly, in transgender men, the resulting fertility decline from HRT is rarely reversible. An additional complication arises when a GD patient seamlessly moves onto HRT after having been treated with GnRH analogues to suppress puberty: they may have never sufficiently developed any of the reproductive material associated with their assigned gender in the first place (depending on whether they began GnRH before or during Tanner stage 2), leaving them with nothing to reverse or preserve. “Currently, no studies address whether fertility can be gained, either naturally or with exogenous gonadotropins, in transgender individuals who underwent pubertal suppression in adolescence, followed directly by gender-affirming hormone therapy.” This is of special concern to the youth patients at the center of this Note, given that many will have undergone such a course of treatment. And while “[f]ertility can be gained in those who undergo pubertal suppression and then discontinue GnRH agonists to allow endogenous puberty to progress [before commencing HRT] . . . there may be negative psychosocial implications of this process for some youth who may progress through puberty incongruent with their affirmed gender identity.”

Due to a high likelihood of infertility, professionals in the field recommend that transgender youth and their guardians be informed of and counseled about options for fertility preservation prior to the initiation of pubertal suppression and HRT. However, “[i]n current practice . . . there remain[s] . . . infrequent counseling about fertility preservation.” Some transgender patients and their physicians have determined that sterility is the “price to pay” for transition upon

---

54. See Endocrine Soc’y, supra note 3.
56. See Nahata et al., supra note 4 (noting that “[f]ew studies specific to the transgender community exist to guide conversations about the long-term effects of gender-affirming hormones on testicular function and fertility.”).
57. Id. at 266.
58. Id. at 266–67; see also Olson-Kennedy & Forcier, supra note 26.
59. Nahata et al., supra note 4.
60. Id.
61. See Endocrine Soc’y, supra note 3, at 3871; see also WPATH, supra note 21, at 42.
discussing the matter.\textsuperscript{63} However, many do not have these discussions. A 2005 guide for GD treatment providers noted that “many transmen report little or no discussion by their providers” about the preservation of their reproductive potential.\textsuperscript{64} Well over a decade later, this has seemingly not changed.\textsuperscript{65} As fertility is impacted by GD treatment, providers should \textit{always} inform patients that medically transitioning while retaining reproductive potential is possible, and that the risk of losing that potential is inherent in certain GD treatments.\textsuperscript{66}

\section*{II. Fertility Preservation for Transgender Youth}

\subsection*{A. The Consequences of Physician Silence on Youth GD Patients}

For transgender youth seeking hormone treatment, it is extremely important that fertility effects are discussed early on, as an otherwise “seamless” transition between pubertal suppression and HRT, or generally, the introduction of HRT, could cause the patient to miss their window of opportunity for fertility preservation and leave them permanently infertile.\textsuperscript{67} With such a heavy permanent change looming and only narrow windows within which to act, reproductive decisions in this arena should not be left to chance and variance. Doing so diminishes or destroys GD patients’ option of biological parenthood and helping, in this way, with the creation of our next generation. Youth patients should be informed about and aided in preserving their fertility should they so choose, allowing them to save the decision of whether or not to have biological children for a time later in life when they may be in a better position to make such a judgment.

Moreover, for youth on puberty-suppressing hormones, there is an increased risk of missing the fertility preservation window due to a likely desire for a seamless transition into HRT, along with the aforementioned lack of information.\textsuperscript{68} A study from the TransYouth Project found that trans children as young as five years old respond to psychological

\begin{thebibliography}{99}
\bibitem{64} \textit{Id.}
\bibitem{65} For example, a 2017 study of 156 transgender and gender-nonconforming adolescents found that only 21 of them (13.5 percent) had discussed the effects of hormone therapy on their reproductive potential with their GD treatment provider. See Diane Chen et al., \textit{Attitudes Toward Fertility and Reproductive Health Among Transgender and Gender-Nonconforming Adolescents}, 63 J. Adolescent Health 62, 65 (2018).
\bibitem{66} Such an approach would also be consistent with WPATH and Endocrine Society guidelines. \textit{See supra} note 61 and accompanying text.
\bibitem{67} \textit{See} Nahata et al., \textit{supra} note 4.
\bibitem{68} \textit{Id.}
\end{thebibliography}
gender-association tests in a way that “show[s] a strong implicit identification with their expressed gender . . . the data from transgender girls showed the same pattern as the data from cisgender girls and the data from transgender boys showed the same pattern as data from cisgender boys.”  

Puberty’s initiation varies from person to person, but has been documented as occurring as early as age ten. This means that transgender youth may live for years before their physicians deem them ready for medical intervention for their GD. And, many transgender youth will begin hormone treatment as early as medically allowed.

The Endocrine Society’s guidelines suggest starting puberty blockers for transgender children between ten and twelve years old, and starting HRT around sixteen years old, but as noted above, they now allow physicians to exercise their judgment in allowing transgender children to begin HRT even earlier. Evidence suggests that GD patients are in fact electing to take advantage of this option when it is presented, as “more and more children are starting hormones at 13 or 14 once their doctors, therapists[,] and families have agreed that they are mentally and emotionally prepared.” Of course, it is important to note that in addition to a desire to be free from the distressing effects of GD, there are health concerns such as decreased bone strength and affected neurological development with the extended use of puberty blockers in children that may be contributing to this trend of transgender children moving onto HRT at younger ages.

At such a young age, it may be difficult for patients to articulate or grasp whether they have or may one day have a stronger desire to have biological children that outweighs their desire to receive immediate hormone treatment for their GD. However, arguing that GD youth patients should wait until they are older to seek HRT is also medically problematic: GD puts psychological strain on the patient and makes normal daily activities uncomfortable and unnecessarily burdensome at a minimum.


71. See Endocrine Soc’y, supra note 3, at 3881–83; see also Priyanka Boghani, When Transgender Kids Transition, Medical Risks are Both Known and Unknown, PBS (June 30, 2015), https://www.pbs.org/wgbh/frontline/article/when-transgender-kids-transition-medical-risks-are-both-known-and-unknown [https://perma.cc/87S6-JCXV].

72. Boghani, supra note 71.

73. For example, “[s]ome children may refuse to attend school because of teasing and harassment or pressure to dress in attire associated with their assigned sex . . . Gender dysphoria . . . is associated with high levels of stigmatization, discrimination, and victimization, leading to negative self-concept, increased rates of mental disorder comorbidity, school dropout, and economic marginalization, including
If transgender youth are aware of the disconnect between their sex and affirmed gender as early as three or five years old, this unempathetic approach would ask that they wait until adulthood before receiving proper and necessary treatment. And, for some youth, they have found themselves unable to consider whether they wish to be parents until their transition is complete, meaning even waiting until adulthood to make that consideration would be useless for them. The option to reproduce should therefore be preserved whenever possible for these youth in conjunction with their GD treatment, sparing them what could be a difficult decision between medical care and having future biological children.

B. Fertility Preservation Options Available to Youth Patients

The effects of sterility do not have to be an inevitable reality for youth GD patients seeking hormone treatment, as fertility preservation options exist. In children who have begun puberty, fertility preservation options include sperm, egg, and embryo cryopreservation. While sperm cryopreservation most often involves collection via masturbation, doctors may extract the sperm via needle, electroejaculation, or other methods. Regardless, sperm preservation can be accomplished with only a day of the patient’s time and is a “safe, established, and cost-effective fertility preservation method.” Egg and embryo cryopreservation both involve a procedure to remove the gonadal tissue from the patient’s body. Doctors treat patients with synthetic hormones to stimulate egg

unemployment with attendant social and mental health risks, especially in individuals from resource-poor family backgrounds.” See DSM-5, supra note 1.

74. See, e.g., Diane Chen et al., Fertility Preservation for Transgender Adolescents, 61 J. ADOLESCENT HEALTH 120, 121 (2017) (noting that “our team has documented several interactions with youth who noted that after medical transition with hormones and exploration of romantic relationships when more comfortable in their bodies, they felt more emotionally capable of considering future parenting desires.”).

75. However, as previously noted, this may not be the case for youth patients who seamlessly transition from puberty-suppressing hormones to HRT before having advanced sufficiently in their assigned gender’s pubertal development, leaving them with nothing to preserve. See supra notes 58–59 and accompanying text.

76. See Endocrine Soc’y, supra note 3, at 3880; see also E. Charles Osterberg et al., Current Practices in Fertility Preservation in Male Cancer Patients, 6 UROLOGY ANNALS 13 (2014). Egg cryopreservation is likely preferable to embryo preservation for youth patients as embryo preservation would require locating a sperm donor. Just as the decision to reproduce generally may be uncertain for these adolescents, so too would be the identity of a potential sperm donor.

77. See Nahata et al., supra note 4. It is important to note that masturbation (and even other methods of sperm collection) may trigger dysphoric distress in patients, presenting another barrier in GD patients’ access to fertility preservation. See Nahata et al., supra note 4; see also Leena Nahata et al., Low Fertility Preservation Utilization Among Transgender Youth, 61 J. ADOLESCENT HEALTH 40, 41 (2017).

78. Id.

and embryo production; the entire process may delay primary treatment, such as for GD, by two or three weeks, and can trigger significant feelings of dysphoria in GD patients specifically. 

Each of the fertility preservation procedures available to youth GD patients can be utilized after the onset of puberty. As this stage in development varies from person to person, candid and continued communication between health care providers and patients is vital to ensure satisfactory, proper care.

Technology for fertility preservation is available for patients facing sterility from treatment, but the associated costs present a significant barrier. First, it is important to note that hormone therapy for GD—among other expenses related to treating GD—is expensive, though, as noted above, is generally covered by insurance if the person has coverage. Puberty blockers cost “approximately $1,200 per month for injections and can range from $4,500 to $18,000 for an implant.” The least expensive form of estrogen can cost anywhere from $4 to $30 a month, while testosterone costs range between $20 to $200 a vial. The prices for these hormones will vary by delivery method “with oral estrogen costing $20 monthly, injectable estrogen roughly $150 to $200 monthly, and accompanying spironolactone $10 to $20 monthly.” And “[f]or transgender men’s hormone therapies, testosterone injections typically cost $80 monthly (but may vary based on state supply regulations), testosterone patches more than $300 monthly, and testosterone gels between $300 to $350 monthly.” Further, hormone therapy is a lifelong treatment.

healthy-lifestyle/getting-pregnant/in-depth/fertility-preservation/art-20047512 [https://perma.cc/6U4P-VEMA].

80. “Notably, while invasiveness of oocyte cryopreservation is an oft-cited barrier to [fertility preservation] among other patient populations, we would assert that it poses unique challenges among transgender men, who often experience significant body dysphoria related to their genitals and reproductive organs. [Fertility preservation] for transgender men requires 10–14 days of daily hormone injections to stimulate follicular development, monitoring via transvaginal ultrasounds, and oocyte retrieval using ultrason-guided transvaginal aspiration of follicular fluid.” Chen et al., supra note 74; see also id.

81. See supra notes 58–59 and accompanying text.

82. See supra notes 28–29 and accompanying text.

83. Boghani, supra note 71.

84. Id.


86. Id.

In addition, GD patients face the costs of fertility preservation, if they seek it. For example, harvesting eggs from ovaries costs a minimum of $500 a year. In addition to costs for the preservation of eggs, each time eggs are thawed, fertilized, and transferred to the uterus with IVF, it costs approximately $5,000, and many people assigned female at birth will have to undergo the process multiple times. Further, egg and embryo storage can cost between $500 to $1,000 per year depending on where the patient lives. For sperm preservation, the costs generally average below $1,000 for collection, testing, and freezing. The costs depend on the number of samples, and storage fees are on average an additional $150 to $300 per year. “Some sperm banks offer discounts for cancer patients or reduced rates for long-term storage[,]” meaning GD patients could potentially qualify for discounted rates, but this is not guaranteed. All patients should be informed that these costly assisted reproductive options are often not covered by insurance. With such a costly if not cost-prohibitive path being the only available option to many patients facing sterility-inducing treatments, a lack of insurance coverage may limit their ability to have biological children. Such high costs would likely create a barrier for anyone seeking fertility preservation, but minor patients experience a greater disadvantage given that, inherent in their age, they are likely to lack sufficient financial resources of their own.

Though insurance coverage for gender therapy is improving, the costs of addressing health concerns that stem from treating GD are often overlooked. As gender therapy and treatment for GD generally have been recognized as medically necessary, insurers should work to ensure that they are offering policies that appropriately match patient needs, including fertility preservation treatments. Indeed, as explained below, states should mandate that insurers cover fertility preservation for youth patients facing sterility as a result of GD treatment, and doctors should be required to inform patients of these fertility risks and their preservation options.

permanent—they are likely to go away if [patients] stop taking the medicines.”


89. See id.


92. See id.

93. Id.

94. Amato, supra note 55.

95. See HUM. RIGHTS CAMPAIGN, supra note 53.

96. See supra note 47 and accompanying text.
III. INSURANCE COVERAGE OF SIDE EFFECTS

With high costs, fertility preservation may prove unattainable for many youth patients without the aid of insurance coverage. Based on the medical community’s consensus over the need for GD treatment and its effects on fertility, insurers should be made to cover the costs of fertility preservation for youth GD patients. As previously stated, insurers currently rarely cover fertility preservation treatments, even when they are needed to fully combat a medical diagnosis directly jeopardizing a patient’s fertility. Though insured GD patients may receive HRT without shouldering great expense, insurers leave these patients to fend for themselves when addressing its resulting sterility.

When considered a side effect of necessary treatment, fertility preservation coverage clearly falls into current, recommended care models as a form of tertiary prevention. Tertiary prevention seeks to address secondary conditions via the “reduction of complications, prevention of further dysfunction, and the reduction of long-term sequelae” Government agencies, such as the Centers for Disease Control and Prevention, recognize the importance of such care for secondary conditions. “Healthy People 2020,” a government overview of national health objectives created by the Office of Disease Prevention and Health Promotion at the U.S. Department of Health and Human Services, directly addresses secondary conditions and seeks to “provide a comprehensive set of recommendations for primary and secondary preventive services for all Americans—from infancy to old age.” As a valid form of tertiary prevention, fertility preservation for youth GD patients should be covered by insurers as a part of GD treatment consistent with these national health objectives.

In some instances, patients have claimed that insurers force them to wait for side effects to manifest before approving coverage. An example of such a policy has been noted with respect to high cholesterol patients.

97. See Campo-Engelstein, supra note 9; Amato, supra note 55.
Statins are highly effective at treating high cholesterol in many people, but approximately one in five users will experience no change in their cholesterol with painful side effects.\footnote{102} For this fifth of the patient pool, doctors can prescribe another drug that has been proven to be effective, but despite its success in these patients, insurers often will not cover it unless side effects, such as a heart attack, occur.\footnote{103} Though this alternative drug prevents heart attacks, insurers will only cover it once that terrible outcome and risk to their life actually occurs. The same is the case here. Denying preemptive coverage of fertility preservation in GD patients can deny them the opportunity to preserve fertility: for many patients, there is no turning back in terms of preserving reproductive material once HRT proceeds. Thus, the best way to address sterility is with proactive fertility preservation as an insured option.

In non-GD cases, courts have ruled in favor of patients seeking coverage for side effects. In 	extit{Hertan v. Unum Life Insurance Company of America}, where a patient claimed headaches following the surgical removal of her brain tumor prevented her from working, the court ruled that the claim administrators in that case must consider the side effects or the remaining disability resulting from the primary diagnosis in their coverage evaluations, as the initially insured condition has not been fully resolved.\footnote{104} Because sterility stems directly from the medical care provided to GD patients (i.e., the primary treatment), it is a side effect. Based on the 	extit{Hertan} ruling, other courts should consider requiring that treatment for side effects be included in insurers’ coverage evaluations.

Because fertility preservation has not been deemed medically necessary, and it is not lifesaving care, it may be classified as elective care by insurers.\footnote{105} However, such a classification is inappropriate because the need for fertility preservation inherently arises from the medically necessary treatment of GD. As an analogy, many consider breast reconstructive surgery to be an elective procedure, but when serving as treatment for a medical condition, it becomes medically necessary. Through its insurance


\footnote{105. Elective care is considered to be beneficial, but not \textit{“absolutely essential,”} to one’s health. See William C. Shiel Jr., 	extit{Medical Definition of Elective}, MEDICINE.NET, https://www.medicinenet.com/script/main/art.asp?articlekey=14354 [https://perma.cc/22SB-5FRC].}
appeals system, the California Department of Managed Health Care held in 2015 that “breast reconstructive surgery can be medically necessary for transgender people” and that individualized care considerations are required for GD patients.106 This decision “serve[s] as a national model and makes clear that individualized assessment for patients is in line with evidence-based medicine practices.”107 Though fertility preservation may not always be medically necessary, it becomes so when sterility is understood as a likely side effect of GD treatment.

Insurers do cover side effects in some instances. By statute, veterans’ insurance covers illnesses and injuries that did not directly result from service, but are “proximately due to or the result of a service-connected disease or injury[].”108 These types of claims are known as secondary service connection claims and include the side effects of medications needed to treat service-related conditions.109 This type of coverage follows the reasoning in Hertan. Insurance coverage of fertility preservation extending from the coverage of primary GD treatment as proposed by this Note would follow the rationale mandated by Congress and implemented by these veterans’ health providers. “Medically necessary” treatment parallels the standard of “service-related” treatment as the initial benchmark to coverage. The need for secondary service claims stemming from the service-related injuries or treatments emulates how fertility preservation stems as treatment of a side effect from the medically necessary GD treatment for transgender youth. The veteran health care system recognizes that the cause of an ailment extends beyond the moment of emergence, and thus, that such a timeline should not be the primary factor in insurance coverage decisions. If a medical treatment is necessary due to a condition that is covered, the secondary treatment of side effects should be covered alongside the primary treatment that caused it.

Not only does medicine aim to treat present conditions and illnesses, but it seeks to prevent the worsening of a patient’s condition or the creation of new harms to the patient. Where a treatment or illness puts a


108. 38 C.F.R. § 3.310(b) (2018); see also Secondary Service Connection for Side Effects of Medications, BERRY L. FIRM (Feb. 12, 2016), http://www.jsberrylaw.com/blog/2016/february/three-most-common-claims-left-on-the-side-second [https://perma.cc/2SWS-LCZR].

109. See BERRY L. FIRM, supra note 108.
patient at risk of further injury or harm, medicine treats them as a whole, rather than simply focusing on the first issue to present itself. Medical providers generally work toward this end, but coverage denials by insurers serve as a barrier. The science exists for transgender youth patients to preserve their fertility while being treated for GD and to no longer accept sterility as a determined outcome of their necessary healthcare. States should therefore require insurers to cover fertility preservation in support of this progress.

One response from the insurance industry may be concern over the cost of covering such care. Even supporters of this Note’s proposed mandate may share concerns that lumping GD into an insurance analysis could lead to its classification as a preexisting condition, increasing the premiums that GD patients would have to pay for insurance coverage. The Affordable Care Act nearly eliminated insurance exclusions related to preexisting conditions, but some exceptions for insurers do remain.\(^{110}\) If insurance coverage of fertility preservation for patients treated for GD is mandated, insurers may charge those diagnosed with GD higher premiums in an effort to offset costs. This is a valid concern, as the structure of the insurance industry is based on shared risks and insurers would have a strong argument for increasing premiums for a population that is more prone to claims.\(^{111}\) Despite this argument, however, the focus should remain on the fact that GD treatment and fertility preservation would be covered by insurers even if this were the case. The premium system allows patients to obtain care that they would otherwise not be able to afford, and implementing higher premiums here would still classify as a victory for GD patients who currently generally lack coverage for fertility preservation procedures at all, as the cost of a premium would more than likely be lower than the cost of paying for fertility preservation out-of-pocket. The choice between receiving medical treatment and preserving the possibility of future offspring is hardly a choice when the two may coexist, but denial of coverage for fertility preservation frustrates that reality for many patients. Insurers currently force an unnecessary dichotomy on GD patients where there is no need for such a limitation, but state intervention can ensure that this practice ceases and that GD youth have access to all forms of care needed to manage every aspect and side effect associated with their GD treatment.

\(^{110}\) Specifically, “grandfathered plans don’t have to cover pre-existing conditions[,]” requiring that those with such plans turn to a Marketplace plan should they experience denials of coverage based on preexisting conditions. Health Benefits & Coverage: Coverage for Pre-existing Conditions, HEALThCARE.gov, https://www.healthcare.gov/coverage/pre-existing-conditions [https://perma.cc/WB9H-BGA8].

\(^{111}\) See supra note 18 and accompanying text.
IV. STATE LEGISLATION ADDRESSING FERTILITY PRESERVATION

States can address both of the problems described in this Note through legislation. Such legislation should require that doctors inform minors seeking GD treatment—HRT in particular—about its side effects that may affect fertility, and should also mandate that insurance companies provide coverage for fertility preservation in such cases. A two-pronged approach is necessary to ensure that youth patients both know about fertility preservation options and can actually utilize them.

Some states already require insurers to provide infertility coverage, but are unclear as to whether that includes fertility preservation specifically.112 Fifteen states, including “Arkansas, California, Connecticut, Hawaii, Illinois, Louisiana, Maryland, Massachusetts, Montana, New Jersey, New York, Ohio, Rhode Island, Texas, and West Virginia, have passed laws requiring insurers to either cover or offer coverage for infertility diagnosis and treatment.”113 Thirteen of those states require actual coverage for infertility treatments, while two (California and Texas) only require that coverage be offered.114 Some states have parameters on the infertility coverage contemplated by their mandates.115 Louisiana and New York, for example, prohibit the denial of insurance coverage for a medical condition otherwise covered by the insurer solely because the condition results in infertility.116 Most of the states with laws requiring insurance coverage for infertility include in vitro fertilization in their mandates, but California, Louisiana, and New York have laws that specifically exclude coverage for such a procedure.117

Most of these laws speak to a need for medical intervention once infertility already exists, but a more proactive stance is necessary for GD patients. A small minority of states affirmatively require insurers to cover fertility preservation: Rhode Island, Connecticut, and Maryland.118 Their legislation—which I describe in the next Part—serves as a blueprint for the model advocated by this Note.

113. Id.
114. Id.
115. Id.
116. Id.
117. Id.
V. **Recommendations**

States should mandate insurance coverage for, and informed decisions about, fertility preservation for youth patients undergoing treatment for GD. Such a mandate would ensure the protection of this young population’s rights and hold two powerful industries, medicine and insurance, accountable to their industries’ own standards.\(^{119}\)

After scientific study and legislative reform, GD treatment has been recognized as medically necessary care and is widely covered by insurers.\(^{120}\) A determination of medical necessity allows patients access to insurance coverage for their medical treatment.\(^{121}\) Infertility, as a side effect of GD, and fertility preservation, as a treatment for that side effect, should be covered by the insurance plans that cover GD primary treatment. States should recognize the causal relationship present between the two and require insurers to provide coverage for both aspects of GD care.

Recognizing the importance of procreation for many people, legislature, medical providers, and insurers should think proactively. As stated throughout this Note, insurance coverage alone is not the entire solution. States should also require that medical providers inform their GD patients of the risk of sterility from hormone therapy and that fertility preservation options are available.\(^{122}\)

A few East Coast states have recognized the need for legislation in this area, and their laws provide a roadmap for addressing the dilemma facing GD patients described in this Note. Though this Note cannot cover every concern and address every counterargument, it does aim to address potential debates over larger issues stemming from enactment of this proposal.

A. **Pioneering Guidance From the East Coast**

A few states have acted to address the need for mandated insurance coverage of fertility preservation in patients who suffer sterility from treatment. In 2017, Rhode Island became the first to pass a law explicitly requiring fertility preservation coverage prior to treatments


121. *Id.*

122. As previously noted, such an approach would also be consistent with WPATH and Endocrine Society guidelines. See supra note 61 and accompanying text.
toxic to the gonads that could “directly or indirectly cause infertility.”

In the same year, Connecticut expanded its infertility coverage mandate to include fertility preservation. That law provides coverage of “cryopreservation of eggs, sperm, or embryo for all patients facing a threat to fertility” and amends the state’s definition of infertility, extending it to include those for whom fertility services are medically necessary. Nine states introduced iatrogenic infertility insurance mandate bills by 2017. However, only Rhode Island’s and Connecticut’s passed. In May 2018, Maryland became the third state to pass fertility preservation legislation. Maryland law already mandated infertility coverage: its new legislation now requires insurers to provide coverage for “standard” fertility preservation procedures necessitated by the effects of “medically necessary” procedures to prevent “iatrogenic infertility.” All states should follow the example of these pioneers and protect patients’ abilities to have their own future biological families.

States legislating in this area may either “establish[] a new mandate defining fertility preservation as an extension of . . . treatment, or revis[e] a current infertility coverage mandate” to include fertility preservation. Rhode Island implemented the first approach, explicit legislation, while Connecticut and Maryland opted for the second: legislative expansion. Both approaches work to realize the goal of requiring insurers to cover fertility preservation, but explicit legislation may be preferable to address the nuances present in this area. For this reason, this Note’s blueprint for state legislation will primarily focus on Rhode Island’s legislation.

B. Recommended State Legislation

1. Insurance Coverage Mandate

To ensure patients receive complete coverage, state legislation should define fertility preservation as medically necessary for youth facing sterility as a side effect of medically necessary treatment. Rhode Island’s legislation “allows for explicit coverage of fertility preservation for iatrogenic infertility as part of medical treatment, without risking

---

123. Cardozo et al., supra note 118.
125. Martz Smith, supra note 14.
128. Id.
129. CARE NEW ENG., supra note 15.
130. See supra note 112 and accompanying text.
interpretation as an elective infertility benefit.” By including the link between the primary treatment and the side effect (the risk to fertility), Rhode Island’s law highlights the need for extension of medically necessary status to fertility preservation. Most insurers require a determination of medical necessity before approving coverage for treatment or care. As a benchmark for insurance coverage, meeting the medically necessary standard is vital for fertility preservation mandates. States should adopt similar language to that in Rhode Island’s bill to ensure that compliance with this standard is evident.

Rhode Island’s bill also serves as an example of how to zealously and wholly protect patients facing iatrogenic infertility. The bill applies to those that could face infertility directly or indirectly from treatment. By wording the legislation this way, Rhode Island’s legislature has avoided inviting scientific debates about the likelihood or severity of patient infertility from specific treatments as an eligibility distinguisher between patients. Regardless of the diagnosis, this bill covers treatments that endanger fertility. Likewise, states drafting legislation should aim to broadly protect similarly situated patients facing this conundrum. Considering the urgent and narrow timelines involved in medical care, insurance battles causing delays in the process could inhibit fertility preservation while primary treatment takes precedence and moves forward.

Connecticut’s bill, by contrast, is stifled by its specificity. The bill covers three major types of fertility preservation: a limiting list of procedures. The major drawback to a list of covered procedures is that it moves us back into the scientific realm. Fertility preservation options evolve, and legislatures should draft laws that will survive modern innovation serving the same interest that the law currently covers. In an effort to avoid multiple amendments, legislators should build from the broad language of Rhode Island’s law, covering fertility preservation in general, to draft an expansive and thorough mandate that covers fertility preservation more generally.

Rhode Island has provided the framework for other states to bridge the gap between sterility-inducing treatment resulting in sterility and fertility preservation insurance coverage. The recognized need for such a framework boasts support from the medical community.
tility coverage has not been mandated prior, states will need to enact legislation that specifically addresses this patient population and fertility preservation. Explicit iatrogenic fertility preservation mandates allow states the ability to tailor language to the needs of this population.

2. Informed Patients Mandate

In order to ensure patients are informed, states should require that physicians inform patients facing infertility or sterility from treatment of the specific risk and available options. Part of a physician’s duty of care includes informing patients of the benefits and risks of treatments, as well as alternatives, in order to ensure that patients are empowered to make informed decisions about their care.\(^\text{136}\) Infertility risks, as a possible blow to a person’s quality of life, must be shared with patients. Fertility preservation is an alternative to accepting infertility or sterility caused by a treatment, and as such, physicians should disclose that option to patients. The lack of information sharing has been traced from behaviors like biased assumptions, such as that those in the transgender community are not interested in having children,\(^\text{137}\) to the scarcity of information on best practices and the workability of fertility preservation in teens.\(^\text{138}\) Physicians are expected to make every effort to ensure that patients are not only told about risks, benefits, and alternatives to treatment, but that they understand them.\(^\text{139}\) These expectations are extinguished typically only during emergency situations where a patient is unconscious.\(^\text{140}\) This is an unlikely scenario for GD patients who undergo years of consultations and therapy sessions prior to initiating permanent treatment. The applicability of the informed consent requirement is based on a risk/benefit analysis.\(^\text{141}\) Physicians must consider if patients risk severe injury or trauma and whether alternatives exist that provide the same benefit

who have chosen to join together to advance the field of fertility preservation. Our members are recognized leaders with expertise in all aspects of fertility preservation including, oncology, reproductive endocrinology, urology, psychology, oncology nursing, and reproductive law.”).\(^\text{136}\) See supra note 119 and accompanying text.


\(^\text{138}\) See For Future Offspring, Docs Save Eggs From Teen Transitioning Female-to-Male, COOPER INSTITUTE FOR ADVANCED REPRODUCTIVE MED. (Feb. 27, 2019), https://www.healthbanks.com/PatientPortal/MyPractice.aspx?UAID=%%B832D2D7D-4DD7-11D4-94C8-0010830391AB%7D&TabID=%%BX%7D&ArticleID=743200 [https://perma.cc/M9ET-P4L].


\(^\text{140}\) Id.

\(^\text{141}\) Id.
or outcome.\textsuperscript{142} States must ensure that the interests and reproductive choices of patients are protected. Mandating that physicians inform patients about iatrogenic infertility minimizes the risk of minor patients unknowingly becoming infertile or sterile from their GD treatment.

Informed consent laws treat minors differently than the average adult patient.\textsuperscript{143} Physicians are at times allowed to only inform the parents of the minor patient as to the associated risks of treatment, rather than informing the patients themselves, and consent is generally given by parents: not the minor patients.\textsuperscript{144} With regard to minor patients, the question arises of whether these patients are mature enough to decide what the best path of treatment is. Even when dealing with minor patients however, physicians are always expected to involve the patient in care decisions where possible, regardless of age.\textsuperscript{145} Additionally, in this specific patient pool, the patients tend to at least be preteens and would therefore be more than capable of understanding general concepts about their care. In the case of a more substantial permanent side effect like infertility, youth patients should be trusted to be involved in their care decisions and at the very least that they be informed. Legislators should ensure that protection by mandating information sharing for true informed consent.

C. \textit{How Long Should Insurers Be Required to Store Gonadal Tissue?}

Mandates on insurance coverage for fertility preservation and required physician disclosures spark a series of further questions and considerations. Though this Note does not purport to answer every lingering question in this area, it offers guidance in considering one important issue: how long should gonadal tissue be stored after it is removed from a patient for preservation? Insurers surely cannot be asked to store the material in perpetuity. Perhaps setting an automatic safety period up to a certain, defined age best addresses the issue. Age twenty-six may be an appropriate age at which time insurers would be relieved of their obligation to store a patient’s gonadal tissue. Reaching twenty-six years allows a person time to complete most types of higher education programs, is a reasonable age at which a person may look to begin a family, and is the age at which minors currently are removed from their parents’ insurance.\textsuperscript{146}

\begin{itemize}
\item \textsuperscript{142} Id.
\item \textsuperscript{144} See id. Minors are allowed to consent to their own treatment only in limited situations, including for mental health care and birth control, but not always for GD treatment. \textit{Id.}
\item \textsuperscript{145} See id.; \textit{A Doctor’s Duty of Care}, All Law (Mar. 7, 2019, 2:21 PM), https://www.alllaw.com/articles/nolo/medical-malpractice/duty-care.html [https://perma.cc/ GU28-9ZKZ].
\item \textsuperscript{146} See Rae Ellen Bichell, \textit{Average Age of First-Time Moms Keeps
At twenty-six, or any other age chosen by a legislature, patients whose fertility preservation was covered by insurance would take over the costs of storage themselves if they wish to continue preserving their tissue. Of course, states may opt out of such a provision or write legislation that does not target minor patients, in which case this matter would involve further considerations. State-specific data related to family planning and other relevant information could help legislators determine when and if an insured storage cutoff is desirable.

**Conclusion**

Many transgender youth face sterility as a medical side effect of a necessary treatment for GD. Beyond GD, others face a similar dilemma, as well. Caroline Bailey experienced the trauma that childhood sterility caused by an illness can bring. Due to a bacterium, she became the youngest female to ever undergo a hysterectomy. She recalls vividly the moment she was told of her infertility:

> I was 11-years-old when I woke up in a haze from surgery. My doctor stood over me and said these words, ‘You can always make love, but you will never be able to have children.’ I barely had an idea what they were talking about. Being 11-years-old, I had not started my period and was just beginning to learn about where babies come from. I had no idea what a lifetime of barrenness would bring. I was just happy to be alive.

Later, Caroline’s view of her condition grew more complicated. She writes, “[d]o you know what it is like to be entering puberty and learn that you will never have children? I can tell you it is devastating and confusing.” She shares that infertility not only affected her self-esteem, but also impacted her romantic relationships. Caroline is incredibly thankful to be alive, but the loss from her surgery became a permanent scar and source of torment. Coverage of and information about fertil-

---


147. Caroline Bailey, “I was 11-years-old when I woke up in a haze from surgery. My doctor said, ‘You can always make love, but you will never have children.’”, Love What Matters (Mar. 6, 2019, 8:01 PM), http://www lovewhatmatters com/i-was-11-years-old-when-i-woke-up-in-a-haze-from-surgery-my-doctor-stood-over-me-and-said-you-can-always-make-love-but-you-will-never-have-children [https://perma.cc/RAK3-K6AV].

148. Id.

149. Id.

150. Id.
ity preservation options for youth patients facing sterility would spare thousands\(^{151}\) of these youth from experiencing what Caroline and numerous others have faced already.

Many who suffer from infertility had no opportunity to prevent it. That is not the case with GD patients. With so many of these patients receiving treatment in their youth, state laws should protect their ability to one day choose to have biological children. GD treatment is medically necessary, but can carry with it the permanent side effect of infertility. The effects of infertility are preventable, but prevention methods are expensive. Patients also may not know of the infertility risks associated with their treatment until it is too late. State legislatures should therefore mandate that insurers cover fertility preservation in youth patients whose treatment causes infertility. Insurers cover medically necessary treatment and insurers cover GD treatment, so insurers should also be required by law to cover fertility preservation as a piece of the GD medical treatment process for overall GD medical care. States will not have to step blindly into this territory; three states have already enacted legislation that targets iatrogenic infertility and mandates insurance coverage for fertility preservation. Other states need only to build upon existing efforts as outlined in this Note.

Informed consent laws protect patients from unknowingly accepting risks and making treatment decisions while ill-informed. Accordingly, state laws should also include information-sharing mandates for physicians regarding GD and sterility to maximize patient protection.

Having children can be among one of the greatest joys of life. The centrality of the family in American culture and general human nature is undisputed. Not all people will choose to have children, but each person should have the ability to make that choice. Mandating that insurers cover fertility preservation for minors and that physicians disclose fertility risks is not only the smart thing to do, but also the right thing to do in preserving that right to choose. State legislators and insurers should not wait to be confronted with lawsuits and the consequences of inaction; rather, they should work to protect these patients now.