ABSTRACT: Gender nonconforming youth are an underserved population who obstetrician–gynecologists are seeing increasingly in their practices. Currently, there are large gaps in training, knowledge, and comfort with transgender patients among obstetrician–gynecologists. The purpose of this document is to review current recommendations that apply to an obstetrician–gynecologist. It is important for obstetrician–gynecologists to be aware of the social and mental health risks for the transgender population. Consensus guidelines support initiating medical therapy after an adolescent has an established diagnosis of transgender identity and has reached Tanner stage II development. Medical management involves the suppression of puberty (typically in the form of gonadotropin-releasing hormone agonists) followed by cross-sex hormone therapy to induce puberty at age 16 years. A variety of surgical options are available, including bilateral mastectomy, hysterectomy with bilateral salpingo-oophorectomy or salpingectomy, and possible neophallus creation. Transgender patients are an at-risk population, and preventive medicine is imperative to their health. This includes proper screening for sexually transmitted infections, screening for suicidal thoughts and mental health issues, and appropriate vaccination. Like all patients, transgender adolescents should have a source for ongoing primary care.

Recommendations and Conclusions
The American College of Obstetricians and Gynecologists makes the following recommendations and conclusions:

- Obstetrician–gynecologists should understand gender identity and be able to treat transgender patients or refer them appropriately for medical and surgical therapeutic options.
- A patient with gender dysphoria may first present to a gynecologist; therefore, it is important for the clinician to be aware of this condition.
- Obstetrician–gynecologists can provide referrals as well as support and resources to young patients.
- It is important for obstetrician–gynecologists to be aware of the social and mental health risks for the transgender population.
- Transgender male adolescents have a uterus, ovaries, and breast tissue and, thus, can develop medical complications of gynecologic organs and also become pregnant.

- The need to discuss fertility preservation before initiation of cross-sex hormones is another important reason that obstetrician–gynecologists may be involved in the care of transgender adolescents.
- Like all patients, transgender adolescents should have a source for ongoing primary care.

Gender nonconforming* youth are an underserved population who obstetrician–gynecologists are seeing increasingly in their practices. A number of medical societies, including the European Society for Paediatric Endocrinology and the Pediatric Endocrine Society, have published guidelines on how best to care for transgender adolescents (1). The purpose of this document is to review current recommendations that apply to an obstetrician–gynecologist. See the Glossary section for terms related to gender identity and transgender individuals.

*Note: Bold-faced, italicized terms are defined in the Glossary section.
**Gender identity** is a person’s fundamental and innate sense of being male, female, or somewhere in between (1). For transgender individuals, their gender identity differs from their natal gender (the gender they were assigned at birth) (2). In the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition, transgender identity is not considered a pathologic diagnosis; however, distress due to transgender identity is considered to be gender dysphoria (3).

The exact prevalence of transgender identity among adolescents is unknown. The World Professional Association for Transgender Health estimated prevalence at approximately 1 in 11,900 transgender female (male-to-female) youth and 1 in 30,400 transgender male (female-to-male) youth (4). Most estimates have been based on the number of patients presenting for medical or surgical services, resulting in an underestimate of the actual prevalence. However, a survey of middle school students in San Francisco found that 1.3% of respondents identified as transgender (5). Additionally, there are cultural differences in how gender identity is expressed and accepted that make the global prevalence difficult to establish (6).

As the recognition of transgender individuals grows, the medical knowledge surrounding them does too. Several organizations have published guidelines for the diagnosis, treatment, and primary care for transgender youth. The American College of Obstetricians and Gynecologists recommends that obstetrician–gynecologists understand gender identity and be able to treat transgender patients or refer them appropriately for medical and surgical therapeutic options (7). Currently, there are large gaps in training, knowledge, and comfort with transgender patients among obstetrician–gynecologists (8).

It is important for general gynecologists to be familiar with transgender medicine for several reasons. A patient with gender dysphoria may first present to a gynecologist; therefore, it is important for the clinician to be aware of this condition. Obstetrician–gynecologists can provide referrals as well as support and resources to young patients. Even for those too young to consider hormone therapy, early behavioral health support can be vital. Additionally, transgender male adolescents have a uterus, ovaries, and breast tissue and, thus, can develop medical complications of gynecologic organs and also become pregnant. The need to discuss fertility preservation before initiation of cross-sex hormones is another important reason that obstetrician–gynecologists may be involved in the care of transgender adolescents. Finally, transgender patients are an at-risk population, and preventive medicine is imperative to their health. This includes proper screening for sexually transmitted infections (STIs), screening for suicidal thoughts and mental health issues, and appropriate vaccination. Like all patients, transgender adolescents should have a source for ongoing primary care.

**Psychosocial Considerations**

It is important for obstetrician–gynecologists to be aware of the social and mental health risks for the transgender population. Transgender adolescents often are subjected to bullying and parental rejection, as well as ostracism from their communities. Transgender youth report the highest rates of sexual harassment, and 15% drop out of school because of bullying (5, 9). This population also faces high rates of physical violence and substance abuse (10). As many as 40% of homeless youth identify as lesbian, gay, bisexual, transgender, or questioning (LGBTQ) (the “Q” sometimes also is defined as “queer”). Homelessness can lead to increased risk-taking behavior such as exchanging sex for money and drug use. Some transgender adolescents may be at an increased risk of STIs; transgender females have the highest reported rates of STIs, including human immunodeficiency virus (HIV) (11). Because of the diversity of patterns of sexual behavior among transgender individuals, the Centers for Disease Control and Prevention recommends that clinicians assess risks related to STIs and HIV for their transgender patients based on current anatomy and sexual behavior (12).

Lesbian, gay, bisexual, transgender, or questioning youth are more likely to experience depression, anxiety, and substance abuse than non-LGBTQ youth (2). Perhaps most alarming is the rate of attempted suicide and instances of self-harm among sexual minority youth (7). More than one half of LGBTQ youth report having considered suicide and 37.4% have made an attempt (13). Although there are data on LGBTQ youth, information specifically on the mental health of transgender youth is less available. As noted by the National Academies of Sciences, Engineering, and Medicine, no data from national probability samples are available; however, studies with sizable convenience samples have demonstrated that many or most transgender youth do not report mental health problems, although they are at an elevated risk of depression and attempted suicide (14).

**Caring for Transgender Patients in the Clinical Setting**

Several resources are available to help guide obstetrician–gynecologists in providing care to transgender patients (see the For More Information section). One of the most important aspects of caring for transgender adolescents is providing a safe and sensitive clinical environment. Providing gender-neutral forms also can be helpful. Gender-neutral forms provide patients with a platform to communicate their preferred gender pronouns, name, and relationship status. Gender-neutral forms also reflect the clinic’s support and sensitivity toward patients (10). Brochures and information for sexual minorities should be made available in the clinic as well (2). Patients encounter many types of health care personnel within various areas of the health care system, from making the appointment to accessing electronic health records. It
may be appropriate to provide cultural competency training for the entire practice. There are multiple transgender resource centers and LGBTQ organizations nationwide that offer training for staff to become knowledgeable about issues affecting this population. When talking with a transgender patient, it is important to use open-ended questions about his or her gender identity, transition, and therapy. It also is important to address sexual health and sexual orientation in a nonjudgmental manner because it may or may not correlate with the patient’s gender identity (15). Adolescents presenting to a gynecologist often discuss confidential issues such as STI testing and contraception. Confidentiality remains paramount for LGBTQ adolescents and should be emphasized to patients and their families (2). See the For More Information section for additional resources regarding confidentiality and the adolescent patient.

Obstetrician–gynecologists can facilitate successful gender transitions for adolescents. They may support patients’ disclosure of gender identity to their families and communities. They also may reach out to the school system in the form of education or documents supporting a patient’s gender (with the patient’s consent). Obstetrician–gynecologists also can connect patients and their families to community resources.

Management
Before any treatment is undertaken, the patient must display eligibility and readiness (Table 1), meaning that the adolescent has been evaluated by a mental health professional, has no contraindications to therapy, and displays an understanding of the risks involved (1). Most states do not have specific laws guiding transgender care for adolescents. Thus, even in states where minors may access treatment for behavioral health, contraception, and STIs without parental consent, adolescents may need parental consent for transgender health care. Additionally, insurance coverage is variable; appeals and prior authorizations may aid in coverage.

### Medical Management

Consensus guidelines support initiating medical therapy after an adolescent has an established diagnosis of transgender identity and has reached Tanner stage II development (1). Medical management involves the suppression of puberty (typically in the form of gonadotropin-releasing hormone agonists) followed by cross-sex hormone therapy to induce puberty at age 16 years. Although it is important for adolescents to understand the risks of puberty suppression (eg, decreased bone mineral density and changes in growth velocity), most other changes are reversible; thus, the discontinuation of medication would lead to the resumption of isosexual pubertal development (1).

At age 16 years, cross-gender puberty induction can begin. For transgender males, this comes in the form of testosterone therapy; for transgender females, it involves the use of estrogen and androgen blockers such as spironolactone. Unlike gonadotropin-releasing hormone agonists, many of the changes that occur with use of hormones may not be reversible (eg, deepening of the voice and facial hair growth). However, hormone therapy has been shown to decrease depression and increase self-esteem among transgender patients (16). There are several risks and adverse effects related to hormone therapy, and close follow-up is required. The clinical health care provider who administers the hormones will check laboratory values and anthropomorphic measures regularly, but a gynecologist should understand the adverse effects.

The undesired risks associated with masculinizing regimens include polycythemia, hyperlipidemia, hypertension, mood changes, and hepatitis (17). Breast cancer, ovarian cancer, uterine cancer, and vaginal cancer all have been reported in transgender male patients receiving androgen therapy. However, these cases are uncommon and there are not enough data to conclude that androgen therapy increases the risk of any gynecologic malignancy (18).

### Table 1. Eligibility and Readiness Criteria

<table>
<thead>
<tr>
<th>GnRH Agonist “Puberty Suppression”</th>
<th>Cross-Sex Hormones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis established for gender dysphoria, transgender, transsexualism</td>
<td>Testosterone or estrogen</td>
</tr>
<tr>
<td>Physical examination reveals Tanner stage II or greater</td>
<td>Fulfill criteria for GnRH agonist</td>
</tr>
<tr>
<td>Pubertal changes worsen gender dysphoria</td>
<td>16 years or older</td>
</tr>
<tr>
<td>No psychiatric illness that prevents proper diagnosis</td>
<td></td>
</tr>
<tr>
<td>No psychiatric or medical contraindications to treatment</td>
<td></td>
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<tr>
<td>Adequate support (eg, ongoing behavioral health support, family or peer support)</td>
<td></td>
</tr>
<tr>
<td>Patient demonstrates understanding of diagnosis, treatment, and the risks and benefits of treatment</td>
<td></td>
</tr>
</tbody>
</table>

Abbreviation: GnRH, gonadotropin-releasing hormone.
Surgical Management

A variety of surgical options are available, including bilateral mastectomy, hysterectomy with bilateral salpingo-oophorectomy or salpingectomy, and possible neophallus creation. Surgical management for transgender male patients typically is reserved for patients 18 years and older; however, the Endocrine Society guidelines state that mastectomy (“top surgery”) may be considered before age 18 years (1). The obstetrician–gynecologist and the patient should engage in a decision-making process to discuss the benefits of salpingectomy compared with salpingo-oophorectomy at the time of hysterectomy. For transgender male patients, a phallopexy or “bottom surgery” may be performed when the patient reaches the age of majority (4). The Endocrine Society suggests deferring bottom surgery until an individual is at least 18 years of age (1). Transgender female patients who choose to undergo surgery for a neovagina may have a vaginoplasty after the age of majority. Gynecologists may provide support with postoperative vaginal dilation. It also may be appropriate to refer a patient to or consult with a specialist or specialty center that has expertise in vaginal reconstructive surgery. It should be noted that there is no uniform transgender experience. Some transgender individuals may choose to undergo surgery or take hormones; others may not. As with all care, health care for transgender youth should be individualized.

Transgender Patients and General Gynecologic Care

Transgender male adolescents may present to a gynecologist with a common gynecologic concern. Dysmenorrhea or premenstrual syndrome may, in fact, be the presenting symptoms of gender dysphoria. After the diagnosis is established and therapy has begun, it is important to remember that these adolescents likely will still have natal-sex internal organs. These patients continue to be at risk of ovarian masses or torsion, pregnancy, and associated complications. When the adolescent’s appearance is not consistent with his or her natal sex, the health care provider may ignore common presenting symptoms for a more serious underlying gynecologic issue. For this reason, it is important to do a routine workup for gynecologic concerns, such as ultrasonography, urinalysis, and a pregnancy test for pelvic pain or a bleeding disorder workup for heavy menstrual bleeding.

Breakthrough bleeding and dysmenorrhea are common concerns of transgender males, specifically during the transition period. Although there are limited data to outline management, progesterone-only methods are used commonly. A progesterone-only pill, medroxyprogesterone acetate shot, or progesterone-containing intrauterine device can help diminish breakthrough bleeding or pain with menses without introducing exogenous estrogen.

The obstetrician–gynecologist also should be familiar with fertility preservation options for transgender adolescents. Gonadotropin-releasing hormone agonists are reversible and do not require fertility preservation; however, changes that occur with cross-sex hormones may make it more difficult to produce eggs in the future. Additionally, after the age of majority, patients may choose to undergo surgical therapy, including hysterectomy with bilateral oophorectomy or salpingectomy. Thus, transgender patients should be counseled about fertility and fertility preservation options such as egg vitrification and sperm freezing (1, 19). Although there is concern that testosterone may cause future damage to ovaries and, thus, lead to infertility, unintended pregnancies have been reported after testosterone use. Therefore, transgender men who are having sex with men should be counseled about contraception (20). Physicians should be aware of the complexity of this care and should discuss this with the patient. For example, if patients have had puberty suppression, there may be technical issues regarding when to perform ovulation induction.

Finally, the obstetrician–gynecologist has an important role in primary care and preventive health, including the provision of human papillomavirus vaccination.

Because transgender adolescents are at risk of exposure to STIs, it is important that sexually active transgender adolescents are screened regularly for gonorrhea, chlamydial infection, and HIV. According to the Centers for Disease Control and Prevention, high-risk patients, such as those who have multiple partners, exchange sex for money, or use illicit drugs, also should be screened for Trichomonas infection. It is recommended that obstetrician–gynecologists and other health care providers evaluate the STI risk for individual patients and screen accordingly in addition to encouraging consistent condom use (12).

Glossary*

Gender Identity: A person’s fundamental and innate sense of being male, female, or somewhere in between.

Gender Nonconforming: People who do not follow other people’s ideas about how they should act according to gender roles.

Queer: A term used by some people—particularly youth—to describe themselves, their community, or both. May be a positive term sometimes used to describe gender fluidity. Because of its varying meanings, this word should only be used when self-identifying or quoting someone who self-identifies as queer (eg, “My cousin identifies as genderqueer.”).

Questioning: A term used to describe those who are in a process of discovery and exploration about their sexual orientation, gender identity, gender expression, or a combination thereof.

*See more at PFLAG’s (formerly known as Parents, Families, and Friends of Lesbians and Gays) National Glossary of Terms, available at https://www.pflag.org/glossary.
Sexual Minority: Those who identify as gay, lesbian, or bisexual or who have sexual contact with persons of the same or both sexes.

Sexual Orientation: Pattern of romantic or sexual attraction; separate from gender identity and gender expression. Traditional categories include heterosexual, homosexual, and bisexual. Newer classifications include asexual, polysexual, and pansexual.

Transgender: A person whose gender identity differs from the sex they were assigned at birth.

Transgender Female: Individuals with a male natal gender but female gender identity.

Transgender Male: Individuals with a female natal gender but male gender identity.

For More Information
The American College of Obstetricians and Gynecologists has identified additional resources on topics related to this document that may be helpful for ob-gyns, other health care providers, and patients. You may view these resources at www.acog.org/More-Info/TransgenderAdolescentsCare.

These resources are for information only and are not meant to be comprehensive. Referral to these resources does not imply the American College of Obstetricians and Gynecologists’ endorsement of the organization, the organization’s website, or the content of the resource. The resources may change without notice.

References