

The Imperative for Transgender and Gender Nonbinary Inclusion

Beyond Women's Health

Heidi Moseson, PhD, MPH, Noah Zazanis, Eli Goldberg, BA, Laura Fix, MSW, Mary Durden, MA, Ari Stoeffler, BA, Jen Hastings, MD, Lyndon Cudlitz, BA, Bori Lesser-Lee, BA, Laz Letcher, PhD, BA, Aneidys Reyes, MSW, BA, and Juno Obedin-Maliver, MD, MPH

We aim to make evident that solely referencing cisgender women in the context of sexual and reproductive health—particularly pregnancy planning and care—excludes a diverse group of transgender and gender non-

From Ibis Reproductive Health, Oakland, California; the Guttmacher Institute, New York, New York; the Robert Larner, M.D. College of Medicine, University of Vermont, Burlington, Vermont; the Planned Parenthood League of Massachusetts, Boston, Massachusetts; the Department of Family and Community Medicine, University of California, San Francisco, San Francisco, California; Lyndon Cudlitz Consulting, Education & Training, Albany, New York; the Community Advisory Team, Malden, Massachusetts; the University of New Mexico, Albuquerque, New Mexico; Edgewood College, Madison, Wisconsin; and the Department of Obstetrics and Gynecology, Stanford University School of Medicine, Stanford, California.

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Corresponding author: Heidi Moseson, PhD, MPH, Ibis Reproductive Health, Oakland, CA; email: hmoseson@ibisreproductivehealth.org.

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binary people who have sexual and reproductive health needs and experiences that can be similar to but also unique from those of cisgender women. We call on clinicians and researchers to ensure that all points of sexual and reproductive health access, research, sources of information, and care delivery comprehensively include and are accessible to people of all genders. We describe barriers to sexual and reproductive health care and research participation unique to people of marginalized gender identities, provide examples of harm resulting from these barriers, and offer concrete suggestions for creating inclusive, accurate, and respectful care and research environments—which will lead to higher quality health care and science for people of all genders.

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Pregnancy—as well as contraception, abortion, prenatal care, birth, postpartum care, chestfeeding or breastfeeding, and childrearing—are often presented as experiences of cisgender women. *Cisgender* is a term that describes a person whose current gender identity is consistent with the gender identity generally assumed for the sex they were designated or assigned at birth, which is typically based on external genitalia. For example, a cisgender woman is a person who identifies as a woman and was assigned female sex at birth (ie, the sex listed on their birth certificate). Yet, people of many genders—women, men, gender-queer, nonbinary, and more—can and do carry pregnancies.^{1,2} We, the authors of this commentary, are sexual and reproductive health advocates, counselors, health-care providers, and researchers with a range of identities, including those who are transgender and gender nonbinary. *Transgender* is an umbrella term for people whose gender identity differs from the gender identity generally assumed for the sex they were

assigned at birth. People with *nonbinary* genders have gender identities that do not fit exclusively into the binary categories of woman or man. For example, some nonbinary people have a gender that blends elements of being a man or a woman, and some nonbinary people do not identify with any gender. Some people's gender changes over time (genderfluid). People whose gender is not that of a woman or man may use many different terms to describe themselves, with nonbinary being one of the most common. Other terms include agender, bigender, genderqueer, and more. None of these terms are identical or synonymous—but all speak to an experience of gender that is not just that of a man or woman exclusively.³

We aim to make evident that solely referencing cisgender women (or cisgender men) in the context of sexual and reproductive health—particularly pregnancy planning and care—excludes a diverse group of people who have sexual and reproductive health needs and experiences that are both similar to and unique from those of cisgender people.⁴ This exclusion prevents the advancement of science and clinical care for people of all genders, including cisgender women. We call on clinicians and researchers to ensure that all points of sexual and reproductive health access, sources of information, and care delivery comprehensively include and are accessible to people of all genders.

We describe harms imposed by a narrow focus on cisgender women in clinical and research settings. We also provide specific and concrete suggestions for how to be inclusive, accurate, and effective in our work to achieve gender justice and improve health care for all.

BARRIERS TO SEXUAL AND REPRODUCTIVE HEALTH FOR TRANSGENDER AND NONBINARY PEOPLE

An estimated 1–1.4 million adults (0.4–0.6% of the adult population) in the United States are transgender,^{5,6} although this number is almost certainly an underestimate.^{6,7} Population proportions may be substantially higher among the next generation; for instance, a study from the GLAAD Institute found that 12% of people aged 18–34 years in the United States identify as a gender other than cisgender.⁸ Yet, owing to inadequacies of existing research, there is much that we do not know about the sexual and reproductive health needs and experiences of transgender and gender nonbinary people. Gaps regarding transgender and gender nonbinary people's health and health care needs include contraceptive method preferences, the influence of gender-affirming hormone use⁹ on fertility, transgender and gender non-

binary people's desires for and experiences with pregnancy and experiences of abortion, and a range of other core sexual and reproductive health outcomes.^{10–13} The existing literature emphasizes that many transgender and gender nonbinary people do not seek needed health care as a result of experiences with discrimination and lower quality care related directly to gender identity.¹⁴ Transgender and gender nonbinary people are more likely than the general U.S. population to be uninsured, to experience discrimination and mistreatment in health care settings, and to be adversely affected by limited clinician knowledge or refusal to provide care.^{10,14–17} For sexual and reproductive health care, although much less is known than for general health care services, these barriers are compounded by the highly gendered environments in which people obtain health care related to contraception, abortion, pregnancy, and birth, among others—care that is widely conceptualized as “women's” health services.^{11,18} Similarly, equating gestational-related services with “women's” health marginalizes both transgender women who cannot (currently¹⁹) carry a pregnancy as well as cisgender women who by choice, congenital anomaly, infertility, or other process cannot or do not want to carry a pregnancy, and thereby reinforces the misguided notion that womanhood is inherently linked to the anatomic and functional capacity for pregnancy.

CONSEQUENCES OF EXCLUSIVE LANGUAGE AND ENVIRONMENTS IN SEXUAL AND REPRODUCTIVE HEALTH CLINICAL CARE

Although scarce formal documentation exists, powerful community testimony highlights the harms of gender-exclusive language (eg, “women's” health) and representation.^{20–23} This can be particularly pronounced in clinical care settings, such as obstetrician-gynecologist (ob-gyn) offices, family planning centers, and other sexual and reproductive health clinics. For example, entering a clinic where the sign advertises “Women's Health,” where the walls and chairs are pink, where images of only cisgender women hang in the waiting room and visit rooms, where instructional brochures use language relevant for cisgender women only, and where the patient restroom is labeled a “women's” restroom can be stigmatizing and isolating for a person who is not a woman.²⁴ Similarly, experiences of mis-gendering by clinic staff, such as a clinic receptionist referring to a man as “Miss” or “she,” or the experience of being seen by a health care provider who is not knowledgeable about the provision of affirming sexual and reproductive health care for transgender and gender nonbinary patients²⁵—or who

outright refuses to provide care to transgender and gender nonbinary patients¹¹—can traumatize patients and deter them from seeking future health care. Electronic medical records (EMRs) can complicate the issue by preventing even well-informed clinicians from completing a patient’s chart accurately simply because specific codes are inconsistent with someone’s sex or gender as registered in the EMR.^{12,26} For instance, a clinician may find that the EMR does not display the appropriate checkboxes to document a prostate examination on a transgender woman who is registered as a woman, or that they are unable to complete charges for a man of transgender experience who is undergoing intrauterine device placement because this is inconsistent with the sex of his registration in the EMR (Fig. 1). Another challenge with some EMR systems is the electronic communication of laboratory values to patients as soon as they are available using laboratory “normal” ranges based on cisgender patients, meaning that a patient may see their result flagged as “abnormal” even when it is actually normal based on the medications or hormones the patient is taking or the surgeries they have had. Similar challenges arise with some health insurance plans that refuse to cover preventive sexual and reproductive health care (eg, Pap tests, contraceptive care, sexually transmitted infection screening) or pregnancy care for someone who has registered as a man on their insurance, even though the Affordable Care Act defines this as illegal under Section 1557.²⁷

Beyond deterring patients from seeking care, these factors can also negatively affect the quality of care received. For instance, in a health record in which a transgender man is registered as male, the EMR will not typically prompt the clinician to ensure that the patient is up to date on his Pap tests or present options to record an obstetric history; a transgender man or nonbinary patient may skip an intake form section marked “For women only,” omitting key information about reproductive history; or simply, a health care provider may skip questions on patient sexual history because they do not know what language to use and are afraid of being offensive.²⁶

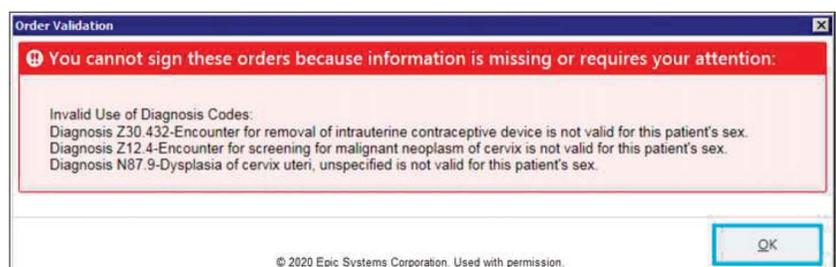
Research suggests that efforts toward incorporating transgender health into undergraduate and graduate medical educations are nascent. Such programs are sparse, with only 16% of Liaison Committee on Medical Education-accredited academic practices reporting a comprehensive LGBTQ competency training program; more than half (52%) report no LGBTQ training.^{28,29} Even when training is provided, it may not be of high quality.³⁰ More specifically, a survey of ob-gyns in the United States found that only a third (or less) were comfortable providing care for transgender patients. Each of these realities (and others) additively acts to deter many transgender and gender nonbinary people from seeking sexual and reproductive health services. Further, they reduce the quality of care if obtained and lead to reluctance to seek future care, thereby reducing access to care for related sexual and reproductive health services, such as desired pregnancies, assisted reproductive techniques, and fertility preservation, and could increase the chance of sexually transmitted infections and unintended pregnancy, missed cancer screenings, and more.

CONSEQUENCES OF EXCLUSIVE LANGUAGE AND IMAGES IN SEXUAL AND REPRODUCTIVE HEALTH RESEARCH

The focus on cisgender women in sexual and reproductive health research has led to data that are either irrelevant to or inaccurate for those of us who are transgender and gender nonbinary. The limited data on the specific sexual and reproductive health needs and experiences of transgender and gender nonbinary people are fraught with misclassification bias owing to lack of specificity in defining terms, vague inclusion criteria, negation of the importance of gender self-identification, heteronormative assumptions about sex and reproduction, clinical and investigational selection bias, and legal or practical requirements for sterilization for gender affirmation. Conflation of language is common, with lack of distinction between “sex” (ie, the classification of people as male, female, intersex, or another sex based on a combination of genital anatomy, hormones, and chromosomes)

Fig. 1. Screenshot of electronic medical record system preventing intrauterine device removal and cervical examination for a patient because their registered sex is male. Epic Systems Corporation. Used with permission.

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compared with “gender” (ie, one’s internal sense of being a man, woman, neither of these, both, or another gender[s]), despite different meanings and implications. Incomplete or vague eligibility criteria lead to study samples that systematically exclude portions of the target population; for instance, studies on pregnancy experiences recruiting women only, thereby excluding pregnant transgender and gender nonbinary people from the study. Relatedly, many examples exist of researchers misclassifying people in ways that do not reflect their gender identity (eg, erroneously including transgender women in research about men who have sex with men⁵), which undermines the identity of research participants and also the inferences that can be derived from study findings. Heteronormative assumptions about sexual activity and pregnancy desires underpin many of these research blind spots, such as the assumption that only cisgender women who are straight or bisexual can get pregnant or would want to be pregnant, when, in fact, that does not capture the diversity of experiences that occur. Further, the historical and current intersection between research and gatekeeping (eg, research being conducted by health care providers who also control patients’ access to gender-affirming treatment), as well as requirements that transgender people be surgically sterilized to be legally recognized in their gender,^{31,32} further contribute to inaccuracies and bias in sexual and reproductive health research by inducing selection bias in both who can and who does present for care.

Whether the invisibility of transgender and gender nonbinary experiences in sexual and reproductive health research is the result of study design and analysis practices that lack consideration of transgender and gender nonbinary experiences or of transgender and gender nonbinary people choosing not to participate in research because of a long history of discrimination and mistreatment, the result is the same—selection bias and invisibility about the needs of transgender and gender nonbinary people. As a result, most existing sexual and reproductive health research cannot be used to inform clinical or public health practice improvements for transgender and gender nonbinary people because the data simply have not been collected. One example of this is in the Behavioral Risk Factor Surveillance System, a national system of health-related telephone surveys conducted in the United States. The Behavioral Risk Factor Surveillance System asks for “sex” as well as “gender identity” but does not provide a definition of “sex” and asks questions about preconception health and family planning only to respondents who report their sex as

female. Yet, in 2017 for instance, potentially owing to the lack of clarity in definitions of “sex” and “gender,” our analyses of Behavioral Risk Factor Surveillance System data indicated that 77 transgender men reported their sex as male and 139 transgender women reported their sex as female.³³ This means that, in this one dataset, at least 139 people who could never have gotten pregnant were asked questions about contraception and 77 people who may or may not have the capability to become pregnant were not asked these questions. Similarly, another analysis found that up to 29.6% of BRFSS respondents are misclassified by sex assigned at birth in the 2014–2016 datasets.³⁴ This misclassification bias leads to issues with data quality and accuracy and inferential errors that researchers and others draw from study data. Further, the lack of inclusion of transgender and gender nonbinary people in much sexual and reproductive health research limits the advancement of reproductive medicine. For instance, in the small but growing body of research in which transgender and gender nonbinary patients have been included, we are learning about the effect of testosterone on ovarian function, puberty, bone health, and sex drive, as well as other biological and pathologic processes.^{35–39} Broader inclusion in research could open up new understandings of medicine for people of all genders.

SUGGESTIONS FOR INCLUSIVITY IN SEXUAL AND REPRODUCTIVE HEALTH CARE AND RESEARCH

Regardless of context, there are almost always simple, direct ways of shifting our language and environments of care and research to be inclusive—subtle changes that may carry much significance for people’s experiences with sexual and reproductive health care. Based on a nascent and growing literature on the needs and preferences of transgender and gender nonbinary populations with regard to sexual and reproductive health care,^{10,11,19} and personal experiences as researchers, clinicians, and members of the transgender and gender nonbinary community, we offer this set of context-specific suggestions to facilitate a shift in our field toward inclusion. In particular, we focus on two settings: clinical care and research.

CLINICAL CARE

It is essential that health care providers and staff communicate information clearly while also prioritizing and being flexible to the unique needs of each individual patient. To achieve this balance, we have identified best practices to make gender-affirming care the norm for patients of all genders (Table 1). We

Table 1. Recommendations for Building Gender-Inclusive Clinical Settings

Context	Marginalizing Practices	Inclusive Practices
Sexual and reproductive care, clinical facilities	<p>“Women” in titles and signage (ie, “women’s health clinic”)</p> <p>Gendered bathrooms (men’s room and women’s room)</p>	<p>Describe the nature of care provided, ie, “sexual and reproductive health clinic” or “genital clinic.”</p> <p>Single-stall bathrooms should be gender neutral (“bathroom” or “all gender bathroom”). If only multi-stall bathrooms available, at least one should be marked “all gender bathroom.”</p>
	<p>“Women’s” vs “men’s” waiting area</p>	<p>Offer gender-neutral waiting areas, offer private waiting areas.</p>
	<p>Inflexibility in appointment times based on patient preferences and needs</p>	<p>Flexibility in offering patient appointments at the very beginning or end of the shift if a patient has concerns about discomfort in the waiting area owing to potential discomfort from others about someone’s gender expression.</p>
	<p>“Breastfeeding room” or “Mother’s room”</p> <p>Marketing sexual and reproductive health services to people assigned female at birth only</p>	<p>“Nursing parents’ room” or “infant feeding room”</p> <p>Consider marketing sexual and reproductive health services for everyone, regardless of gender—eg, affirming sexually transmitted infection testing and care, general health screening, fertility preservation, support to induce lactation, postvaginoplasty care, pelvic pain.</p>
Patient education materials	<p>Pictures of cisgender women (or cisgender heterosexual couples) used to illustrate contraception, abortion, or pregnancy</p>	<p>Include pictures of both cisgender women and transgender and nonbinary people, including multiple genders of pregnant people where applicable, including people who are in same-gender partnerships.</p>
	<p>Using only pink, flowers, butterflies (to advertise sexual and reproductive health services)</p>	<p>Design schemes should avoid unnecessarily gendering care with traditional markers of femininity.</p>
Clinical encounters	<p>Using gender- or sex-specific intake forms</p>	<p>Use the same, all-gender, intake form for all patients, without any questions designated as for “women only” or “men only.” Consider an all-gender intake form that asks people to indicate the organs they have and elicits words that each patient uses to talk about their body parts to guide patient and provider interactions (an example of a simple, if specific, intake form can be found in Ref. 45). Any intake form should receive input from a diverse cross-section of patient representatives.</p>
	<p>Asking only for legal name and sex</p>	<p>Early in a visit, systematically allow patients to indicate their gender identity pronouns and how they wish to be addressed; note this information clearly in the patient file and ensure that all staff use it throughout the clinical encounter. For gender identity, offer the opportunity to identify as a man, woman, nonbinary, genderqueer, gender-nonconforming, or another gender not specified. Ideally, allow people to write in their full gender identity. Allow patients to indicate the sex that is registered with their insurance, legal sex, sex assigned at birth, and organs that they currently have, without assuming that these align; verify this information at subsequent visits because name, gender identity, pronoun, and legal or administrative sex may change. Educate and train staff so that they understand the importance of and are comfortable asking for this information.</p>
	<p>Relying on patients to offer pronouns</p>	<p>Create a culture in which clinic staff introduce themselves with their pronouns (“Hi, I’m Dr. X and my pronouns are she and her. How are you today?”) and include pronouns on staff identification badges. If not assessed on forms or before encounter, ask patient’s name and pronouns: “What name do you prefer I use? What are your pronouns?”</p>

(continued)

Table 1. Recommendations for Building Gender-Inclusive Clinical Settings (continued)

Context	Marginalizing Practices	Inclusive Practices
	Not using collected information on pronouns or identity or recording this information in a place that is difficult to reference	Store patient pronouns and identity information in a place that is visible and readily accessible to all staff who need to identify or communicate with the patient throughout each encounter and from encounter to encounter. Ideally, wherever the patient's name is displayed, the identified pronouns are also visible.
	Assuming which body parts or organs a person might have based on gender identity or sex assigned at birth	Ask or assess (eg, with intake forms) all patients what body parts or organs they have in a systematic way, regardless of gender identity, and record this in a way that is accessible to other clinicians from encounter to encounter.
	Assuming use of clinical terms for body parts	Ask all patients which terms they prefer to use to describe their own body parts and whether there are any terms they are not comfortable using, regardless of gender identity. Demonstrate awareness of when and where language may not be ideal, eg, "I'm going to use anatomical terms because that's the clearest way that I can describe this," or "this pamphlet refers to all pregnant people as women, but it has some really helpful information about X."
	Assuming particular pregnancy or fertility desires of transgender or gender nonbinary patients	Introduce the topic of pregnancy and family building neutrally, without assuming anything about pregnancy or fertility preservation desires, and discuss all related options, including contraception, pregnancy, parenting, abortion, adoption, co-housing, co-parenting, and more.
	Asking only about "opposite" (or assumed opposite) gender when taking sexual histories	In taking sexual history for all patients—cisgender patients included—ask about all sexual partners and allow patients to specify the gender(s) and body parts of partners. Understand that patients' partners may not be cisgender and ask additional questions as necessary to clarify partners' anatomy and specific sexual behaviors.
	Requiring patients to remove clothes for much of the appointment	Conduct as much of the appointment as possible with the patient clothed and allow patients the opportunity to defer invasive physical examinations to another appointment (unless absolutely necessary).
	Training only direct clinical providers in gender-affirming practices	Work with ancillary providers (eg, pharmacists, radiographers) as well as other facility staff with patient contact (eg, door greeters, phone operators, billing and insurance staff) to make sure that every step of the care pathway is welcoming.
	Use of gendered terms for routine care (ie, "well-woman's exam")	Describe examinations and procedures in gender-neutral ways, such as, eg, "preventative care visit," "pelvic exam," "contraceptive services," "cervical cancer screening."

group these recommendations according to physical aspects of care facilities (signage, services provided), patient informational materials and intake forms, and interactions between staff and patients. Our recommendations build off of guidance provided by clinicians who specialize in the care of transgender and gender nonbinary patients,^{11–13,18} and we broaden our recommendations for clinical encounters with patients of all genders.

RESEARCH SETTING

Specificity and precision in language are essential to conducting high-quality research and to communicating results clearly. Although some have argued that expanding the focus beyond cisgender women in sexual and reproductive health research may confuse people,⁴¹ or generalize the research to an extent that it is difficult to understand, we disagree. Failing to clearly articulate the relevant study population for

Table 2. Recommendations for Conducting Gender-Inclusive Research

Context	Marginalizing Practices	Inclusive Practices
Community engagement	<p>Study teams containing only cisgender researchers or lack of transparency about the demographics and composition of the research team as it relates to the study of interest</p> <p>Relying only on published literature or on formal representatives of the transgender community (consultants, nongovernmental organizations, advocacy groups)</p>	<p>Strive to collaborate with transgender and gender nonbinary researchers; name as a limitation if study team does not include the population of interest.</p> <p>Collaborate closely with a community advisory board made up of individuals who represent the communities most affected by the research. Strive for individuals from different backgrounds, including those typically underrepresented within research, and consider a multiplicity of identities and experiences (eg, nonbinary and genderqueer people, differently abled and neurodiverse transgender people, transgender people of color).</p>
Study population and recruitment	<p>Restricting sexual and reproductive health surveys to cisgender women or to people assumed to be cisgender women</p>	<p>Specify when research is relevant specifically to people who are capable of pregnancy or have specific reproductive anatomy and describe as such, rather than tied to gender. In eligibility criteria, be intentional about assessments related to gender identity and sex assigned at birth based on relevance to the research question.</p>
Measurement of gender, sex, and sexual activity	<p>Two gender options: man–male and woman–female</p>	<p>Offer (at a minimum) the opportunity to identify as a man, woman, nonbinary, genderqueer, gender nonconforming, another gender not specified, or to opt not to identify a gender at all. Ideally, allow people to write in their full gender identity before asking people to select from a list of gender identities. Always include an option for people to self-identify (blank space where an individual can write in an identity if it is not included in the options).</p>
	<p>One question indicating gender or sex</p>	<p>Ask separately about current gender identity, sex assigned at birth, and intersex status.</p>
	<p>Separate options for “woman–man” and “trans woman–trans man”</p>	<p>Either specify “cisgender woman or cisgender man” (rather than assuming cisgender as default) or offer one option for “woman or man” and a separate question to indicate whether someone is transgender or cisgender.</p>
	<p>Asking only about sexual behavior with an assumed opposite gender partner</p>	<p>Ask about gender(s) of partner(s), including nonbinary gender options. If relevant, specifically ask about sexual activity that can cause pregnancy (ie, “Do you engage in sexual activities where sperm is released in or near the vagina?”) or transmit infections.</p>
	<p>Asking only about sexual attraction to one or both binary gender options (man or woman)</p>	<p>Ask participants to “select all” from a list of genders to which they may or may not be attracted and be sure to include nonbinary gender identities as well as the option for not being attracted to people of any gender. Do not assume that sexual attraction aligns with sexual behavior or that either align with sexual identity (eg, a transgender woman who identifies as a lesbian primarily has sex with cisgender and transgender women but occasionally has sex with cisgender men).</p>

(continued)

Table 2. Recommendations for Conducting Gender-Inclusive Research (continued)

Context	Marginalizing Practices	Inclusive Practices
Skip patterns	Using gender or sex questions to determine skip patterns related to contraception and pregnancy	If skip patterns are needed, ask specifically about capacity for pregnancy, reproductive anatomy, sex assigned at birth, or all (as relevant to research question), rather than relying on gender identity to present questions relevant to contraception and pregnancy.
Reproductive and sexual anatomy	Using only technical or medically accepted terminology for sexual anatomy (eg, breasts, vagina, uterus)	Allow participants to specify the language they use for their anatomy and “pipe-in” preferred language throughout the survey form. If this is not possible, at the very least acknowledge limitations and potential discomfort people may feel with medical terms.
	Assuming all primary and secondary sexual characteristics correspond to stated gender (and to other characteristics)	Ask about specific anatomy in an organ inventory, recognizing that participants may be intersex or may have altered sexual, anatomic, or physiologic characteristics through gender affirmation processes or other life experiences.
	Assuming sexual characteristics of sexual partners based on gender	Ask about both gender and sex assigned at birth for patients’ sexual partners, as necessary, rather than making assumptions about chance of pregnancy based on stated partner gender.
Dissemination of findings	Presenting only two gender or sex options in description of study population (ie, Table 1)	As relevant for the research question, present current gender identity as distinct from sex assigned at birth, with options beyond the binary man or woman. Consider presentation of results by organ inventory or other measures of relevance for the health outcome of interest (eg, pregnancy, sexually transmitted infection), rather than gender identity.
	Disseminate results in scientific journals and conferences only	Develop a dissemination plan to ensure results are shared with the communities for whom they are most relevant, including social media sharing, blog posts, videos, fact sheets, and more.
	Discussing research related to pregnancy as if it pertains only to women	Where possible, use gender-inclusive language (eg, “pregnant people,” “individuals,” “patients”) throughout introduction and discussion sections. If more specific language around gender is appropriate, specify it as such and be clear about when and why gendered language is appropriate.

a given research question in terms of gender identity, sex assigned at birth, hormonal milieu, or current organs can restrict (or broaden) the sample population unnecessarily, leading to the systematic exclusion of certain populations from research and complicating our ability to understand whether and to whom research results apply. Further, most widely used or validated measures of sexual and reproductive health experiences are laden with heteronormative, cisnormative assumptions about the types of sex people are having^{42,43}; the gender, sex assigned at birth, and current organs of people’s partners; and their capacity for pregnancy. These assumptions bias the questions and, consequently, the data that they collect.

We make recommendations for how researchers can more appropriately consider and define the relevant study population for a given research question (in terms of gender identity and sex assigned at birth); develop and field more inclusive, relevant, and precise research measures; report and disseminate findings with more thought and nuance in relation to gender and sex; and involve transgender and gender nonbinary individuals at each step of the process, including on the research team itself (Table 2).

CONCLUSION

Clinical care and research are closely linked; questions that arise in clinical care motivate much

research, and research subsequently informs changes and innovations in clinical care. If people are left out of either space, they are left out of both. In this commentary, we have endeavored to highlight key barriers to inclusion of transgender and gender non-binary people in sexual and reproductive health care and research and to provide suggestions for addressing these barriers. We have by no means covered all barriers and, indeed, know that more is needed to understand barriers faced by more vulnerable and differently resourced communities within the larger transgender and gender nonbinary umbrella, including barriers specific to youth and adolescents, such as parental involvement and consent, coming out or disclosure to parents, and more, as well as barriers unique to transgender and gender nonbinary people of color, people with disabilities, and people who do not speak English.

Language reflects and reinforces our attitudes. When we evaluate our language, we examine more deeply the assumptions that frame our work. Changing the language we use and the environments in which we work is necessary for greater inclusion and quality, but it is not an all-encompassing solution. Rather, it is the first of many crucial steps needed to move us toward greater inclusivity, kindness, and, ultimately, higher quality clinical care and research for people of all genders. We hope this commentary contributes to shifting the paradigm of sexual and reproductive health clinical care and research toward this vision of comprehensive inclusion and high-quality health care for all.

REFERENCES

1. Light A, Obedin-Maliver J, Sevelius J, Kerns J. Transgender men who experienced pregnancy after female-to-male gender transitioning. *Obstetrics Gynecol* 2014;124:1120–7.
2. Beatie T. Labor of love: is society ready for a pregnant male? *Advocate*, March 14, 2008.
3. National Center for Transgender Equality. Understanding non-binary people: how to be respectful and supportive. Available at: <https://transequality.org/issues/resources/understanding-non-binary-people-how-to-be-respectful-and-supportive>. Retrieved November 1, 2019.
4. Light A, Obedin-Maliver J. Opening the ob/gyn door for sexual and gender minority patients. *Contemporary OB/GYN*, January 15, 2019.
5. Sevelius JM, Keatley J, Calma N, Arnold E. “I am not a man”: trans-specific barriers and facilitators to PrEP acceptability among transgender women. *Glob Public Health* 2016;11:1060–75.
6. Meerwijk EL, Sevelius JM. Transgender population size in the United States: a meta-regression of population-based probability samples. *Am J Public Health* 2017;107:e1–8.
7. MacCarthy S, Reisner S, Nunn A, Perez-Brumer A, Operario D. The time is now: attention increases to transgender health in the United States but scientific knowledge gaps remain. *LGBT Health* 2015;2:287–91.
8. GLAAD. Accelerating acceptance 2017: a Harris poll survey of Americans’ acceptance of LGBTQ people. Los Angeles (CA): GLAAD; 2017.
9. Deutsch M. Overview of gender-affirming treatments and procedures. Available at: <https://transcare.ucsf.edu/guidelines/overview>. Retrieved November 18, 2019.
10. Hoffkling A, Obedin-Maliver J, Sevelius J. From erasure to opportunity: a qualitative study of the experiences of transgender men around pregnancy and recommendations for providers. *BMC Pregnancy Childbirth* 2017;17:332.
11. Obedin-Maliver J. Time for OBGYNs to care for people of all genders. *J Women’s Health* 2015;24:109–11.
12. Hahn M, Sheran N, Weber S, Cohan D, Obedin-Maliver J. Providing patient-centered perinatal care for transgender men and gender-diverse individuals: a collaborative multidisciplinary team Approach. *Obstet Gynecol* 2019;134:959–63.
13. Krempasky C, Harris M, Abern L, Grimstad F. Contraception across the transmasculine spectrum. *Am J Obstet Gynecol* 2019;222:134–43.
14. James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. The report of the 2015 U.S. transgender survey. Washington, DC: National Center for Transgender Equality; 2016.
15. Kates J, Ranji U, Beamesderfer A, Salganicoff A, Dawson L. Health and access to care and coverage for lesbian, gay, bisexual, and transgender individuals in the U.S. Available at: <http://files.kff.org/attachment/Issue-Brief-Health-and-Access-to-Care-and-Coverage-for-LGBT-Individuals-in-the-US>. Retrieved August 3, 2018.
16. Klein D, Berry-Bibee E, Keglovitz Baker K, Malcolm NM, Rollison JM, Frederiksen BN. Providing quality family planning services to LGBTQIA individuals: a systematic review. *Contraception* 2018;97:378–91.
17. Rodriguez A, Agardh A, Asamoah B. Self-reported discrimination in health-care settings based on recognizability as transgender: a cross-sectional study among transgender U.S. citizens. *Arch Sex Behav* 2017;47:973–85.
18. Stroumsa D, Wu JP. Welcoming transgender and nonbinary patients: expanding the language of “women’s health.” *Am J Obstet Gynecol* 2018;219:585.e1–5.
19. Jones B, Williams N, Saso S, Thum MY, Quiroga I, Yazbek J, et al. Uterine transplantation in transgender women. *BJOG* 2019;126:152–6.
20. Finlay J. Seahorse. Available at: <https://seahorsefilm.com/>. Retrieved January 26, 2020.
21. Barker J A deal with the universe. Available at: <https://www.imdb.com/title/tt8014038/>. Retrieved January 26, 2020.
22. Huberdeau R. Transforming family. Available at: <https://www.imdb.com/title/tt11171320/>. Retrieved January 26, 2020.
23. Davis K. Southern comfort. Available at: <https://www.imdb.com/title/tt0276515/>. Retrieved January 26, 2020.
24. Reisner S, Perkovich B, Mimiaga M. A mixed methods study of the sexual health needs of New England transmen who have sex with nontransgender men. *AIDS Patient Care STDS* 2010; 24:501–13.
25. Unger CA. Care of the transgender patient: a survey of gynecologists’ current knowledge and practice. *J Women’s Health* 2015;24:114–8.
26. Forsberg H. Practices, challenges and needs of healthcare providers doing contraceptive care for transmasculine and non-binary assigned female at birth patients. Pittsburgh (PA): American Public Health Association; 2019.

27. Department of Health and Human Services. Nondiscrimination in health programs and activities. 45 CFR Part 92; RIN 0945-AA02. Vol Section 1557 of the Affordable Care Act 2016.
28. Khalili J, Leung LB, Diamant AL. Finding the perfect doctor: identifying lesbian, gay, bisexual, and transgender-competent physicians. *Am J Public Health* 2015;105:1114–9.
29. Dubin SN, Nolan IT, Streed CG Jr, Greene RE, Radix AE, Morrison SD. Transgender health care: improving medical students' and residents' training and awareness. *Adv Med Educ Pract* 2018;9:377–91.
30. Obedin-Maliver J, Goldsmith ES, Stewart L, White W, Tran E, Brenman S, et al. Lesbian, gay, bisexual, and transgender-related content in undergraduate medical education. *JAMA* 2011;306:971–7.
31. Mendez J. Report of the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment. New York (NY): United Nations General Assembly; 2013.
32. The Associated Press. Japan's Supreme Court upholds transgender sterilization requirement. Associated Press, January 25, 2019. Available at: <https://www.nbcnews.com/feature/nbc-out/japan-s-supreme-court-upholds-transgender-sterilization-requirement-n962721>. Retrieved March 23, 2020.
33. Centers for Disease Control and Prevention. Behavioral risk factor surveillance system: 2017 BRFSS survey data and documentation. Atlanta (GA): CDC; 2017.
34. Tordoff D, Andrasik M, Hajat A. Misclassification of sex assigned at birth in the behavioral risk factor surveillance system and transgender reproductive health: a quantitative bias analysis. *Epidemiology* 2019;30:669–78.
35. Grynberg M, Fanchin R, Dubost G, Colau JC, Brémont-Weil C, Frydman R, et al. Histology of genital tract and breast tissue after long-term testosterone administration in a female-to-male transsexual population. *Reprod Biomed Online* 2010;20:553–8.
36. De Roo C, Lierman S, Tilleman K, Peynshaert K, Braeckmans K, Caanen M, et al. Ovarian tissue cryopreservation in female-to-male transgender people: insights into ovarian histology and physiology after prolonged androgen treatment. *Reprod Biomed Online* 2017;34:557–66.
37. Schagen SE, Cohen-Kettenis PT, Delemarre-van de Waal HA, Hannema SE. Efficacy and safety of gonadotropin-releasing hormone agonist treatment to suppress puberty in gender dysphoric adolescents. *J Sex Med* 2016;13:1125–32.
38. Chan KJ, Liang JJ, Jolly D, Weinand JD, Safer JD. Exogenous testosterone does not induce or exacerbate the metabolic features associated with PCOS among transgender men. *Endocr Pract* 2018;24:565–72.
39. Wiepjes CM, de Jongh RT, de Blok CJ, Vlot MC, Lips P, Twisk JW, et al. Bone safety during the first ten years of gender-affirming hormonal treatment in transwomen and transmen. *J Bone Miner Res* 2019;34:447–54.
40. Dadasovich R, Auerswald C, Minnis AM, Raymond HF, McFarland W, Wilson EC. Testosterone and sexual risk among transmen: a mixed methods exploratory study. *Cult Health Sex* 2017;19:256–66.
41. Pollitt K. Who has abortions? *The Nation*, March 13, 2015.
42. Alpert AB, CichoskiKelly EM, Fox AD. What lesbian, gay, bisexual, transgender, queer, and intersex patients say doctors should know and do: a qualitative study. *J Homosex* 2017;64:1368–89.
43. Sevelius J. “There’s no pamphlet for the kind of sex I have”: HIV-related risk factors and protective behaviors among transgender men who have sex with nontransgender men. *J Assoc Nurses AIDS Care* 2009;20:398–410.
44. Pederson S. A new and inclusive intake form for diagnostic imaging departments. *J Med Imag Radiation Sci* 2018;49:371–5.

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