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ORIGINAL PAPER



Stakeholder Perceptions and Experiences Regarding Access to Contraception and Abortion for Transgender, Non-Binary, and Gender-Expansive Individuals Assigned Female at Birth in the U.S.

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Abstract

Sexual and reproductive health (SRH) care often excludes the needs and experiences of transgender, non-binary, and genderexpansive (TGE) individuals. This study aimed to collect diverse stakeholder perspectives on barriers and facilitators to contraception and abortion for TGE individuals assigned female at birth (AFAB), assess knowledge and attitudes about unintended pregnancy prevention in these populations, and identify recommendations for improving SRH services for people of all genders. Between October 2017 and January 2018, we conducted 27 in-depth interviews with SRH stakeholders, including five TGE individuals who had obtained contraception or abortion care, and 22 clinicians, researchers, and advocates experienced in transgender healthcare. We iteratively developed a codebook and conducted thematic analysis to capture the spectrum of perspectives across interviews. Stakeholders reported a range of barriers to contraception and abortion access for TGE people AFAB, including inability to afford services, lack of gender-affirming clinicians, difficulty obtaining insurance coverage, and misconceptions about fertility and unplanned pregnancy risk. Deterrents to care-seeking included gendered healthcare environments, misgendering, and discrimination. Stakeholders described provider knowledge gaps and a perceived lack of medical education relevant to the SRH needs of TGE people. Recommendations included using gender-inclusive language and gender-affirming patient education materials and improving provider training on gender-affirming SRH care. Stakeholders identified substantial barriers to high-quality contraception and abortion care for TGE AFAB people in the U.S. They recommended specific interventions at the provider and institutional levels to improve experiences with care for TGE people and ensure broader access to gender-affirming SRH services.

Keywords Transgender · Abortion · Contraception · Family planning · Gender identity · Gender-inclusive

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Introduction

Transgender, non-binary, and gender-expansive (TGE) people experience barriers unique to their gender identity when accessing health care in the U.S. Transgender people are those whose current gender identity differs from their sex assigned at birth (Gender Spectrum, 2017). While some people use the term "gender-expansive" to describe their particular experience, the term also captures a range of gender identities including but not limited to transgender, agender, bigender, genderqueer, non-binary, and pangender (Gender Spectrum, 2017). Gender identity is fluid and individuals may hold multiple identities simultaneously or experience a change in their identity throughout the lifespan (Kuper, Nussbaum, & Mustanski, 2012; Suen et al., 2020).

Estimates of the number of TGE people in the U.S. vary, as information about gender is not collected in nationally

representative surveys such as the United States Census (MacCarthy, Reisner, Nunn, Perez-Brumer, & Operario, 2015). Existing estimates suggest that about 390 per 100,000 U.S. adults (Meerwijk & Sevelius, 2017) or approximately 1.4 million adults (0.6% of the adult population) in the U.S. are transgender (Flores, Herman, Gates, & Brown, 2016). However, due to limitations and biases in measurement and data collection, these figures likely underestimate the population size (MacCarthy et al., 2015; Meerwijk & Sevelius, 2017).

Some of the numerous barriers to medical care faced by TGE people in the U.S. include discrimination in the healthcare setting based on gender identity, limited clinician knowledge and/or refusal to provide care, and lower rates of insurance coverage than the general U.S. population (Hoffkling, Obedin-Maliver, & Sevelius, 2017; Kates, Ranji, Beamesderfer, Salganicoff, & Dawson, 2016; Klein et al., 2018; Rodriguez, Agardh, & Asamoah, 2017; Wingo, Ingraham, & Roberts, 2018). In this paper, we refer to discrimination that TGE people may face at the interpersonal, organizational, and structural levels of the healthcare system, as outlined by Krieger (2014). Facilitators to care for TGE people, conversely, include knowledgeable clinicians, use of gender-inclusive language by clinicians and staff, affirming and inclusive healthcare environments, and comprehensive health insurance (James-Abra et al., 2015; Klein et al., 2018; Oliver & Cheff, 2012).

Of the factors that impede access to care, the lack of knowledgeable providers may stem in part from the shortage of high-quality, formal TGE-inclusive and TGE-specific educational and training opportunities for providers, both at a basic and advanced level (Obedin-Maliver et al., 2011). This inadequate provider knowledge not only deters healthcare seeking by TGE populations, but also can reduce the appropriateness and quality of care provided to TGE patients and lead to poor health outcomes (Agénor et al., 2016; Peitzmeier, Khullar, Reisner, & Potter, 2014a; Peitzmeier, Reisner, Harigopal, & Potter, 2014b; Seelman, Colón-Diaz, LeCroix, Xavier-Brier, & Kattari, 2017; Tabaac, Sutter, Wall, & Baker, 2018). Correspondingly, research findings highlight a desire among many clinicians for additional training to improve their care of TGE patients (Davidge-Pitts, Nippoldt, Danoff, Radziejewski, & Natt, 2017; Paradiso & Lally, 2018), as well as to improve their confidence, sense of preparedness, and experience with providing care to these populations (Davidge-Pitts et al., 2017; Dy et al., 2016; White et al., 2015).

Research specific to the contraception and abortion care experiences and desires of TGE people assigned female at birth (AFAB) is limited. Findings from existing research indicate that transgender people at risk of unintended pregnancy may not be using any contraception or highly effective methods, therefore increasing the chances of having an unintended pregnancy (Cipres et al., 2017; Light, Obedin-Maliver, Sevelius, & Kerns, 2014; Light, Wang, & Gomez-Lobo, 2017). Reasons for low use of contraception may include stigmatizing experiences at SRH clinics, disinterest or discomfort using methods containing "female" hormones, misconceptions about the contraceptive effectiveness of testosterone, and provider uncertainty or reluctance to discuss reproductive intentions with transgender patients (Cipres et al., 2017). In one mixed-methods study of transgender men, 60% reported use of at least one contraceptive method, and 17% had one or more pregnancy in their lifetimes; 12% of the sixty pregnancies reported by study participants ended in induced abortion (Light, Wang, Zeymo, & Gomez-Lobo, 2018). The Guttmacher Institute conducted a survey of abortion facilities in the U.S. and estimated 462-530 TGE individuals obtained an abortion in a non-hospital setting in 2017 (Jones, Witwer, & Jerman, 2020). This figure may be lower than the actual number of cases, as many facilities do not regularly collect information about both gender identity and sex assigned at birth (Jones et al., 2020). Beyond these few studies, the experiences of TGE AFAB populations with unintended pregnancy, contraception, and abortion care are not well-documented. Research on interventions for improving experiences with, the quality of, and access to sexual and reproductive healthcare (SRH) for TGE individuals AFAB is also lacking (Cipres et al., 2017; Harb, Pass, De Soriano, Zwick, & Gilbert, 2019; Kanj, Conard, & Trotman, 2016; Light et al., 2014, 2017).

To address the gap in the literature, we conducted a qualitative study to identify key barriers and facilitators to accessing contraception and abortion care among TGE individuals AFAB in the U.S. and to assess stakeholder attitudes towards unintended pregnancy among these populations. We will use these data to inform large-scale research on the impact of these barriers, the family planning needs and desires of these populations, and to identify approaches to the delivery of inclusive and gender-affirming family planning care.

Method

Participants

Between October 2017 and January 2018, we conducted 27 interviews with stakeholders across the country. To recruit a sample with a range of perspectives from different sectors of the healthcare field related to TGE sexual and reproductive health, we invited stakeholders in four key categories: (1) TGE people AFAB who have accessed contraception or abortion services, (2) clinicians, (3) advocates and educators, and (4) researchers. Eligible participants spoke English, were at least 18 years of age, and self-identified as working in transgender health care and/or as TGE. TGE individuals

recruited to participate in their personal capacity had to selfreport female sex assigned at birth and prior experience with contraception and/or abortion care to determine eligibility. The authors developed an initial list of potential stakeholders through their own personal and professional networks and expanded this list through social media posts and interviewee snowball sampling.

Measure and Procedure

Stakeholders were invited via e-mail and social media posts. After expressing interest, stakeholders were asked to complete a brief online screening survey of socio-demographic information including self-disclosure of recruitment category best describing their work and/or personal experience. Stakeholders who fit in more than one recruitment category, e.g., TGE individual and clinician, were invited to participate from a personal or professional capacity in order to determine which interview guide was used. They are identified here according to the stakeholder group they selected, though we invited responses informed by all dimensions of participants' lived experiences. Screening helped ensure our final sample included stakeholders from each major geographic region of the U.S. and each target group.

Interviewers described study participation and confirmed potential participants' desire to proceed before obtaining verbal informed consent from all participants involved in the study. Three trained interviewers conducted semi-structured in-depth interviews by telephone. As a team, we recognized the importance of shared experiences and identities in fostering collaborative interviewing so as to diminish power differentials and promote participant comfort (Muhammad et al., 2015). Therefore, we ensured that interviews with TGE individuals AFAB and participating in their individual capacity were conducted by a TGE-identified interviewer who disclosed their identity at the beginning of the interview.

The interview guide (Appendix) included the following topics: barriers and facilitators to accessing general and reproductive health care; attitudes and decision making around contraceptive methods and abortion services; individual experiences accessing contraception and abortion care; knowledge and attitudes towards risk of unintended pregnancy for TGE individuals; training for clinicians in compassionate care; and role of stigma in provision of care. Interviews were audio-recorded and lasted between 45 and 90 mins. Audio recording failed during one interview, and instead a detailed memo of the participant's responses was used. Participants who identified as TGE, advocates, or educators received \$50 gift cards for their participation; clinicians and researchers did not receive incentives, but provided voluntary service and contribution. The difference in incentive structure was intended to recognize and acknowledge power differentials between stakeholder groups (Muhammad

et al., 2015). This study was approved by the Allendale Investigational Review Board and the Institutional Review Board at the University of California, San Francisco.

All interviews were professionally transcribed and analyzed using thematic analysis (Braun & Clarke, 2006). The research team developed a codebook based on a priori topics identified in the interview guide and in vivo codes that emerged from interviews. Three members of the research team applied codes independently to two transcripts and met to discuss discrepancies and amend the codebook. They applied the revised codebook to three additional transcripts, finalizing the codebook after reaching consensus on code definitions and how they should be applied. The remaining interviews were independently coded using the final codebook in Dedoose version 8.0.35 (2018), and the study team met regularly to review coding and confirm inter-rater reliability. We used the same codebook for all interviews; however, some codes were primarily applicable to certain participant types, such as "disclosure of gender identity" for TGE individuals who accessed contraception or abortion services or "research challenges" for researchers. We produced code summaries for key topics after coding was complete, and the full research team interpreted and discussed findings. Illustrative quotes are presented with participant role and geographic location.

Results

Participant Characteristics

We interviewed 27 stakeholders who had valuable insight and views on access to SRH services among TGE individuals including TGE-identified individuals who had previously accessed contraception or abortion (n=5), clinicians (n=13), advocates and educators (n = 5), and researchers (n = 4). Participant characteristics are presented in Table 1. Thirteen participants resided in the Northeast, eight in the West, four in the South, and two in the Midwest, following regional boundaries as defined by the U.S. Census Bureau (2013). Participants were 23-63 years of age (median 35 years). The 22 stakeholders participating in their professional capacity had 1–25 years of experience in their field (median 8 years). Among the clinician participants, six worked in community health centers, four in family planning clinics, and three in academically affiliated or private outpatient offices. Clinicians identified their areas of specialty to include: family medicine, gynecology, "women's health," LGBT health, pediatrics, pediatric endocrinology, adolescent medicine, HIV, family planning, and physician assistant.

Table 1 Participant characteristics

All participants, $N=27$	
Gender identity ^a	
Transgender man, transman, or FTM	6
Cisgender man	2
Cisgender woman	16
Genderqueer or non-binary	4
Other	1
Sex assigned at birth	
Female	25
Male	2
Participant role	
TGE AFAB individual	5
Advocate	5
Clinician	13
Researcher	4
Geographic location	
Midwest	2
Northeast	13
South	4
West	8
Age, years	
Mean	36
Median	35
18–25	1
26–35	15
36–44	8
45+	3
Race ^a	
Asian or Pacific Islander	3
Black	4
Hispanic or Latino/a	6
White	18
Professional stakeholders, $n=22$	
Experience, years	
Mean	9.6
Median	8.2
1–5	7
6–10	9
11–15	2
16–20	3
21+	1

^aMultiple selections allowed

Gender Identity and Disclosure

TGE participants had diverse descriptions of their genders, and some reported that their gender identity had changed throughout their lives. Participants described their gender identity as: "mixed gender" or "non-binary," "genderqueer," "trans man," "non-binary transgender queer,"

"genderqueerish," "trans or transgender or non-binary." Three TGE individuals reported routinely evaluating the risks and benefits of disclosing their gender identity in different situations, and two reported always disclosing. One advocate (Northeast) explained that hesitance to disclose in a medical setting can stem directly from a lack of inclusivity: "Most healthcare settings have not done a lot of work to show that they want to include trans people and give them space to selfidentify." Stakeholders suggested that the real or perceived inability to safely disclose one's gender identity might deter TGE individuals from seeking any type of health care. One TGE participant (West) described this fear, saying, "You start to doubt yourself, like, why do I bother with this? Why do I bother pushing my pronouns or my identity? Why bother trying to make space for myself when no one's listening? It's really disheartening."

Some stakeholders noted that gendered language that centers cisgender women in SRH care excludes TGE individuals and may also deter them from seeking care. One researcher (West) connected resistance to shifting from gendered to inclusive language in the SRH field to "ignorance around the fact that not everybody who's getting contraception or who's getting abortions is a woman." Another researcher (West) explained that researchers in SRH "need to be more specifically careful around language...a man may have the capacity for pregnancy" and "a woman may have sperm."

Others noted that using language that does not make assumptions about a patient's gender, the gender of their sexual partners, or how they refer to body parts and functions can make the care environment more welcoming for TGE individuals thereby facilitating access. One clinician (West) emphasized the importance of asking patients "what words they use to describe those parts of their body, if something other than an anatomical word sounds better to them, like 'opening' [instead of labia or vagina], for example."

Contraception Access and Preferences

We asked a series of specific questions about contraception and abortion access among TGE individuals. Universally, stakeholders spoke about the importance of gender-affirming care and how such care is often limited throughout the U.S. While individuals within the TGE community have differing experiences and preferences, participants shared some patterns they have witnessed and characteristics of high-quality contraception and abortion services.

Stakeholders suggested that the most desirable qualities of contraceptive methods for TGE individuals tend to be those that prevent or alleviate dysphoria, cause amenorrhea, are free of estrogen or other hormones, and have few side effects. Participants perceived that long-acting reversible contraceptives (LARCs), such as intrauterine devices (IUDs), or the subcutaneous etonogestrel contraceptive

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(Nexplanon) implant, and barrier methods were the most often-used methods for TGE populations. Many participants noted that obtaining a method free of estrogen is "the number one thing" TGE patients ask about contraception and, as one noted, "trans-men don't want to take anything with estrogen." One clinician (West) explained "I think it's more important to the patient than it is medically. It's safe to be on estrogen if you're also on testosterone, and it doesn't usually have as many effects as patients are worried it might. But I do tend to stay away from estrogen containing birth control methods for patients who use testosterone." An advocate (Northeast) added that "if you're someone who's on testosterone, you don't really want to be adding estrogen in your body anyway, whether—even though, it's medically okay."

About half of the participants suggested that different contraceptive methods can lead to dysphoria for TGE people. Placement of an IUD requires an internal exam by a clinician that may trigger dysphoria and can be painful, and removable methods such as the vaginal ring require a user to touch their frontal genital opening, which may also trigger dysphoria. Taking a daily contraceptive pill, although usercontrolled, can be a frequent unwanted reminder of capacity for pregnancy:

...the pill is a daily reminder of, I need to do this because I'm at risk of pregnancy. And that just kind of sucks. The ring, whenever you have sex, and whenever you remove it, that's a reminder. I feel that the less reminders of that, the better for people. (Advocate, Northeast)

Multiple participants considered menstrual suppression or amenorrhea associated with many methods of contraception a main benefit of these methods since menses may provoke gender dysphoria. One TGE participant (West) shared, "the idea that I could get something implanted and not have to think about it for 5 years and not have a period is fantastic." A clinician in the Northeast explained, "a lot of patients did not want to get their period....We would talk about menstrual manipulation and also contraception at the same time."

Contraceptive side effects were also identified as a deterrent to using some methods, particularly those containing hormones. One TGE participant (South) discussed balancing the side effects of gender-affirming hormone therapy and hormonal contraception: "We already have to risk so much with hormones and stuff like that, killing our liver or increased blood sugar or all these other—we basically have to be okay, well, I want hormones and so I have to risk every other part of my health in order to get it. So it's just like [as] small amount of side effects as possible." A clinician explained that "fears around weight changes and mood changes that make people just really averse to their use" are common and reported by many of their patients, regardless of gender identity. Another highlighted that TGE individuals taking gender-affirming hormone therapy involving testosterone may experience side effects that impact use of barrier methods of contraception:

...because of the vaginal atrophy effects of testosterone, there are some folks who struggle with receptive—vaginal or fungal effects anyways, but with it, sometimes physical barriers such as internal or external condoms can further irritate that. So there are some folks who are struggling to use that type of barrier method because they're already dealing kind of with a challenging health consideration with that part of their body. (Advocate, Northeast)

Abortion Access and Preferences

A few stakeholders explained that while many people across the U.S. face barriers to abortion services, there are factors specific to the stigma and discrimination faced by TGE populations that compound already limited access.

Even within transgender expansive communities, like any marginalized communities, we don't want to draw attention to what is considered bad by society. Right? So we don't want to draw attention to something like abortion because of the stigma around it and because there's already stigma around these individuals that carry live identities....I'd say it's from a community perspective, we don't want to admit to the general world that we are people who might need this. (Advocate, Northeast)

When considering where they would recommend a TGE AFAB individual go to access abortion care, one participant explained that they would consider the person's race and ethnicity in addition to their gender identity "because I know that some of the facilities have better reputations with serving people of color than others." (Researcher, Northeast); another said they would trust a large, well-known facility:

They are so big and they have name recognition that as a queer person and now a trans person in the South, the name recognition does something for the confidence of being able to go in because it's like at least you know you're not about to be judged or ridiculed for being queer or trans. (TGE individual, South)

Two of the TGE individuals in the study reported their own abortion experience. One had "never had anybody even acknowledge that trans people have abortions" and "didn't mention the gender part" to their provider. The other felt supported by their abortion provider, explaining that the care they received after sexual assault "probably actually saved my life because I don't [know] if I would've even made it to the next—to the crisis center to actually get therapy." Both participants paid out-of-pocket for their abortion; one split the cost with a partner and the other borrowed money "from everybody." All three of the remaining TGE participants had not personally obtained an abortion, but indicated they would reach out to informal support networks, TGE advocates, or direct service organizations to determine where to obtain gender-affirming abortion care. One TGE participant in the Northeast explained, "I would probably try to consult with friends of mine who've had abortions before, in addition to any healthcare information I might get from one of my own providers." Another TGE participant (Midwest) stated, "I do know that eventually it may or may not happen. And that is something that I constantly think about."

Barriers to Care Among TGE Individuals

Participants identified barriers to care for TGE populations at the structural, provider, and individual levels. Exemplary quotes for each theme are presented in Table 2.

Affordability and Health Insurance

Most participants mentioned difficulties with health insurance coverage as a primary barrier to SRH care for TGE individuals. Gaps in coverage, including failure to cover Pap smears or contraception for individuals with a male gender marker, excluding providers at Planned Parenthood from coverage, or covering clinician-administered testosterone injections but excluding self-injection, could mean "patients might have to miss school or work" or "pay out of pocket for those services."

One clinician in the Northeast explained that obtaining insurance coverage itself may be a barrier to care "because transgender populations are so often marginalized and may not be employed in positions where they get healthcare through an employer..." The "economic marginalization" that TGE individuals experience may mean that even insured individuals "may not be accessing care that [they] technically do have access to" if they cannot afford premiums, copays, or deductibles. The cost of contraception was highlighted specifically. One clinician (West) stated that "when [birth control is] not affordable, it's just not [going to] be accessible for people," and noted that it could become particularly inaccessible if the Affordable Care Act mandate that insurance plans in the U.S. cover birth control methods were reversed.

Limited Knowledge Among Providers

Participants identified several gaps in knowledge among healthcare providers that could influence patient education or provision of contraception and abortion care to TGE people. These barriers included: a general lack of knowledge about TGE individuals, lack of understanding that TGE individuals AFAB are capable of becoming pregnant and may be engaging in sexual activity that puts them at risk of unintended pregnancy, or that they would need or desire contraception or abortion care. Participants also highlighted a general lack of familiarity among healthcare providers with TGE identities, pronouns, and de-gendered terminology. One TGE individual emphasized the need for providers to use inclusive rather than gender-neutral terminology, i.e., language that incorporates the pronouns and terminology used by the patient to describe themselves and their body parts rather than using blanket terms, as it better reflects patient experience:

I think we often times try to use umbrella terms to include lots of people so that we don't end up having to say a mouthful of things, and I actually think that's the wrong trend. I think we should go the other way. Take a little bit more time. Be inclusive of all of the folks that we can be and go from there and say who you're talking about. So if you're talking about folks who were assigned female at birth who have questions about all of these other things, say it. (TGE individual, South)

Additional gaps in provider knowledge were identified around gender-affirming hormone therapy and its effects, the need for Pap smears, and for referrals for appropriate care for these populations. One participant noted that a lack of previous experience or training in TGE care can make otherwise amenable clinicians hesitant. Another clinician in the Northeast highlighted that providers may be concerned about the consequences of "throwing your whole schedule off" to provide an unfamiliar type of care. Multiple participants emphasized that clinicians who may have obtained adequate technical or clinical knowledge about TGE SRH may still lack the training, skill or insight to provide SRH in a way that is welcoming, gender-affirming, and inclusive of TGE patients. While TGE stakeholders participating in this study felt able to advocate for themselves in healthcare settings, some participants believed that many TGE individuals may not feel empowered to do so or be aware that they could. One advocate (West) explained, "you're actually supposed to have this provider and the system behind this provider that informs how they work with you... If you're kinda navigating that on your own, you're losing out on all the support that you can and should have."

Some participants felt that this lack of information, as well as discrimination and uncompassionate care, could lead to inadequate, poor, or harmful clinical experiences for TGE patients. For example, clinicians may not screen or counsel patients appropriately for unintended pregnancy or STIs despite being well-intentioned. One clinician explained that this can be particularly true for transgender men:

Oh, the other assumption is that trans men don't have sex, and trans women are extremely sexually active. And so trans women get all the STI screening, whereas trans men are kind of like, you know, aren't offered

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Table 2 Barriers and facilitators to care

Barriers to care	Exemplary quotes
Affordability and insurance coverage	It's hard to keep consistent insurance, for one. A lot of it is because it's hard to keep consist- ent employment and those are usually linked, so the access to it. And then, for me, I also don't have a car. So if I did have insurance, getting to and from appointments would be also an issue. Yeah, and then I think money. Right? I think this all—it definitely all comes down to—but it's money to be able to pay for co-pays or medicine, and that's even if you do—once you get access to the healthcare because even Obamacare, there's—the reason I don't have Obamacare right now is because the premiums are so high. (TGE individual, South) If their gender marker is male on their health insurance—in the health insurance system that, then, means that they can't get things like regular Pap tests. And so the very unfortunate dilemma that this causes for people in terms of deciding, can I get reproduction—putting reproductive healthcare over gender affirmation, pitting those two against each other, I think
	is very unfortunate and dehumanizing. And no one should have to choose between those things.
	(Clinician, West)
Limited provider knowledge	people don't know what providers they can trust who will not see their need for contracep- tive access as something that is counter to their identity. (Advocate, Northeast)
	I have possible interest in being pregnant at some point. And it depends on the provider how they respond. Usually, if they—so if they know that I'm trans, oftentimes, they're confused, just like they're often confused that I'm not—that I'm not on hormones and have no plans for hormones, and I've not had top surgery and have no plans for top surgery. So oftentimes, they seem confused, and so I make decisions about, okay, am I gonna talk about my transness with this provider or am I gonna talk about my intentions for my body down the line with this provider?
	(TGE individual, Midwest)
Inadequate contraceptive counseling & methods	I think a lot of the language and the way that I'm spoken to puts up a big wall and makes it dif- ficult to communicate with my general practitioner. On top of that, I think the things that are offered to me, like birth control or—the way that it's offered to me is not necessarily an issue or something that I would need based on who I'm with or my partner is. That's not really taken into consideration at all. (TGE individual, West) We heard from several folks that testosterone acts as a contraceptive, and so folks might not be
	aware that they're at risk for unintended pregnancythose kinds of beliefs and norms among providers as well.
	(Researcher, Northeast)
Lack of affirming service provision	So it's about a two-and-a-half hour drive to the closest place that might have reproductive healthcare that is actually competent for trans people. (TGE individual, Northeast)
	I think location is a barrier. I have a couple of folks who are upstate New York and they don't have income at this time. So they can't get to me very easily. It costs them money to come on the public transportation system and it can be \$30.00. So that can be an obstacle as well. So financial and geographical. (Clinician, Northeast)
Prior experience with exclusion in healthcare	 A lot of people don't get checkups. A lot of people don't—try to do things online or have someone else go get plan B for them or don't realize that, for instance, they're pregnant until pretty far down the line. So there's certainly more unplanned and unwanted pregnancies, I think, in trans masculine communities than people are really aware of. And certainly, plenty of sexually transmitted infections that take a longer time to get taken care, if ever, because on top of kind of the messages that we're supposed to hate our bodies, we're not supposed to take care of them as they are, they need to be a certain way for us to take care of them, that get internalized and that I think are often at the root of not going to get care. (TGE individual, Midwest) I have possible interest in being pregnant at some point. And it depends on the provider how they respond. Usually, if they—so if they know that I'm trans, oftentimes, they're confused, just like they're often confused that I'm not—that I'm not on hormones and have no plans for hormones, and I've not had top surgery and have no plans for top surgery. So oftentimes, they
	seem confused, and so I make decisions about, okay, am I gonna talk about my transness with this provider or am I gonna talk about my intentions for my body down the line with this provider?
	(TGE individual, Midwest)

Table 2 (continued)

Barriers to care	Exemplary quotes	
Intersecting discrimination	Race, ethnicities, socioeconomic status, immigrant status—You have all of the different types of discrimination that are associated with those identities that would kind of compound and intersect with discrimination based on gender identity and gender expression in various ways, to hinder people's access to the care they need. (Researcher, Northeast) There's just so much discrimination for them to deal with to be able to get health insurance and have—pay for healthcare services. (Clinician, West)	
Facilitators of care	Exemplary quotes	
Informal resources	Marginalized communities talk, and I think this is a pure example of that, that folks are really communicating amongst each other before they ever talk with healthcare providers about this. Are gaining information from their friends, their peers. Gaining information from the people they may trust at the local LGBT center, if those individuals working at the center even have that information. (Advocate, Northeast) Community is the biggest one. People are—for as long as the Internet has existed, there have been spaces where trans people, across the whole spectrum, have talked with each other and communicated with each other about where they go, what they do, what tips to use with X, Y, Z. That's how they access healthcare. That's how they find someone to trust. A lot of people don't wanna be that first person who goes somewhere. (Advocate, Northeast)	
Social supports during care	Sometimes, just online, finding other people that encounter some of the same barriers that I do that—just being able to talk about it is usually helpful. (TGE individual, West) I feel like people having friends that can help them, or having—like organizations are like— and, like, finding health centers in which they can get the stuff that they need is very impor- tant. Because sometimes, they can't be their own advocate and they need someone else do it. (TGE individual, Northeast)	

that. And so I think that there's a lot of, I guess, biases around who's having sex and who's not having sex. I think there's also a lot of biases around whether trans men have any internal sexual intercourse. And so making sure that they are asked the appropriate questions and asked about their sexual history in a way that is not—that doesn't cause dysphoria. (Clinician, Northeast)

Doubt, stigma, ignorance, or fear of not being competent enough may lead clinicians to refuse to see TGE patients or refer them elsewhere for SRH care that they could have offered themselves were they adequately trained. One participant attributed TGE individuals' reluctance to seek care to a desire to avoid re-traumatization by non-affirming health care providers:

...a lot of trans and gender expansive folks don't go to the doctor outside of the endo to get hormones because of the healthcare is not comprehensive. Soon as you go soon as you get to the office, it's like you can expect to be misgendered probably the entire time that you're in the doctor's office. You probably won't get called by the name that most people use because it's not your legal name. And you probably won't be able to afford half of the stuff that you need while you're there. (TGE individual, South)

Inadequate Contraceptive Counseling and Methods

Being misgendered (i.e., referred to using a pronoun that is not reflective of one's gender identity by clinicians and medical staff), or counseled on contraceptive methods misaligned with one's sexual activity, may make accessing contraception difficult. A researcher (West) discussed the conflict that some TGE individuals face seeking contraception to regulate menses and reduce menstruation-related dysphoria, stating, "So there is added need for contraception to help transmen reduce dysphoria but that means having to go into a very hetero-normative space and talk about things that can be triggering themselves." One TGE participant (West) characterized the current state of contraceptive access as "not great unless we pretend to not be TGE." A TGE participant in the Northeast explained, "as someone who's at risk of unintended pregnancy, just being misgendered is one of my biggest things ... " Another TGE participant (Northeast) said that they had never spoken with friends about birth control experiences or options.

Lack of Affirming Service Provision

About half of the stakeholders characterized the general availability of clinicians trained to provide inclusive or affirming SRH care in the U.S. as limited or rare, though some noted that in their own region or facility skilled clinicians are readily available. Stakeholders also reported that TGE individuals often have to educate their clinicians, with one TGE participant (Midwest) confirming, "I end up having to do some level of education no matter what." Stakeholders also reported that provider availability varied geographically and that inclusive care was less available in rural areas and smaller cities, particularly in the Midwestern and Southern U.S. TGE people in those areas reportedly had to "drive hours" or "100 miles in any direction" to find any affirming healthcare ranging from routine gender-affirming hormone therapy to gender-affirming masculinizing chest surgery or "top surgery." One clinician in the Northeast explained that some plastic surgeons to whom they had referred TGE patients for gender-affirming surgery "would refuse to see them because they had no experience" or "wouldn't see them out of their own moral or ethical beliefs."

A TGE participant in the South characterized such barriers as "dehumanizing" explaining "we get told by homophobes and transphobic people all the time that we are not worthy. And then the lack of support in healthcare just kind of reiterates that or reinforces it." One advocate (Midwest) described the negative impact that clinician scarcity can have on healthcare access for TGE individuals, saying, "People don't go to the doctor. People don't have PCPs [primary care providers]. People don't go for yearly checkups or anything like that. People don't use birth control at all, or if they do it's not effective or it's not—they're not aware of all the options that they have."

Prior Experience with Exclusion

Many stakeholders reported that fear of discrimination and resultant avoidance of healthcare settings leads to a cumulative negative impact on a TGE individual's health. "So you aren't going to the doctor in years. You don't go to the dentist in years. And those things, little things just add up over time." (Advocate, Northeast) Similarly, previous experiences being misgendered or addressed with the wrong name or pronouns may make healthcare settings feel less safe for those who do obtain care. Stakeholders suggested that even in LGBTfocused medical centers, TGE individuals, and particularly those with non-binary identities, may still feel excluded or be "treated as a curiosity" if the space centers binary, lesbian, gay, or bisexual identities. One clinician (West) described a clinic that was "priding itself on being trans-competent and inclusive" but where a patient with a non-binary gender identity refused to return because "the clinician would kinda get flustered and not be able to meet that client with their pronouns."

Intersecting Discrimination

Some participants noted that discrimination based on one's race, immigration, or socioeconomic status may compound gender-based discrimination and impact access to care. Two clinicians also highlighted that TGE individuals for whom English is not their first language may face additional difficulty accessing affirming care when it is offered only in English. Others noted that for TGE youth, these barriers may be compounded by those related to their age such as "parental rejection or parental lack of support" while they still "depend on them financially and are often on their insurance." In addition, TGE youth might be "less plugged into those word-of-mouth conversations" that many TGE adults rely on to locate affirming care.

Community and Social Supports as Facilitators for Navigating Care

Stakeholders identified facilitators for care in two domains: informal resources and social supports (Table 2). Nearly half of the stakeholders reported that TGE individuals identify affirming and inclusive healthcare providers via internet resources, "word of mouth," and "sharing of resources amongst the population." Participants explained that TGE individuals obtain information "outside of medical systems" through "social networks online," "message boards" or clinic websites "that use language that makes it inviting."

Some stakeholders, including four out of five TGE individual participants, highlighted the importance of relying on friends, family, or partners for support when TGE individuals seek and obtain care. As one TGE participant explained, the presence of an ally in a healthcare appointment can be the deciding factor in disclosing one's gender identity to a provider, "...sometimes I just don't come out—be there with me who is really one of my people, then—or who's not necessarily someone who was willing to speak up to power and authority, then because I don't pass [as the gender that reflects my gender identity], I often just don't say anything." (Midwest)

Recommendations for High-Quality SRH Care

Stakeholders shared a variety of recommendations for the delivery of high-quality SRH care for the TGE community including improving patient education, training clinicians and staff, and developing relationships with TGE communities in order to better inform care. Specific recommendations and relevant resources can be found in Table 3.

Domain	Stakeholder recommendations	Related resource(s)
Patient education	 Support TGE individuals in creating evidence-based and gender-affirming patient education materials Ensure access to medically accurate, gender-inclusive sex education 	Trans Women of Color Collective (www.twocc.us)
Provider education	 One-time and continuing medical education for staff at all levels of care provision Attend research symposia or conferences to build TGE-specific knowledge Utilize existing online educational resources 	Association of American Medical Colleges: Diversity 3.0 Learning Series (www.aamc.org/what-we-do/missi on-areas/diversity-inclusion/ learning) Cedar Rivers Clinic Transgender Health Care Toolkit (www.cedarriverclinics.org/trans toolkit/) The Fenway Institute (www.fenwayhealth.org/the-fenwa y-institute/) GLMA: Health Professionals Advancing LGBT Equality (www.glma.org) Planned Parenthood (www.plannedparenthood.org/ learn/sexual-orientation-gender) TransLine—Transgender Medical Consultation Service (www.project-health.org/trans line/) UCSF Center of Excellence for Transgender Health (www.trans health.ucsf.edu)
Practice	 Partner with TGE communities to ensure changes in practice center the needs and desires of TGE patients Use gender-affirming language in intake forms Commit to inquire about and use patients' pronouns and preferences for terminology around body parts and sex 	
Research	 Present TGE-specific SRH research at professional conferences Collect sexual-orientation and gender identity (SOGI) information in research studies Allow for open responses to SOGI questions during data collection 	Philadelphia Trans Wellness Conference (www.mazzonicen ter.org/trans-wellness) National Transgender Health Summit (www.prevention.ucsf.edu/trans health/education/nths) World Professional Association for Transgender Health (www.wpath.org)
Healthcare environment	 Use gender-affirming language in marketing materials Aim for staff composition to reflect the communities being served Empower TGE staff to guide shifts in culture and service delivery 	· · · · ·
Policy	Advocate for comprehensive contraceptive and abortion insurance coverageAdvocate for over-the-counter (OTC) contraception	

Table 3 Stakeholder recommendations for improving TGE-specific SRH care, provider training, and research

Improve Patient Education

Several stakeholders noted that improving patient education begins with medically accurate and affirming sex education that includes information about safer sex, fertility, contraception, and abortion. A TGE individual (Midwest) explained that "comprehensive lifespan-based sexual education" should include "really clear information about, for instance, what does it mean to be on period blockers and be sexually active." Participants characterized sex education inclusive of anyone besides cisgender heterosexual people as "seriously lacking," "non-existent," and "really hard to come by." One advocate (Northeast) noted that this paucity of comprehensive sex education "undermines individuals and also providers' ability to provide care."

Many stakeholders suggested that using patient education materials featuring gender-inclusive language and nonbinary and transgender identities, needs, and experiences is central to improving patient knowledge and care provision. One advocate in the South emphasized the importance of acknowledging heterogeneity within TGE communities, explaining "... if your health communication materials are very binary...you're gonna lose gender expansive, gendernon-conforming, genderqueer folks." Three noted that materials should be created by TGE individuals and reflect their own experiences not "rely on people who are just in academia." One TGE individual, also in the South, stated, "I don't want somebody else who doesn't share our identities or understandings about how the world works writing that for us because they won't get it right." An advocate in the Northeast explained that some materials "are better than getting nothing" but some allied LGBTQ institutions are "still missing the mark because they're not paying people in the community to develop these things." Several suggested a specific need for patient education to counter the misconception that testosterone therapy is a sufficient form of contraception, as some TGE individuals AFAB may mistakenly believe that they cannot get pregnant when experiencing amenorrhea associated with testosterone therapy.

Disseminate Healthcare Information

Some stakeholders suggested that patient education materials should include ads, incorporate creative ways to reach TGE individuals in rural areas, and be available on and offline. One advocate (South) noted that materials should "engage with the population of focus" explaining that TGE individuals in rural areas may not relate to "cutting-edge gender-expansive language." Recommendations for expanding the reach of health education materials included "social marketing of an amazing website in multiple languages," "public advocacy" such as placement of materials on public transit, and "doing more work on the ground, letting communities know that we're here for them."

Develop and Strengthen Community Partnerships

Many stakeholders felt that SRH providers should develop partnerships with TGE individuals to improve or develop inclusive services, thereby demonstrating a commitment to creating a welcoming environment and providing truly affirming care:

If folks were really committed to actually, in practice, becoming trans-inclusive facilities and providers, doing some kind of training or having some kind of partnerships with trans organizations or something like that, but a—not a statement that says we are inclusive of trans people, but some kind of action that actually shows them taking the initiative to wanna know more. (TGE individual, South)

One advocate discussed the importance of eliciting feedback from TGE populations in making improvements to care, explaining a successful strategy used by two clinics they worked with:

They've been really clear with their patients. They've been really clear with me that they want that feedback on how services—how all of their services are going for transgender expansive people. So I just thought that feedback is really, really key. They've also—both places have hired transgender expansive people. (Advocate, Northeast)

Some participants emphasized the importance of asking about a patient's pronouns in the process of improving care. One TGE participant explained that this fosters a sense of safety in the healthcare environment for TGE patients:

I feel like we should be able to go in and not get misgendered to get care in general. Because that's not fair to us.... And like having an environment we could feel safe enough [to] be there and knowing that we are going to be respected there is important. (TGE individual, Northeast)

Train Healthcare Providers

Stakeholders also recommended training in TGE care and identified existing resources for clinicians and medical staff (Table 3). A majority of stakeholders suggested that clinicians and staff need to commit to TGE-inclusive and affirming training with many emphasizing that such training should extend to all facility staff to improve all steps of care provision. Suggested sources of training include online resources, local TGE groups, conferences, Planned Parenthood, provider retreats, LGBTQ centers, and universities. Two clarified that training should be ongoing rather than a one-time event, and three suggested that trainings should be well-documented to serve as a reference for future staff. One clinician emphasized the importance of training for both new and established providers and staff:

I think it just needs to be part of all aspects of medical education so, starting from med school through residency. And I think the others who focus on clinics that are already providing family planning services and trying to get them to a place where they are—they can be gender-inclusive and gender-affirming. I think my kind of idea of sexual and reproductive healthcare [is] that you shouldn't feel like you need a place that is specialized for you. You should be able to go anywhere and all places should be a place where you can get the care that you need. (Clinician, Northeast)

Four stakeholders emphasized the need for introductory education about gender. One clinician explained that providing beginner-level information about gender is essential for clinician and staff knowledge and engagement:

I think that you should be willing to do gender 101 with folks. I think that meeting people where they are and not judging them for making mistakes and helping them come along is really important so people don't feel threatened, that they're not competent or not able to be inclusive and kind of get it right. And so things like the TransLine or other resources where providers can call with questions are really important. (Clinician, West)

Additional Recommendations

Stakeholders shared a range of additional suggestions for improving care for TGE individuals including presenting at professional conferences, ensuring that the same range of SRH services available to cisgender women are made inclusive and available to TGE patients, and making services less siloed. Participants also emphasized the need to make care affordable including through improving insurance enrollment and coverage. A few additional participants suggested that expanding the availability of contraception for everyone would also reduce access barriers specific to TGE populations, with one suggesting that over-the-counter access to contraception would help TGE individuals overcome many of the current barriers to contraception care:

I would think that for everyone, access would be improved by having contraception be over-the-counter. And I think that would have a disproportionate beneficial impact for marginalized groups who, for whatever reason, don't see healthcare providers either because of lack of health insurance, cost, the lack of transportation, distance, mistrust, prior negative experiences in a healthcare setting, things like that. (Researcher, Northeast)

Discussion

This study synthesized perceptions and experiences of five stakeholders who identified as TGE themselves, were AFAB, and had accessed contraception or abortion care, and 22 stakeholders who work with TGE people, including some who hold a TGE identity. The findings provide a deeper understanding of the barriers to seeking or obtaining gender-affirming and inclusive SRH care in the U.S. Primary barriers identified were related to financial concerns, limited provider knowledge and information provision, gendered and cis- and heteronormative healthcare environments and patient education materials, stigma, and discrimination. Findings additionally highlight pathways for improving care, such as developing gender-inclusive SRH education materials, making such materials widely available, working in partnership with TGE populations to develop or improve inclusive SRH services, asking for and consistently using patient-identified pronouns and terminology in healthcare settings, and pursuit of TGE-specific education and training for clinicians and medical staff.

Stigma and the absence of gender-affirming, evidencebased information in the formal medical system can cause TGE people to rely on informal sources of SRH information that may unintentionally spread misinformation, such as the myth of testosterone as an effective contraceptive method. While use of personal and online networks has been shown to be an important source of support for TGE populations (McInroy & Craig, 2015), little evidence exists about the quality of TGE-specific SRH information available online. Misinformation about general transgender health has been repeatedly encountered in online searches (Evans et al., 2017). Online sources of information about hormone therapy for TGE individuals (Deutsch, 2016) and family building for LGBTO populations and transgender individuals in particular (Kreines, Farr, Chervenak, & Grünebaum, 2018) have been shown to be limited and of inconsistent quality. Our findings suggest a need for additional evaluation of the availability and quality of SRH information that TGE people are encountering, as well as the development of evidence-based, gender-affirming, and readily accessible sources of SRH information informed by the needs of these populations.

Consistent with existing research on clinician and medical student knowledge and attitudes toward provision of care to TGE populations, stakeholders in this study reported an inadequate supply of SRH clinicians trained to provide evidence-based, inclusive, and affirming care in the U.S. (Liang, Gardner, Walker, & Safer, 2017; Obedin-Maliver et al., 2011; Parameshwaran, Cockbain, Hillyard, & Price, 2017; Sequeira, Chakraborti, & Panunti, 2012; White et al., 2015). The links between insufficient provider knowledge, anticipated healthcare discrimination, gendered healthcare environments, and delays in care-seeking highlighted by stakeholders have also been found in research on motivators and deterrents for SRH care-seeking among TGE patients AFAB (Harb et al., 2019). Misconceptions about health risks for transgender men raised by stakeholders are consistent with other research on patient and provider knowledge and attitudes about cervical cancer risk as well as cervical cancer screening behaviors among transgender men (Agénor et al., 2016; Peitzmeier et al., 2014a, 2014b; Tabaac et al., 2018). Stigma and anticipated misgendering have also been shown to have a negative impact on general, mental health, and SRH care-seeking among TGE patients (Harb et al., 2019; Seelman et al., 2017; Wingo et al., 2018). Results of this study

also suggest that an intersectional approach to future research on SRH care and outcomes for TGE populations is necessary in order to better understand the barriers to healthcare faced by TGE individuals who experience discrimination based on race, ethnicity, socioeconomic, or immigration status in addition to their gender identity (Crenshaw, 1990; Lefevor, Boyd-Rogers, Sprague, & Janis, 2019). Further exploration of the impacts of discrimination and experiences of inadequate care provision on SRH care and SRH-specific health outcomes for TGE people is needed.

Given this small but growing body of evidence suggesting that barriers to care and stigma around provision of SRH care to TGE people may have negative health effects, it is necessary to develop strategies and interventions at the client, provider, and institutional level in order to provide high-quality SRH care. One of the primary contributions of this work is to identify concrete strategies for improving SRH care for these populations. Routinely including TGE-specific training in all stages of primary and continuing medical education for health care providers is a critical step toward expanding access to high-quality, safe, and appropriate care for TGE patients. Stakeholders also suggested actionable steps that healthcare providers can take to provide excellent SRH care to TGE patients. They identified existing and readily accessible resources that providers can access to obtain evidencebased information and training in provision of gender-affirming care, inform affirming patient education materials, and build partnerships with TGE communities.

Estimates of the current number of TGE people in the U.S. vary, and even less is known about the proportion of TGE people at risk of pregnancy (defined as having a uterus and reporting receptive vaginal sex with individuals who produce sperm in the prior year), or about their experiences, needs, and desires for contraception and abortion care. While this qualitative study explores these topics, further research is needed in order to identify unplanned pregnancy risk, better understand the impact of these existing barriers to SRH care identified by stakeholders, and to ensure that interventions to address the needs and desires of these populations are evidence-based and tested.

This study has several limitations. Participant perspectives likely do not reflect the full range of SRH services available in different U.S. geographic regions and are particularly limited in the Midwest and South. In addition, the majority of our sample identified as white; therefore, results may not reflect the experiences of TGE individuals from different racial and ethnic groups. Only English-speaking stakeholders were eligible to participate and thus aspects of SRH care-seeking for non-English-speaking TGE people were not captured and deserve further inquiry. Results of this study cannot elucidate differences in experiences of and preferences for abortion and contraception care by gender identity, as only five stakeholders held a TGE identity, were AFAB, and explicitly shared their personal experiences accessing abortion or contraception. Research with a larger sample of TGE individuals AFAB is needed. Despite these limitations, stakeholders represented a range of disciplines and the findings include perspectives across advocacy, clinical, and research areas in the SRH field. This rigorous formative research is crucial for developing an in-depth understanding of the components of excellent and affirming SRH care for TGE populations that can inform best practices and actionable recommendations. The diversity of gender and sexual identities within our interdisciplinary research team, as well as the variety of expertise, further strengthens the range of perspectives that contributed to the analysis and interpretation of the data.

Conclusion

TGE individuals face numerous barriers to accessing SRH care that may be compounded by discrimination, limited resources, and a lack of available and knowledgeable clinicians. These findings identify the components of excellent contraception and abortion care for TGE populations and affirm such care is in the scope of SRH professionals. Findings from this study lay out changes essential to improve SRH care for TGE populations and provide supportive, genderaffirming SRH care for all: (1) enhanced provider education, (2) the creation of inclusive patient-centered education materials and programs, and (3) the development of a broader research agenda focused on the experiences of TGE AFAB individuals seeking abortion and contraception. Future research on a national scale is also needed to estimate the number of TGE AFAB individuals at risk of unintended pregnancy, identify variations in experience, needs, and desires by different facets of identity, including gender identity and expression, and to understand the population-level impact of existing barriers to SRH care and related health outcomes of TGE people AFAB.

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Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflicts of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Consent was obtained for all participants.

Appendix: In-depth Interview Guide

Abortion and contraceptive access for transgender and gender expansive individuals: Exploring gaps and strategies with key stakeholders

TGE Individuals

I. Introductory Questions

Thank you again for agreeing to participate in this interview. To get started, I'd like to learn a bit about your experience as a TGE individual.

- 1. Can you tell me about your identity within the TGE umbrella? Is there specific language you use to describe your gender identity? What feels important for you to share about your gender identity for us to understand what it means to you?
- 2. How long have you identified in this way? In what spaces do you choose to share this information? In what spaces do you feel you don't have a choice in sharing this information?

II. General Health Care

Now I'd like to ask you a few questions about health care access among TGE individuals.

- 3. What are the three most important health issues faced by TGE individuals at risk of unintended pregnancy in the US?
- 4. What barriers to general health care do you face as a TGE individual at risk of unintended pregnancy?
 - a. Who is included in access for these programs? Who might be left out?
- 5. What about other TGE individuals who you know specifically? Are there additional barriers they face?
- 6. What systems, programs, or other facilitators exist that have supported you as a TGE individual in getting the health care you need?
- 7. What does support look and feel like to you as a TGE individual within a health care setting?
- 8. What systems, programs, or other facilitators exist that have not supported you as a TGE individual in getting the health care you need?
- 9. What does it look and feel like to not have support as a TGE individual within a health care setting?

- 10. How do you manage or navigate these barriers to care?
- 11. How do you see other TGE individuals manage or navigate these barriers to care?

III. Current access and barriers to sexual and reproductive health services (General)

Next I would like to ask you some questions about access and barriers to sexual health services.

- 12. Based on your experience, what are the most important sexual and reproductive health issues faced by TGE individuals?
- 13. What are some additional sexual and reproductive health issues that you feel are important?
- 14. What are some factors or identities that you feel may influence these issues?
- 15. Do you seek out care to prevent the risk of unintended pregnancy?
 - a. If no, why is that?
 - b. If yes, what type of care do you seek out? How did you figure out where to go? What types of conversations have you had with your providers?
 How has that gone? Have you ever talked to you provider about abortion as a TGE individual?
 If that is a service you needed, how would you go about assessing TGE-inclusive care?
- 16. In your opinion, how available are clinicians who have been trained to provide abortion or contraception services in an affirming or inclusive way? What factors affect availability?
- 17. Has your provider shared with you their qualifications for working with TGE individuals?
- 18. What methods of payment or types of insurance coverage for abortion and contraceptive services do you use?
 - a. If yes for insurance, have you experienced any barriers in enrollment?
 - b. What type of cost barriers would you anticipate when trying to access these services?
 - c. If you have had cost barriers, how did you navigate that? Were you still able to access services?
- 19. Have you or other TGE people you know experienced any privacy issues when using or attempting to use or obtain health insurance for abortion/contraception coverage?

IV. Access to contraception and abortion services

Now I would like to ask you some questions about access to contraception and abortion care for TGE people in the US.

20. Have any of your providers discussed pregnancy intentions and histories with you? (a) If so, who generally brings up the subject? (b) How comfortable do you feel having this conversation with your provider? (c) Has a provider not been able to answer your questions about contraception and abortion related to TGE individuals?

A. Contraception

- 21. How would you describe current access to contraception care among TGE individuals you know and in the US more broadly?
- 22. What are the most important features of contraceptive methods for you and TGE individuals you know? Probe:
 - a. Is obtaining products without estrogen important? Is estrogen a barrier to using existing methods?
- 23. What types of contraception have you used in your lifetime?

Probe:

- a. Are there certain reasons for use or non-use of certain methods?
- b. Has your identity as a TGE individual changed your relationship to contraceptive methods over time?
- 24. What types of patient education materials specific to contraception for TGE people have you seen? Probe:
 - a. Where have you found these materials?
 - b. Do these materials feel as if they have appropriate and accurate language about your identity, body, and behaviors?
 - c. Do you have any recommendations ways to create more inclusive materials?
- 25. Based on your experience, how could we improve access to contraception among TGE individuals?

B. Abortion

- 26. As a TGE individual, if you were to need an abortion, how would you figure out a preference for a specific procedure?
- 27. As a TGE individual, if you were to need an abortion, how would you figure out a preference for a specific clinic or provider?
- 28. How knowledgeable have health providers and sexual and reproductive health providers you've seen been

about abortion counseling and care for transgender people at risk of unintended pregnancy? What types of information would you want your provider to know before starting this conversation?

- a. If not knowledgeable, have you been supported with referrals for accessing abortion counseling and care?
- 29. What types of patient education materials specific to abortion for TGE people have you been given, if any?
 - a. Do you have any recommendations for creation of materials?
- 30. Based on your experience, how could we improve access to abortion among TGE individuals?

V. Attitudes and stigma among providers

Now we'll focus on attitudes among health care providers.

- 31. Can you describe the attitudes that providers have about the provision of care to transgender people at risk of unintended pregnancy?
 - a. Describe any attitudes specific to provision of abortion care that you've had shared with you by a provider.
 - b. Describe any attitudes specific to provision of contraception that you've had shared with you by a provider.
 - c. What examples can you share about stigma or negative judgment you've felt accessing reproductive health services?
- 32. What impact (if any) do the attitudes of providers have on your desire to seek out care for unintended pregnancy? What types of changes in attitude would affect your desire to access this care?
- 33. What strategies or systems have you seen organizations or providers use to improve their TGE competency and inclusivity?

VI. Moving forward

We're interested in your opinions about recommendations for improving these services.

- 34. How would you describe the ideal range of sexual and reproductive health services that you believe should be available to you as a TGE individual?
- 35. What recommendations do you have for increasing attention to the SRH needs of transgender people at risk of unintended pregnancy in the US?

- 36. How would you recommend that advocates for affirming abortion and contraceptive care for TGE individuals reach out to TGE individuals to show they are transinclusive in the SRH field? How would you recommend they frame and speak about affirming SRH care for TGE individuals?
- 37. Are there any additional suggestions or thoughts you would like to share related to your SRH needs?
- 38. Are there any things you think it would be important for me to know that we haven't yet discussed?
 - a. Are there questions we should be asking in future interviews?
 - b. What do you think about the definition of TGE we are using in this study?

THANK THE PARTICIPANT. TURN OFF RECORDER BEFORE ASKING THE FOLLOWING QUESTION

39. We are asking each of our participants to share the contact information of others they think would be a good fit for an interview. Do you know of any TGE individuals that may be interested in participating in this study?

Abortion and contraceptive access for transgender and gender expansive individuals: exploring gaps and strategies with key stakeholders

Providers/Advocates

I. Introductory Questions

Thank you again for agreeing to participate in this interview. To get started, I'd like to learn a bit about your role and experience working in healthcare with TGE individuals. As we've discussed, we use the term "TGE" in this study to refer to anyone who identifies as either transgender or one of the many gender-expansive identities under the transgender umbrella; including but not limited to agender, bigender, genderqueer, non-binary, and pangender. Although these identities are under the transgender umbrella, not all identify as transgender.

- 1. Can you tell me about your work and general responsibilities?
 - Probe:
 - a. What is your title?
 - b. How long have you been in this position?

- c. How long have you been working in your field?
- Can you describe the population(s) that you work with in your current role? Probe:
 - a. Do you have experience working with this population prior to your current role? Tell me about that.

This study primarily focuses on TGE individuals who are at risk for unintended pregnancy. That includes those who were born with and retain a uterus, ovaries, and fallopian tubes and who engage in sexual activities with individuals who produce sperm. At the end of this interview we will have time to discuss your thoughts about this definition.

- 3. What percentage of your clientele would you estimate identify as TGE?
- 4. What percentage of your clientele would you estimate identify as TGE AND are at risk for unintended pregnancy?

If participant is a CLINICIAN:

5. What is your specific involvement (if any) in providing abortion or contraception care to TGE individuals? At what point in a client's visit are you involved in their care?

If participant is an ADVOCATE:

6. What is your specific involvement (if any) in supporting TGE individuals in accessing abortion or contraception care to TGE individuals? Probe: At what point in the process of accessing this care do you become involved?

II. General Health Care

Now I'd like to ask you a few questions about health care access among TGE individuals.

- 7. What are the three most important health issues faced by TGE individuals at risk of unintended pregnancy in the US?
- 8. What barriers to general health care do TGE individuals at risk of unintended pregnancy face?
 - a. Who is included in access for these programs? Who might be left out?
- 9. How do you think TGE people in the US manage or navigate these barriers to care?

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a. What examples do you have of TGE individuals you have worked with who have navigated barriers in the health care system?

III Current access and barriers to sexual and reproductive health services (General)

Next I would like to ask you some questions about access and barriers to sexual health services.

- 10. Based on your experience, what are the most important sexual and reproductive health issues faced by TGE individuals?
- 11. What other issues have you heard from the TGE individuals you've worked with about sexual and reproductive health issues they face?
- 12. Please describe the barriers you see that limit access to abortion and contraception access for TGE individuals.
 - a. Do barriers vary geographically?
 - b. Vary based on age?
 - c. On race?
 - d. Other differences you see?
- 13. Where do TGE people at risk of unintended pregnancy go to seek reproductive health care services such as (birth control, pap smears, STI screening,)?
 - a. How do they tend to figure out where to go?
 - b. Generally, how are they treated at these places? Why?
 - c. What about for abortion—where do you think they generally go?

Probe: Facility type, service-provider type

- In your opinion, how available are clinicians who have been trained to provide abortion or contraception services in a gender affirming or inclusive way? Probe:
 - a. Can you discuss any factors (such as geography or type of facilities) that influence the availability of providers?
- 15. How did you acquire training to work compassionately with TGE individuals?
 - a. And why did you seek this training?
- 16. Are there specific insurance coverage issues or barriers that TGE individuals face

Probe:

- a. Please describe any payment or cost barriers specific to this population (if any)
- Do barriers vary geographically?
- Vary based on age?
- On race?
- Other differences you see?
- b. Have you heard of people in this population experiencing any privacy issues when using or attempting to use or obtain health insurance for abortion/ contraception coverage?

IV. Access to contraception and abortion services

Now I would like to ask you some questions about access to contraception and abortion care for TGE people in the US.

17. Do you generally discuss pregnancy intentions and histories with TGE individuals at risk for unintended pregnancy? If so, who generally brings up the subject?

C. Contraception

- 18. How would you describe current access to contraception care among TGE individuals you work with and in the US more broadly?
- 19. What are the most important desired aspects of contraceptive methods for people in this population? Probe:
 - b. Is obtaining products without estrogen important? If so, how?
 - c. Is the perception of hormones and estrogen a barrier to using existing methods?
- 20. What types of contraception do TGE individuals at risk of unintended pregnancy typically use? Probe:
 - c. Are there certain reasons for use or non-use of certain methods?
- 21. What types of patient education materials specific to contraception for TGE people are available? Probe:
 - d. How available are these materials?
 - e. Do you have any recommendations for creation of additional materials?

22. Based on your experience, how could we improve access to contraception among TGE individuals?

D. Abortion

23. Do you believe there are preferences among most TGE individuals accessing abortion for a type of procedure or provider? What are those? Why?

If participant is a CLINICIAN:

- 24. How were you trained to provide care for TGE individuals? How knowledgeable and comfortable you do you feel about abortion counseling and care for transgender people at risk of unintended pregnancy?
- 25. What type of referral systems exist for TGE individuals seeking abortion care (e.g., facilities/provider types)?
 - a. How could these be improved?
- 26. What types of patient education materials specific to abortion for TGE people are available? Probe:
 - b. How available are these materials?
 - c. Do you have any recommendations for creation of additional materials?
- 27. Based on your experience, how could we improve access to abortion among TGE individuals?

V. Attitudes and stigma among providers

Now we'll focus on attitudes among health care providers.

- 28. Can you describe the attitudes that providers have about the provision of care to TGE people at risk of unintended pregnancy?
 - a. Describe any attitudes specific to provision of contraception.
 - b. Describe any attitudes specific to provision of abortion care.
 - c. Do you have any examples of positive affirming care you've witnessed?
 - d. Do you have any examples of stigma or negative judgement you've witnessed?
- 29. What impact (if any) do the attitudes of providers have on provision of care and access to services for transgender people at risk of unintended pregnancy?
- 30. What strategies or systems have you seen help improve positive attitudes towards provision of reproductive services to TGE individuals?

VI. Moving forward

We're interested in your opinions about recommendations for improving these services.

- 31. How would you describe the ideal range of sexual and reproductive health services that you believe should be available to TGE individuals?
- 32. If a TGE individual came to you and asked where you think they should go for contraception services, what would you recommend? Why?
 - a. What about for abortion? Why?
- 33. What recommendations do you have for increasing attention to the SRH needs of transgender people at risk of unintended pregnancy in the US?
- 34. How would you recommend that advocates for affirming abortion and contraceptive care for TGE individuals reach out to colleagues in the broader SRH field?
- 35. Are there any additional suggestions or thoughts you would like to share related to the SRH needs of this population?
- 36. Are there any things you think it would be important for me to know that we haven't yet discussed?
 - a. Are there questions we should be asking in future interviews?
 - b. What do you think about the definition of TGE we are using in this study?

THANK THE PARTICIPANT. TURN OFF RECORDER BEFORE ASKING THE FOLLOWING QUESTION.

37. We are asking each of our participants to share the contact information of others they think would be a good fit for an interview. Do you know of any other clinicians, advocates, or researchers that may be interested in participating in this study?

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