Gender-Affirming Care With Transgender and Genderqueer Patients: A Standardized Patient Case

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Abstract

Introduction: Transgender and gender-diverse (TGD) patients experience health disparities and bias in health care settings. To improve care for TGD patients, medical trainees can practice gender-affirming care skills such as inclusive communication and discussing hormone therapy through patient simulation. Systematically evaluating these simulation outcomes also helps educators improve training on gender-affirming care.

Methods: A standardized patient case with a patient establishing primary care was developed for rising third-year medical students. The case featured multiple patient iterations to portray individuals with the same health history but a different gender identity and/or sex assigned at birth. Each student was randomly assigned to one patient encounter. Gender-affirming care skills were assessed through standardized patient checklists, postencounter notes, and preventive care recommendations.

Results: Over 2 years, 286 students participated in the simulation. Transgender men and women, cisgender men and women, and genderqueer patients were portrayed. Performance gaps such as misgendering patients and incorrect cancer screening recommendations based on perceived gender identity (rather than sex assigned at birth) were documented. Ninety-eight percent of students agreed that the encounter helped them practice clinical skills needed to see actual patients, and students described the case as challenging but important.

Discussion: This case served dual roles for medical training: (1) Students working with TGD patients practiced skills for gender-affirming care, and (2) portraying TGD patients along with cisgender patients allowed educators to identify biased recommendations that necessitated additional training. The outcomes further highlighted the importance of students routinely practicing gender-inclusive communication with all patients during simulation.

Keywords
Gender Identity, LGBTQ+, Standardized Patient, Diversity, Equity, Inclusion

Educational Objectives
By the end of this activity, learners will be able to:

1. Practice gender-inclusive communication when taking a history with new patients.
2. Apply best practices related to gender-affirming care in a primary care setting.
3. Recommend appropriate preventive care recommendations to transgender and gender-diverse patients.

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Introduction

Transgender and gender-diverse (TGD) people experience extreme health disparities and prejudice in health care settings.1 (For definitions of the terminology used in this publication, see Table 1; its definitions are derived from the Safe Zone Project.)2 The lack of provider training around gender-affirming care for TGD patients has historically contributed to this inadequate care.3 In 2014, the Association of American Medical Colleges released guidelines detailing competencies that medical students should develop to work with lesbian, gay, bisexual, transgender, and gender-nonconforming patients.4 Since that release, many medical schools have developed training around TGD care,5,6 much of which focuses on teaching and assessing students’ knowledge, attitude, and comfort with TGD communities and health.

In addition to improving students’ understanding of TGD disparities and gender-affirming care, it is critical that students...
be able to practice inclusive skills. Students who are comfortable using inclusive communication (e.g., asking for pronouns or distinguishing between gender identity and sex assigned at birth [SAAB]) and discussing basic gender-affirming care (e.g., hormone therapy) will be more likely to keep TGD patients engaged in care. Avoiding clinical mistakes with all patients is aspirational (and unlikely), but the health care system has not earned the trust of many TGD patients. Thus, errors such as misgendering or cisnormative assumptions often result in TGD patients delaying future care or dropping out of the health care system altogether. Patient simulation is a crucial component of teaching medical students about gender-affirming care because it allows students to practice and become more comfortable with these skills in a low-stakes setting.

This publication describes a standardized patient (SP) case designed to assess learners practicing skills for gender-affirming care. The target audience is medical students as well as medical educators responsible for developing and evaluating curricula around gender-affirming care. This case is similar to other published cases in MedEdPORTAL that feature TGD patient identities in that all are designed to allow trainees to practice inclusive communication and basic gender-affirming care. The previously published formative SP cases allow students to practice inclusive communication and basic skills around hormone therapy, while more advanced cases focus on other aspects of gender-affirming care such as interprofessional interactions.

This resource is unique because it features multiple patient iterations. A group of SPs with various gender identities can portray an individual with the same health history who differs only by details related to gender identity and/or SAAB. Thus, the same patient can be portrayed by transgender men and women, cisgender men and women, or genderqueer people (who identify with neither or a combination of masculine and feminine genders). This allows for extreme flexibility in casting and assessment by the simulation program. Portraying both cisgender and TGD patients in the same event allows educators to directly compare their students’ performances between the patient groups (this case provides cisgender controls for evaluation purposes). While most existing TGD simulation cases portray transgender men and women, this case also includes TGD identities that are not binary, which helps learners practice important skills like using gender-neutral pronouns.

Furthermore, in addition to the learner outcomes, this case allows educators to compare student communication between TGD and cisgender SPs. Discrepancies between communication skills or preventive care recommendations allow educators to identify bias toward TGD patients, and these outcomes can be used as part of program evaluation to recommend specific improvements for their program’s LGBTQ+ clinical skills training and improve training around these gaps. While this case is used in our program as a low-stakes summative assessment as part of our continuous improvement process, it can function as a meaningful formative teaching activity as well.

**Methods**

**Case Development and Student Content**

Five medical educators, including a simulation educator and two physicians, developed the SP case (Appendix A), which portrayed...
a new patient establishing primary care at an outpatient clinic. The case included six iterations of the same patient history and specified details relevant to gender identity (e.g., pronouns) and SAAB (e.g., cancer screening history) for each iteration (Table 2). For all case iterations, the patient was in their mid-30s and had not seen a physician in a decade, having been previously uninsured. The patient expressed interest in general preventive care such as vaccines and cancer screenings. The patient also described symptoms of uncontrolled, unrecognized asthma. Each patient purchased hormones online without a prescription, with TGD patients using hormones for gender transition and cisgender patients using them for treating acne (cisgender women) and increasing muscle mass (cisgender men). We incorporated feedback from transgender and genderqueer SPs during training (described below) to help reduce stereotype risk and ensure that the SP case reflected their lived experience.

We developed the case for rising third-year medical students who completed the clinical skills encounter right before beginning clerkship rotations, which allowed us to assess how students applied skills they had learned throughout their preclinical training. In our program, students’ clinical skills training in the preclinical years consisted of written, spoken, and nonverbal communication skills; practice gathering a new patient history and information for complaint-driven visits; and basic physical exam skills. For this case, we expected students to discuss gender identity and pronouns, to make appropriate preventive care recommendations, and, for those students who worked with TGD patients during the event, to effectively discuss hormone therapy and gender transition.

We conducted this SP encounter twice, once in 2017 (year 1) and again in 2018 (year 2). Prior to the event, students in year 1 completed our program’s standard integrated LGBTQ+ health curriculum, which focused on health disparities, inclusive care, and general information about TGD communities. Students in year 2 completed this same curriculum as well as targeted LGBTQ+ clinical skills training, much of which was developed in response to the gaps in gender-affirming care identified from year 1 of this simulation. This intervention consisted of an online module that walked students through an LGBTQ+ clinical skills training manual, and then, students practiced taking a medical history with LGBTQ+ patients in a student role-play, all of which took place about 3 months before the SP encounter.

**SP Recruitment and Training**

Our program portrayed TGD patients with SPs who identified as transgender and genderqueer so that the SPs’ gender identities matched the patients they portrayed. TGD SPs were already working in our program, but we did not have enough TGD SPs in our pool to cast the encounter with all iterations of the case. We therefore recruited additional SPs from our local TGD community with the help of our university’s LGBT Center (Appendix B).

Because we onboarded new SPs each year in addition to SPs from our pool, training was more extensive than with typical cases (Appendix C). First, we piloted the case with one genderqueer SP and three volunteer rising fourth-year students. We recorded these encounters to use as training videos. Next, we scheduled six 2-hour training sessions with all SPs participating in the case. Group training was critical so that new SPs could work alongside seasoned SPs. Although the cisgender SPs portrayed cisgender patients, TGD SPs gave them additional insight about their experiences in health care to underscore the broader goals of the assessment. Throughout the training sessions, we reviewed the case objectives and walked through the patient case details. The SPs practiced the case with peers and then rehearsed individually in a recorded encounter with student volunteers as learners.

We developed a case-specific SP checklist (Appendix D) to assess SP perceptions of the overall encounter, including students’ inclusive communication and understanding of gender-affirming care in a primary care setting. At the training sessions, we discussed each checklist item and developed item response anchors for case-specific questions. The SPs watched the training

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**Table 2. Standardized Patient Case Iterations With Different Patient Gender Identities and SAAB**

| Case Detail                  | Transgender Female | Genderqueer Male and Female SAAB | Cisgender Male | Transgender Woman | Genderqueer Male SAAB | Cisgender Male SAAB | Cisgender Male |
|------------------------------|--------------------|---------------------------------|----------------|-------------------|----------------------|---------------------|------------------|
| Patient pronouns            | He/him Male        | They/them Female SAAB           | She/her        | Male              | They/them            | Male                | He/him Male     |
| Patient SAAB                | Female             | Female                          | She/her        | Male              | Male                 | Male                | Male             |
| Current sexual partner’s SAAB | Male               | Male                            | Male           | Male and female   | Male and female      | Male and female     | Male             |
| Previous sexual partners’ SAAB | Male and female   | Male and female SAAB            | Estrogen       | Female            | Estrogen             | Female              | Female           |
| Patient sexual orientation  | Queer              | Queer                           | Acne           | Feminize          | Feminize             | Feminize            | Hormone use      |
| Hormone use                 | Testosterone       | Testosterone                    |                |                   |                      |                     | Reason for hormone use |
| Reason for hormone use      | Masculinize        | Masculinize                     |                |                   |                      |                     | Masculinize       |

Abbreviation: SAAB, sex assigned at birth.
videos as a group and discussed how to rate each encounter. We used training input from the initial year, particularly from TGD SPs, to update case history details and checklist items.

Clinical Skills Encounter
The clinical skills encounter was held in a simulation center with 12 patient rooms that accommodated our entire class within three 4-hour blocks over 2 days (Appendix E). Each student completed one SP encounter and was randomly assigned to a patient room. Students were scheduled for 60 minutes in the simulation center, with 30 minutes for the patient interview and the remaining time for documentation and written recommendations. Each SP completed eight to 12 encounters in a given year.

The door chart (Appendix F) described the clinical setting and asked students to complete a new patient history without a physical exam. For this summative assessment, the patients’ gender identity and SAAB were not listed on the door chart, and students were not told prior to the case that their LGBTQ+ clinical skills were being assessed. Our goal was to assess how students applied their skills organically (including any assumptions made about gender identity) rather than prompting students to restudy and perform gender inclusivity for the case. For this reason, the SPs did not give feedback directly to the students after the encounter to reduce case leakage. We were also intentional about referring to the assessment broadly as the clerkship orientation case rather than having gender-affirming care or LGBTQ+ clinical skills as part of the case title. After the patient encounter, students and SPs had 30 minutes to separately complete their postencounter assessments and checklist activities, respectively.

Learner Assessment and Follow-up
Students completed a postencounter note (Appendix G), which allowed us to identify correct pronoun usage (since patients were typically not referred to in the third person during an SP case). After completing the note, students were asked their perceptions of the case and how likely they were to recommend various preventive care measures to the patient (Appendix H). Preventive care recommendations allowed us to assess their understanding of appropriate care such as cancer screenings for TGD patients, and variation in some recommendations among case iterations (e.g., HIV screening) could indicate bias related to sexual orientation and gender identity (Appendix I). The preventive care assessment was available only after the postencounter note had been completed so that the list would not influence students’ notes. Learners in year 2 were also asked to reflect on what went well and what they struggled with during the encounter, and the investigators completed a thematic analysis of the responses using Dedoose Version 9.0 (SocioCultural Research Consultants).

The course director viewed encounters throughout the event from our SP clinic control room, debriefed with the SPs after each block, and then summarized the main gaps observed with students during a separate student orientation event that included all students. After the case, we compared the main outcomes of the SP checklist and student assessments between the TGD and cisgender patients. This allowed us to identify differences in communication and accurate preventive care recommendations. We summarized best practices in a follow-up discussion guide for faculty to use to help students address these gaps (Appendix J).

Results

Over 2 years, 286 students participated in the simulation. The mean encounter time was 17 of 30 available minutes. Across 2 years, we cast transgender men ($n = 4$), transgender women ($n = 3$), cisgender men ($n = 3$), cisgender women ($n = 4$), and genderqueer people ($n = 6$). All genderqueer SPs recruited for our events were female SAAB; although the SP case accommodates patients who are genderqueer and male SAAB, we were unable to compare outcomes for this identity.

Students were significantly more likely to state that they would refer TGD patients for follow-up care ($M = 1.9$ vs. $1.5$, $H = 6.19$, $df = 1, p = .01$). However, after the intervention in year 2, we saw a reduction in the number of students who would have referred TGD patients to endocrinology for hormones and an increase in the proportion of students willing to prescribe hormones to TGD patients in a primary care setting (Table 3). A surprising number of students in year 1 skipped the sexual history completely or did not clarify specific sexual behaviors, although these proportions decreased in year 2. Across both years, few students asked explicitly about sexual orientation.

TGD SPs in year 1 of the case were less likely than cisgender SPs to agree that students were knowledgeable enough to manage their care ($55\%$ vs. $76\%$, $\chi^2(1) = 5.04$, $p = .03$). Across

| Description of Skill                                                                 | Year 1 (%) | Year 2 (%) |
|-------------------------------------------------------------------------------------|------------|------------|
| Willing to prescribe hormones to transgender/genderqueer patients                    | 68         | 88         |
| Did not refer patient to endocrinology (managed in primary care)                     | 40         | 63         |
| Included sexual history in new patient history                                      | 60         | 82         |
| Specified sexual behaviors in sexual history                                         | 57         | 64         |
| Asked specifically about sexual orientation                                         | 23         | 26         |
both years, most TGD SPs (83%) reported being misgendered at some point during the encounter. This often happened with assumed honorifics at the beginning of the encounter, particularly for genderqueer patients who were referred to as Ms. Nichols.

Across both years, a substantial portion of students (21%) made one or more incorrect sex-specific cancer screening recommendations to TGD patients (e.g., a cervical cancer screening for transgender women or discussing prostate-specific antigen with transgender men). There were two main sources of this error. Some students did not discuss SAAB explicitly with the patient and recommended screenings that aligned with the patient’s gender expression. This included many students who asked transgender patients for their pronouns but did not clarify gender identity and SAAB (e.g., both cisgender and transgender men use he/him, so asking pronouns was necessary but not sufficient to affirm the patient through the encounter). Other students fully discussed gender identity with the patient but misunderstood appropriate, sex-specific screenings for TGD patients. Some preventive care recommendations varied by case iteration. For example, students were more likely to recommend HIV screening to TGD patients ($H = 27.3$, $df = 4$, $p < .001$), but all patients should have been screened since no patient iteration had ever been tested or knew their partner’s status.

Across the case iterations, SPs generally felt respected (> 93% for all groups and $p > .05$ across all case iteration comparisons). We observed some instances of learners laughing nervously or having difficulty proceeding when discussing gender identity, such as stating, “I’m not sure what else to ask.” Of students in year 2 who were asked to reflect on their performance, nearly all (98%) agreed that the encounter helped them practice skills needed to see actual patients. In written responses, students described feeling challenged by the case but reflected on the importance of the experience (Table 4). They described struggling with taking an adequate sexual history, organizing their patient interview/history, and making specific recommendations about preventive care. Students felt they performed well at establishing rapport and completing at least some aspects of a patient history. Some students noted that they appreciated the encounter because they viewed it as an opportunity for practice and improvement.

**Discussion**

This case served dual roles for our program’s LGBTQ+ medical training: (1) Students who worked with gender-diverse patients practiced skills for gender-affirming care, and (2) the portrayal of both cisgender and gender-diverse patients within the same assessment event allowed educators to identify biased recommendations based on sexual orientation and gender

### Table 4. Students’ Reflections on Their Performance in the Standardized Patient Encounter

| Theme                                           | Example Student Reflection Quotes                                                                 |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Students recognized gaps in gender-affirming care skills. | “I realized midway through my questions that the patient was a transgender female, which is something that I should have been able to establish earlier with direct questions.” |
| The case provided opportunities for improvement. | “I didn’t even think to ask about sex assigned at birth and gender identity and wish I had done better. But I think this will help me to be better during this year and in the future as I see patients of all identities.” |
| Students felt confident establishing rapport.   | “I definitely needed to brush up on my LGBT care questions and recommendations. I think this lab really helped with that.” |
| Students struggled to take an organized, full history. | “I think I did a good job of making the patient comfortable talking about these sensitive subjects with a doctor.” |
| Students struggled to make care recommendations. | “My organization could have been better, but I feel like I covered most things. If I can establish a flow that I use on a normal basis, that will keep me from jumping around so much and make sure I cover everything.” |
| Students needed more practice taking new patient histories—especially sexual histories. | “I felt that I hit important health care concerns for this patient; however, I feel that I need to vastly improve my knowledge regarding clinical indications and providing accurate knowledge to similar patients in the future.” |
| Students struggled with organizing the interview and forgot some of the medically relevant information that the patient should know. | “I also struggled with organizing the interview and forgot some of the medically relevant information that the patient should know.” |

**Abbreviation:** SOAP, subjective, objective, assessment, and plan.
identity (since risk factors and medical history were otherwise the same) that could be specifically addressed with additional training. Critically, we found evidence that both patient groups were harmed by biased recommendations: TGD patients experienced prejudice, and cisgender patients missed critical preventive care recommendations. Finally, our outcomes show definitively that a patient's gender identity cannot be assumed based on appearances. Together, these outcomes highlight the need for programs to build in opportunities for students to regularly practice gender-inclusive communication skills such as asking for pronouns and two-part gender identity (identity and SAAB) with all patients during simulation as part of a standard history.

While we used this case for a summative assessment to evaluate and improve our curriculum, other educators could adapt it as a formative teaching assessment. If all patients were cast as TGD and SPs gave direct postencounter feedback, each student would have the opportunity to work specifically with a TGD patient to practice gender-affirming care (although educators must consider the challenge of recruiting more TGD SPs, as discussed below). For such formative assessments, it may be appropriate for educators to emphasize which gender-affirming care skills students should practice ahead of the encounter and to reveal the SPs' gender identity and SAAB on the door charts to help students practice assessing this information for each patient ahead of the encounter. Feedback sessions for such formative cases may also benefit from smaller group sizes immediately after each encounter set. Furthermore, this case would likely be appropriate for other trainee levels, including higher-level students and residents, to practice skills for gender-affirming care.

Our assessment was ungraded, and some educators might be concerned that it may be unfair to assign a grade to this case if students take a history from patients with different gender identities. It is critical to realize that the expectations around inclusive communication, sexual history, and, in this case, also the hormone use discussion are similar across case iterations: These are skills that should be used with all patients and thus can be assessed among the case iterations presented here. The concern about TGD identities being too complex or unfair to students is often overestimated and can prevent faculty from casting diverse SPs, which ultimately undermines the accurate representation of gender diversity in patient simulation.

This case is valuable because it portrays a new patient history that is not just about gender-affirming care. This reflects the reality of transgender and genderqueer patients being more than their TGD identity. These additional patient details may allow programs to integrate the case more easily as a summative assessment in which LGBTQ+ clinical skills could be one of many components of a complete history that are assessed. Importantly, some students in our program have argued that conversations about identity need to be limited to an intake form because there is not enough time to discuss identity with the patient. However, the mean encounter time was only 17 of 30 available minutes, which showed that lack of knowledge, skill, and perhaps discomfort—but not time—are driving factors for the absence of identity conversations.

One limitation related to generalizability is that this case does not portray TGD patients who have had gender-affirming surgery. Cancer screenings based on SAAB will not always be accurate because SAAB does not always correspond with organs present (e.g., for intersex patients), and students will increasingly encounter TGD patients who have had organs removed. Therefore, recommendations for screening should focus on organs present rather than expectations based on SAAB alone, and future case iterations should include student assessment of both SAAB and organs present.

Another limitation is that some programs may have difficulty recruiting TGD SPs. Our program engaged local TGD communities before we began the case, and TGD SPs were also already working with our SP program. Our understanding of the importance of authenticity and SPs' ability to speak about bias they have experienced in health care helped inform our decision-making around who would portray TGD patients. We debriefed formally with the SPs after each event, which helped the SPs process their experiences and further underscored the value of lived experience and the impact of this case on TGD community members, who described a sense of empowerment and service to their communities. While some of the new SP recruits joined our SP program after this case, most had full-time careers elsewhere, which limited the sustainability of their participation over time. Furthermore, because many TGD SPs have had negative previous experiences with the health care system, SP well-being and psychological safety must be prioritized when casting TGD SPs in roles where they are likely to experience microaggressions and bias. Casting decisions for TGD patient simulation roles are not uniform among simulation programs, and many programs with recruitment limitations struggle between casting cisgender SPs in these roles or canceling their cases about gender-affirming care. Educators may consider arranging virtual SP sessions in order to engage authentic identities, especially as physical exams are not a feature of this case.
Future directions for this work include expanding and adapting this case to more broadly assess LGBTQ+ clinical skills by including cisgender, sexual minority case iterations. This could provide more feedback to educators and help recruitment limitations. Our group is also working with trainees to code microaggressions from the recorded encounters. The current case does not directly assess microaggressions and other slights, so this future work will help us understand whether different training is needed to improve these types of communication skills. Finally, the gaps around sexual history suggest that more effort is needed to increase student comfort and competence in discussing sexual health, which is a key component of preventive care.

**Appendices**

A. Standardized Patient Case.docx
B. SP Recruitment Guide.docx
C. SP Training & Debrief Facilitator Guide.docx
D. SP Checklist.docx
E. Logistics Guide.docx
F. Door Instructions.docx
G. Postencounter Note Guide.docx
H. Postencounter Student Assessment.docx
I. Postencounter Recommendation Assessment Key.xlsx
J. Follow-up Discussion Guide.docx

All appendices are peer reviewed as integral parts of the Original Publication.

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**Disclosures**

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**Prior Presentations**

Weingartner LA, Holthouser A, Potter J, et al. Measuring clinical skills with transgender and genderqueer standardized patients: gains, gaps, and future directions for medical students. Poster presented at: Association of American Medical Colleges Southern Group on Educational Affairs Spring Meeting; April 19-21, 2018; Jackson, MS.

Weingartner LA, Holthouser A, Potter J, et al. Involving the transgender and genderqueer communities in medical student assessment to identify disparities and develop clinical skills for LGBTQ health. Presented at: LGBT Health Workforce Conference; May 4-5, 2018; New York, NY.

Weingartner LA, Holthouser A, Potter J, et al. eQuality at the University of Louisville: developing LGBTQ health clinical visits via direct practice. Presented at: Association of American Medical Colleges Southern Group on Educational Affairs Spring Meeting; March 27-30, 2019; Orlando, FL.

Weingartner LA, Noonan E, Holthouser A, et al. Direct practice with medical students to develop LGBTQ clinical skills and identify barriers to implementation. Presented at: Association of American Medical Colleges Southern Group on Educational Affairs Spring Meeting; March 27-30, 2019; Orlando, FL.

Weingartner LA, Holthouser A, Noonan E, et al. Teaching and assessing LGBTQ clinical skills with the eQuality Toolkit. Presented at: Learn, Serve, Lead: The Annual Meeting of the Association of American Colleges; November 8-12, 2019; Phoenix, AZ.

**Ethical Approval**

The University of Louisville Institutional Review Board approved this project.
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