Strategies to Improve the Cervical Cancer Screening Experience of LGBTQ Patients: a Film-Based Curriculum

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Abstract

**Introduction:** Reproductive health screenings, such as Papanicolaou (Pap) tests, are an essential aspect of preventative health that enable detection and treatment of precancerous cervical changes (i.e., dysplasia), ultimately resulting in prevention of cervical cancer. Despite being as likely to develop cervical cancer as heterosexual cisgender women, LGBTQ people with a cervix underutilize cervical cancer screening tests. There is a need to educate medical providers and trainees in order to improve the cervical cancer screening experience for LGBTQ patients and, ultimately, to increase rates of cervical cancer screening in this population.

**Methods:** A participatory educational workshop was developed to permit medical trainees to practice challenging conversations and learn how to implement practical strategies to improve the cervical cancer screening experience for LGBTQ patients. The 1.5-hour session included: a 30-minute didactic presentation featuring the 10-minute film, *We Are Not a Monolith*, two 10-minute role play scenarios, a 25-minute large group discussion, and administration of pre- and post-session surveys to assess knowledge of and confidence level in providing cervical cancer screening to this population. In September 2017, the workshop was offered to learners at the GLMA: Health Professionals Advancing LGBT Equality (GLMA) Annual Meeting. In January 2018, the workshop was offered to Harvard Medical School (HMS) students at all levels of training.

**Results:** There were 30 GLMA workshop participants. 26 out of 30 completed pre-workshop surveys, and 22 (73%) completed both a pre- and post-workshop survey. There were 12 HMS workshop participants, all of whom completed pre- and post-workshop surveys. The GLMA and HMS groups were analyzed separately. Comparing GLMA participants’ overall performance on the full set of knowledge questions using a composite Total Mean Knowledge Score, there was statistically significant improvement between the pre- and post-scores (p-value = 0.008). When comparing HMS participants’ composite pre- and post-workshop Total Mean Knowledge Score, improvement was noted, but statistical significance was not observed (p-value = 0.504). When comparing participants’ composite Total Mean Confidence Scores between the pre- and post-workshop, statistically significant improvement was observed for both the GLMA and the
HMS group (p-value <0.001). Itemized and written feedback were obtained from both participant groups. Feedback was overwhelmingly positive with most participants (n=33, 97%) either agreeing or strongly agreeing about the appropriateness of teaching techniques utilized, and the workshop’s effectiveness in achieving the stated learning objectives.

**Discussion:** The quantitative improvement in knowledge and confidence levels and positive feedback observed suggest that this workshop enables medical trainees to improve their knowledge, confidence and comfort with providing cervical cancer screening care to their LGBTQ patients.

**Keywords:** LGBTQ, Cervical Cancer Screening, Communication, Health Equity, Educational Film

**Educational Objectives:**
By the end of this session, learners will know how to:
1) Apply basic screening guidelines to correctly identify LGBTQ patients who need cervical cancer screening
2) Discuss with LGBTQ patients specific techniques to improve emotional and physical comfort during cervical cancer screening exams
3) Use appropriate language to discuss anatomy and examination procedures with LGBTQ patients
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Glossary of Abbreviations

BAGLY – Boston Alliance of LGBTQ Youth

BIDMC – Beth Israel Deaconess Medical Center

FSAB – Female Sex Assigned at Birth

FTM – Female-to-Male

GLMA – GLMA: Health Professionals Advancing LGBT Equality

HMS – Harvard Medical School

HPV – Human Papilloma Virus

LGBTQ – Lesbian, Gay, Bisexual, Transgender, Queer

LOCS – Lesbians of Color Collaborative and Symposium

MSAB – Male Sex Assigned at Birth

Pap Test – Papanicolaou Test

SP – Standardized Patient

STI – Sexually Transmitted Infection
Introduction

Understanding LGBTQ Terminology: Basic Definitions
Though the lexicon of LGBTQ terminology is complex and constantly evolving, an understanding of fundamental concepts in sex and gender theory is necessary to delve deeper into understanding and addressing the barriers LGBTQ people face when accessing cervical cancer screening.

Sex is defined as a biological assessment of a person’s chromosomes, hormones, and internal and external genitalia.\textsuperscript{1-3} Gender identity is a person’s internal sense of self and how they fit into the world, from the perspective of gender. Gender expression is the way an individual outwardly expresses or displays their gender. While sex and gender are often conflated, it is important to recognize that a person’s biological sex, gender identity, and gender expression may or may not align. Cisgender or cis people have a gender identity that matches the sex they were assigned at birth. Transgender or trans people have a gender identity that is different from the sex they were assigned at birth. Although many societies have constructed gender as a strict gender binary—man as a discrete identity, and woman as the other—gender identities and expressions can be fluid, exist on a spectrum, or transcend the binary (Figure 1).

Entirely separate from gender identity, sexual orientation describes the type of sexual, romantic, physical, and/or spiritual attraction one feels for others.\textsuperscript{1,2} It is often labeled based on the gender relationship between the person and the people they are attracted to—in other words, a person’s sexual attractions. Some terms that people use to describe their sexual orientation identity are straight, gay, lesbian, and bisexual. Sexual behavior describes the physical acts an individual engages in during sexual intimacy. Behavior does not always align with a person’s sexual orientation identity or their sexual attractions (Figure 2). For example, a woman may simultaneously identify as a lesbian, be attracted to both men and women, and never have had sex before.
This terminology carries important implications for how providers care for their patients. Because individuals may outwardly express themselves differently from how they identify internally, the only way to know a patient’s identity is to ask them. Because everyone has a gender identity, providers should strive to ask all of their patients the same questions about their gender. This establishes a therapeutic alliance grounded in respect—for example, providers are able to use the patient’s correct pronouns and name in conversation and documentation. With regard to sexual orientation identity, attractions and sexual behaviors, it is crucial to obtain information about specific sexual practices in order to inform appropriate screening, prevention and counseling with respect to STIs, contraception and sexual satisfaction. Finally, by assessing gender identity and sexual orientation identity, providers are better equipped to screen for stress related to being a member of a gender or sexual minority group, which can have a cumulative effect on a patient’s health and resilience.  

4, 5

**LGBTQ Access to Cervical Cancer Screening**

Reproductive health screenings, such as Papanicolaou (Pap) tests, are an essential aspect of preventative health that enable detection and treatment of precancerous cervical changes (i.e., dysplasia), ultimately resulting in prevention of cervical cancer.  

Despite being as likely to develop cervical cancer as heterosexual cisgender women, LGBTQ people with a cervix underutilize cervical cancer screening tests.

Studies examining the rates of cervical cancer screening in the LGBTQ population have focused on three subgroups: cisgender lesbian women, cisgender bisexual women, and female-to-male transgender men. There are currently no published studies that explore screening rates among LGBTQ people that identify outside of these groups, for example, among gender non-binary, queer, or pansexual people.

The majority of studies suggest that lesbians, bisexual women, and transgender men have significantly lower cervical cancer screening rates than heterosexual women.  

In one study, young adult lesbians were found to have a 75% lower odds of receiving a Pap test in the previous year and an 87% lower odds of ever receiving a Pap test than heterosexual
In addition to disparities in cervical cancer screening, there are also disparities in Human Papilloma Virus (HPV) vaccination among lesbians. Thus, in addition to being underscreened, this group is less protected from cervical cancer than heterosexual women. Bisexual women also have 30% lower odds of being screened than heterosexual women, likely aided as compared to lesbians by visits for contraception and a perceived need for routine sexually transmitted infection (STI) screening.

Transgender men are also underscreened. One study found that approximately one in three transgender men are not up-to-date per recommended 2012 U.S. screening guidelines and that female-to-male (FTM) patients are 33% less likely to be up-to-date on Pap tests compared to cisgender women. Importantly, even when transgender men are screened at appropriate intervals, there is a 10-fold risk of inadequate (i.e., not testable due to poor sample quality) Pap tests as compared to cisgender women. Authors attributed this finding to a combination of physical changes induced by testosterone therapy and provider/patient discomfort with the exam.

Transgender men, lesbians, and bisexual women face additional health disparities that place them at a higher risk for cervical cancer and cancer-related death. These include a greater prevalence of smoking, under- or uninsured status, obesity, and exposure to high-risk sexual practices.

Causes for LGBTQ Underutilization of Cervical Cancer Screening Services

The underlying causes for decreased rates of cervical cancer screening among LGBTQ people are multifactorial and related to the stigma, marginalization, and socioeconomic disparities experienced by LGBTQ populations. Underinsurance, an increased prevalence of childhood sexual abuse and adult trauma, and experiences of discrimination and fear of discrimination in the health care setting make sexual and gender minorities less likely to seek routine preventative care.

Cervical cancer is often framed as a “women’s health issue,” “Heterosexual woman”-centered health care environments, education materials and provider language about
cervical cancer screening can alienate patients who are neither heterosexual nor identify as a woman but do have a cervix. While many patients experience unease surrounding having a pelvic examination, this can be especially problematic when the patient feels the exam is discordant with their gender identity.

From an educational standpoint, there is a lack of knowledge regarding the need for screening on the part of both patients and providers, as well as a lack of LGBTQ-specific provider training. This training gap, in addition to implicit biases and assumptions, can lead to provider discomfort with treating members of the LGBTQ community. There is a need to educate medical providers and trainees in order to improve the cervical cancer screening experience for LGBTQ patients, and, ultimately, to increase screening rates in this population.

**Education as Intervention**

Over the course of their four years of training, medical students spend, on average, five hours learning about LGBTQ health.21 This project seeks to address the crucial need for additional attention to LGBTQ health during medical training. Several other publications have addressed the importance of developing communication skills to building a trusting provider-patient relationship with LGBTQ patients.21, 22 This interactive, film-based curriculum allows participants to practice challenging conversations and learn how to implement practical strategies to improve the cervical cancer screening experience for their future LGBTQ patients.

**Methods**

*We Are Not a Monolith: The Film Project*

To address cervical cancer screening disparities, a film project (Figure 3) incorporating community member-provider collaboration, evidence-based research, and innovative medical education strategies was launched to promote changes in the way LGBTQ people are treated in health care settings. Each phase of the project involved both face-to-face interaction with community members and collaboration with community organizations. Incorporating authentic voices of community members enhances viewers’ understanding
of LGBTQ health experiences. The use of video content was also key for this project as film can be easily accessed by community members, disseminated broadly at low cost, and used in many spheres, from activism to medical training. Video also facilitates outreach to hard-to-reach populations who avoid seeking care, may be the most traumatized, and are therefore less likely to undergo routine preventive health care. This initiative featured a two-fold implementation strategy involving: 1) an online launch of a short documentary-style film, entitled We Are Not a Monolith, featuring community members and expert providers, and 2) adoption of the film into a nationally-available, interactive medical education curriculum.

LGBTQ individuals (n=12) were recruited to participate in filmed interviews about their experiences with cervical cancer screening. After obtaining IRB approval, community members were recruited via social media outreach and by distribution of paper and electronic flyers to LGBTQ-focused health care clinics and community organizations, including Boston Alliance of LGBTQ Youth (BAGLY), Lesbians of Color Collaborative and Symposium (LOCS), Fenway Health, Beth Israel Deaconess Medical Center (BIDMC), and The Meeting Point. In order to be interviewed, volunteers were required to be LGBTQ identified, age 21 or over—as this is the age at which screening is first recommended—and anatomically at risk for cervical cancer, either in the past or currently, regardless of whether or not they had ever been screened. No compensation was provided to community member participants. Health care providers with expertise in serving LGBTQ populations (n=7) were also interviewed to offer techniques to improve the screening experience for patients. Expert providers were identified and electronically invited to participate in the filmed interviews. Again, no compensation was provided.

A preliminary draft of the film was compiled. With IRB approval, two 90-minute focus groups were organized to provide feedback. Participants in the first group (n=10) were members of a collaborative group of LGBTQ health researchers. The focus group was conducted during a regularly scheduled group meeting, and no compensation was provided. For the second focus group, LGBTQ community members (n=6) were recruited via social media outreach and distribution of paper and electronic flyers to LGBTQ-
focused community organizations, including BAGLY, LOCS, and The Meeting Point. In order to be included, volunteers were required to be LGBTQ-identified, age 21 or over, anatomically at risk for cervical cancer, either in the past or currently, and fluent in English. Individuals who were interviewed in the film were excluded from focus group participation. Community member participants received a $10 Amazon gift card and dinner was provided at the focus group session. The study principal investigator led both focus groups. Anonymous qualitative feedback was manually recorded during both sessions. Feedback from focus group participants was used to guide final edits to the film.

The interview footage was edited into two versions: a patient version for online distribution to the LGBTQ community, and a 10-minute video for medical trainees and providers. The films showcase powerful stories from diverse individuals to convey a range of experiences with cervical cancer screening. The clinician video served as the basis for curricular development.

Curricular Overview and Implementation

This curriculum was designed as a 1.5-hour workshop for medical trainees (Figure 4). The content is appropriate for medical students and other health professional students with experience in basic interviewing and physical examination skills and can easily be adapted for medical residents.

The session begins with a 30-minute didactic (Appendix A) that includes: 1) A review of basic LGBTQ terminology, 2) An overview of current cervical cancer screening guidelines and their application to LGBTQ patients, 3) A literature review of cervical cancer screening rates in the LGBTQ population and the factors contributing to disparities, and 4) An evidence-based framework for how to improve the screening experience for LGBTQ patients. We Are Not a Monolith is embedded into the didactic and highlights the key elements of this framework.

Following the didactic, learners are divided into pairs for a 25-minute case-based role play session. Each pair is given two cases, approximately 10 minutes per case, with
instructions for a patient role and a clinician role. After the first case, the participants switch roles, allowing each learner to play both the patient and the clinician role. The first patient case (Appendix B) is 45-year-old Devin Washington, a cisgender pansexual woman who was previously told by a provider that she did not need cervical cancer because she was sexually active with a woman at the time. The second case (Appendix C) is 28-year-old Sam Jones, a transmasculine queer patient who is anxious about their first Pap test. The participants in the clinician role are instructed to focus specifically on cervical cancer screening by taking an adequate gender and sexual history, reviewing the patient’s screening history, and offering specific techniques to address their concerns about the screening exam.

The workshop closes with a 25-minute large group discussion to answer learner questions and to discuss the role play scenarios. A list of suggested large group discussion questions is included in Appendix D. The goal of the discussion is primarily to evoke particularly challenging, awkward and/or “aha” moments that occurred, either in the patient or the clinician role, and to workshop them as a group.

The workshop was piloted in two unique settings. In September 2017, the workshop was offered to learners at the GLMA: Health Professionals Advancing LGBT Equality (GLMA) Annual Meeting. 30 participants at various stages of medical training attended the workshop. In January 2018, the workshop was offered to Harvard Medical School (HMS) students at all levels of training as an optional evening session with dinner served. Based on results and feedback from the GLMA session, a review of basic LGBTQ terminology was added to the didactic portion, and the workshop was extended in length from 1 hour to 1.5 hours for the session conducted at HMS.

Curriculum Evaluation
At the beginning of the workshop, learners were asked to fill out a 5-minute pre-workshop survey (Appendix E). The pre-workshop survey contains three sections: demographic, knowledge, and confidence questions. The demographic questions characterize the learner’s training level, general exposure to LGBTQ patients and cervical
cancer screening, and personal sexual orientation and gender identity. Knowledge and confidence questions were developed with the workshop learning objectives in mind. Participants were asked five multiple choice questions about LGBTQ terminology, application of screening guidelines, and appropriate comfort techniques to offer LGBTQ patients during the screening exam. The multiple-choice format was selected in order to facilitate individual and aggregate pre- and post-workshop comparisons. To assess confidence in communicating with LGBTQ patients in general and specifically about cervical cancer screening, participants were asked to respond to seven confidence questions using a Likert scale (1=Very Unconfident; 2=Somewhat Unconfident; 3=Somewhat Confident; 4=Very Confident). This standardized rating scale was selected, again, to facilitate pre- and post-workshop comparison. The same knowledge and confidence questions were asked in a 5-minute post-workshop survey (Appendix F). Additionally, participants were asked to name one thing from the session that they planned to incorporate into their future practice. To gather feedback, participants were also asked to evaluate the appropriateness of teaching techniques utilized, and the workshop’s effectiveness in achieving the stated learning objective on a scale from “Strongly Disagree” to “Strongly Agree.” Finally, participants were invited to offer written feedback. In order to anonymously link the pre- and post-survey results, participants were asked to write the last four digits of their phone number at the top of both surveys.

Statistical Analysis
Data from pre- and post-surveys administered at the GLMA workshop and the HMS workshop were analyzed separately. Of primary interest were the changes in responses to survey questions designed to gauge participants’ knowledge and confidence. For each of the five knowledge questions, a two-sided Sign Test was used to test the pairs of pre- and post-survey question for differences. A two-sided test was used to account for the possibility of a decrease in scores. The Sign Test is a nonparametric test that analyzes the signs of the difference scores between pre- and post-measures. The null hypothesis is that the median difference between the pre- and post-scores is zero, and the alternative is that there is a difference between the pre- and post-scores. To compare overall performance,
each subject’s scores on the knowledge questions were summed and averaged to create a composite value called the Total Mean Knowledge Score. The maximum total score for knowledge questions was 5, representing 5/5 correct answers. A two-sided paired t-test was used to determine if the pre- and post-survey Total Mean Scores for knowledge were different from each other. A parallel set of analyses was performed for the set of seven confidence questions to assess changes in each of the question items and in the composite Total Mean Confidence Score. The maximum total score for confidence questions was 28, representing a rating of 4 or “Very Confident” on all 7 confidence questions. All analyses were performed in R.\textsuperscript{23, 24}

\textit{Ethical Review}
This publication contains data obtained from human subjects and received ethical approval by the Fenway Health IRB and the Harvard Medical School Academy Scientific Review Committee.

\textbf{Results}

\textit{Participants – GLMA}
There were 30 GLMA workshop participants, 26 of whom completed pre-workshop surveys. Participants represented a variety of health care backgrounds, including health professional students (n=8, 31%), nurse practitioners (n=7, 27%), and physicians (n=6, 23%) (Table 1). The majority of participants identified as a sexual orientation minority (n=21, 81%). Most participants stated their gender identity as “woman” (n=15, 58%), and nearly all participants stated they were female sex assigned at birth (n=20, 77%). 19% of participants identified as gender identity minorities, with four participants identifying as gender non-binary and one participant identifying as a transgender man.

The majority of GLMA participants reported they had ≥ 11-50 interactions in all of the exposure domains, including: 1) Asking about pronouns (n=14, 54%); 2) Clinical interactions with LGBTQ patients (n=19, 73%); 3) Asking about sexual orientation, sexual behaviors, and gender identity (n=16, 62%); 4) Observed a Cervical Pap Test (n=15, 58%); and 5) Performed a Cervical Pap Test (n=13, 50%). The exposure levels on
the fifth exposure domain reflected the breadth of participants’ level of medical training: Six participants (23%) had never performed a cervical Pap test, while eight (31%) had performed over 100.

After removing participants who did not complete a post-workshop survey, we obtained our analysis sample (n=22).

Participants—HMS
There were 12 HMS workshop participants, all of whom completed pre-workshop surveys. All participants were medical students, most of whom were in their first year of training (n=10, 83%) (Table 1). The majority of participants identified as straight/heterosexual (n=8, 67%). Nearly all participants stated their gender identity as “woman” (n=10, 83%), and nearly all participants stated they were female sex assigned at birth (n=10, 83%). No participant identified as a gender identity minority.

The majority of HMS participants reported they had ≤10 interactions in all of the exposure domains, including: 1) Asking about pronouns (n=6, 50%); 2) Clinical interactions with LGBTQ patients (n=8, 67%); 3) Asking about sexual orientation, sexual behaviors, and gender identity (n=10, 83%); 4) Observed a Cervical Pap Test (n=10, 83%); and 5) Performed a Cervical Pap Test (n=11, 92%).

All participants completed both pre- and post-workshop surveys and were included in our final analysis sample (n=12).

Clinical Knowledge—GLMA
On knowledge Questions One and Two about basic LGBTQ terminology, 100% of participants (n=22) responded correctly on the pre-workshop survey (Table 2). On the post-workshop survey, 86% (n=19) answered Question One correctly, and 90% (n=20) answered Question Two correctly. This decline in scores was not statistically significant in either case (p-value = 0.25 for Question One, p-value = 0.50 for Question Two). On the third knowledge question, which asked participants to apply cervical cancer screening
guidelines to LGBTQ patients, most participants either improved (n=8, 36%) or correctly answered on both the pre- and post-survey (n=10, 45%) (p-value = 0.008). For both Questions Four and Five, 90% (n=20) of participants answered correctly on the pre-workshop survey, and 100% (n=22) answered correctly on the post-workshop survey. This was an improvement but did not meet statistical significance (p-value = 0.125 for both).

Comparing participants’ overall performance on the full set of knowledge questions using the Total Mean Knowledge Score, there was statistically significant improvement between the pre- and post-scores (Δ=0.5-point improvement, p-value = 0.008).

**Clinical Knowledge—HMS**

Among the HMS participants, 100% (n=12) responded correctly to Question One on the pre-workshop survey, and 83% (n=10) responded correctly on the post-workshop survey (Table 2). This decline in scores was not statistically significant (p-value = 0.5). All participants (n=12, 100%) answered Question Two correctly on both the pre- and post-workshop surveys (p = 1.0). There was no change in performance observed for Question Three with five participants (42%) answering correctly on both the pre- and post-surveys (p = 1.0). For both Questions Four and Five, 83% (n=10) answered correctly on the pre-workshop survey, and 100% (n=12) answered correctly on the post-workshop survey. These improvements did not meet statistical significance (p-value = 0.5 for both).

Comparing participants’ composite pre- and post-workshop Total Mean Knowledge Score, improvement was noted, but statistical significance was not observed (Δ=0.2-point improvement, p-value = 0.504).

**Confidence – GLMA**

There were seven questions rating participants’ confidence in interacting with patients, and the change in participants’ confidence between the pre- and post-surveys was assessed for each item and overall. Statistically significant improvement was observed for confidence ratings on four skills: 1) Asking about pronouns (p = 0.004), 2) Identifying
LGBTQ patients needing screening (p = 0.001), 3) Using appropriate language to describe the screening exam (p = 0.004), and 4) Discussing comfort techniques (p < 0.001). Confidence ratings improved in the three other domains as well, but improvements were not found to be statistically significant.

Overall, participants began with a Total Mean Confidence Score of 22.6 and improved to a score of 25.8 after the workshop. This improvement in overall confidence scores between the pre- and post-workshop was found to be statistically significant (Δ=3.2-point improvement, p-value <0.001).

Confidence—HMS
For HMS participants, statistically significant improvement was observed for confidence ratings on three skills: 1) Identifying LGBTQ patients needing screening (p < 0.001), 2) Using appropriate language to describe the screening exam (p < 0.001), and 3) Discussing comfort techniques (p = 0.001). Confidence ratings improved in the three other domains (interacting with LGBTQ patients, asking about pronouns, and asking about sexual behaviors) as well, but improvements were not found to be statistically significant.

Overall, participants began with a Total Mean Confidence Score of 15.8 and improved to a score of 21.8 after the workshop. This improvement in overall confidence scores between the pre- and post-workshop was found to be statistically significant (Δ=6-point improvement, p-value <0.001).

Itemized Feedback
The post-workshop survey included eight feedback questions. All participants from the GLMA and HMS workshops (n=34) said that the format of the session was appropriate for the content covered, and most participants thought the session length was appropriate (n=31). Three GLMA participants felt that the 1-hour session was too short. Regarding the teaching techniques used in the session, all participants “Agreed” or “Strongly Agreed” that they felt comfortable asking questions, felt their perspectives were valued
and felt engaged in the session. All participants “Agreed” or “Strongly Agreed” that they could use appropriate language to review examination procedures with LGBTQ patients and discuss specific comfort techniques, and all but one participant “Agreed” or “Strongly Agreed” that they could correctly identify LGBTQ patients who need cervical cancer screening.

Written Feedback
 Several themes emerged from responses to the question, “Name one thing from the session that you plan to incorporate into your future practice:”

Asking Questions and Avoiding Making Assumptions
• “Asking questions—pronouns, history, identity, terms to use for genitals” (n=6)
• “Normalizing ‘no assumptions’ to make a patient feel respected and welcomed”
• “Ask for permission to ask further clarifying questions with regard to patient’s anatomy”
• “Open ended ways of asking about pronouns and preferred anatomical terms”
• “Obtaining a better history of gender transitioning”

The Importance of Terminology
• “Decrease assumptions, increase gender neutral terminology”
• “Terminology”
• “Frontal canal”
• “Using gender neutral terms: ‘Well person exam’”

Applying Screening Guidelines Correctly
• “Knowing Screening Guidelines!” (n=2)
• “Recommending cervical cancer screening to all patients who need it”

Counseling Patients about the Available Comfort Techniques
• “Providing options for comfort techniques prior to screening” (n=5)
• “Asking someone what their concerns are about the procedure and if I can do anything to make them more comfortable” (n=2)
• “Ask patient preferences for amount of information they want to hear during exam” (n=2)
• “Counseling transmen on testosterone of the possibility of insufficient cellularity on Pap test”
• “Specific comfort techniques: bringing speculum and lube home beforehand”
• “Offering patient option to come back for appointment later to do Pap”
• “Being more sensitive to patient's emotional/psychological concerns surrounding screening”
• “Discussing past experiences, good and bad”
General Enthusiasm

- “All of It!” (n=2)

Free-text feedback comments included:

- “Loved the YouTube video! And format of the presentation doing the case study!”
- “Great!”
- “Excellent presentation!”
- “Discuss anal Paps and the populations that need it as it applies to LGBTQ and HIV-positive populations”
- “Make role play optional or do small-groups rather than pairs”
- “Loved that IPV/trauma was included, also so important to wellness!”
- “Would love to discuss thoughts on how necessary bimanual exams are...I know that's beyond the focus of Paps/HPV screening but feel like they go hand-in-hand”
- “We need a session like this for everyone, as part of the formal curriculum!”
- “More specifics on language we can use for LGBTQ patients would be great”
- “Be part of the curriculum!!”
- “THANK YOU MUCH NEEDED! Should happen in POM” [Practice of Medicine (POM) is a longitudinal course on basic interviewing and physical exam skills taken in the first year.]
- “I would love to know more common non-gendered anatomy terms that are used. Thank you so much for this session!”
- “Incredible! We need more sessions like this!”
- “Should be mandatory THANK YOU”

Discussion

Initiatives to better educate medical trainees and providers about LGBTQ health are key strategies to address health care disparities experienced by LGBTQ people. This film-based workshop gave participants an opportunity to learn about the challenges faced by LGBTQ people in accessing cervical cancer screening and to practice culturally competent communication techniques to address those challenges.

There were notable differences between the GLMA and HMS study populations. As compared to the HMS group, GLMA participants had more prior clinical exposure in all studied domains and represented a variety of healthcare backgrounds. The GLMA group also had a higher proportion of sexual and gender minorities, which most likely reflected...
the general pool of conference attendees. These findings have important implications in interpreting the knowledge and confidence results.

**Knowledge**

With regard to knowledge, both study groups improved on their overall performance. However, the GLMA group achieved a statistically significant improvement, which was not observed in the HMS group. Certainly, the relatively small sample size of the HMS group prohibits precise statistical inference. Additional participants would help provide evidence as to whether the observed trend toward improvement is statistical noise or a statistically significant finding. This is also true of both groups’ performance on Questions Four and Five, in which performance improved but did not meet statistical significance benchmarks.

Interestingly, the GLMA group significantly improved on the third knowledge question about the application of guidelines to identify LGBTQ patients needing screening, while the HMS group’s performance did not change. Prior clinical exposure likely played a role in this finding: Four HMS participants missed the question because they incorrectly stated that Patient B, a 55-year-old transgender male who has had a total hysterectomy and negative screening history, needed screening. However, all four respondents hand-wrote, “Would not need screening if cervix was removed.” This indicates a need for clarification of the terms “total hysterectomy” and “supracervical hysterectomy,” particularly in learning groups with lower levels of clinical experience.

A decline in scores on Questions One and Two was observed in the GLMA group, which prompted the addition of a review of basic LGBTQ terminology for the HMS workshop. However, a decline in scores was still observed for Question One in the HMS group. The decline in scores was not statistically significant in either case. The overall high performance (all participants answered both questions correctly on the pre-workshop survey) might suggest removing Questions One and Two from the surveys. However, it is important to consider that these questions on basic terminology may have more utility.
among non-volunteer participants, who may have lower levels of prior exposure or interest to the workshop content.

**Confidence**

Both study groups significantly improved on their overall confidence ratings. Significant improvement was also observed in several specific domains, particularly those assessing the stated educational objectives (identifying LGBTQ patients needing screening, using appropriate language to describe the screening exam, and discussing comfort techniques).

Of note, GLMA participants entered the workshop with a higher overall confidence level, likely related to their higher level of prior clinical exposure, and demonstrated a smaller gain in confidence than the HMS participants. Although gains in confidence levels do not necessarily correlate with greater competence—which would require a formal skills assessment for evaluation—self-confidence plays an important part in building medical trainees’ belief in their ability to master challenging problems and in encouraging motivation to build knowledge and skills in the tested domains.  

**Limitations**

There are several limitations to this study. First, as mentioned above, both the GLMA and HMS workshops had voluntary participants, leading to small sample sizes and a selection bias in favor of individuals with a prior interest in LGBTQ health. However, even with high levels of prior experience or interest among participants, we still observed overall improvements in knowledge and confidence. This finding suggests that the potential impact might be even greater if formally implemented into the mainstream medical school curriculum, thereby reaching students with minimal prior exposure to LGBTQ health issues. Furthermore, the written feedback from participants, particularly those in the HMS group, strongly supported inclusion of the workshop in the formal medical curriculum.

Second, both GLMA and HMS participants were heavily skewed toward female sex assigned at birth (FSAB), woman-identified participants. This gender skew limits our ability to understand how male sex assigned at birth (MSAB) and male-identified
individuals would respond to the workshop. Additionally, although the study population consisted mostly of cisgender women, it is unlikely that the results from this pilot session can be used to extrapolate how non-volunteer women would do in a mandatory session. Certainly, this finding speaks to the importance of formally introducing the workshop into the mainstream curriculum, so as to ensure that MSAB students who may be less familiar with FSAB bodies are introduced to these topics. Future learning sessions incorporating MSAB and non-LGBTQ identified participants will be necessary to test the acceptability and perceived effectiveness of the curriculum.

Third, because the curriculum was amended in content and length between the GLMA and HMS sessions, the results can be qualitatively compared but cannot be pooled for more powerful statistical inference. The materials submitted here in their final form offer a stable intervention, which allows data collected from subsequent workshops with medical trainees and providers of all levels to be pooled and analyzed.

Finally, this curriculum, while demonstrably successful in improving participants’ knowledge regarding and confidence offering cervical cancer screening to LGBTQ patients, is a limited intervention in its scope. The workshop does not include the opportunity to interact with an authentic member of the LGBTQ community, practice the techniques discussed during an actual cervical cancer screening procedure, or undergo a post-session assessment of skills acquisition via direct observation with a standardized patient (SP) or mini-Clinical Evaluation Exercise (mini-CEX).

Suggestions for Future Work
In the future, we plan to use this curriculum as a stable intervention to be studied over time. The first step toward this aim is the implementation of the workshop into formal medical curricula at our home institution, and subsequently nationally. This would enable pooling of data from multiple clinical training environments to assess the curriculum’s impact. Furthermore, there is potential for a longitudinal study that would survey workshop participants in their pre-clinical years, and survey them again in their final year of medical school to assess the long-term impact of the educational experience. Finally, the development of an accompanying mini-CEX or SP case would allow for a skills
assessment. This would require substantial modification of the workshop or development of a second workshop to allow participants to practice their skills, for example, in the setting of interacting directly with an LGBTQ community member or practicing comfort techniques during a cervical cancer screening procedure.

Summary
Although this study is limited as stated above, the quantitative improvement in knowledge and confidence levels and positive feedback observed suggest that this workshop enables medical trainees to improve their knowledge, confidence and comfort with providing cervical cancer screening care to their LGBTQ patients.
Acknowledgements

I want to thank Jennifer Potter for her incredible support and mentorship since the beginning of this project. Your passion for serving the LGBT community is infectious.

I want to thank Aaron Seriff-Cullick, my best friend and film guru, for making my cinematographic dreams come true.

To Savannah Bergquist, thank you for your unyielding support, both emotionally and statistically. I could not have done this without you.

Thanks to Karen Spiller, the Albert Schweitzer Fellowship, and all of my fellow Fellows for inspiring me to start this project in the first place. The Fellowship is a wonderful place to learn how to serve communities in need.

I want to thank several community organizations that helped to get the word out about this project: Aaron Gonzales and BAGLY, Shaunya Thomas and The Lesbians of Color Symposium Collective, The Meeting Point, and EqualityTexas.

I want to thank Claire Goh for composing an original song that serves as the soundtrack to *We Are Not a Monolith*. It’s perfect.

I want to thank the Harvard OpenGate Foundation, Harvard Scholars in Medicine Program, and the Albert Schweitzer Fellowship for their financial support of this project.

I want to thank my family—particularly my parents—and friends for supporting me as I discover and pursue my passions.

Finally, I want to thank the community members and providers who volunteered to share their stories and experiences with cervical cancer screening:

Community Members: Dukes, Elijah, Fern, Ida, Jessica, Kaden, Kelly, Laura, Lou, Simbrit, Tanekwah, Van

Providers: AndreAs Neumann-Mascis, PhD; Alexis Drutchas, MD; Jennifer Potter, MD; Julie Thompson, PA-C; Michal McDowell, MPH; Miranda Balkin, MD; Ralph Vitters, MD, MPH; Yvonne Gomez-Carrion, MD, FACOG

You are the heart and soul of this project.
References


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Tables and Figures

Figure 1: Spectrums of Sex, Gender Identity, and Gender Expression

Figure 1: Spectrums of Sex, Gender Identity, and Gender Expression\textsuperscript{1}
Figure 2: Three Components of Sexual Orientation – Identity, Behavior, and Attraction

Figure 3: Concept flowsheet of We Are Not a Monolith Project Phases
Figure 4: Workshop Flowsheet
Table 1: Participant Summary Statistics

<table>
<thead>
<tr>
<th>Professional Background</th>
<th>GLMA (N=26)</th>
<th>HMS (N=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Professional Student</td>
<td>8 (31%)</td>
<td>12 (100%)</td>
</tr>
<tr>
<td>Nurse Practitioner/Nurse</td>
<td>9 (35%)</td>
<td>--</td>
</tr>
<tr>
<td>Physician’s Assistant</td>
<td>1 (4%)</td>
<td>--</td>
</tr>
<tr>
<td>Physician</td>
<td>6 (23%)</td>
<td>--</td>
</tr>
<tr>
<td>Other (Administrator/Community Member)</td>
<td>2 (8%)</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year in Medical School</th>
<th>GLMA (N=26)</th>
<th>HMS (N=12)</th>
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<tbody>
<tr>
<td>1</td>
<td>-- 10</td>
<td>(83%)</td>
</tr>
<tr>
<td>2</td>
<td>-- 1</td>
<td>(8%)</td>
</tr>
<tr>
<td>3</td>
<td>-- 0</td>
<td>(0%)</td>
</tr>
<tr>
<td>4</td>
<td>-- 1</td>
<td>(8%)</td>
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<table>
<thead>
<tr>
<th>Sexual Orientation Identity</th>
<th>GLMA (N=26)</th>
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<tbody>
<tr>
<td>Bisexual</td>
<td>4 (15%)</td>
<td>2 (17%)</td>
</tr>
<tr>
<td>Gay</td>
<td>6 (23%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Lesbian</td>
<td>6 (23%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Queer</td>
<td>5 (19%)</td>
<td>1 (8%)</td>
</tr>
<tr>
<td>Straight</td>
<td>5 (19%)</td>
<td>8 (67%)</td>
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<table>
<thead>
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<th>Gender Identity</th>
<th>GLMA (N=26)</th>
<th>HMS (N=12)</th>
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<tbody>
<tr>
<td>Man</td>
<td>6 (23%)</td>
<td>2 (17%)</td>
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<tr>
<td>Non-binary</td>
<td>4 (15%)</td>
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</tr>
<tr>
<td>Transgender Man</td>
<td>1 (4%)</td>
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<tr>
<td>Woman</td>
<td>15 (58%)</td>
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<table>
<thead>
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<th>Sex Assigned at Birth</th>
<th>GLMA (N=26)</th>
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<tr>
<td>Female</td>
<td>20 (77%)</td>
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<tr>
<td>Male</td>
<td>6 (23%)</td>
<td>2 (17%)</td>
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<table>
<thead>
<tr>
<th>Asked Someone about Pronouns</th>
<th>GLMA (N=26)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2 (8%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>1-10</td>
<td>10 (38%)</td>
<td>6 (50%)</td>
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<tr>
<td>11-50</td>
<td>5 (19%)</td>
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<tr>
<td>51-100</td>
<td>3 (12%)</td>
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</tr>
<tr>
<td>100+</td>
<td>6 (23%)</td>
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<table>
<thead>
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<th>Clinical Interactions with LGBTQ+ Patients</th>
<th>GLMA (N=26)</th>
<th>HMS (N=12)</th>
</tr>
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<tr>
<td>0</td>
<td>4 (15%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>1-10</td>
<td>3 (12%)</td>
<td>8 (67%)</td>
</tr>
<tr>
<td>11-50</td>
<td>11 (42%)</td>
<td>2 (17%)</td>
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<tr>
<td>51-100</td>
<td>4 (15%)</td>
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</tr>
<tr>
<td>100+</td>
<td>4 (15%)</td>
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</table>

<table>
<thead>
<tr>
<th>Asked Patient about Sexual Orientation, Behaviors, Gender Identity</th>
<th>GLMA (N=26)</th>
<th>HMS (N=12)</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>5 (19%)</td>
<td>4 (33%)</td>
</tr>
<tr>
<td>1-10</td>
<td>5 (19%)</td>
<td>6 (50%)</td>
</tr>
<tr>
<td>11-50</td>
<td>8 (31%)</td>
<td>1 (8%)</td>
</tr>
<tr>
<td>51-100</td>
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<tr>
<td>100+</td>
<td>7 (27%)</td>
<td>0 (0%)</td>
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</table>

<table>
<thead>
<tr>
<th>Observed a Cervical Pap Test</th>
<th>GLMA (N=26)</th>
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</tr>
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<tbody>
<tr>
<td>0</td>
<td>1 (4%)</td>
<td>5 (42%)</td>
</tr>
<tr>
<td>1-10</td>
<td>10 (38%)</td>
<td>5 (42%)</td>
</tr>
<tr>
<td>11-50</td>
<td>8 (31%)</td>
<td>2 (17%)</td>
</tr>
<tr>
<td>51-100</td>
<td>6 (23%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>100+</td>
<td>1 (4%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performed a Cervical Pap Test</th>
<th>GLMA (N=26)</th>
<th>HMS (N=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>6 (23%)</td>
<td>8 (67%)</td>
</tr>
<tr>
<td>1-10</td>
<td>7 (27%)</td>
<td>3 (25%)</td>
</tr>
<tr>
<td>11-50</td>
<td>4 (15%)</td>
<td>1 (8%)</td>
</tr>
<tr>
<td>51-100</td>
<td>1 (4%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>100+</td>
<td>8 (31%)</td>
<td>0 (0%)</td>
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</tbody>
</table>

Note: Percentages may not sum to 100% due to rounding.
Table 2: Correct Responses to Knowledge Question Set

<table>
<thead>
<tr>
<th>Question</th>
<th>GLMA (N=22)</th>
<th></th>
<th>HMS (N=12)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre Post</td>
<td>P-value</td>
<td>Pre Post</td>
<td>P-value</td>
</tr>
<tr>
<td>1: Gender Identity</td>
<td>22 (100%) 19 (86%)</td>
<td>0.250</td>
<td>12 (100%) 10 (83%)</td>
<td>0.500</td>
</tr>
<tr>
<td>2: Sexual Orientation Identity</td>
<td>22 (100%) 20 (90%)</td>
<td>0.500</td>
<td>12 (100%) 12 (100%)</td>
<td>1.000</td>
</tr>
<tr>
<td>3: Applying Screening Guidelines</td>
<td>10 (45%) 18 (82%)</td>
<td>0.008</td>
<td>5 (42%) 5 (42%)</td>
<td>1.000</td>
</tr>
<tr>
<td>4: Gender Neutral Terminology</td>
<td>18 (82%) 22 (100%)</td>
<td>0.125</td>
<td>10 (83%) 12 (100%)</td>
<td>0.500</td>
</tr>
<tr>
<td>5: Comfort Techniques</td>
<td>18 (82%) 22 (100%)</td>
<td>0.125</td>
<td>10 (83%) 12 (100%)</td>
<td>0.500</td>
</tr>
<tr>
<td>Total Mean Knowledge Score</td>
<td>4.1 -- 4.6 --</td>
<td>0.008</td>
<td>4.1 -- 4.3 --</td>
<td>0.504</td>
</tr>
</tbody>
</table>

Note: Numbers in table represent correct responses to each multiple-choice question. P-values for Questions 1-5 calculated using a two-sided Sign test. P-value for difference in Total Mean Knowledge Score calculated using a two-sided paired t-test.
<table>
<thead>
<tr>
<th>Statement</th>
<th>GLMA (N=22)</th>
<th></th>
<th></th>
<th>HMS (N=12)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>P-value</td>
<td>Pre</td>
<td>Post</td>
<td>P-value</td>
</tr>
<tr>
<td>1: Interacting with LGBTQ Patient</td>
<td>4</td>
<td>4</td>
<td>0.250</td>
<td>3</td>
<td>3</td>
<td>0.125</td>
</tr>
<tr>
<td>2: Asking about Pronouns</td>
<td>3</td>
<td>4</td>
<td>0.004</td>
<td>3</td>
<td>3</td>
<td>0.219</td>
</tr>
<tr>
<td>3: Asking about Sexual Orientation</td>
<td>4</td>
<td>4</td>
<td>0.375</td>
<td>3</td>
<td>3</td>
<td>1.000</td>
</tr>
<tr>
<td>4: Asking about Sexual Behaviors</td>
<td>4</td>
<td>4</td>
<td>0.125</td>
<td>2.5</td>
<td>3</td>
<td>0.688</td>
</tr>
<tr>
<td>5: Identifying LGBTQ Patients</td>
<td>3</td>
<td>4</td>
<td>0.001</td>
<td>1</td>
<td>3</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>(Needing Cervical Cancer Screening)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6: Using Appropriate Language to Describe Exam</td>
<td>3</td>
<td>3</td>
<td>0.004</td>
<td>1.5</td>
<td>3</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>7: Discussing Comfort Techniques</td>
<td>3</td>
<td>4</td>
<td>&lt;0.001</td>
<td>1.5</td>
<td>3</td>
<td>0.001</td>
</tr>
<tr>
<td>Total Mean Confidence Score</td>
<td>22.6</td>
<td>25.8</td>
<td>&lt;0.001</td>
<td>15.8</td>
<td>21.8</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Note: Confidence rated on a Likert scale (1=Very Unconfident; 2=Somewhat Unconfident; 3=Somewhat Confident; 4=Very Confident). P-values for Statements 1-7 calculated using a two-sided Sign test. P-value for difference in Total Mean Confidence Score calculated using a two-sided paired t-test.
Appendices

Appendix A: Didactic Presentation

STRATEGIES TO IMPROVE THE CERVICAL CANCER SCREENING EXPERIENCE FOR LGBTQ PATIENTS
Iman Berradou
MD Candidate, Class of 2018
Harvard Medical School

Collaboration:
Rita Artino, MD
Harvard Medical School, Beth Israel Deaconess Medical Center, Fenway Health
Karen Hart-Cvik

Disclosures
• I have no disclosures to report.

Learning Objectives
1. Correctly identify LGBTQ patients who are eligible for cervical cancer screening
2. Use appropriate language to review relevant anatomy and examination procedures with LGBTQ patients
3. Discuss specific techniques to improve emotional and physical comfort for LGBTQ patients during cervical cancer screening exams
**Pronouns**

<table>
<thead>
<tr>
<th>3rd Person Singular Subjective</th>
<th>3rd Person Singular Objective</th>
<th>3rd Person Singular Possessive</th>
<th>3rd Person Singular Interjective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whom</td>
<td>It's to</td>
<td>Their</td>
<td>HimSELF</td>
</tr>
<tr>
<td>She</td>
<td>Her</td>
<td>Herself</td>
<td>HeSELF</td>
</tr>
<tr>
<td>He</td>
<td>His</td>
<td>Hiself</td>
<td>SheSELF</td>
</tr>
<tr>
<td>They</td>
<td>Them</td>
<td>Themselves</td>
<td>ItSELF</td>
</tr>
<tr>
<td>It</td>
<td>Its</td>
<td>Itsself</td>
<td>YouSELF</td>
</tr>
<tr>
<td>You</td>
<td>Your</td>
<td>Yours</td>
<td>WeSELF</td>
</tr>
<tr>
<td>Me</td>
<td>My</td>
<td>Myself</td>
<td>YouSELF</td>
</tr>
<tr>
<td>MySELF</td>
<td>We</td>
<td>Us</td>
<td>YouSELF</td>
</tr>
</tbody>
</table>

**Case**

You are scheduled to see a new patient in clinic this afternoon. You walk into the office and encounter a patient named Pat with a female gender presentation. What is their gender identity?

**Sexual Orientation**

**Case**

Abdul is a long-time patient of yours who previously told you he is a straight cisgender man. During today's visit, he states he recently had sex with a cisgender man. What is his sexual orientation identity?
Case

A patient of yours, Sam, tells you that she is a transgender woman and uses she/her/his pronouns. What can you assume about her sexual orientation?

Human Papillomavirus: Epidemiology

Most common STI in the US, over 100 types transmitted between humans via skin-to-skin contact

- 50-80% of sexually active people exposed in their lifetime
- 90% have asymptomatic infections that clear within 24 months
- Persistent HPV infection can be associated with:

  - Neurogenic bladder
  - Genital warts
  - Anal cancer
  - Dysplasia of skin
  - Penile cancer
  - Anal/rectal cancer

90% of cases attributable to HPV types 6 and 11

70% of cases attributable to HPV types 16 and 18

Many Screening Options Exist

Cervical Cytology: Also known as the cervical PAP test

HPV Testing: Checks directly for HPV virus

Screening Options that Require a Provider: ASCCP Guidelines, 2012

<table>
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<tr>
<th>Age Group</th>
<th>Screening Option</th>
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<tbody>
<tr>
<td>&lt;25 years old</td>
<td>Not indicated</td>
</tr>
<tr>
<td>25-45 years old</td>
<td>Cervical PAP test every 3 years (preferred)</td>
</tr>
<tr>
<td>45-65 years old</td>
<td>Cervical PAP test every 5 years (optional)</td>
</tr>
<tr>
<td>&gt;65 years old</td>
<td>Not indicated (as long as patient has negative history with evidence of adequate screening)</td>
</tr>
<tr>
<td>Nativated</td>
<td>Same recommendations as unactivated</td>
</tr>
<tr>
<td>Post-Total hysterectomy for benign indication</td>
<td>Not indicated (as long as patient has negative history with evidence of adequate screening)</td>
</tr>
</tbody>
</table>
Screening Options that Require a Provider: ASCCP Interim Guidelines, 2015

- Provider administered cervical HPV swab as primary screening
- Still requires anoscopy exam
- More accurate, especially for adenocarcinoma, but leads to more referrals to colposcopy
- Optimal screening interval not yet known

In the Future: Self-Administered HPV Swabs?

Comparing self- and provider-collected vulvarcetion for HPV DNA testing in female-to-male transgender adult patients: a mixed-methods biobehavioral study protocol

Cervical Cancer Screening (Pan Testing) Behaviours and Acceptability of Human Papillomavirus Self-Testing among Lesbian and Bisexual Women Aged 21-26 Years in the USA

Paul C. Reder 1,2 and Anne Laurie Mufson 1

Screening methodology is not that important
MOST IMPORTANT IS THAT PEOPLE GET SCREENED!

Reviewing the Literature: Cervical Cancer Screening in the LGBTQ population

LGBTQ encompasses a diverse spectrum of identities and behaviors

Screening
HPV Test
Cervical Cancer Screening

[Other diagrams and information related to cervical cancer screening and LGBTQ+]
Reviewing the Literature: Cervical Cancer Screening in the LGBTQ population

Three subgroups have been the focus of published research:

- Female-to-Male Transgender Men
- Lesbian/Omegender Women
- Bisexual/Omegender Women

Reviewing the Literature: Cervical Cancer Screening and Transgender Men

- Approximately one in three TM patients are not up-to-date per recommended 2012 U.S. screening guidelines.
- TM patients are 50% less likely to be up-to-date on Pap tests compared to cisgender women.
- Female-to-male patients have a high proportion of unreviewed Pap tests compared to cisgender females (71% vs. 5.3%)

Reviewing the Literature: Cervical Cancer Screening and Lesbian Women

- Most studies find lesbians are significantly less likely to have had a cervical Pap test in the last 3 years compared to heterosexual women.
- Several documented disparities contribute to increased cervical cancer risks in the lesbian population, including:
  - Higher rates of obesity
  - Higher rates of smoking
  - Lower likelihood of being insured

Reviewing the Literature: Cervical Cancer Screening and Bisexual Women

- Most studies also find bisexual women to be significantly less likely to be up-to-date with cervical cancer screening.
- One study estimated bisexual women had 30% lower odds of having a Pap test in the past year compared to heterosexual women.
We Are Not a Monolith can be viewed at https://www.youtube.com/watch?v=SDANwAZf6cc
Appendix B: Role Play Scenario One – Devin Washington

Role Play Scenario General Instructions:

Design: Participants will break up into pairs with the following roles:
1) Patient
2) Clinician: conducts the interview with the patient

Each pair will act out their first patient scenario for 10 minutes. Then participants will switch roles for the second patient scenario. Each participant should be in an interviewing role once to ensure that everyone has the opportunity to practice conversation and counseling skills.

Scenario One, Instructions for Person in the Interviewer Role:

You are a primary care provider who is meeting 45-year-old Devin Washington for the first time. You have reviewed the patient’s past medical and surgical history, which is negative. You see that on the intake form the patient wrote, “I think I need to be screened for cervical cancer, but I’m nervous.”

You have 10 minutes to discuss this concern with the patient. Please be sure to take an adequate gender and sexual history, review the patient’s screening history, and, offer specific techniques to address their concerns about the screening exam.
Scenario One, Instructions for Person in the Patient Role

Patient Name: Devin Washington
Age: 45
Symptoms: None
Patient Complaint: Anxiety surrounding cervical cancer screening
Opening Statement: “I think I need to be screened for cervical cancer, but I’m nervous.”

Scenario: You are 45-year-old Devin Washington, a high school teacher originally from a small town in Massachusetts. You recently moved to Philadelphia and are establishing care with your new primary care provider. You do not have any specific symptoms, but have concerns about your need for cervical cancer screening. A close friend of yours recently had a Pap test that showed an “abnormality,” and they encouraged you to be screened.

History:
Past Medical History
None

Gender History

Gender Identity: Cisgender woman
Pronouns: she/her/hers

Sexual Orientations Identity: Pansexual. You rarely come out to medical providers because in the past you’ve been asked uncomfortable questions about it.
Current Sexual Behaviors: You are sexually active in a monogamous relationship with your cisgender female partner of 25 years. You have vaginal and oral sex, and your last sexual contact was two weeks ago.
Past Sexual Behaviors: Prior to meeting your long-term partner in college, you had sex with two cisgender female partners and two cisgender male partners. You had vaginal and oral sex with all of them. You did not have anal sex with any of them. Condoms were used with male partners.
IPV/Trauma: No history of intimate partner violence or history of trauma.

Obstetric/Gynecologic History

STIs: No history of sexually transmitted infections.
Pregnancy: No prior pregnancy.
Bleeding: Your last period was two weeks ago, and cycles are regular.
Prior Screening: You have been screened for cervical cancer twice, once at age 23 and again at age 34. Both showed no abnormalities. A provider subsequently told you did not need to be screened because you are only sexually active with your female partner.

Screening History

Concerns Today: Both prior screening experiences were unpleasant because the providers asked inappropriate questions about your sexual orientation identity and rushed through the exam without explaining anything that they were doing. When your friend had an abnormal screening exam, she encouraged you to get checked out. **You want clarity on whether or not you should be screened for cervical cancer, and you are nervous about having another rushed, unpleasant exam.**
Appendix C: Role Play Scenario 2 – Sam Jones

Role Play Scenario General Instructions:

Design: Participants will break up into pairs with the following roles:
1) Patient
2) Clinician: conducts the interview with the patient

Each pair will act out their first patient scenario for 10 minutes. Then participants will switch roles for the second patient scenario. Each participant should be in an interviewing role once to ensure that everyone has the opportunity to practice conversation and counseling skills.

Scenario Two, Instructions for Person in the Interviewer Role:
You are a primary care provider who is meeting 28-year-old Sam Jones for the first time. You have reviewed the patient’s past medical and surgical history, which is negative. You see that on the intake form the patient wrote, “I think I need to be screened for cervical cancer, but I’m nervous.”

You have 10 minutes to discuss this concern with the patient. Please be sure to take an adequate gender and sexual history, review the patient’s screening history, and, offer specific techniques to address their concerns about the screening exam.
Scenario Two, Instructions for Person in the Patient Role

Patient Name: Sam Jones
Age: 28
Symptoms: None
Patient Complaint: Anxiety surrounding cervical cancer screening
Opening Statement: “I think I need to be screened for cervical cancer, but I’m nervous.”

Scenario: You are 28-year-old Sam Jones, a graduate student originally from Dallas, Texas. You recently moved to Philadelphia and are establishing care with your new primary care provider. You do not have any specific symptoms, but have concerns about your need for cervical cancer screening. A close friend of yours recently had a Pap test that showed an “abnormality,” and they encouraged you to be screened.

History:

Past Medical History
- You have been on testosterone for the past seven years.

Gender History
- Gender Identity: Transmasculine
- Pronouns: they/them/theirs

Anatomical Terminology:
- You are okay with providers referring to your parts as “vagina,” “cervix,” “uterus,” and “ovaries.”

Sexual Orientation Identity: Queer

Current Sexual Behaviors:
- You are sexually active in a monogamous relationship with your cisgender female partner of 2 years. You have oral sex and insertive vaginal sex with toys. You do not have receptive vaginal or anal sex. Your last sexual contact was two weeks ago.

Past Sexual Behaviors:
- Prior to meeting your current partner, you have been sexually active with five cisgender female partners and two cisgender male partners. You have had oral sex and insertive vaginal sex with toys. You did not have receptive vaginal or anal sex with any of them.

IPV/Trauma:
- No history of intimate partner violence or history of trauma.

Obstetric/Gynecologic History
- STIs: No history of sexually transmitted infections.
- Pregnancy: No prior pregnancy.
- Bleeding: You have had no breakthrough bleeding on testosterone.

Prior Screening:
- You have never been screened for cervical cancer.

Concerns Today:
- You tend to avoid doctors, apart from check-ups for testosterone, because you are frequently misgendered by providers. Because you have never felt like you are in a safe space to undergo a screening exam, you have always declined the procedure. However, when your friend had an abnormal screening exam, you felt like it was time to get checked out.
Appendix D: Sample Large Group Discussion Questions

1. What were some particularly challenging or awkward moments you encountered in the clinician role?
2. What were ways you found to be successful in asking about sexual orientation identity? Sexual behaviors? Gender identity?
3. Obviously, this role play exercise is different from a real patient encounter. Would you feel comfortable asking a patient the same questions? Why or why not?
4. Did the patient use any terms you were unfamiliar with in their responses to your questions? How would you handle that situation with a real patient?
5. What was it like to be in the patient role?
Appendix E: Pre-Workshop Survey

Last Four Digits of Phone #: __ __ __ __

Pre-Workshop Survey

1. What year of medical school are you currently in?
   a) First
   b) Second
   c) Third
   d) Fourth
   e) Research/Dual Degree Year
   f) Other: ______________________

2. What is your sexual orientation identity?
   a) Bisexual
   b) Gay
   c) Lesbian
   d) Straight/Heterosexual
   e) Prefer not to say
   f) Prefer to self-describe: ______________________

3. What is your gender?
   a) Woman
   b) Man
   c) Transgender woman
   d) Transgender man
   e) Non-binary
   f) Prefer not to say
   g) Prefer to self-describe: ______________________

4. What sex were you assigned at birth on your original birth certificate?
   a) Female
   b) Male
   c) Intersex
   d) Prefer not to say

5. How many LGBTQ+ patients have you interacted with clinically?
   a) Zero
   b) 1-10
   c) 11-50
   d) 51-100
   e) >100

6. How many times in your life have you asked someone what pronouns they use?
   a) Zero
   b) 1-10
   c) 11-50
   d) 51-100
   e) >100

7. How many times have you asked a patient about their sexual orientation identity, sexual behaviors, and gender identity?
   a) Zero
   b) 1-10
   c) 11-50
   d) 51-100
   e) >100

8. How many times have you observed a cervical Pap test?
   a) Zero
   b) 1-10
   c) 11-50
   d) 51-100
   e) >100

9. How many times have you performed a cervical Pap test?
   a) Zero
   b) 1-10
   c) 11-50
   d) 51-100
   e) >100

Please use the following scenario to answer Questions 10 and 11:
You are scheduled to see a new patient in clinic this afternoon. You walk into the office and encounter a patient named Devin who has a short haircut and is wearing a dress.

10. What is Devin’s gender identity?
    a) Cisgender Woman  b) Transgender Woman  c) Non-binary  d) Not enough information given

11. What is Devin’s sexual orientation identity?
12. Which of the following patients should be screened for cervical cancer? (you may select more than one answer)
   a) 35-year-old cisgender lesbian who has only had female sexual partners
   b) 55-year-old transgender male who has had a total hysterectomy and negative screening history
   c) 67-year-old cisgender pansexual woman with a negative screening history
   d) 25-year-old transmasculine person on testosterone who was vaccinated against HPV

13. Which of the following terms is gender neutral?
   a) Vulva   b) Frontal Canal   c) Uterus   d) Menstruation

14. Which of the following is NOT a comfort technique you could offer a patient prior to screening?
   a) Give the patient the option of bringing a support person in for the exam
   b) Offer the patient the option to lie on their side or with their feet on the exam table rather than in stirrups
   c) Offer the patient the option to insert the speculum themselves
   d) These are all appropriate options to offer a patient

Please rate how confident you are in performing the following:

1 = Very unconfident  2 = Somewhat unconfident   3 = Somewhat confident   4 = Very confident

   ___ Interacting with an LGBTQ patient overall
   ___ Asking a patient about their pronouns and gender identity
   ___ Asking a patient about their sexual orientation identity
   ___ Asking a patient about their sexual behaviors
   ___ Correctly identifying LGBTQ patients who need cervical cancer screening
   ___ Using appropriate language and terminology to review relevant anatomy and examination procedures with LGBTQ patients
   ___ Discussing specific techniques to improve LGBTQ patients’ physical and emotional comfort during a cervical cancer screening exam

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Appendix F: Post-Workshop Survey

Please use the following scenario to answer Questions 1 and 2:
You are scheduled to see a new patient in clinic this afternoon. You walk into the office and encounter a patient named Devin who has a short haircut and is wearing a dress.

1. What is Devin’s gender identity?
   a) Cisgender Woman  
   b) Transgender Woman  
   c) Non-binary  
   d) Not enough information given

2. What is Devin’s sexual orientation identity?
   a) Bisexual  
   b) Lesbian  
   c) Gay  
   d) Not enough information given

3. Which of the following patients should be screened for cervical cancer? (you may select more than one answer)
   a) 35-year-old cisgender lesbian who has only had female sexual partners  
   b) 55-year-old transgender male who has had a total hysterectomy and negative screening history  
   c) 67-year-old cisgender pansexual woman with a negative screening history  
   d) 25-year-old transmasculine person on testosterone who was vaccinated against HPV

4. Which of the following terms is gender neutral?
   a) Vulva  
   b) Frontal Canal  
   c) Uterus  
   d) Menstruation

5. Which of the following is NOT a comfort technique you could offer a patient prior to screening?
   a) Give the patient the option of bringing a support person in for the exam  
   b) Offer the patient the option to lie on their side or with their feet on the exam table rather than in stirrups  
   c) Offer the patient the option to insert the speculum themselves  
   d) These are all appropriate options to offer a patient

Please rate how confident you are in performing the following tasks:
1 = Very unconfident  
2 = Somewhat unconfident  
3 = Somewhat confident  
4 = Very confident

   ____ Interacting with an LGBTQ patient overall
   ____ Asking a patient about their pronouns and gender identity
   ____ Asking a patient about their sexual orientation identity
   ____ Asking a patient about their sexual behaviors
   ____ Correctly identifying LGBTQ patients who need cervical cancer screening
   ____ Using appropriate language and terminology to review relevant anatomy and examination procedures with LGBTQ patients
   ____ Discussing specific techniques to improve LGBTQ patients’ physical and emotional comfort during a cervical cancer screening exam

Name one thing from this workshop that you intend to incorporate into your future practice:

__________________________________________________________________________________________
Please take a few moments to provide feedback on this workshop:

| STRATEGIES TO IMPROVE THE CERVICAL CANCER SCREENING EXPERIENCE FOR LGBTQ PATIENTS |
|---------------------------------------------------------------|-------|-------|
| Please answer the following questions to help enhance this session for future participants. | Yes | No |
| 1. The format (film-based didactic and case-based role play) of the session was appropriate for the content covered. | | |
| 2. The length of the session was appropriate given the amount of information covered. | | |
| • If no, was the session too long or too short? | | |
| Please indicate your level of agreement or disagreement with the following statements regarding your perception of the teaching techniques utilized. | Strongly Disagree | Disagree | Agree | Strongly Agree |
| I was comfortable asking questions. | | | | |
| I felt my perspectives were valued. | | | | |
| I felt engaged in the session. | | | | |
| Please indicate your level of agreement or disagreement with the following statements regarding your perceptions of your learning. | Strongly Disagree | Disagree | Agree | Strongly Agree |
| As a result of this session, I feel I am better able to: | | | | |
| Correctly identify LGBTQ patients who need cervical cancer screening | | | | |
| Use appropriate language and terminology to review relevant anatomy and examination procedures with LGBTQ patients | | | | |
| Discuss specific techniques to improve LGBTQ patients’ physical and emotional comfort during a cervical cancer screening exam | | | | |

Comments/Suggestions: