

Teaching LGBTQ+ Health: Improving Provider Knowledge About Transgender Health

I. Specific Educational Aims

Teaching LGBTQ+ Health (<https://mededucation.stanford.edu/courses/teaching-lgbtq-health/>)¹ is a free, online, interactive, faculty development and CME course designed by members of our investigator team. It teaches health professionals the fundamentals of LGBTQ+ Health, as well as methods for teaching that content to their trainees. The course launched in 2021 on the Stanford MedEducation platform and has been well trafficked and positively reviewed. It was recently added to the Coursera platform² and continues to have a steady increase in new registrations and course completions.

Our aim for this project is to update the *Teaching LGBTQ+ Health* course to include information and data about the care of transgender patients. Specifically, this would include an animated video about transgender health and two interactive case-based modules to guide learners through the process of making medical decisions for gender-affirming care. This new content will fill an important training gap for most providers. Those who complete the course will be better prepared to provide equitable care for transgender patients and to teach others to do the same.

II. Project Rationale

LGBTQ+ patients have unique healthcare needs³, and the number of LGBTQ+ individuals in the U.S. is rising⁴. All health professionals will care for LGBTQ+ patients, therefore there is a need for basic training in LGBTQ+ health and culturally competent practices by all. However, LGBTQ+ health is rarely covered in the standard curriculum in the health professions⁵, despite a growing student demand for such education⁶. This has resulted in generations of health professionals who were never adequately trained in LGBTQ+ health and who are unfamiliar with the content that needs to be taught to students⁷. This faculty training gap is magnified for transgender health and the care of other gender expansive patients.

Teaching LGBTQ+ Health was the first online faculty development course about LGBTQ+ health in the U.S. To our knowledge, only Harvard has since launched a similar program about the care of sexual and gender minority patients⁸. However, there are no other reports of faculty development initiatives about LGBTQ+ health by any other U.S. medical school in the literature to date, online or otherwise. There remains a dearth of training opportunities, and *Teaching LGBTQ+ Health* is relevant and needed at Stanford and beyond. With respect to this project, we hypothesize that foundational principles of transgender health and gender-affirming care will be new to most faculty members who take the course.

Our new transgender care modules will be pedagogically unique from the existing *Teaching LGBTQ+ Health* course and the Harvard offering. We will create an innovative “choose your own adventure” logic to the user experience, which will allow learners to explore the use of different gender-affirming care options in simulated clinical encounters. We believe this approach will be highly engaging for the user and offer a broad overview of treatment options available to transgender patients.

III. Approach

We will follow Kern’s *Six Steps for Curriculum Development*⁹. Steps 1 and 2 are complete. The problem is clearly identified in the literature as described above (Step 1), and we used data from previous *Teaching LGBTQ+ Health* course evaluations to inform our needs assessment (Step 2). We will use the pre-award period to create our educational objectives through consults with experts in transgender care and a comprehensive literature search (Step 3). We will meet with transgender patients from the Stanford Medicine LGBTQ+ Health Program before we write the case modules, and we will determine the storyboard logic with Stanford EdTech during the first two months of the project (Step 4.) We have collaborators internal and external to Stanford who will provide medical content review. The build of the online modules with EdTech will occur in the remaining 8 months of the award period (Step 5,

Implementation.) Program evaluation (Step 6) will be ongoing for years after the launch of the new modules using the RE-AIM framework, as described below.

Our project team is a collaboration between our original *Teaching LGBTQ+ Health* faculty and the leadership of the Stanford Medicine LGBTQ+ Health Program. Each team member brings specific content or methods expertise, including a medical education researcher, a lead instructional designer from Stanford EdTech, three LGBTQ+ health content experts, and a data scientist who will help design the evaluation tools.

IV. Timeline and Plan for Implementation

Pre-grant application: Completed program evaluation¹⁰, EdTech consultation, needs assessment

Pre-award: Literature search, consult with transgender health content experts, IRB submission

Oct – Nov: Consult with transgender patients about case development, write cases, build storyboard

Dec – July: Stanford EdTech build of the online modules, launch new modules in July

Post-award: Marketing campaign, presentations, publications, ongoing program evaluation & QA

V. Anticipated Work Product

We will create 1 animated video summarizing key principles of transgender health and 2 interactive, case-based modules that will guide users through clinical encounters about gender-affirming care for transmasculine and transfeminine patients. These will be added to the existing *Teaching LGBTQ+ Health* course platform. These modules will fill important gaps in faculty clinical and teaching skills, as well as a content gap in the current course. Notably, this will be the first addition of new modules to the course; if we streamline the process, *Teaching LGBTQ+ Health* could become a central platform for an open access suite of LGBTQ+ educational offerings from other teams at Stanford Medicine.

VI. Evaluation Plan

In early 2023, we conducted a comprehensive program evaluation of *Teaching LGBTQ+ Health* using the RE-AIM framework, two years after the launch of the course. We published a manuscript describing this program evaluation in *JMIR Medical Education*¹⁰; it details our data collection methods and outcomes used to determine if the course was successful and should be expanded in the ways we propose in this application. We will use a similar approach to evaluate the new transgender health content, and data collection will be ongoing. We plan for a second program evaluation 2 years after this new content is available. RE-AIM stands for Reach (user demographics), Effectiveness (pre/post course testing), Adoption (quantitative and qualitative responses on course evaluations), Implementation (open text responses to prompts throughout the course), and Maintenance (ongoing costs and quality assurance)¹¹.

VII. Dissemination of Results

We will present our work at the annual Stanford Medicine Medical Education & Biosciences Day and publish in relevant journals. We will contact each previous course participant and provide a link to the new modules. The Stanford Medicine LGBTQ+ Health Program will disseminate the materials to Stanford providers. The modules will be added to the existing course on the Coursera platform. Stanford EdTech will cross promote with several other existing courses. And as with the original course, we will conduct a rigorous marketing campaign to disseminate the new content that will include a press release to the media, direct outreach to LGBT health clinics around the U.S., and the use of social media via blogs, podcast interviews, and posts. For instance, we presented *Teaching LGBTQ+ Health* at National LGBT Health Week as a keynote, gave numerous grand rounds lectures about the course, trained a large cohort of health educators at Historically Black Colleges and Universities, provided a course demo to a U.S. Navy women's association, and discussed the course on NBC Bay Area News, just to name a few marketing outcomes. Interestingly, two U.S. medical schools require their preclinical students to complete the course, and we will be sure to communicate the new modules to those partners.

References:



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