

## Background

LGBTQIA+ communities face significant health disparities. One contributor is inadequate education and training for medical professionals.

Since 2016, a senior elective course at Harvard Medical School (HMS) aims to:

- 1) immerse medical students in clinical care for sexual and gender minority (SGM) patients in a broad diversity of practice settings, across the entire lifespan, and within an array of medical specialties;
- 2) provide mentorship to develop scholarly projects.

## Course Objectives

Goals of the elective include:

1. To immerse senior medical students in care for SGM patients across the lifespan and in a variety of medical specialties and settings, providing students with an appreciation of the scope of clinical practice possible;
2. To teach senior medical students about unique health disparities and needs experienced by SGM patients, filling in gaps within standard medical education;
3. To frame and recognize SGM health as a legitimate field of clinical care and scholarship;
4. To offer medical students the opportunity to contribute to SGM health scholarship.

**Table 1. Clinical Experiences and Participating Clinical Practice Sites (2016-2021)**

Clinical Experiences	Primary Medical Care (Youth and Adults) Psychology/Psychiatry (Children, Adolescents and Adults) Gender-affirming Medical Care (Youth and Adults) Gender-affirming Surgery (Youth and Adults) Endocrinology (Children, Adolescents and Adults) Sexual Health/Sexually Transmitted Infections (Youth and Adults) HIV Care Intersex Care Obstetrics and Gynecology Dermatology High-resolution Anoscopy Services Homeless Health Services Immigrant Health Services
Clinical Practice Sites	Teaching Hospitals: Beth Israel Deaconess Medical Center Boston Children's Hospital Cambridge Health Alliance Massachusetts General Hospital Federally Qualified Health Centers: Fenway Health (Adult Services and Sidney Borum, Jr. Health Center) Greater Lawrence Family Health Center Boston Health Care for the Homeless

## Methods

At the end of the elective, students were invited to provide voluntary feedback via course evaluations, which were obtained from the HMS Registrar's Office. We analyzed quantitative and qualitative course feedback and collected information about scholarly projects resulting in student authorship of peer-reviewed publications.

## Results

Since January 2016, 30 students completed the course. Students rated the clerkship overall as **"excellent"** and reported the course enabled them to **master core knowledge** related to SGM health. Furthermore, students reported that the clerkship **enhanced their interest** in the subject matter and **fostered self-directed learning**. Students reported publishing a wide variety of scholarly projects.

**Table 2. Student Responses on Course Evaluation Form (Mean Score)**

	M response (SD)
Overall rating of the clerkship from 1 (excellent) to 5 (poor)	1 (0)
How much did this clerkship enhance your interest in the subject matter from 1 (very) to 5 (not at all)?	1 (0)
How much did this clerkship foster your self-directed learning from (very) to 5 (not at all)?	1.4 (0.42)
How well did the content in this clerkship enable you to master core knowledge related to this subject from 1 (very) to 5 (not at all)?	1.4 (0.42)

**Table 3. Themes from Student Course Evaluation Free-Text Comments (Available from the HMS Registrar's Office April 2018-December 2021)**

Course Strengths	<ul style="list-style-type: none"> <li>- Immersive exposure to SGM care, diverse patient populations and practices</li> <li>- Caring for a vulnerable population of patients, from basic science research to clinical care to policy and advocacy</li> <li>- Exposed to a variety of specialties including internal medicine, family medicine, pediatrics, psychiatry, and surgery</li> <li>- Good foundation of knowledge of care for transgender patients (e.g., hormone therapy, surgery)</li> <li>- Ability to act like a near-intern; lead patient encounters when appropriate, do procedural tasks</li> <li>- Great learning setting for open-minded medical students with limited prior exposure</li> <li>- Ability to tailor clinical time to interests</li> <li>- Time and mentorship dedicated to a scholarly project</li> <li>- Ample time to read on topics of interest</li> </ul>
Areas for Course Improvement	<ul style="list-style-type: none"> <li>- Physical travel between multiple distant clinical sites</li> <li>- Challenge preparing for clinic days due to variation in electronic health record systems across different sites</li> <li>- Due to variation in preceptors' schedules, specific clinical activities not always scheduled on the same day of the week each week</li> <li>- Due to wide range of sites and preceptors, some variation in level of clinical independence afforded to students (active role vs. shadowing)</li> <li>- Desire for more structured didactic content</li> <li>- Desire for a structured self-directed learning guide accompanying the course</li> </ul>

**Table 4. Participating Medical Student Scholarly Projects (2016-2022)**

Number of Students Who Took the Course	30
Sample Scholarly Project Topics Resulting in Student Authorship of Peer-reviewed Publications	<ul style="list-style-type: none"> <li>- Affirming gender identity in the setting of serious mental illness</li> <li>- Anal cancer screening for HIV-negative men who have sex with men</li> <li>- Barriers to insurance coverage for transgender patients</li> <li>- A blueprint for planning and implementing a transgender health program</li> <li>- Facilitators of and barriers to high-resolution anoscopy adherence among men who have sex with men</li> <li>- Factors associated with gender-affirming surgery and age of hormone therapy initiation</li> <li>- Factors associated with anal cancer screening follow-up by high-resolution anoscopy</li> <li>- Gender identity data collection in iPLEDGE and increasing the number of isotretinoin prescribers among transgender health providers</li> <li>- Organizational strategies and inclusive language to build culturally responsive health care environments for sexual and gender minority patients</li> <li>- Planning and Implementing Sexual Orientation and Gender Identity Data Collection in Electronic Health Records</li> <li>- Psychiatric epidemiology of transgender and nonbinary primary care patients</li> <li>- Screening, counseling and shared decision making for alcohol use disorders with transgender and gender diverse patients</li> </ul>

## Conclusion

Upon completion of the elective, students reported their **interest in working with SGM patients and in the field of SGM health had enhanced**, demonstrating that advanced clinical electives may be an important way not only to meet the current health care needs of LGBTQIA+ communities, but also to nurture the next generation of LGBTQIA+ health care leaders.

## Acknowledgements

We would like to thank Cary Crall and Robert Kitts for their instrumental help in creating and launching the care for patients with diverse sexual orientations and gender identities elective at HMS.