Harvard Medical School's Sexual and Gender Minority Health Equity Initiative: Curricular and Climate Innovations in Undergraduate Medical Education

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Abstract

Problem

Sexual and gender minority (SGM) populations face numerous health disparities. Medical school curricula lack adequate educational content preparing students for serving SGM patients, and medical students typically do not experience welcoming, inclusive educational environments conducive to learning about SGM health care.

Approach

In 2018, Harvard Medical School (HMS) launched the 3-year Sexual and Gender Minority Health Equity Initiative to integrate SGM health content throughout the longitudinal core medical curriculum and cultivate an educational climate conducive for engaging students and faculty in SGM health education. The initiative employed innovative strategies to comprehensively review existing SGM health curricular content and climate;

integrate content across courses and clerkships; lead with LGBTQIA+ (lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minorities) community engagement; adopt an intersectional approach that centers racial equity; cultivate safe, affirming educational environments for LGBTQIA+ and non-LGBTQIA+ students and staff; ensure all graduating students are prepared to care for SGM patients; enhance faculty knowledge, skills, attitudes, and confidence teaching SGM health; evaluate effectiveness and impact of SGM health curricular innovations; prioritize sustainability of curricular innovations; and publicly share and disseminate SGM health curricular products and tools.

Outcomes

Key outcomes of the initiative focused on 5 areas: development of 9 SGM health

competencies, stakeholder engagement (HMS students and faculty, national SGM health experts, and LGBTQIA+ community members), student life and educational climate (increased LGBTQIA+ student matriculants, enhanced mentorship and support), curriculum development (authentic LGBTQIA+ standardized patient experiences, clerkship toolkit design), and faculty development (multimedia curriculum on content and process to teach SGM health).

Next Steps

In addition to refining curricular integration, evaluating interventions, and implementing comprehensive antiracist and gender-affirming educational policies, the next phase will involve dissemination by translating best practices into feasible approaches that any school can adopt to meet local needs with available resources.

Problem

A growing body of literature documents disparities in health care access and

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The authors have informed the journal that John L. Dalrymple and Jennifer Potter have completed the intellectual and other work typical of the last author.

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Acad Med. 2022;97:1786–1793. First published online August 9, 2022 doi: 10.1097/ACM.0000000000004867 outcomes among sexual and gender minority (SGM) populations (i.e., those with minoritized sexual orientations, gender identities or expressions, or sex development), including primary and preventative care, specialty care, sexual and reproductive health, and mental health. These health inequities are often understood in the context of minority stress, whereby SGM people experience stigma and discrimination based on their sexual orientation, gender identity, or sex development. In turn, these stressors can adversely impact engagement in care and health outcomes.

Despite significant health inequities, ¹ SGM health education has historically been limited within standard medical school curricula. Medical students in the United States and Canada receive an average of 5 or fewer hours of SGM health

instruction.^{2,3} Efforts to incorporate SGM health content have often involved single sessions or elective sessions, or have focused on narrow specialty topics, rather than comprehensively integrating content longitudinally across multiple aspects of the curriculum. In addition to the lack of SGM health curricular content, some medical schools have not systematically cultivated an educational environment that is both conducive to all students learning best practices in SGM health and inclusive and affirming for students who identify as lesbian, gay, bisexual, transgender, queer, intersex, asexual, or any and all sexual and gender minorities (LGBTQIA+).4 As a result, graduating medical students have been inadequately prepared to care for SGM populations, to the detriment of LGBTQIA+ communities' health and well-being.⁵ Of note, in this

article, we use the term "SGM" in the context of academic population health and "LGBTQIA+" in the context of community self-identification.

In response to this need for SGM health medical curriculum development, Harvard Medical School (HMS) embarked upon the novel 3-year Sexual and Gender Minority Health Equity Initiative. The initiative's goals were to design, implement, and evaluate a longitudinal SGM health curriculum, within HMS's existing curriculum and broader learning environment, with the vision to ultimately disseminate resulting curricular products and tools to any interested medical school. In this article, we describe how HMS designed and implemented this innovative curriculum, including facilitators, barriers, and lessons learned in this process, thus providing a model for other medical schools to formulate strategies for systematically integrating SGM health into their own core curricula.

Approach

In 2018, HMS received a generous philanthropic gift to launch the initiative, with endorsement by HMS curricular governance and support from the Office of the Dean. From 2018 to 2021, the initiative was resourced for staffing by an initial core team including 3 faculty co-directors (10% effort) with diverse SGM medical and educational expertise across 3 specialties (internal medicine, obstetrics–gynecology, and psychiatry), an outreach and engagement director (50% effort), and a program coordinator (100% effort).

The core team initially leveraged existing frameworks for SGM health curricular development (Table 1). Coincident with the launch of the initiative and based on the Liaison Committee on Medical Education Accreditation Standard 7 (curricular content) and Element 7.5 (societal problems),6 HMS identified and debuted specific societal themes as priorities for curricular development and integration. The initiative was designated as one such societal theme, which enhanced buy-in across key stakeholder groups and afforded opportunities for collaboration and synergy across intersecting societal themes (i.e., health equity, trauma-informed care, substance use and pain, aging and end-of-life

care) that have direct relevance to and complementarity with SGM health. The initiative expanded existing frameworks due to the need for integration with other societal themes, the vastness of HMS's faculty, which limited the reach of in-person trainings, the importance of creating a conducive educational climate, and the need to attend to well-being of both LGBTQIA+ students and faculty.

Early on, the team formulated a mission statement, identified goals and priorities, and engaged key stakeholders at HMS (Table 1). While stakeholders expressed enthusiasm and support for the initiative, philanthropic funding allowed for dedicated faculty to advance curricular efforts beyond volunteerism. A selection process for SGM health curriculum fellows supported identification of 3 HMS early-career faculty fellows, who joined the initiative's core team in the second year, with 20% dedicated effort and well-defined curricular projects. Three additional fellows joined during the initiative's third year. Although the grant provided an initial catalyst, since the funding ended in 2021 the core team has continued the work on the initiative because of its commitment to the mission and passion to effect change.

Outcomes

As the initiative evolved, our goals and priorities shifted from conceptual design and articulating vision, mission, and goals to practical approaches for defining core SGM competencies, engaging additional stakeholder groups (e.g., medical students, faculty, community members), nurturing the educational climate and student life, and developing focused curriculum and faculty development (Table 1). These approaches varied over time, with new information prompting shifts in strategic priorities. For instance, as we engaged course and clerkship directors with a needs assessment about SGM health curricular development and integration, we recognized a critical need to first educate faculty on foundational SGM health concepts and terminology. We produced the publicly available guide to foundational concepts and affirming terminology (https://lgbt.hms.harvard. edu/files/lahms/files/terminology_ guide 5.15.2020.pdf) that now serves as a resource for students, faculty, and staff at HMS and beyond. The following overview summarizes key outcomes to date.

SGM health core competencies

An early priority was defining core SGM health competencies, beginning with the 30 professional competencies outlined in the 2014 Association of American Medical Colleges guidelines on improving LGBTQIA+ health care. The authors rated these competencies, ranked them by importance for students to achieve, and through iterative review and prioritization, developed a final list of 9 core SGM health competencies that mapped onto the 6 HMS MD competencies and associated program objectives (Table 2).

Stakeholder engagement

With core competencies defined, we focused on engaging key stakeholders: HMS students and faculty, nationally recruited SGM health faculty experts, and nationally recruited LGBTQIA+ community members. We conducted student town halls and open sessions, and met one-on-one and in small groups to engage students in their curricular and social experiences, eliciting ongoing feedback on Initiative activities, and encouraging students to participate in medical education and SGM health activities. We established the Professional Advisory Council (PAC) of 15 faculty experts from across the country, representing diverse SGM and intersectional identities and backgrounds and a breadth of academic medicine and health professions, research, education, policy, and advocacy experience. The goals of the PAC were to inform curriculum development by providing feedback on priorities, processes, and integration of SGM health curricular content, and to participate in periodic SGM health educational symposia.

Engagement of LGBTQIA+ communities was prioritized based on experiences from other institutions. 8,9 Given the diversity of experiences across the life cycle, we developed both young adult (ages 18-24 years) and adult (age 25 years and older) Community Advisory Groups (CAGs), with 10 and 12 members, respectively. With a far-reaching call for applications through local communication efforts, flyers, emails to listservs, and social media outreach, we received over 800 applications from communities across the United States and thus were able to form 2 groups reflecting rich diversity among SGM and

ies, Harvard Medical School, 2018–2022	Outcomes	Needs assessment data for integrated understanding of both student and faculty perspectives regarding SGM health educational content, processes, and climate Development of responsive curricular interventions to enhance SGM health educational content and climate across all preclerkship courses, core clerkships, and advanced courses and electives	 Enhancement of buy-in across key stakeholder groups for longitudinal medical education and curriculum development. Trusting relationships across network of affiliated teaching institutions provide opportunities for collaboration and synergy across intersecting societal themes. Adoption of standards for SGM health educational content and process across all affiliated medical teaching institutions while allowing flexible adaptation and tailoring for organizational context. Development of clerkship-specific toolkits 	 New framework for SGM community-based participatory medical education Published peer-reviewed article disseminating SGM community-based participatory education model Greater engagement of medical students in SGM health curriculum development, including new first-year medical student SGM health curriculum representative role New national network of SGM health medical educators with lived experience
Table 1 SGM Health Equity Initiative Goals, Barriers and Challenges, Facilitators and Innovative Strategies, and Outcomes, Harvard Medical School, 2018–2022	Facilitators and innovative strategies	 Student-led systematic mapping of SGM health content across first-year curriculum Building on existing SGM health education efforts, including a student-led workshop on microaggressions Leveraging affiliations of faculty directors and early-career faculty fellows across various HMS-affiliated hospitals to assess existing SGM health curricular content and climate Student town halls, open sessions, one-on-one and small-group meetings to incorporate their lived curricular and social experience at HMS Engagement of course and clerkship directors in needs assessment for SGM curriculum development and integration 	 Formulation of mission statement emphasizing broad integration to benefit all people: Through the sustainable integration of knowledge, skills, and attitudes related to sexual orientation, gender identity, and sex development, we aim to optimize the health and wellbeing of all institutional designation of SGM Health Equity as formal societal threme for curriculum development and integration in response to Liaison Committee on Medical Education Element 7.5 Leveraging of 2 existing frameworks for SGM health curricular development: 2014 Association of American Medical Colleges guidelines, "Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who are LGBT, Gender Nonconforming, or Born with DSD: A Resource for Medical Educators," and University of Louisville School of Medicine model for comprehensive SGM health integration into a medical curriculum preclerkship, required clerkship and postclerkship advanced course directors, HMS-based SGM health faculty champions, and HMS student champions Collaboration across all groups leading societal themes for curriculum development and integration 	 Financial support for LGBTQIA+ faculty directors and early-career faculty fellows Early and sustained engagement of LGBTQIA+ students, CAGs, and external PAC, which provided continual input and feedback Engagement of LGBTQIA+ employee resource groups across HMS-affiliated hospitals
uity Initiative Goals, Barriers anc	Barriers and challenges	Vast array of preclinical coursework, primary clinical experience clerkships, and advanced elective and selective courses Course descriptions and syllabi do not necessarily reflect full reality of course and clerkship content or processes Need to incorporate both faculty and student perspectives on SGM health educational content, processes, and climate	Large, decentralized network of affiliated medical teaching institutions with 12,000 faculty; multiple curricular efforts happening in parallel	 Scientific evidence often valued over lived experience Lack of precedent for financially supporting community-based participatory education
Table 1 SGM Health Equ	Goals	Comprehensive review of existing SGM health curricular content and climate	Longitudinal integration of content across courses and clerkships	Leading with LGBTQIA+ community engagement

(Table continues)

an interse an interse cultivating safe, inclusive, as teachir and affirming educational environment for LGBTQIA+ students, about SG staff conducive for medical saff to learn development saff to learn development students, about SGM students and students and students about SGM students and students. "mainstre patients	tendency to obhasize both SGM and obhasize both SGM and ducation, or to focus as separate populations or as separate or and a separation or burdening or sated SGM people of a secondary, and staff of a secondary, and staff or a secondary, and staff or a secondary, and staff or a secondary, and sex second or innation, and sex innt only apply to SGM and patients and not sem" students and not sem" students and area.	Design of core competencies to focus on intersection of SGM identities with race intentional recultment of CAG and PAC members with diverse racial and ethnic identities. Close collaboration with HMS racial health equity societal theme leaders. Close collaboration with HMS racial health equity societal theme leaders. Partnership with ORMA to support students with SGM and BIPOC identities. Plan for implementation of comprehensive antiracist policies to guide longitudinal curriculum development and foster a trauma-informed, affirming educational environment in which all students feel safe and can thrive. Compensation for CAG- and PAC-led panel discussions, webinars, and symposia that focused on lived experience and nurturing inclusive institutional climate. Compensation for CAG- and PAC-led panel discussions, webinars, and symposia that focused on lived experience and nurturing inclusive institutional climate. Compensation for CAG- and PAC-led panel discussions, webinars, and symposia that focused on lived experience and flaculty and staff Partnerships with HMS Dean's LGBT Advisory Committee, ORMA, Office for Diversity Inclusion and Community Partnership, and the HMS Admissions Office, to enhance LGBTQIA+ student recruitment and advising efforts Development of intentional policies and practices to support transgender and gender diverse students, such as gender-inclusive dress codes across all affiliated medical teaching institutions Development and dissemination of publicly accessible "Foundational Development and staff" Development and dissemination of publicly accessible "Foundational Concepts and staff"	• Faculty development module on teaching SGM health through an intersectional lens, including formulation of clinical case scenarios that are nuanced and accurate without stereotyping or causing offense. • Faculty members at ORMA with dedicated time to advise and support students with intersecting SGM and minoritized racial and ethnic identities. • Faculty development programming focused on sensitive and affirming communication, implicit bias, and power imbalances in medical education and clinical care. • Fivefold increase in number of identified LGBTQIA+ students matriculating at HMS from 4% (2015) to 21% (2021) • Establishment of entrance interviews for LGBTQIA+ students and support for longitudinal one-on-one faculty advising focused on SGM identity disclosure, intersecting identities, and navigating personal and educational challenges • Leveraging of HMS "Outlist"—a voluntary roster of > 300 LGBTQIA+ and allied faculty, staff, and trainees—for ongoing opportunities to highlight and connect LGBTQIA+ communities across HMS • Development and pilot of evidence-based mentorship program for faculty and trainees focused on SGM populations • Faculty development live webinars and interactive modules addressing the importance of incorporating content relevant for serving patients of all sexual orientations, gender identities, and sex development • Modules offering guidance for faculty to frame microaggressions in educational settings as opportunities for enving patients of all nonclinical staff in primary medical educational environment • Establishment of build an incluses and clerkships to elicit Establishment of guidelines for courses and clerkships to elicit
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Table 1 (Continued)			
Goals	Barriers and challenges	Facilitators and innovative strategies	Outcomes
Enhancing faculty knowledge, skills, attitudes, and confidence teaching SGM health	• Faculty concerns included needing to bring their comfort and knowledge level up to that of the students, integrating new content into an already "overstuffed" curriculum, perception of limited content and subject matter expertise	 Kick-off event featuring interactive discussion for key HMS educational faculty and grand rounds by faculty and trainee leaders from University of Louisville School of Medicine initiative for comprehensive SGM health integration into medical curriculum Partnership with the HMS Office of Educational Quality Improvement, Director of Faculty Development, and the HMS Academy to offer live series of trainings on teaching SGM health Two-day virtual symposium exploring best practices for integrating SGM health content across the medical school curriculum Creation of comprehensive, online multimedia modular curriculum for faculty development 	 Faculty development programming that emphasizes SGM terms, concepts, and health inequities, and offers concrete strategies for integrating SGM health content into existing courses and clerkships, weaving intersectional identities and life experiences into cases, and SGM health educational evaluation and dissemination Readiness for implementation and dissemination of faculty development modules across all courses and clinical training sites
Evaluating the effectiveness and impact of SGM health curricular innovations	Delineating meaningful measures of curricular improvement	 Designing checklists for students on clerkships to track completion of key SGM health activities and meet basic SGM health competencies Developing system to assess knowledge acquisition through faculty development programming 	 Collection of evaluation feedback from students on quality of SGM health-focused educational sessions, such as the training on obtaining an inclusive and affirming sexual history Plan for evaluating impact of curricular interventions on faculty and student knowledge, skills, attitudes, and practices regarding SGM health
Long-term sustainability of SGM health curricular innovations	 Maintaining funding Evolving priorities within courses, clerkships, and affiliated medical teaching institutions Faculty, student, and staff turnover 	 Incorporating SGM health education continuous quality improvement processes into well-established medical education committees and processes Emphasis on dissemination of enduring content with long shelf-life rather than individual champions 	 Online faculty development modules and clerkship toolkits that endure and emphasize foundational principles and strategies rather than content that may become outdated Identification of additional funding sources to support dedicated effort of SGM health early-career faculty fellows to sustain and expand initiative
Publicly share and disseminate SGM health curricular products and tools	 Curriculum structure and process, as well as educational culture and climate, vary across medical schools and health care organizations 	 Engagement of PAC members from a broad national diversity of medical schools and health care organizations Establishment of relationships with medical schools at similar points of readiness to enact SGM health curriculum development and integration 	 Design of faculty development modules and clerkship toolkits is universal rather than specific to HMS Development of preliminary agreement with peer medical school to make curricular products available to their faculty and staff Plan for proactively disseminating faculty development modules and clerkship toolkits in publicly available forms, as well as through conferences and peer-reviewed articles

Abbreviations: SGM, sexual and gender minority; BIPOC, Black, Indigenous, and people of color; DSD, differences of sex development; CAG, Community Advisory Group; HMS, Harvard Medical School; LGBT, lesbian, gay, bisexual, and transgender; LGBTQIA+, lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minorities; ORMA, Office of Recruitment and Multicultural Affairs; PAC, Professional Advisory Council.

Table 2
SGM Health Core Competencies for Medical Students, Harvard Medical School

Topics	SGM health core competencies	Corresponding HMS MD program competencies ^a
SGM identities	 Define and describe the differences among: sex and gender; gender identity and gender expression; gender diversity and gender dysphoria; and sexual orientation-related attraction, behavior, and identity. 	Medical knowledge
SGM health inequities	 Define and describe specific health inequities related to sexual orientation, gender identity and expression, and sex development, and how these intersect with health experiences related to race, ethnicity, gender, age, ability, education, economic status, immigration status, and other social positions. 	 Medical knowledge Organizational and social determinants of health care
	 Outline strategies that can be used to address sexual and gender minority health inequities at individual, organizational, community, and societal levels based on the socioecological model. 	 Critical thinking and inquiry Organizational and social determinants of health care
Unconscious bias and power imbalance	 Recognize how unconscious bias and assumptions about sexual and gender minority people may negatively affect clinical encounters and health care outcomes and develop strategies to mitigate these effects. 	 Critical thinking and inquiry Interpersonal and communication skills Professionalism Patient care
	5. Recognize how inherent power imbalances between physician and patient or between physician and parent/guardian, including dynamics related to race, ethnicity, gender, age, ability, education, economic status, immigration status, and other social positions may negatively affect clinical encounters and outcomes for sexual and gender minority patients and develop strategies to mitigate these imbalances.	 Critical thinking and inquiry Interpersonal and communication skills Professionalism Patient care Organizational and social determinants of health care
Communication and interpersonal skills	6. Develop rapport with all patients, families, and/or members of the health care team regardless of their gender identities, gender expressions, sexual orientations, and sex development, to promote respectful and affirming interpersonal exchanges, including by staying current with evolving terminology and practice guidelines and recommendations.	 Interpersonal and communication skills Patient care Professionalism
	 Sensitively and effectively elicit relevant information about sex anatomy, sex development, sexual behavior, sexual history, sexual orientation, and gender identity from all patients in a confidential and developmentally appropriate manner. 	Patient careInterpersonal and communication skillsProfessionalism
Physical examination and screenings	8. Perform a complete and accurate physical exam with sensitivity to issues specific to sexual and gender minority patients at all stages across the life span. This includes knowing when components of the exam are essential and when they may be unnecessarily traumatizing or require adaptation.	Patient care Interpersonal and communication skills Professionalism
	 Demonstrate the ability to individualize screening and tailor trauma-informed clinical care according to a patient's preferences, identities, anatomical structures present, and biobehavioral risk factors. 	Patient careInterpersonal and communication skillsProfessionalism

Abbreviations: SGM, sexual and gender minorities; HMS, Harvard Medical School. ^aSee https://medstudenthandbook.hms.harvard.edu/md-program-objectives. Accessed June 30, 2022.

Black, Indigenous, and people of color (BIPOC) communities. Essential to the establishment of these community groups was demonstrating value and respect for their involvement and providing monetary compensation for their time. Similar to the PAC, the CAGs played a pivotal role through engaged meetings with Initiative faculty and interactive panel presentations and webinars with HMS students and faculty, providing personal reflections on lived experiences with health care, amplifying best clinical practices, and identifying opportunities for curricular enhancements.

We engaged HMS faculty stakeholders through several needs assessments, including in-person presentations and focus group discussions with preclerkship course directors and a survey of core clerkship directors. Our findings indicated a critical need for faculty development before further curricular integration could be entertained, including primers on SGM concepts and terminology, sensitive and affirming communication, and establishing an inclusive learning environment. Faculty concerns included needing to elevate their comfort and knowledge to that of students, integrating new content into an "over-stuffed" curriculum, perception of limited content and subject matter expertise, and inconsistent student exposure to SGM patients.

Student life and educational climate

A key component of the initiative was to engage and support students, with a focus

on those with LGBTQIA+ identities, as well as the broader educational climate for all students (Table 1). In partnership with an already robust LGBTQIA+ student support system through the HMS Office of Recruitment and Multicultural Affairs, we provided assistance with LGBTQIA+ recruitment efforts during the admissions process, with a fivefold increase in LGBTQIA+ matriculants from 2015 (4%) to 2021 (20%). To better support LGBTQIA+ students, we now provide entrance interviews, similar to established practice for BIPOC students, and continue with longitudinal one-on-one advising by LGBTQIA+ faculty to support students' unique needs, including navigating identity disclosure, intersecting identities, and personal and educational difficulties. To

further support LGBTQIA+ faculty and trainees as well as those focused on SGM populations, the Initiative developed and piloted a formal mentorship program through the adaptation of evidence-based mentorship curricula.¹⁰

Curriculum development

Curriculum development began with a broad review of SGM health initiatives at other medical schools and a curricular inventory across our 3 phases. In partnership with HMS students, we identified approximately 4 separate 1-hour sessions of preclerkship content, limited or no formal clerkship content, and a single 4-week clinical postclerkship elective. To address a gap in intersex health content, we piloted an optional panel event during the students' first preclinical course that

covers genetics and development, with family members sharing experiences raising intersex children. We developed a session on sensitive and effective communication with SGM patients and obtaining a comprehensive and affirming sexual history during the preclerkship clinical skills course. Through partnership with the objective structured clinical examination team and a standardized patient (SP) company, we developed simulated experiences for students to practice their skills among SPs with authentic LGBTQIA+ identities, who portrayed experiences based on scripts and gave students formative feedback. These efforts have already tripled the initial preclerkship offerings, with more programming in development. Finally, to address larger gaps in the clerkship

curriculum, we began formulating clerkship toolkits to provide clerkship faculty with resources, best practices, and strategies to integrate specialty-specific SGM health content.

Faculty development

After early needs assessments identified a critical need for faculty development, we partnered with HMS's Office of Educational Quality Improvement, which supports the Associate Dean for Faculty Development in Medical Education and the HMS Academy, and offered live and recorded sessions. Examples of sessions are "Including SGM Health in Your Teaching: A Do-It-Yourself Framework," "Sensitive and Affirming Communication with Sexual and Gender Minorities: Learn What Your Students Already

Table 3
Recommendations for Integrating SGM Health Into Medical School Curricula

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Socioecological level	Recommendations
Societal	 Weave SGM health content throughout curriculum in a ubiquitous and universal manner, rather than limiting it to sexual health. For example: Establish SGM health as a formal curricular integration priority for the medical school, to enhance buy-in across key stakeholder groups for longitudinal medical education and curriculum development (e.g., cumulative and coordinated SGM population focus in HIV content across: preclerkship courses on infectious disease, immunology, and hematology; core clerkships in internal medicine, obstetrics—gynecology, and pediatrics; advanced coursework on health policy). Incorporate a social determinants of health framework into coursework. For example: Define medical student competencies focused on understanding and addressing health inequities related to sexual orientation, gender identity and expression, and sex development, and how these intersect with health experiences related to race, ethnicity, gender, age, ability, education, economic status, immigration status, and other social positions.
Community	 Actively engage community members and organizations, to build curriculum based on SGM lived experience in addition to scientific evidence. For example: Engage internal LGBTQIA+ faculty, trainees, and staff by leveraging an institution-wide electronic "OutList" to facilitate networking and mentorship; establish a financially compensated community advisory group, to provide continual input and feedback based on SGM lived experience.
Institutional	 Take advantage of momentum of existing and ongoing institutional initiatives. For example: Coordinate with and amplify activities of existing LGBTQIA+ employee resource groups and LGBTQIA+ student affinity groups; collaborate with medical school admissions and recruitment staff to enable applicants to self-identify as LGBTQIA+, and offer LGBTQIA+ applicants opportunities to engage with current LGBTQIA+ students and faculty. Prioritize improving the context and process of SGM health education, in addition to content. For example: Organize faculty development trainings on: foundational SGM health concepts and terminology; sensitive and affirming communication with LGBTQIA+ students and patients; anti-LGBTQIA+ implicit bias and power dynamics; responsive handling of anti-LGBTQIA+ microaggressions during teaching; and building inclusive and welcoming learning environments for LGBTQIA+ students.
Individual	 Support empowerment of faculty to change their own courses, while making it easy and straightforward for them to do so. For example: Provide detailed guidance for faculty to know how to: scan their existing course syllabus for opportunities to integrated SGM health principles and content, without having to remove other important course content; search for and integrate SGM health content from the relevant subject area into their course; design SGM health clinical case scenarios without stereotyping; evaluate impact of newly integrated SGM health content into their course on medical student knowledge, attitudes, skills, and practices. Support empowerment of students to contribute to curricular change for future cohorts. For example: Establish medical student SGM health education representative roles in each year's class, and meet regularly with student representatives for feedback about preclerkship courses, core clerkships, and advance courses; conduct student-led systematic mapping of SGM health content across curriculum; organize student-led town halls, open sessions, one-on-one and small-group meetings to incorporate their lived curricular and social experience.

Abbreviations: SGM, sexual and gender minority; HIV, human immunodeficiency virus; LGBTQIA+, lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minorities.

Know!," and "Gender Identity and Sexual History in the Practice of Medicine Course." Our measure of success was to ensure that all HMS faculty had access to foundational SGM health educator tools, through both synchronous and asynchronous modalities. The 3-year initiative culminated in a 2-day virtual symposium exploring best practices for integrating SGM health content across the curriculum. We also devoted much of the initiative's third year to creating a comprehensive, online, multimedia faculty development curriculum consisting of learning modules on SGM terms, concepts, and health inequities; implicit bias and power imbalances; sensitive and affirming communication; fostering a supportive learning environment; integrating SGM health content into courses and clerkships, for example by adapting publicly available SGM health curricula from MedEdPORTAL; weaving intersectional identities and life experiences into cases; and educational evaluation and dissemination.

Next Steps

Through these initial efforts, we have recognized the many barriers and challenges that exist in meeting our SGM health curricular goals, and that implementing innovative strategies requires clearly defining priority outcomes (Table 1). Ongoing curricular and faculty development efforts include SGM-focused learner assessments, evaluation of program effectiveness and longitudinal educational quality improvement, and dissemination of curricular and program materials to other schools without dedicated financial resources for SGM health. In Table 3, we synthesize low-cost and granular recommendations to support other SGM health curricular development and integration initiatives. Through intentional curricular planning with medical school leadership and collaborative efforts among faculty, students, and community stakeholders, medical schools can move closer to optimizing the health and wellbeing of all.

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