

Expanding Underrepresented in Medicine to Include Lesbian, Gay, Bisexual, Transgender, and Queer Individuals

Tim Kelly, MD, MA, and Sarah B. Rodriguez, PhD

Abstract

In 2003, the Association of American Medical Colleges (AAMC) stopped using the term “underrepresented minority” and instead adopted “underrepresented in medicine.” This was not the first time the AAMC revised this definition. In this article, the authors call on the AAMC to revise and expand this definition to include another group that is underrepresented in medicine: lesbian, gay, bisexual, transgender, and queer (LGBTQ) individuals. It is difficult to know whether LGBTQ populations are underrepresented in medicine; however, the data that do exist suggest a significant lack of LGBTQ

representation in medicine. It is unclear if this underrepresentation is due to a true numerical lack of LGBTQ physicians, to LGBTQ physicians not publicly self-identifying due to anti-LGBTQ sentiments and reactions, or to both.

The authors urge the AAMC to take 3 actions: to anonymously and sensitively poll physicians nationwide to obtain a better estimate of the current number of LGBTQ physicians, to formulate improved standards for an LGBTQ health curriculum for all medical trainees to consistently produce LGBTQ-competent physicians, and to once again expand

its definition of underrepresented in medicine to include LGBTQ populations. Such a change to this definition would likely lead to concerted efforts to increase the number of LGBTQ physicians, which could then lead to increased visibility, inclusivity, and mentorship programs where LGBTQ trainees could thrive. With these 3 actions, the authors believe that the AAMC has the opportunity to forge a path forward that is not only beneficial to LGBTQ trainees but also to LGBTQ patients who currently face a myriad of health disparities due to the lack of LGBTQ-identifying and LGBTQ-competent physicians.

In 2003, the Association of American Medical Colleges (AAMC) stopped using the term “underrepresented minority,” a term which included “Blacks, Mexican Americans, Native Americans (i.e., American Indians, Alaska Natives, and Native Hawaiians), and mainland Puerto Ricans,” and instead adopted “underrepresented in medicine,” defined as “those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population.”¹ This was not the first time the AAMC revised this definition, which has historically primarily focused on race and ethnicity.²⁻⁴ In this article, we call on the AAMC to revise and expand this definition to include people who identify as lesbian, gay, bisexual, transgender, and queer (LGBTQ). We do so not only as a

means of recognizing that this population is underrepresented in medicine but also as a means of recognizing that, as we will show, medical knowledge on LGBTQ patient populations is an underrepresented area.

An underrepresented in medicine designation from the AAMC is important. First, the AAMC, which many may view as a principal gatekeeper over medical education, recognizes the importance of diversity in creating a strong health care workforce that is able to care for a diverse patient population.^{2,5} Importantly, while the definition of underrepresented in medicine varies across academic medical centers, more than half directly follow the AAMC’s definition to help direct their diversity efforts.² Further, nearly an additional one-third use this definition with additional diversity factors added, such as socioeconomic status and sexual orientation; taken together, this means that the vast majority of U.S. academic medical centers incorporate the AAMC’s definition of underrepresented in medicine in their diversity definitions.² Given this influence, an expansion of the definition of underrepresented in medicine by the AAMC to include LGBTQ populations will most certainly

prompt a similar expansion among academic medical centers.

Second, the underrepresented in medicine designation has led to the development of mentorship programs for minoritized trainees, and studies have repeatedly shown these programs to have positive effects, such as feelings of increased inclusivity, increased recruitment of underrepresented trainees, and increased retention of underrepresented faculty.⁶ These studies make clear that representation matters and that the increased visibility of underrepresented faculty in a particular medical specialty can lead to increased mentorship opportunities for trainees and a significantly increased number of underrepresented applicants into that specialty.^{7,8}

Thus, we believe that the inclusion of LGBTQ individuals within the AAMC’s definition of underrepresented in medicine would encourage efforts to increase the inclusion and mentorship of these populations. In addition, then, to calling on the AAMC to again expand the definition of underrepresented in medicine to include LGBTQ populations to enable a concerted effort to increase the number of LGBTQ physicians, we

Please see the end of this article for information about the authors.

Correspondence should be addressed to Tim Kelly, University of Washington Department of Psychiatry & Behavioral Sciences, 1959 NE Pacific St., Box 356560, Seattle, WA 98195; telephone: (206) 543-6577; email: tjkkelly@uw.edu.

Acad Med. 2022;97:1605–1609.

First published online May 3, 2022

doi: 10.1097/ACM.00000000000004720

Copyright © 2022 by the Association of American Medical Colleges

urge the AAMC to take 2 further actions: First, to anonymously and sensitively poll physicians nationwide to obtain a better estimate of the current number of LGBTQ physicians, and second, to formulate improved standards for an LGBTQ health curriculum for all medical trainees to consistently produce LGBTQ-competent physicians. With these 3 actions, we believe that the AAMC has the opportunity to forge a path forward that is not only beneficial to LGBTQ trainees but also to LGBTQ patients who currently face a myriad of health disparities due to the lack of LGBTQ-identifying and LGBTQ-competent physicians.

Anonymously and Sensitively Poll Physicians Nationwide

An important part of the definition of underrepresented in medicine is that a population is “underrepresented in the medical profession relative to their numbers in the general population.”¹ We acknowledge that knowing whether LGBTQ populations are underrepresented in medicine is difficult, in particular since there are physicians who, for a variety of reasons, may be unwilling and/or unable to publicly self-identify as LGBTQ. However, the data that do exist suggest LGBTQ populations are underrepresented in medicine compared with their numbers in the general population. For example, a 2020 Gallup survey found that 5.6% of Americans polled self-identified as LGBTQ, though this percentage varied significantly by state (in general, more traditionally liberal states had higher percentages of LGBTQ-identifying individuals) and by age (younger generations had significantly higher percentages of individuals who identified as LGBTQ).⁹ Moreover, this poll is probably a conservative estimate, as political pressure, social stigma, and fear of persecution for identifying (or being identified) as LGBTQ most likely prevented some from revealing their LGBTQ identity. Using a *conservative* estimate of 5.6% of the general population identifying as LGBTQ and based on the fact there were 985,026 licensed physicians in the United States in 2018,¹⁰ there should be approximately 55,161 LGBTQ physicians in the United States. However, the GLMA: Health Professionals Advancing LGBTQ Equality (previously known as the Gay

and Lesbian Medical Association), the largest health care–related LGBTQ group in the United States, only has approximately 1,000 members (and this number includes other health care professions in addition to physicians),¹¹ and only 3.2% of American Academy of Family Physician members identify as LGBTQ,¹² indicating that the number of LGBTQ physicians does not reflect even the conservative general population percentage. It should be noted that membership in a medical organization such as these is not the best way to accurately measure the number of LGBTQ physicians in the workforce. However, due to the lack of overall data on this topic, these data remain some of the best currently available sources of information for extrapolation.

The AAMC recognizes there is a need for more robust data regarding the number of LGBTQ physicians and medical students, and starting in 2016, it began including 2 questions about sexual orientation and gender identity in its annual Matriculating Student Questionnaire and Medical School Graduation Questionnaire,¹² and in 2018, it began offering medical school applicants the option of including their sexual orientation and gender identity on their applications.¹³ We applaud these efforts by the AAMC to gather this information and encourage the AAMC to go further by polling physicians nationwide in an anonymous and sensitive manner to better determine the number of physicians who identify as LGBTQ. We would like to stress, however, that even if such a poll were to find that the number of physicians who identify as LGBTQ is on par with the number of LGBTQ individuals in the general population, LGBTQ individuals should still be included in the AAMC’s definition of underrepresented in medicine because these populations are underacknowledged in medicine, both in terms of the serious repercussions that physicians within these populations who do publicly self-identify may face and in terms of the health care disparities faced by LGBTQ patient populations.

Formulate Improved Standards for an LGBTQ Health Curriculum for All Medical Trainees

One of the most important reasons for increasing the number of physicians

across racial and ethnic populations is because there is substantial evidence demonstrating that racial and ethnic minoritized patients receive better care from physicians who come from similar communities.^{14–16} The LGBTQ community has its own share of health care disparities, and it has been shown that LGBTQ patients tend to feel more comfortable with and receive better care from LGBTQ-competent physicians.¹⁷ Though to the best of our knowledge there is no current research regarding the care LGBTQ patients receive from LGBTQ physicians, it is not an unreasonable assumption that LGBTQ physicians are more likely to be LGBTQ-competent than their non-LGBTQ peers.

Currently, few clinicians report possessing strong knowledge regarding LGBTQ health topics. For example, in a recent study of clinicians at one multisite health care institution in the United States, only 6% to 10% “reported sophisticated knowledge of six LGBTQ+ health topics.”¹⁸ However, the majority of respondents believed knowledge of these topics was “either important or very important for all physicians.”¹⁸ Another study of trainees in medicine, dentistry, and nursing found that less than half felt their formal training had prepared them to treat LGBTQ patients, with respondents who identified as LGBTQ even less likely than their heterosexual peers to consider the limited training they had received to be effective.¹⁹ Seventy-one to eighty-one percent of the students reported an interest in obtaining more education on LGBTQ health concerns. Similar results—of medical students feeling unprepared by their training to competently care for LGBTQ patients—have been found by other studies,²⁰ and medical students have advocated for the inclusion of more LGBTQ health training in the curriculum.²¹ As suggested by how many medical students feel unprepared by their medical education to care for LGBTQ individuals, many medical schools lack a formal curriculum regarding LGBTQ health,²² and it is unclear how many schools have expanded their curriculum to include LGBTQ health content,²³ though a recent commentary outlined how a few medical schools are seeking to address this education gap.²⁴

Both the underrepresentation of LGBTQ physicians and the

paucity of physicians competent in LGBTQ health mean that LGBTQ patients face poor patient–physician interactions, discrimination from medical professionals, and negative health outcomes. Even while LGBTQ communities have gained visibility and increased legal protections in recent years,^{25,26} the 2015 U.S. Transgender Survey, which had 27,715 respondents, continued to show the negative impact discrimination and lack of knowledge have on the health of transgender individuals.²⁷ For example, when either sick or injured, 23% of transgender patients postponed medical care due to fear of discrimination. When seeking medical care, 24% of respondents stated that they had to teach their provider about how to provide appropriate care to transgender patients. In addition, 15% of respondents reported being asked invasive and unnecessary questions about being transgender when it was not the reason they were seeking care, 8% were refused transition-related care, and 3% were refused basic forms of medical care. One of the most shocking statistics was that 31% of respondents stated that not a single one of their medical providers knew they were transgender, with the primary reason cited for not telling their providers was fear of discrimination.²⁷ How can the medical field even begin to address the health disparities of the LGBTQ population if patients cannot be open and honest with their medical team due to warranted fear of discrimination? Sadly, a more recent 2019 study corroborated many of these statistics, showing that 18% of LGBQ patients (and 22% of transgender patients) avoid health care altogether due to anticipated discrimination, and an additional 16% of LGBTQ individuals reported experiencing overt discrimination in their health care encounters.²⁸ Given these reports, it is not surprising that there is strong evidence that LGBTQ communities have worse health and health outcomes than those who do not identify as LGBTQ, including, for example, an increased prevalence of psychologic distress/psychiatric comorbidities and substance use disorders.²⁹ We, therefore, call on the AAMC to formulate improved standards for an LGBTQ health curriculum for all medical trainees to consistently produce LGBTQ-competent physicians, as one means of mitigating

the underacknowledgment of LGBTQ patient populations and the poor health outcomes they face.

Expand the Underrepresented in Medicine Definition to Include LGBTQ Populations

The AAMC has released core competencies for LGBT education,³⁰ conducted interviews that illustrated how little non-LGBT doctors knew about LGBT health,³¹ created a number of educational videos about LGBT health and health care,³² and recently released a 300+-page document outlining ways to improve health care for those who identify as LGBT.³³ These actions seem to suggest that the AAMC recognizes that LGBTQ populations are underrepresented and underserved and has taken steps to improve the health of these marginalized populations.

An additional step the AAMC could and should take is to classify medical school applicants who identify as LGBTQ as underrepresented in medicine and to follow the lead of at least 2 dozen medical schools who already do so.² Recognizing LGBTQ individuals as underrepresented in medicine would bring to light some of the hidden barriers and discrimination that LGBTQ applicants have faced during their lifetime and encourage additional medical schools to take factors like sexual orientation and gender identity into consideration. By not defining the LGBTQ community as underrepresented in medicine and thus not actively encouraging programs to increase the number of LGBTQ trainees, the AAMC is missing an important means to reduce the discrimination that LGBTQ students face within the field of medicine on a daily basis. For example, a 2015 study found nearly a third of sexual minority medical students choose not to disclose their sexual orientation during medical school and two-thirds of gender minority students (transgender, nonbinary, etc.) concealed their gender identity during medical school, their primary motivation being that 40% feared discrimination from their medical school, peers, and even patients if they disclosed their sexual orientation and/or gender identity.^{34,35} These fears are not unwarranted. For example, a 2014 study of surgical residents showed that 57% of LGBTQ residents concealed their sexual orientation from fellow residents due to

fear of rejection, and 52% concealed their identities from attending physicians due to fear of poor evaluations.³⁶ Twenty-one percent of LGBTQ residents in this study reported experiencing targeted homophobic remarks by fellow residents, and 12% reported targeted homophobic remarks by attending physicians. It is important to note that *none* of the surgical residents who experienced these targeted remarks reported them to their supervisors out of fear of reprisal, not wanting to create more “trouble,” and/or a belief that nothing would be done.³⁶ Furthermore, the results of the largest ever research study analyzing obstacles LGBTQ professionals face in science, technology, engineering, and math (STEM) careers published in 2021 found that LGBTQ STEM professionals were more likely to experience career limitations, harassment, and professional devaluation than their non-LGBTQ peers.³⁷ In addition, LGBTQ professionals reported more frequent health difficulties and reported greater intentions to leave STEM.³⁷

We recognize that the AAMC has made significant strides regarding LGBTQ health in recent years, but it is also clear that there is still much work to do. Until resources like “Navigating the Residency Match as an LGBT Applicant”^{38,39} become obsolete and LGBTQ applicants do not refrain from disclosing their sexual orientation and gender identity for fear of discrimination, it is imperative that the AAMC again reevaluate its definition of underrepresented in medicine to include the LGBTQ community. Reducing the fear of identifying as LGBTQ in medical school and medical practice will likely both help to reduce larger prevailing social stigmas and greatly benefit the health and well-being of LGBTQ patients. Such a change in the definition of underrepresented in medicine would also likely lead to concerted efforts to increase the number of LGBTQ physicians, which could then lead to increased visibility, inclusivity, and mentorship programs where LGBTQ trainees could thrive.

Conclusions

Based on the available research, it is clear that there are 3 possibilities for the current state of LGBTQ representation within medicine. First, it could be that there remains a gross underrepresentation of LGBTQ

individuals within medicine. Second, anti-LGBTQ sentiments and reactions both within medicine and society as a whole could prevent physicians from disclosing their sexual orientation and/or gender identity. Finally, and most likely, is that it is some combination of the first 2 possibilities, both of which are unacceptable and both of which underline the importance of the AAMC taking the 3 actions we outlined here: to anonymously and sensitively poll physicians nationwide to obtain a better estimate of the number of LGBTQ physicians, to formulate improved standards for an LGBTQ health curriculum for all medical trainees, and to expand the definition of underrepresented in medicine to include LGBTQ populations.

Unfortunately, organizational policy change takes time, but there is no time to waste. While medical education waits for the AAMC to officially acknowledge the underrepresentation of LGBTQ individuals in medicine by including these individuals in the definition of underrepresented in medicine, medical educators need to act at the institutional level. Speak with the deans at your academic medical centers. Advocate for change in institutional policies. Only with combined efforts can medical education effectively encourage the enrollment of LGBTQ medical students and address the lack of medical knowledge regarding LGBTQ populations in medical education curricula.

Funding/Support: None reported.

Other disclosures: None reported.

Ethical approval: Reported as not applicable.

T. Kelly is a resident physician, Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, Washington.

S.B. Rodriguez is associate professor of instruction, Global Health Studies Program, Weinberg College of Arts and Sciences, Northwestern University, Evanston, lecturer, Feinberg School of Medicine, Northwestern University, Chicago, and faculty member, Medical Humanities and Bioethics Graduate Program, Northwestern University, Evanston, Illinois.

References

- Association of American Medical Colleges. Underrepresented in medicine definition. <https://www.aamc.org/what-we-do/equity-diversity-inclusion/underrepresented-in-medicine>. Accessed March 31, 2022.
- Page KR, Castillo-Page L, Poll-Hunter N, Garrison G, Wright SM. Assessing the evolving definition of underrepresented minority and its application in academic medicine. *Acad Med*. 2013;88:67–72.
- Western Group on Educational Affairs. Underrepresented minority (URM) discussion document and alternative policy option. https://apps.medsch.ucla.edu/wgea/Reports_Bylaws/urm.htm. Accessed August 19, 2021. [No longer available.]
- Johnson DG, Smith VC Jr, Tarnoff SL. Recruitment and progress of minority medical student school entrants 1970–1972. *J Med Ed*. 1975;50:713–755.
- Association of American Medical Colleges. Equity, Diversity, & Inclusion. <https://www.aamc.org/what-we-do/equity-diversity-inclusion>. Accessed March 31, 2022.
- Bonifacino E, Ufomata EO, Farkas AH, Turner R, Corbelli JA. Mentorship of underrepresented physicians and trainees in academic medicine: A systematic review. *J Gen Intern Med*. 2021;36:1023–1034.
- Okike K, Phillips DP, Johnson WA, O'Connor MI. Orthopaedic faculty and resident racial/ethnic diversity is associated with the orthopaedic application rate among underrepresented minority medical students. *J Am Acad Orthop Surg*. 2020;28:241–247.
- Dai JC, Agochukwu-Mmonu N, Hittelman AB. Strategies for attracting women and underrepresented minorities in urology. *Curr Urol Rep*. 2019;20:61.
- Jones JM. LGBT identification rises to 5.6% in latest U.S. estimate. Gallup. <https://news.gallup.com/poll/329708/lgbt-identification-rises-latest-estimate.aspx>. Published February 24, 2021. Accessed March 31, 2022.
- Young A, Chaudhry HJ, Pei X, Arnhart K, Dugan M, Steingard SA. FSMB census of licensed physicians in the United States, 2018. *J Med Regulation*. 2019;105:7–23.
- Gay and Lesbian Medical Association. GLMA: Health professionals advancing LGBTQ equality. <http://www.glma.org/index.cfm?fuseaction=Page.viewPage&pageId=897&parentID=532>. Accessed March 31, 2022.
- Leggott K. Here's why LGBTQ physicians should self-identify. American Academy of Family Physicians. <https://www.aafp.org/news/blogs/freshperspectives/entry/20200303fp-lgbtqphysicians.html>. Accessed March 31, 2022.
- Tanner L. U.S. medical schools boost LGBTQ students, doctor training. Associated Press. <https://apnews.com/article/985d50d0a7b1b593acd0dd791e8c3118>. Published February 20, 2020. Accessed March 31, 2022.
- Frakt A. When Black patients see non-Black doctors. Harvard Global Health Institute. <https://globalhealth.harvard.edu/when-black-patients-see-non-black-doctors>. Updated September 9, 2019. Accessed March 31, 2022.
- Huerto R. Minority patients benefit from having minority doctors, but that's a hard match to make. University of Michigan Health Lab. <https://labblog.uofmhealth.org/rounds/minority-patients-benefit-from-having-minority-doctors-but-thats-a-hard-match-to-make-0>. Published March 31, 2020. Accessed March 31, 2022.
- Williams JP. Why America needs more Black doctors. *U.S. News & World Report*. <https://www.usnews.com/news/healthiest-communities/articles/2018-08-31/why-america-needs-more-black-doctors>. Published August 31, 2018. Accessed March 31, 2022.
- Jann JT, Edmiston EK, Ehrenfeld JM. Important considerations for addressing LGBT health care competency. *Am J Public Health*. 2015;105:e8.
- Gentile D, Boselli D, MacNeill E. Clinician's experience and self-perceived knowledge and attitudes toward LGBTQ + health topics. *Teach Learn Med*. 2021;33:292–303.
- Greene MZ, France K, Kreider EF, et al. Comparing medical, dental, and nursing students' preparedness to address lesbian, gay, bisexual, transgender, and queer health. *PLoS One*. 2018;13:e0204104.
- White W, Brenman S, Paradis E, et al. Lesbian, gay, bisexual, and transgender patient care: Medical students' preparedness and comfort. *Teach Learn Med*. 2015;27:254–263.
- Cohen RD. Medical students push for more LGBT health training to address disparities. NPR. <https://www.npr.org/sections/health-shots/2019/01/20/683216767/medical-students-push-for-more-lgbt-health-training-to-address-disparities>. Published January 20, 2019. Accessed March 31, 2022.
- Roth LT, Friedman S, Gordon R, Catalozzi M. Rainbows and “ready for residency”: Integrating LGBTQ health into medical education. *MedEdPORTAL*. 2020;16:11013.
- Pregnall AM, Churchwell AL, Ehrenfeld JM. A call for LGBTQ content in graduate medical education program requirements. *Acad Med*. 2021;96:828–835.
- O'Leary KB, Kunkel GH. Restructuring LGBTQ curriculum in medical schools. *Acad Psychiatry*. 2021;45:487–490.
- Chappell B. Supreme court declares same-sex marriage legal in all 50 states. NPR. <https://www.npr.org/sections/thetwo-way/2015/06/26/417717613/supreme-court-rules-all-states-must-allow-same-sex-marriages>. Published June 26, 2015. Accessed April 11, 2022.
- Totenberg N. Supreme court delivers major victory to LGBTQ employees. NPR. <https://www.npr.org/2020/06/15/863498848/supreme-court-delivers-major-victory-to-lgbtq-employees>. Published June 15, 2020. Accessed April 11, 2022.
- James SE, Herman JL, Rankin S, Keisling M, Mottet L, Anafi M. The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality; 2016. <https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf>. Accessed March 31, 2022.
- Casey LS, Reisner SL, Findling MG, et al. Discrimination in the United States: Experiences of lesbian, gay, bisexual, transgender, and queer Americans. *Health Serv Res*. 2019;54(suppl 2):1454–1466.
- Gonzales G, Przedworski J, Henning-Smith C. Comparison of health and health risk factors between lesbian, gay, and bisexual adults and heterosexual adults in the United States: Results from the National Health Interview Survey. *JAMA Intern Med*. 2016;176:1344–1351.
- American Medical Association. AAMC releasing core competencies in LGBT

- medical education. <https://www.ama-assn.org/education/accelerating-change-medical-education/aamc-releasing-core-competencies-lgbt-medical>. Published December 2, 2014. Accessed March 31, 2022.
- 31 Beck J. What doctors don't know about LGBT health. *The Atlantic*. https://www.theatlantic.com/health/archive/2014/11/what-doctors-dont-know-about-lgbt-health/382792/?single_page=true. Published November 15, 2014. Accessed March 31, 2022.
- 32 Association of American Medical Colleges. AAMC videos and resources about LGBT health and health care. <https://www.aamc.org/what-we-do/diversity-inclusion/lgbt-health-resources/videos>. Accessed March 31, 2022.
- 33 Association of American Medical Colleges. 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. Washington, DC: Association of American Medical Colleges; 2014. https://store.aamc.org/downloadable/download/sample/sample_id/129. Accessed March 31, 2022.
- 34 Mansh M, White W, Gee-Tong L, et al. Sexual and gender minority identity disclosure during undergraduate medical education: "In the closet" in medical school. *Acad Med*. 2015;90:634–644.
- 35 White T. Discrimination fears remain for LGBT medical students, study finds. *Stanford Medicine News Center*. <https://med.stanford.edu/news/all-news/2015/02/many-lgbt-medical-students-choose-to-stay-in-the-closet.html>. Published February 18, 2015. Accessed March 31, 2022.
- 36 Lee KP, Kelz RR, Dube B, Morris JB. Attitude and perceptions of the other underrepresented minority in surgery. *J Surg Educ*. 2014;71:e47–e52.
- 37 Cech EA, Waidzunas TJ. Systemic inequalities for LGBTQ professionals in STEM. *Sci Adv*. 2021;7:eabe0933.
- 38 Association of American Medical Colleges. Navigating the residency match as an LGBT applicant. <https://www.aamc.org/what-we-do/diversity-inclusion/lgbt-health-resources/videos/navigating-residency-match-as-lgbt-applicant>. Accessed March 31, 2022.
- 39 Smith TM. LGBT residents provide insights to match applicants. *American Medical Association*. <https://www.ama-assn.org/residents-students/match/lgbt-residents-provide-insights-match-applicants>. Published September 6, 2016. Accessed March 31, 2022.