

## Health Justice and Diversity in Medical School Admissions

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### From the Editor

- Motivating Health Justice and Diversity Through Medical School Admissions 907  
Jewel Mullen, MD, MPH, MPA and David Henderson, MD

### Case and Commentary

- How Should Medical School Admissions Drive Health Care Workforce Diversity? 912  
Rosa Lee, MD

- How Should Lived Experience of Racism Count in Medical School Admissions? 919  
Tanisha King, PhD and Joselyn Hines

- How Should Medical Schools Foster Equity and Inclusion in Admissions? 926  
Adela Valdez, MD, MBA, Lala Forrest, Alessandra Jimenez, MPH, and  
Kim-Thu Pham, MD, MPH

- Whose Responsibility Is It to Address Bullying in Health Care? 931  
Lindsey E. Carlasare, MBA and Gerald B. Hickson, MD

### Medical Education

- Three Things Schools Should Do to Make Advancement Assessment Just 937  
Marjorie Westervelt, PhD, MPH, Darius Billingsley, MD, Maya London, and  
Tonya Fancher, MD, MPH

- What Is the Role of Accreditation in Achieving Medical School Diversity? 946  
Barbara Barzansky, PhD, MHPE, Robert B. Hash, MD, MBA, Veronica Catanese,  
MD, MBA, and Donna Waechter, PhD

## Health Law

- How Has American Constitutional Law Influenced Medical School Admissions and Thwarted Health Justice? 953  
Scott J. Schweikart, JD, MBE

## Policy Forum

- Does the AAMC's Definition of "Underrepresented in Medicine" Promote Justice and Inclusivity? 960  
Wendy A. Clay, MD, MPH, Donna H. Jackson, EdD, and Kevin A. Harris, PhD, MSA

## Medicine and Society

- What Does It Mean for Medical School Admissions to Be Socially Accountable? 965  
Mark C. Henderson, MD, Charlene Green, PsyD, and Candice Chen, MD, MPH
- How to Eliminate a Deficit-Centered Mindset About Medical Students of Color 975  
Martha Elks, MD, PhD, Zita Lazzarini, JD, MPH, and Cinnamon Bradley, MD
- Why Disability Must Be Included in Medical School Diversification Efforts 981  
Nicole D. Agaronnik, Shahin A. Saberi, Michael Ashley Stein, JD, PhD, and Dorothy W. Tolchin, MD, EdM
- How Should We Build Disability-Inclusive Medical School Admissions? 987  
Lisa M. Meeks, PhD and Christopher Moreland, MD, MPH

## History of Medicine

- Living Histories of Structural Racism and Organized Medicine 995  
Robert Baker, PhD and Matthew K. Wynia, MD, MPH

## Art of Medicine

- Personification of a Duality 1004  
Jamalje Rohnquist Bassue

## Podcast

- Myths of "Merit-Based" Admissions: An Interview with Drs Jewel Mullen and David Henderson



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### FROM THE EDITOR

#### Motivating Health Justice and Diversity Through Medical School Admissions

Jewel Mullen, MD, MPH, MPA and David Henderson, MD

It is undeniable that bigotry and discrimination predate the official founding of our nation, even if we only consider the status and treatment of Indigenous populations, enslaved Africans, and women. The civil rights movement of the mid-20th century contributed to the passage of civil rights laws, suggesting the promise of national progress on human rights overall. However, during the summer of 2020, as a nation we found ourselves facing a raging pandemic and protests sparked by police violence against George Floyd, Breonna Taylor, and Ahmaud Arbery. These 2 crises broke through a rosy façade of cultural progress that had been in place for over half a century and forced us to face the persistence of inequities embedded in our society's foundations. Just as police violence is not simply police misconduct, so inequity floridly manifest in lower rates of COVID testing and vaccination and in higher rates of morbidity and mortality among members of Black, Brown, and Indigenous communities are not just aberrations.<sup>1,2</sup> Both have roots in long-standing discrimination, racism, and segregation that contribute to inequitable access to quality education, housing, and health care and unequal opportunities for economic advancement and for wealth attainment and accrual.

Questions about justice and diversity in medical school admissions often broaden and deepen an active fault line of conflict that has shaken the foundation of our nation. At a time of full-throated demands for social justice at all levels, how should we frame diversity and justice in medical school admissions? How should we respond to recurring challenges to affirmative action and other equity-minded admissions strategies from groups who contend it was never fair or is no longer needed?

Despite ongoing **debate over affirmative action**, it has directly contributed to diversity in medical education in ways we simultaneously seem to accept and overlook. That White women have been affirmative action's major beneficiaries is rarely mentioned. Between 1980 and 2000, the number of women physicians increased by 300%.<sup>3</sup> By contrast, between 1978 and 2014, the number of African American male medical school matriculants decreased from 542 to 515 (ie, from 3.4% to 3.0% of matriculants).<sup>4</sup> Yet, ironically, White women have often litigated affirmative action, as did Abigail Fisher in suing the University of Texas (UT) at Austin in 2016<sup>5</sup> and Jennifer Gratz in suing the University of Michigan in 2003.<sup>6</sup> Fisher's case is notable because UT Austin, as part of its admissions process, included consideration of multiple social factors, of which race

was one. Thus, holistic review has been legally challenged as well as affirmative action. Which, if any, features of these examples should be applied to medical school admissions now? Neither affirmative action nor holistic review directly addresses the fundamental injustices it was intended to remediate. If social justice questions dominate our national conversation about medical school admissions, it seems reasonable to ask: How should a **social justice lens** be used to explore and pursue diversity? A social accountability framework offers one such lens.

In 1995, the World Health Organization (WHO) defined medical schools' social accountability as *"the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve.* The priority health concerns are to be identified jointly by governments, health care organizations, health professionals and the public"<sup>7</sup> and defined in light of 4 ethical and cultural values: relevance, quality, cost effectiveness, and equity. The WHO added: "Accountability exists independently of whether a school acknowledges it and addresses it; all medical schools are accountable."<sup>7</sup> These statements from the WHO assert the importance of a social accountability as a fourth cornerstone complementing the three traditionally recognized as foundational to medical education: education, research, and clinical care. Concurring with the WHO's conception of social accountability in medicine, the American Medical Association (AMA) in June 2020 defined racism as a public health threat and made an organizational commitment to act against racism, injustice, and police violence.<sup>8</sup>

In September 2019, the AMA also convened a group of medical educators from across the country—the Accelerating Change in Education (ACE) Consortium—which, guided by social accountability as an ethical value, engaged in a "wicked problem"<sup>9</sup> fishbone exercise to identify drivers of medicine's lack of diversity. The fishbone exercise revealed 6 root causes of inequity in medical education: (1) debt, (2) overreliance on traditional metrics, (3) structural racism, (4) lack of inclusion in health care education and work environments, (5) lack of attention to harmful biases among organizational leaders and institutional processes, and (6) neglect of diversity, equity, and inclusion as key ethical values along professional development pathways. The ACE Consortium cited medical schools' responsibility for implementing changes to address injustices structurally entrenched in classroom and clinic-based teaching and learning cultures, especially those perpetuating inequity through bias in standardized examinations and metrics that prop up myths of meritocracy. Medical College Admission Test® (MCAT) and United States Medical Licensing Examination® (USMLE) scores, for example, do not predict clinical performance quality but do correlate well with family income.<sup>10,11</sup>

By demanding that "primary attention should be given to those who suffer the most, to ailments that are most prevalent, and to conditions that can be addressed with locally available means,"<sup>7</sup> the WHO framework suggests how to incorporate social justice in admissions processes. The WHO states: "Medical schools can and should also have some role in defining the composition and distribution of the health workforce most appropriate to meeting the needs of society."<sup>7</sup> With regard to quality, the WHO maintains that "high-quality health care uses evidence-based data and appropriate technology to deliver comprehensive health care to individuals and populations, taking into account their social, cultural and consumer expectations."<sup>7</sup> The WHO defines cost-effective health care systems as those with "the greatest impact on the health of a society while making the best use of its resources."<sup>7</sup>

Currently, medical schools have few incentives to meet society's needs, and many aspire to be highly ranked **based on metrics** (eg, grade-point averages, MCAT scores) that indicate neither students' quality nor their merit. In a study of 136 allopathic and 34 osteopathic medical schools' mission statements published in 2014, only 16% named diversity as a prominent theme.<sup>12</sup> Thus, another question is how to respond to such a lack of commitment to **diversity in health care** when evidence has accrued that racial, ethnic, and cultural patient-clinician concordance promotes stronger, more functional relationships and improves patients' adherence and outcomes.<sup>13,14,15</sup> If we apply the WHO's 4 ethical and cultural values of relevance, quality, cost effectiveness, and equity to medical school admissions processes and practices, we ought not to be satisfied with processes ill-equipped to generate the physician workforce diversity that society needs. Health equity is a product of medical schools' social accountability.

During the civil rights movement of the 1960s, calls for social justice, informed by principles of distributive and procedural justice, manifested not only in ideals and mission statements but also in action. In 2020, restorative and reparative justice again became prominent in national conversations, as it was acknowledged that not all among us have had opportunities to fully realize our common American strivings and inalienable rights to "Life, Liberty and the pursuit of Happiness."<sup>16</sup> We recognize that Thomas Jefferson's words, valiant in mission, failed to be meaningfully enacted in our shared history. As educators, clinicians, and researchers in medicine in our present time, we must improve retention and promotion of diverse students and faculty, foster inclusion, and modify curricular content<sup>17,18</sup> to build public health capacity; we are accountable for making our fields as diverse as needed so that all are cared for equitably.

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**CASE AND COMMENTARY: PEER-REVIEWED ARTICLE**

**How Should Medical School Admissions Drive Health Care Workforce Diversity?**

Rosa Lee, MD

**Abstract**

Over the past decade, holistic review has been implemented to motivate schools' compliance with state and federal laws about how to regard race in admissions processes and decisions. From clinical, ethical, and public health standpoints, physician workforce diversification is widely regarded as foundational to medicine's capacity as a profession to respond justly to the health care needs of a pluralistic nation. In response to a case, this commentary considers merits and limitations of holistic review's roles in advancing health professional workforce diversity and health equity.

**Case**

U School of Medicine's mission is to train physicians to serve residents of the state who are recognized by the state's health department as *medically underserved*, which is defined in terms of inequitable health outcomes in communities inhabited predominantly by people with racially and ethnically minoritized identities. Over half of the state's population resides in these communities, which are both rural and urban.

Accreditation standards compliance requires schools to define diversity categories, which, for U, includes students from resource-poor families, women, African Americans, Latinx Americans, Native Americans, and first-generation college graduates. U's admissions committee members holistically review candidates using a rubric that includes applicants' diversity categories, academic performance, service history, life experience, and communities of origin.

U admissions committee members deliberate about to whom, from their alternate list, they should offer admission into next year's class. U's usual protocol for drawing on the alternate list is for a subcommittee to determine which alternates will be invited to fill the class. Subcommittee members generally agree that matriculants who have already accepted U's offer of admission are, collectively, well-balanced among rubric categories, except for race. One alternate is a first-generation college graduate from a rural, underserved, resource-poor area of the state. Another, from a suburban community, is a racialized minority group member whose parents are both physicians. One has a better academic record than the other, but the 2 candidates' overall rubric scores are nearly



identical. Subcommittee members deliberate about which candidate should receive one of U School of Medicine's last offers of admission.

### Commentary

We are at a moment of national reckoning over the racial and social injustices that have plagued us since the formation of this country. Given the inequitable negative effects of the COVID-19 pandemic on communities of color in the United States, as well as the murder of George Floyd and other Black individuals at the hands of police and the Black Lives Matter protests that were sparked by these deaths, systemic racism—in particular, anti-Black racism—is being acknowledged at a level never previously reached in recent history. Many institutions, including those in health care and academic medicine,<sup>1,2</sup> have recently expressed their commitment to building an ant-racist future, and it is important at this moment to think strategically about how to advance both justice and diversity in medical education.

Medical school admission represents a gateway to the profession of medicine. Consequently, the medical school admissions process is a highly visible stage upon which evidence of disparities due to systemic racism and inequalities manifest. Blacks and Hispanics, for example, continue to make up a smaller percentage of both applicants and matriculants than their share of the US population,<sup>3,4,5</sup> and roughly 75% of medical student matriculants come from families in the top 40% for household income.<sup>6</sup> Matriculants' **lack of racial and socioeconomic diversity** reflects inequalities embedded deeply in economic, social, and educational institutions that lead to diminished opportunities for students from underrepresented minority groups to enter medicine.

Over the past decade, holistic review in medical school admissions has been introduced and widely disseminated as a practice to increase diversity in medical schools.<sup>7</sup> The Association of American Medical Colleges (AAMC) refers to holistic review as “mission-aligned admissions or selection processes that take into consideration applicants' experiences, attributes, and academic metrics as well as the value an applicant would contribute to learning, practice, and teaching.”<sup>8</sup> This case illustrates how holistic review can be implemented in medical school admissions. How does holistic review work in practice, and how effective is it in advancing diversity and social justice in medical education admissions? In order to answer these questions, it is critical to understand the principles of holistic review in admissions as well as the legal opinions on which holistic review in admissions is based.

### Holistic Review

The landmark Supreme Court case *Regents of the University of California v Bakke* (1978) has formed the basis for admissions policies in higher education institutions for over 4 decades.<sup>9</sup> In this case, the Supreme Court outlawed racial quotas in admissions by declaring unlawful the University of California, Davis School of Medicine's practice of reserving spots for minority students who were evaluated under different standards through the school's “2-track” admissions policy. At the same time, the court effectively made affirmative action permissible under some circumstances by striking down a lower court's ruling that had prohibited the university from taking race into account as a factor in its future admissions decisions. The court was deeply divided on this case; both rulings were decided by a 5-4 vote, with Justice Lewis Powell's vote determining the majority for both rulings. Yet of the 6 separate written opinions that were included in the court's decision, Justice Powell's opinion in the *Bakke* case has been the argument

upon which higher education institutions have subsequently based their diversity efforts in admissions.<sup>10</sup> Justice Powell found it permissible for universities to consider race in admissions on the grounds that diversity was essential to the educational mission of the institution. He wrote that the attainment of a diverse student body “clearly is a constitutionally permissible goal for an institution of higher education”<sup>11</sup> and that the university was “seeking to achieve a goal that is of paramount importance in the fulfillment of its mission.”<sup>11</sup> In medicine, specifically, he recognized the value of diversity in allowing the profession to ultimately fulfill its mission to serve a diverse patient population. In his written opinion, Justice Powell also elaborated on what an admissions system that supported diversity could look like. He identified race and ethnicity as factors to consider among many other qualities, such as life and work experiences, leadership potential, communication skills, and compassion. He wrote:

An admissions program operated in this way is flexible enough to consider all pertinent elements of diversity in light of the particular qualifications of each applicant, and to place them on the same footing for consideration, although not necessarily according them the same weight. Indeed, the weight attributed to a particular quality may vary from year to year depending upon the “mix” both of the student body and the applicants for the incoming class.<sup>11</sup>

With these words, Justice Powell presented most of the core principles upon which holistic review in medical school admissions was established. The AAMC Holistic Review Project defines holistic review as “a flexible, highly-individualized process by which balanced consideration is given to the multiple ways in which applicants may prepare for and demonstrate suitability as medical students and future physicians.”<sup>9</sup> Under the holistic review framework, institutions are instructed to utilize rubrics to evaluate candidates consistently and equitably based upon a broad mix of key experiences, attributes, and academic metrics (EAM) that are prioritized by the committee to best reflect the institution’s mission. In holistic review, applicants are evaluated on the basis of the value they might contribute to the institution’s learning environment as well as to the institutional mission. Where allowed by state laws, admissions committees may consider race and ethnicity as part of the broader mix of applicants’ key EAM for the purpose of holistic review. While racial quotas and racial balancing practices are prohibited, admissions committees have flexibility to “weigh and balance” the range of criteria needed,<sup>8</sup> including race or ethnicity, to create a diverse class each year that will allow the institution to achieve its desired educational goals.<sup>8,9,12</sup> It is important to note that 8 states have prohibited considerations of race, ethnicity, and sex in public higher education admissions practices.<sup>9</sup> For public medical schools in these states, holistic review must utilize race-neutral policies and practices.<sup>9</sup> Holistic review also demands an evidence-based approach in which institutions evaluate their admissions process to ensure that it ultimately yields students who support the mission of the institution.

Let us apply the AAMC’s framework for holistic review in medical school admissions<sup>8</sup> to the case of U School of Medicine. The school has established broad-based screening and selection criteria that are linked to the school’s mission to train physicians to serve medically underserved residents of the state. The desired EAM are presumably based upon local performance data that can be used to assess a student’s likelihood of fulfilling the school’s mission. The fact that the final 2 applicants have very different EAM but are nearly identical in their rubric scores suggests that the holistic review process is capable of generating a diverse candidate pool. Assuming it is permissible under state law, the school may consider race and ethnicity, among other diversity factors, in its deliberations—not to create a racially balanced class but to achieve the

class diversity the school believes will enable it to fulfill its mission and optimize learning environments.

### **Holistic Review Advances Equality, Not Equity**

Holistic review aims to increase diversity in admissions by threading the needle through the legal landscape that was first established by Powell's opinion in *Bakke* and upheld in subsequent Supreme Court rulings concerning affirmative action (*Grutter v Bollinger*, 2003; *Gratz v Bollinger*, 2003; *Fisher v University of Texas*, 2013 and 2016).<sup>12</sup> The AAMC holistic review framework instructs medical schools to tailor their diversity efforts and goals to their institution's mission.<sup>9</sup> While this framework has allowed medical schools to advance the legitimate argument that diversity is essential to excellence and to meeting the social contract of the profession of medicine to care for the health of a diverse nation, it is also important to understand the arguments that have *not* been advanced since *Bakke*. In his written opinion, Justice Powell specifically rejected UC Davis' argument that its special admissions program served the purposes of reducing the historic underrepresentation of minorities in medical school and countering the effects of societal discrimination. However, Justices William Brennan, Byron White, Thurgood Marshall, and Harry Blackmun, who voted with Justice Powell to allow for the consideration of race as a factor in admissions, broke with Powell's opinion in their separately written opinion on the *Bakke* ruling:

Davis' articulated purpose of remedying the effects of past societal discrimination is, under our cases, sufficiently important to justify the use of race-conscious admissions programs where there is a sound basis for concluding that minority underrepresentation is substantial and chronic, and that the handicap of past discrimination is impeding access of minorities to the Medical School.<sup>11</sup>

The 4 justices thus argued that deliberate race-conscious policies were actually necessary to undo the effects of systemic race-based discrimination. This stance diverges from the current practice of holistic review, which eschews goals explicitly related to social justice and instead seeks to advance diversity through institution-specific education missions.<sup>8,12</sup>

The arguments that the 4 justices offered for race-conscious admissions to mitigate historical racism and discrimination deserve renewed consideration at this historic moment when there is a loud call within academic medicine to dismantle systemic racism. Holistic review in admissions is a well-intentioned, thoughtfully constructed, yet ultimately limited tool that has failed to yield a racially and ethnically diverse physician workforce. Morris et al's recent study demonstrates that the proportion of Black and Hispanic male matriculants has changed little in the 4 decades since the *Bakke* ruling. In fact, during this time, the percentage of Black men enrolled in medical school actually dropped from 3.1% of the national medical student body in 1978 to 2.9% in 2019.<sup>13</sup> Holistic review in admissions is limited in its ability to produce a racially diverse physician workforce precisely because it is based on Powell's argument that diversity should be sought because it benefits all, not because it can benefit some who have been most victimized by past discrimination. Accordingly, holistic review in admissions advances equality, not necessarily equity. Justice Blackmun's separate written opinion in the *Bakke* case was prescient in this regard. He wrote: "In order to get beyond racism, we must first take account of race. There is no other way. And in order to treat some persons equally, we must treat them differently."<sup>11</sup>

## Improving Workforce Diversity

The medical schools most successful at increasing physician workforce racial diversity have missions that specifically focus on access and opportunity for students from underrepresented groups. Rodriguez et al reported that, between 2003 and 2013, historically Black college and university (HBCU) medical schools made up 2.4% of medical colleges yet accounted for 14% of Black medical school enrollees.<sup>14</sup> The CUNY School of Medicine, while not an HBCU medical school, is similarly mission-driven and focuses on increasing access for students from historically underrepresented groups in medicine so that they can pursue medical careers and ultimately care for medically underserved patients and communities. This mission drives the school's holistic review process and has resulted in students from underrepresented groups in medicine making up 46% to 74% of the entering class every year since the creation of the new 7-year BS/MD program in 2013 (A. Motta-Moss, PhD, unpublished data, 2019, and J. Erves, email, July 8, 2021). The AAMC recognizes access- and opportunity-focused institutional missions as another legally justifiable strategy by which **race-conscious admissions** practices may be implemented: “the door remains open for medical schools to incorporate core access and equal opportunity principles into their enrollment-related policies, particularly as they address issues of critical access to high-quality health care that are so central to the schools’ mission-driven aim.”<sup>9</sup>

Despite the limitations of holistic review, efforts are being made to stretch holistic review practices to address structural racism and its impact on the admissions process in medical schools. The simultaneous COVID-19 pandemic and protests against systemic anti-Black racism during the past year have created a heightened awareness of the impact of external experiences— such as historical, political, and social events—on applicants’ E-A-M. The AAMC’s Advancing Holistic Review Committee recently released guidance documents to help admissions committees consider the disparate ways that these events have affected applicants and to provide guidance on processes, policies, and resources that institutions can implement to **mitigate the adverse effects** of these events on applicants.<sup>15</sup>

## Conclusion

Holistic review alone is not sufficient to create a physician workforce whose racial composition corresponds to the racial composition of the US population. However, it does prompt medical schools to ask whether an institution’s mission explicitly addresses diversity and health equity; whether the EAM prioritized by an institution’s admissions rubric generate admission offers to applicants who motivate the institution’s mission; and whether deliberation about each applicant addresses that applicant’s qualities within historical, social, and political context to promote equity. With these foci on justice, institutions can meet their diversity goals and fulfil their social contract with society.

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## AMA Journal of Ethics®

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### CASE AND COMMENTARY: PEER-REVIEWED ARTICLE

#### How Should Lived Experience of Racism Count in Medical School Admissions?

Tanisha King, PhD and Joselyn Hines

##### Abstract

There are fewer Black men in US medical schools today than in 1970. This and other kinds of ongoing inequity express the systemic racism Black Americans face in health care. Increasing Black physician representation in medicine is key to motivating health equity, so many colleges and universities have developed programs to recruit and retain students with minoritized identities. This article suggests how Black medical school applicants' lived experiences of racism can contribute prominently to building medicine's capacity to promote healing and health equity.

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##### Case

One month ago, through a DNA test kit, African ancestry was found to be prominent in AJ's family past. Currently applying to medical schools with average MCAT scores, some B grades, and an overall "ramp up" in academic performance over the course of college and graduate studies, AJ indicates being African American to the American Medical College Application Service®. Several schools to which AJ has applied invite AJ for early on-campus interviews. Following an in-person interview at one of these schools, one admissions committee member and interviewer said to the school's admissions committee chair, "This applicant does not look African American." The school's admissions committee chair agrees, but does not say so, and considers how to respond.

##### Commentary

Having a doctor who looks like you—or having a physician workforce representative of the population—is not enough when discussing what matters in medical school admissions decisions. Although representation is important in admissions reform, an **understanding of institutional bias** and discrimination is essential, as "the struggle to recognize institutional racism can be understood as part of a wider struggle to recognize that all forms of power, inequality, and domination are systematic rather than individual."<sup>1</sup> There are policies and practices in place that favor disproportionately admitting White peers over persons of color and dismissing underrepresented students

due to academic struggles. To combat these biases and to truly understand the depth, harm, and consequences of systemic racism in institutional life, medical school admission policies and practices must not be informed by assumptions based on racial categorizations. Interviews should directly ask students—or provide them with opportunities—to share their experiences of race in daily life, as well as its influence on their motivations for becoming physicians. This article discusses effects of systemic racism in health care and how Black medical school applicants' lived experiences of racism can contribute prominently to building medicine's capacity to promote healing and health equity.

### **Racism's Health Effects**

Before the Civil War, heinous and harmful medical procedures were inflicted upon Black people by White physicians who believed that Black women were capable of enduring inordinate amounts of pain in contrast to their White counterparts.<sup>2</sup> For example, J. Marion Sims tortured enslaved Black women by performing gynecological procedures on them without sedation, and, after perfecting his craft, he performed the same procedures on sedated, wealthy White women.<sup>3</sup> Yet racism in medicine is not just an issue of the past.

Racism in medicine today directly contributes to the disproportionate number of Black women who die in childbirth.<sup>4</sup> High-profile examples of wealthy Black women celebrities, such as Serena Williams and Beyoncé Knowles-Carter, demonstrate that bias in medicine is not reducible to class-based bias. The famous tennis star Williams, for example, developed pulmonary embolism postdelivery and needed a computed tomography image and heparin drip; clinicians seemed not to take her concerns seriously and suggested that pain medications might have left her confused.<sup>5</sup> Knowles-Carter developed preeclampsia, a pregnancy complication that disproportionately affects Black women and is not standardly treated,<sup>6</sup> and ultimately delivered her twins via emergency cesarean section.<sup>7</sup> Systemic bias in medicine thus transcends fame, class, and wealth. Incorporating the lived experiences of Black students early in admissions and interview processes would help create a future health care workforce better equipped to address and bring about health equity.

### **Diverse Representation**

According to the US Census Bureau, the Black and Hispanic population in the United States hovers just above 30%.<sup>8</sup> Yet, according to 2018 Association of American Medical Colleges data, the percentage of Black and Hispanic practicing physicians is less than 11%.<sup>9</sup> As a result, the lived experiences of marginalized and oppressed groups are less likely to be considered by clinicians providing care. For Black people, the lived experience of racism and discrimination includes redlining, the school-to-prison pipeline, microaggressions, and—most recently—suffering **disproportionate morbidity and mortality from COVID-19**.<sup>10</sup> Clinicians' lack of consideration of Black people's lived experience comes at great cost. For example, the number of Black newborn mortalities in excess of White newborn mortalities per 100 000 births is almost 40% higher when Black newborns are cared for by White doctors than Black doctors.<sup>11</sup> Moreover, Black patients are more likely to follow preventative health measures when delivered by Black physicians due to increased patient-clinician comfort levels.<sup>12</sup> Thus, better health outcomes might be achieved when clinicians look like their patient population and can fully understand, embrace, and consider the daily lives of their minority patients. Black physicians who themselves have experienced disparities in income, education, and housing are necessary to seriously address and rectify health inequity.



## Recruitment

*Acknowledge racism's effect on minority applicants.* To ensure that marginalized racial communities are adequately represented in the future physician workforce, medical school administrators must take into account racial health disparities when crafting recruitment practices and admission policies. It is imperative that medical schools target underrepresented minorities through the recruitment process—well before the admission interview—based on their lived experiences of medicine and not just of economic and educational disadvantages that impact academic preparedness for medical school. People of color are generally (and rightfully) more distrustful of health care professionals because of historically racist practices (eg, forced sterilization,<sup>13</sup> medical experimentation on enslaved Black women,<sup>3</sup> the intentional withholding of treatment from Black people infected with syphilis,<sup>14</sup> the extraction of a Black woman's cells for medical use without her knowledge or consent<sup>15</sup>), as well as current racist institutional practices more broadly. Potential Black medical student applicants are not immune to skepticism of health care fields, creating a barrier to their accessing medical education. Admission and recruitment practices that recognize and address this distrust and skepticism may have better results in increasing the number of Black matriculants.

*Avoid relying solely on racial categories.* With the rise in popularity of at-home DNA testing offered by companies such as 23andMe, White people are using “newly discovered” minority DNA to take advantage of programs that target groups underrepresented in medicine (URiM).<sup>16</sup> However, if the percentage of minority heritage is minimal, some students who “appear” White might take advantage of URiM programs and opportunities without having experienced racism.<sup>17</sup> We believe it is abhorrent for anyone to self-identify as a racial or ethnic minority simply to boost their chances of scholarships or admission to medical school. Attempting to pass as a member of a marginalized and oppressed group should be an automatic disqualification.

## Admissions Best Practices

While there is no quick fix for reducing racial health disparities, it is medical schools' duty to address racial disparities in a substantive way. Doing so requires creating “an intellectually engaging space” where doctors and student doctors “can be introduced to the historical, sociological, and anthropological scholarship on race in medicine, its continuities, and discontinuities.”<sup>18</sup> Racism has **shaped medical education** and the profession overall and remains pervasive. As Welton et al note:

Educational *institutions* are called such for a reason, because their unspoken norms and social agreements have a long history that has been “instituted” or developed over time, and thus become deeply entrenched into the fabric of how they operate.... This institutionalization process is why embarking on the change needed to achieve racial equity in education—or any change for that matter—is rather difficult, because it forces institutional members to call into question how the norms, practices, and routinization they have long grown comfortable with may in fact be the cause of racial inequities that are injurious to marginalized students, faculty and staff, and even the surrounding community.<sup>19</sup>

Accordingly, social justice practices in medicine are necessary to combat institutional injustices. The lived experiences of people of color, especially Black people, are uniquely oppressive. As mentioned, the systems that Black people endure are not equitable to the privileged systems that their wealthy White counterparts experience and enjoy.

To best understand the influence of lived experiences of race and racism on medical student applicants of color, admission interviewers should ask applicants to share such experiences or provide the space and opportunity during the interview for such input.

Interviewers should directly ask or provide students the opportunity to share their experiences of race in their daily lives, as well as its influence on their motivation for becoming a physician. For example, during the admissions interview process, the interviewer could ask, “If at all, how has your racial and ethnic identity impacted your life and education?” While interviewers should be mindful not to evoke or trigger racial trauma by such questioning, their assumptions about applicants’ lived experiences of race and racism based on self-identified race during the application process are inadequate to seriously understand the impact of oppressive racial systems on applicants of color. Ohio University Heritage College of Osteopathic Medicine has developed some admissions and interview practices to meet this commitment. On interview day during the group sessions, the Office of Inclusion provides space for interviewees to reflect upon and share their thoughts or feelings about racially traumatizing events occurring in the present, including and especially the death of Black people at the hands of the state and law enforcement.

The virtual admission and interview landscape of the Covid-19 pandemic has allowed interviewees, particularly Black students, to share their experiences and losses during the pandemic. Creating an opening for applicants to discuss the pandemic not only allows admissions interviewers to consider applicants’ lived experiences but also allows student interviewees to gain meaningful insight into their peers as well. The realization of shared experiences among students creates community and a space of shared healing.

Medical school admission committees and practices must embed diversity, equity, inclusion, and antiracism into the **fabric of the admissions process** to ensure long-term institutional transformation. Admission practices must be thoroughly examined, analyzed, and transformed to consider applicants’ lived experiences if medical schools are to be truly committed to recruiting, retaining, and graduating future Black physicians.

Medical schools must develop recruitment plans that strategically include outreach and pipeline programs targeting underrepresented minorities and must require diversity, equity, and inclusion training for members of medical school admission search committees.<sup>20</sup> Such training should acknowledge factors that have historically contributed to medical school admissions decisions and to the disproportionately low representation of people of color in the medical field. Recruitment and admission of diverse people in medical school can be realized by taking the following steps:

- Create and maintain effective early assurance programs that recruit and help prepare students for medical education as early as kindergarten through grade 12.
- Consider partnering with high schools for underrepresented minority students to provide early assurance of medical school admission without Medical Schools Admissions Test® requirements via BS-MD (joint bachelor of science and doctor of medicine) programs or BS-DO (joint bachelor of science and doctor of osteopathic medicine) programs.
- Offer pipeline programs that adequately prepare students for the rigor of medical education, including one-on-one tutoring in addition to access to learning service specialists.

- Provide free access to test prep (including content exams and board prep) and to study skills and test-taking strategies training during and in advance of the medical school application process.
- Ask probing questions during the interview process about the influence of race and racism on applicants' lived experiences.
- Provide persons of color upon acceptance with reduced or free tuition and cost-of-living stipends or with scholarships that cover tuition and offset living costs.
- Pair newly accepted students with both underrepresented faculty and underrepresented peer mentors.

There must also be a commitment to retaining and graduating physicians of color. Far too often, pipeline programs and other recruitment strategies achieve their goals in the number of admitted students but not graduates. It is imperative that dollars are committed to providing the support necessary to fill in the gaps of some URiM students' preparation. Despite the number of persons of color applying to medical school, far too many are accepted and yet fail due to educationally disadvantaged backgrounds and lack of access to resources that are often available to their more affluent counterparts.<sup>21</sup> Without a high level of commitment, as outlined in the above recommendations, there will consistently be a decline in the number of students of color who apply to, are accepted and enroll in, and graduate from medical schools.

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## AMA Journal of Ethics®

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### CASE AND COMMENTARY: PEER-REVIEWED ARTICLE

#### How Should Medical Schools Foster Equity and Inclusion in Admissions?

Adela Valdez, MD, MBA, Lala Forrest, Alessandra Jimenez, MPH, and Kim-Thu Pham, MD, MPH

##### Abstract

This commentary in response to a case considers how merit and features of medical school applicants' dossiers should be drawn upon in admissions processes to promote equity and inclusion in medicine. It is argued that medical schools should incentivize inclusion by redefining merit in their admissions goals and processes, promote meaningful inclusion, and show institutional leadership in addressing social justice.

##### Case

UMed is a public institution in a state with limited racial and ethnic diversity. Its largest funder is the state, and its mission is to train physicians to serve its residents. UMed's recently appointed admissions dean has made new scholarships available to members of groups underrepresented in medicine (URiM). A primary funding source for these new scholarships is a pool of money that has traditionally supported only need- and merit-based scholarships. Decisions about which scholarships are offered to incentivize selected applicants to matriculate at UMed are made by its admissions committee.

Few in-state applicants from groups URiM reside in the state, so many new scholarships are awarded to out-of-state applicants. Some UMed deans and faculty oppose this trend, suggesting it's unfair to reduce numbers of need- and merit-based scholarships and supposing that "they won't stay here after they're licensed."

##### Commentary

Traditional medical school merit-based criteria largely consist of applicants' grades, Medical College Admission Test® (MCAT) scores, research engagement, scholarly article publications, mission trips, and clinical shadowing opportunities.<sup>1</sup> However, traditional merit-based criteria do not measure students' structural competency.<sup>1</sup> These metrics often reflect better access to preparatory resources and the wherewithal to allocate time and energy to academic pursuits rather than competing psychosocial demands. As Ziegelstein et al note, schools pursuing merit scholarships often favor the affluent, which may be subverting our desire to bring in a broader socioeconomic and diverse class.<sup>2</sup> This article argues that medical schools should redefine *merit* in their admissions goals and processes to promote meaningful inclusion.

### **Structural Competence as Merit**

For schools to address health equity and select structurally competent candidates, the definition of merit must align with schools' missions.<sup>1</sup> A **structurally competent** candidate would combine identity and experience (eg, by being the first in their family to attend college or medical school, experiencing multigenerational influences, having undergone individual or historical trauma or socioeconomic deprivation) in ways that equate to structural competency.<sup>1</sup> In essence, the definition of merit should be expanded to what one has done with what one was given.<sup>3</sup>

The challenges students face can be severe. Speaking as a former applicant who faced such challenges, the third author states:

Those of us (who) have little financial support from our families can only succeed if we are able to eat and have a place to live. For a lot of us, homelessness and hopelessness are not so far away, and COVID-19 has exacerbated the struggle our families are experiencing.... Something that costs a penny more than what you have is prohibitively expensive when you don't have it.<sup>4</sup>

In some ways, scholarships and financial aid quantify the value placed on diversity or on an individual student. The second author has described her experience this way: "When I'm presented with a scholarship, I view that as the school seeing me, seeing my potential, and I don't take that lightheartedly ... and then I'm more empowered to do good and become involved and leave the school a better place than how I found it."<sup>3</sup> Students from minority and underserved communities bring with them **life experiences and diverse perspectives** that enhance the learning environment during medical school, and there is growing evidence that clinicians whose diversity reflects that of the communities they serve provide better care to underserved patients as well, improving patient outcomes.<sup>5</sup>

### **Equity**

Equitable allocation of resources and opportunities is key to URiM students' success and to equality of outcomes.<sup>6</sup> The second author notes: "when schools provide merit scholarships and other incentives, URiM students know they are equitably entrusted with opportunities others with power and privilege simply expect."<sup>4</sup> Despite academic institutions' mission statements and good intentions, students of color compose an inequitably small number of medical school matriculants.<sup>6,7</sup> The Association of American Medical Colleges (AAMC) notes that URiM students make up the largest proportion of students needing financial assistance.<sup>8</sup> Most of these students need significant financial support, as reflected in the second author's observation that "scholarships are vital.... My family is not wealthy, some of my family members have lost their businesses and we have lost some of our family [to the COVID-19 pandemic]."<sup>4</sup>

### **Inclusion**

Inclusion plays a central role in expressing an individual's worth in close-knit hierarchical organizations, such as medical schools.<sup>9</sup> Diversity of representation on its own, without meaningful inclusion or equity, does not motivate diversity of thought and understanding. As the AAMC notes, inclusion requires "a climate that fosters belonging, respect, and value for all."<sup>10</sup> For instance, scholarships are only the first step in making students feel appreciated and accepted, with an authentic sense of belonging.<sup>3,9</sup> Paradoxically, scholarships allocated specifically on the basis of students' URiM status could undermine efforts to foster students' sense of inclusion. Redefining merit and expanding merit-based scholarship eligibility would place explicit value on students' life experience, grit, and resilience—traits that support learners' success. Inclusion can and

should also be fostered by institutional investment in strong, effective support systems (eg, pipeline and pathway programs that encourage youth to consider medicine as a career, mentorship, role modeling by diverse faculty, academic resources, and health and wellness programming that can help students who have experienced personal or historical trauma). An ethos of **cultural humility** also creates space for shared inquiry and dialogue in communities of learners.

### **Institutional Leadership**

Social justice requires responding to inequity based on gender, sexuality, race, ethnicity, religion, age, and other characteristics and requires that all individuals have access to quality care.<sup>11</sup> Medical schools' positions of status in higher education mean they are well positioned to promote social justice by increasing representation of URiM students in medicine, expanding health equity content in curricula, and enhancing URiM students' access to role models and mentors who have professional and life experiences similar to their own. Medical education administrators and faculty have duties to foresee the health implications of inequity in our shared society.<sup>12</sup> With deliberate and strategic planning, medical school leadership can motivate social justice in classroom- and clinic-based settings. Doing so demands faculty leaders with knowledge, intuition, influence, and courage who can inform both students' understanding of how our shared past situates the quality of our present-day clinical encounters and the future role of public health in achieving social justice.

Given the recent national and global awakening to persistent, insidious effects of systemic racism, many institutions have been reviewing their missions and revising them to more robustly express diversity and inclusion. Yet most schools continue to struggle to achieve diversity in their student bodies or faculty.<sup>6</sup> Internal pressures and structural biases maintain the status quo.<sup>12</sup> Accreditation bodies should play key roles in holding institutions accountable to their mission statements and in reaffirming fiduciary and social contract obligations of students, trainees, physicians, and medicine as a profession to serve patients and communities justly.

Leaders throughout an organization, especially those administering admissions procedures, can promote transformation and needed change. Typically standing committees in medical schools, admissions committees are independent and should be free of external influences. Internal influences, such as explicit—or, more often, implicit—biases must be acknowledged and uprooted from standing committee operations.<sup>7</sup> Admission committee chairs must champion diversity, equity, and inclusion through deliberate and sustained effort lest they be remembered as barriers to progress.

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### CASE AND COMMENTARY: PEER-REVIEWED ARTICLE

#### Whose Responsibility Is It to Address Bullying in Health Care?

Lindsey E. Carlasare, MBA and Gerald B. Hickson, MD

##### Abstract

Bullying has significant, far-reaching consequences for all health professionals, students, trainees, patients, their families, and organizations. Bullying is antithetical to healthy organizational culture, patient safety, and professionalism. A culture of safety and respect in sites of health care education and work is foundational to the well-being of everyone in health care. This commentary on a case recommends individual and collective responses to bullying that express fundamental clinical and ethical values and what it means to be a professional.

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##### Case

Dr S is a second-year surgery resident who is apprehensive about a last-minute assignment to assist Dr T in an aortic valve replacement for the patient, JJ. Dr T often condescended to many students, trainees, and colleagues and repeatedly made public, belittling remarks about Dr S's performance, specifically. During JJ's surgery, Dr T ordered Dr S to get a 28 mm St Jude mechanical valve. Dr S paused, however, recalling from JJ's patient record a prior episode of intestinal bleeding. Dr S wondered whether Dr T knew about this detail in JJ's history, which would influence evaluation of prospective risks and benefits of long-term anticoagulation therapy that standardly follows mechanical valve placement. Dr S felt intimidated by Dr T and hesitated, wanting to ask whether a bioprosthetic valve, which would not necessitate anticoagulation therapy, might be more appropriate for use in JJ's case.

Dr T shouted, "What are you waiting for, S? Get the valve or get out!" Members of the surgical team looked away, including Dr A, an anesthesiologist who has often witnessed Dr T's outbursts and their effects. Dr S retrieved the valve and was distracted throughout the rest of the surgery. Hours later, Dr S reminded herself to make sure there was a plan for evaluating the patient's need for long-term anticoagulation.

##### Commentary

Professionalism is the conduct, values, and qualities that characterize members of a profession and guide decision making in ethically challenging, rapidly changing clinical

practice environments.<sup>1</sup> Health professionals have duties to maintain competency and skill standards in their fields, practice self- and group-regulation,<sup>2</sup> and express enduring commitment to reliable, safe, equitable care for all patients. Clinicians also commit to practice with empathy, compassion, respect, collegial engagement, and teamwork. High-functioning teams demonstrate defining characteristics of professionalism: sharing core ethical values, modeling respect for fellow professionals, and promoting cultures in which everyone feels safe asking questions.<sup>3</sup> When **well-functioning professional teams** are partnered with health systems with shared goals and values—and when leaders are committed to building systems that make it easy for team members to do the right thing—a culture of safety is possible.

### **Safety Culture Undermined**

The American Medical Association (AMA) defines workplace bullying as “repeated, emotionally or physically abusive, disrespectful, disruptive, inappropriate, insulting, intimidating, and/or threatening behavior targeted at a specific individual or a group of individuals that manifests from a real or perceived power imbalance and is often, but not always, intended to control, embarrass, undermine, threaten, or otherwise harm the target.”<sup>4</sup> Bullying can affect anyone regardless of gender,<sup>5</sup> occupational status,<sup>6</sup> or nationality<sup>7</sup> and is more frequently reported by women<sup>7,8</sup> and members of some racial and ethnic groups.<sup>9,10</sup>

Disrespectful behavior, including **bullying and aggression**, directed toward colleagues and learners diminishes their vigilance and willingness to share concerns or ask for help and threatens team performance.<sup>11,12</sup> Disrespectful behavior contributes to errors, patient dissatisfaction, and preventable adverse outcomes.<sup>12,13,14,15,16</sup> Patients who receive care from surgeons like Dr T are more likely to experience complications (eg, surgical site infections, cardiac arrest, septic shock, and stroke).<sup>16,17</sup>

Team members subjected to behavior like Dr T’s report diminished professional satisfaction, isolation, burnout, distress, depression, anxiety, and suicidal ideation.<sup>18,19,20,21,22</sup> Those regularly exposed or subject to patterns of disrespect can experience pain, fibromyalgia, and cardiovascular disease.<sup>23,24,25,26,27</sup> Bullying contributes to increased absenteeism<sup>19,28</sup> and can undermine organizations’ attempts to build respectful, safe workplaces.<sup>13,29</sup> Reputational damage, legal costs, and turnover are other organizational consequences of bullying and disrespectful behavior.<sup>30,31,32</sup> When single incidents go unaddressed over time, they forge dysfunctional practice patterns.<sup>33</sup> As a seasoned observer of Dr T’s abusive behavior, Dr A, for example, also regularly lets colleagues down by remaining silent, further eroding trust, undermining effective communication, and threatening patient safety.<sup>11,13,18,28,29,34,35,36</sup>

### **Everyone Is Responsible**

When team members model courage by speaking up in the moment and reporting incidents when needed, they reinforce desirable, safety-oriented clinical and ethical values (eg, respect, equity, inclusion) and help strengthen organizational cultures of safety. As health care practice continues to evolve and care delivery trends change, addressing disrespect and bullying will require collaboration among clinicians, professional societies, health professions schools and their admissions committees, and health care organizational leaders. Preventing bullying begins with recognizing the need to promote self-reflection and self-regulation opportunities during professional development, before patterns of dysfunctional, unprofessional behavior emerge. To help

organizations achieve a workplace safety culture, the AMA established guidelines, among which the following are key<sup>4</sup>:

- Describe organizational leaders' "commitment to providing a safe and healthy workplace."
- "Outline steps for individuals to take when they feel they are a victim of workplace bullying."
- "Provide contact information for a confidential means for documenting and reporting incidents."
- Establish "procedures and conduct interventions within the context of the organizational commitment to the health and well-being of all staff."

Establishing and maintaining a system-wide peer reporting and feedback mechanism improves accountability and enhances professional self-regulatory capacity and can help motivate self-reflection.<sup>33</sup> For example, professionals should consider the following questions:

- Do I understand relationships between disrespect and adverse outcomes for my patients?
- What should I do to make it easier for others to collaborate with me to care well for our patients?
- Do I understand how to respond to someone expressing disrespect toward a colleague, patient, or myself?
- How should I partner with organizational leaders to support my colleagues effectively and sustainably?

Organizations have duties to patients and staff to promote safety, to promote awareness of threats to safety that bullying and other forms of disrespect create, to establish clear processes by which incidents that threaten safety can be safely reported (eg, by minimizing vulnerability to or fear of reprisal), and to **review and respond to incidents** and patterns of unprofessional behavior equitably and effectively. In our experience, responses to reports of incidents are not well coordinated or consistently or equitably applied to all team members, especially when abuse is committed by individuals like Dr T who, despite being viewed as "high value" in terms of having cultivated an exclusive skill set or capacity to generate revenue, enact behaviors corrosive to collegiality or the reputation of the organizational workplace.<sup>37,38,39,40</sup>

The pursuit of a high-functioning professional team begins with steadfast confirmation of shared clinical and ethical values expressed through professional collaboration with active organizational leaders with the courage and authority to offer consistent reinforcement of values and consistent messaging and enforcement (eg, in performance reviews) of behaviors and practices that are incentivized (or penalized). To promote a culture of safety and professionalism, leaders should hold **everyone equally accountable**, recognize professionals who exceed expectations, employ and effectively utilize reporting systems, and provide sufficient resources to individuals and teams to build and maintain these efforts.<sup>41</sup> It is through this commitment to a better culture focused on safety that all health care workers and trainees, organizational leaders, administrators, patients, and families can stand up for medicine and be vigilant advocates for the medical profession.

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### MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

#### Three Things Schools Should Do to Make Advancement Assessment Just

Marjorie Westervelt, PhD, MPH, Darius Billingsley, MD, Maya London, and Tonya Fancher, MD, MPH

##### Abstract

This article considers how student advancement assessment in American medical schools undermines equity. Although much attention is paid to admissions processes' capacity to diversify the physician workforce, students' advancement has been neglected as the next key step along their journeys toward graduation and residency training. This article canvasses common ways advancement undermines equity and suggests 3 areas of focus. In particular, it suggests that retention, student progression, and career advancement milestones are at least as important as admissions-based efforts to promote justice in medical education opportunity.

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##### Introduction

In *Regents of the University of California v Bakke* (1978), the US Supreme Court acknowledged the educational benefits of diversity, writing that while racial quotas were unconstitutional, **race-conscious admissions policies** were legal if race was one of many factors considered.<sup>1</sup> Over 40 years later, we—affiliates of the medical school whose rejection of Bakke's application spurred the case—revisit the concept of diversifying the physician workforce and ensuring that medical education systems' support of diverse learners does not end with recruitment but continues throughout the educational continuum.<sup>2</sup>

##### Defining and Measuring Diversity

Medical schools' social missions are measured by 3 indicators: the percentage of graduates practicing primary care, the percentage of graduates practicing in health professional shortage areas, and the percentage of graduates from backgrounds underrepresented in medicine (URiM).<sup>3</sup> The historically Black colleges and universities dominate the social mission rankings by educating the vast majority of Black physicians in the United States and delivering a curriculum that inspires graduates to practice in locations and specialties with physician shortages.<sup>3</sup> The importance of this work is magnified by recent evidence of improved health outcomes when Black patients are

cared for by Black physicians.<sup>4,5</sup> There is a need for other schools to adopt similar strategies to promote diversity more broadly.

In 2003, the Association of American Medical Colleges (AAMC) broadened its definition of URiM to include any “racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population” to permit schools to define underrepresentation based on their region<sup>6</sup> and to include nonracial and ethnic identities, such as sexual orientation, **disability**,<sup>7</sup> rural origin,<sup>8</sup> growing up in a low-income household, and first generation to attend college.<sup>9</sup> Prior to 2003, *underrepresented minority* was the term the AAMC used to refer to “Blacks, Mexican-Americans, Native Americans (that is, American Indians, Alaska Natives, and Native Hawaiians), and mainland Puerto Ricans.”<sup>6</sup> The shift from “underrepresented minority” to URiM helped medical schools to think more broadly and more regionally about workforce diversity.

How progress in diversity is measured is shaped by the mission of an institution and its ideal student population. In interviews with medical school admissions officers across the United States, Ko et al (unpublished data, 2019-2020) found that they take advantage of the local approach by creating their own definitions of diversity with easy-to-meet thresholds. For example, institutions can use the demographics of their surrounding community or state as diversity benchmarks. Thus, in states with less racial and ethnic diversity, the target number of URiM matriculants will be lower. However, if national—or even global—population data were used, the benchmark for diversity at any given institution would be higher.

Diversity benchmarks can be used to promote not only parity<sup>10,11,12,13</sup> or equality, whereby everyone receives the same thing regardless of their background, but also a culture of equity, which ensures that all students receive what they need to be successful and that all aspects of medical education are just. A culture of equity, however, cannot be limited to recruitment, admissions, and selection but must encompass curriculum, assessment, and career advancement milestones. Much of the focus in diversifying the physician workforce is on pathway programs to expand the applicant pool<sup>14,15,16</sup> and admissions processes such as multiple mini-interviews,<sup>17</sup> trainings to mitigate bias,<sup>18,19</sup> and holistic review<sup>20</sup> based on applicants’ experiences, attributes, and metrics. Less research focuses on how to ensure a supportive and equitable learning environment for learners once they matriculate. We contend that progress in equity must be measured in terms of not only recruitment to medical school but also success in medical school and beyond.

### **Equity in Assessment**

Although holistic admissions practices have greatly increased the number of students from minoritized groups attending medical school,<sup>21</sup> the medical education system is lagging in developing and implementing strategies that ensure student success. This lag is not due to lack of motivation or intention; in fact, medical schools across the country have invested significant resources in providing academic support to students from minoritized groups who tend to matriculate with lower metrics (eg, grade-point average, Medical College Admission Test® [MCAT] scores).<sup>22</sup> However, it may be unreasonable to expect the same performance from students with diverse educational opportunities and experiences. Moving away from traditional performance expectations (which were set in place by historically dominant groups) and redefining success is the only way to achieve equity in assessment in medical education.

Lucey et al classified equity in medical assessment as a “wicked problem,” that is, a problem that is immeasurably complex and nearly impossible to solve.<sup>23</sup> The authors identified 3 requirements for equity in assessment: intrinsic equity (unbiased assessments), contextual equity (a fair learning environment), and instrumental equity (the use of assessment data in advancement and selection).<sup>23</sup> Layering these equity requirements on a competency-based medical education (CBME) framework provides an opportunity to create a system for equitable advancement and progression. Per the first requirement, assessments in a medical school employing a CBME framework would use criterion-based measures of performance, which compare performance to a predetermined standard or performance level and provide students as much time as necessary to achieve them. The decision of the United States Medical Licensing Examination® (USMLE) to move from a numeric to a pass/fail scoring system for Step 1, effective no earlier than January 1, 2022, is a timely example of aligning assessment with the principles of CBME.<sup>24</sup> This change might reduce the USMLE’s negative effects (eg, isolation, anxiety, and the misuse of Step 1 scores for residency selection or measurement of competence) on URiM students.<sup>25</sup>

Standardized assessments (eg, USMLE Step 1 and Step 2 Clinical Knowledge) are one, albeit a predominant, traditional metric of success in undergraduate medical education (UME). Other “measures” of success include clerkship grading and clinical skills assessment—both of which can be extremely subjective and biased—and matching into a residency program. In a multi-institutional study of over 600 medical students, Bullock et al found that only 44% of medical students believed clerkship grading to be fair.<sup>26</sup> Taking a different approach, Teherani et al conducted semi-structured interviews with 20 senior medical students and residents to identify what they perceived as equitable assessment practices.<sup>27</sup> The analysis identified a number of possible improvements related to clinical assessment, including, but not limited to, shifting the focus from grades to patient care and removing peer comparisons. These findings once again reinforce the benefits of moving to a CBME model: focusing on the ultimate goal of the educational experience (ie, safe and effective patient care) and using criterion-based rather than normative standards. In response to this feedback, some schools decided to move to a pass/fail grading system for clerkships. However, as of the 2019-2020 academic year, only 11 of 153 schools had adopted this strategy.<sup>28</sup> A major challenge to widespread adoption of CBME is residency selection: most residency programs rely on clerkship grades to identify medical students worthy of consideration for their specialty. Without clerkship grades and USMLE Step 1 scores, residency programs would need to find a more holistic way to review applicants, which might improve the representation of URiM residents (and eventually faculty) across all specialties.<sup>29,30,31</sup>

Standardized exams and residency selection are part of the larger medical education system that must be examined in order to achieve equity. Some students from URiM groups enter medical school having had less access to academic preparation and having underperformed on standardized tests due to the tests’ inherent biases.<sup>32,33,34</sup> This inequity can be traced throughout the K-12 and undergraduate education systems. Expecting students to make up 16 years of disadvantages in 2 years (or less in some medical schools) while learning and retaining all the new knowledge presented to them in the preclerkship curriculum is unrealistic. However, students who may (understandably) need more time face extreme scrutiny by student progress committees through repeated reviews of their academic progress and the need to justify delays, and viewing this extra time as a delay or falling behind can have a negative impact on their well-being.<sup>35</sup> Many URiM students also have **fewer financial resources** upon

matriculation and leave medical school with more debt than their peers from higher socioeconomic backgrounds.<sup>36,37</sup> A more equitable CBME system would have a “flat rate” for the MD degree, allowing students as much time and resources as necessary to move through the curriculum. In this system, success would be defined as every student finishing medical school, regardless of the amount of time it takes.

### **Where Can We Go?**

As gatekeepers to the profession, US medical schools should embrace their role in creating an equitable medical education system and in driving the representiveness and diversity of the workforce<sup>30,38,39,40,41,42</sup> that will address health needs around the globe, following the examples below.

*Recruitment with retention.* While several US medical schools (as well as graduate medical education [GME] programs<sup>29,43</sup>) have implemented holistic review and multiple mini-interviews to recruit a diverse student body,<sup>44,45,46,47</sup> some have also added GME to UME admissions, reenvisioning admission to medical school as admission to UME and to GME. For example, Oregon Health & Science University (OHSU) and the University of California, Davis (UC Davis), with grant support from an American Medical Association Accelerating Change in Medical Education initiative, established a collaborative known as COMPADRE (California Oregon Medical Partnership to Address Disparities in Rural Education and Health). OHSU and UC Davis, along with regional residency programs, co-recruit and train the physicians needed in the rural, tribal, and urban communities residing between Portland, Oregon, and Sacramento, California.<sup>48</sup> Other organizations have approached UME/GME joint recruitment through a time-variable approach. For example, the Education in Pediatrics Across the Continuum Project bases advancement on the achievement of competency rather than time-based milestones across the UME-GME continuum.<sup>49</sup>

*Retention and advancement.* The 2021 Coalition for Physician Accountability’s 42 recommendations to improve the UME-to-GME transition include a call to action for UME and GME programs to eliminate systemic biases in their grading and awards structures.<sup>50</sup> The profession’s collective overreliance on metrics to assess student performance has been dispelled by the Morehouse School of Medicine. The Step 1 scores of students graduating between 2009 and 2014, who received interventions designed to facilitate success, exceeded those expected based on their MCAT scores.<sup>22</sup> The school creates the right milieu for learning as well as mentoring opportunities, aligns the structure and content of its curriculum to its mission, and uses a robust system to monitor student performance and retention. Similarly, the University of Michigan School of Medicine is leading the nation in providing an inclusive environment for students with a physical disability or functional limitation<sup>7</sup> and in intentionally aiming to reduce barriers for learners to promote equity in access and education. Although not directly supporting retention, the AAMC’s application to medical school offers prospective students the option of specifying gender identity and preferred pronouns,<sup>51</sup> and the Accreditation Council for Graduate Medical Education awards<sup>52</sup> includes awards for diversity and inclusion. These are 2 major steps in recognizing the diverse identities of medical learners and in promoting inclusion.

*Career advancement.* Exemplars of equity in access to medical specialty careers are harder to identify. The Indiana University School of Medicine publishes a diversity dashboard fact sheet— including data for UME students, staff, faculty, GME trainees, and the state of Indiana—which is a step toward accountability (though the current

dashboard does not include data by specialty).<sup>53</sup> Both Ohio University Heritage College of Osteopathic Medicine and the University of North Carolina (UNC) offer programs that include post-GME retention at the point of entry to medical school. The Heritage College's Transformative Care Continuum is an accelerated UME-to-GME program that includes a contract with the Cleveland Clinic upon residency completion.<sup>54</sup> The UNC Fully Integrated Readiness for Service Training program is a UME-to-GME program that includes 3 years of post-GME service in rural and underserved North Carolina.<sup>55</sup>

### Conclusion

We propose that defining diversification goals at individual institutions demands that those institutions honor regional needs to provide the best care,<sup>4,5</sup> advance health equity,<sup>56</sup> and optimize the educational benefit for all students.<sup>1,57</sup> We encourage schools to embrace recruiting a health care workforce that is diverse with respect to race and ethnicity but also to consider identities such as disability, sexual orientation, socioeconomic status, and first generation to attend college, and the intersection of these identities. Once students have been recruited, schools must support them throughout their education, remove barriers to equitable advancement, encourage them to explore all specialties, and continue to support them as they transition to careers.

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### MEDICAL EDUCATION: PEER-REVIEWED ARTICLE

#### What Is the Role of Accreditation in Achieving Medical School Diversity?

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##### Abstract

Diversity standards in medical education accreditation do not guarantee diversity but do stimulate schools' activities to recruit and retain diverse students and faculty. The Liaison Committee on Medical Education's (LCME's) accreditation standard addressing medical school diversity neither mandates which categories of diversity medical schools must use nor defines quantitative outcomes they should achieve. Rather, each medical school is required to (1) identify diversity categories that motivate its mission and reflect its environment and (2) use those categories to implement programs to promote diverse representation of students and faculty. When the LCME assesses each medical school's compliance with these requirements, it considers single point-in-time diversity numbers, trends in student and faculty diversity, and outcomes of programs implemented by the school to promote diversity in the categories it identifies as key to its mission.

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##### Accreditation Stimulates Diversity

The demographic composition of the physician workforce in the United States results from individual and organizational decisions at multiple levels, including by the individual who decides to pursue medicine as a career and apply to specific medical schools and by the medical school that makes the admission and graduation decisions. In the United States, each transitional step leading from primary and secondary school to eventual entry into undergraduate medical education, graduate medical education, and practice is dependent on the pipeline from the previous level. For this discussion, we focus on US MD (doctor of medicine)-granting medical schools, which numerically represent the largest contributor to US residency programs<sup>1</sup> and, consequently, to the physician workforce.

In *Grutter v Bollinger*,<sup>2</sup> the US Supreme Court ruled that the use of race, among other criteria, in admissions was permissible based on the educational benefits of a diverse student body. There is substantial literature supporting that a diverse physician

workforce provides culturally competent health care to a diverse population and is, therefore, both likely and necessary to **address existing health inequities**.<sup>3,4,5,6</sup> Accreditation has been shown to be one among several mechanisms leading to increased medical student diversity.<sup>7</sup> Proceeding from the premise that a diverse student body confers educational benefits, we discuss the role and limitations of accreditation in shaping medical school diversity activities and outcomes.

### **Framing a Diversity Standard**

In the United States, medical education programs leading to the MD degree are accredited by the Liaison Committee on Medical Education (LCME). There has been an LCME accreditation standard related to student diversity in the document, “Functions and Structure of a Medical School: Standards for Accreditation of Medical Education Programs Leading to the MD Degree,” since 1997,<sup>8</sup> but the relation of this requirement to diversity outcomes has been judged to be unclear.<sup>9,10</sup> There are multiple reasons for this perception, including the degree of congruence between diversity requirements specified in accreditation standards and what stakeholders believe those requirements and resulting outcomes should be and whether schools can and do achieve the outcomes. Although there are barriers to achieving diversity, we describe how accreditation can be utilized to enhance diversity and discuss the implications and limitations of the LCME’s specific approach.

National and regional barriers to mandating specific diversity categories, such as race and ethnicity, follow from the national prohibition against requiring quantitative diversity outcomes in accreditation standards. For example, in *Regents of the University of California v Bakke*,<sup>11</sup> the US Supreme Court ruled against using race-based quotas but allowed race to be one factor among others in **admission decisions**. In addition, California Proposition 209, approved in 1996, prohibited universities from granting “preferential treatment” to applicants based on race, sex, color, ethnicity, or national group.<sup>12</sup> Accreditation standards that apply at a national level, therefore, need to take into account the real and perceived constraints imposed by regulatory and judicial actions.

Accordingly, LCME accreditation Element 3.3, “Diversity/Pipeline Programs and Partnerships,” states the following expectation:

A medical school has effective policies and practices in place, and engages in ongoing, systematic, and focused recruitment and retention activities, to achieve mission-appropriate diversity outcomes among its students, faculty, senior administrative staff, and other relevant members of its academic community. These activities include the use of programs and/or partnerships aimed at achieving diversity among qualified applicants for medical school admission and the evaluation of program and partnership outcomes.<sup>13</sup>

There are consequences to including diversity as a component of accreditation requirements without mandating predefined diversity categories. If diversity is an expectation but specific categories and outcomes are not set by the accreditor, the decision is left to each medical school to identify diversity categories for which it will commit resources and implement recruitment and retention activities. LCME accreditation Element 3.3<sup>13</sup> thus allows flexibility for schools to identify their diversity categories in the context of their missions and environments, including the diversity needs of their regions. For example, the mission of one LCME-accredited medical school is to “transform the Rio Grande Valley, the Americas, and the world through an innovative and accessible educational environment that promotes student success, research, creative works, health and well-being, community engagement, and

sustainable development.”<sup>14</sup> Following from this mission statement, the school’s diversity policy states in part: “The [medical school’s diversity] goals stem from the School’s unique geographic location at the border of US and Mexico, a place with rich bicultural and family traditions, but also one burdened by health disparities.”<sup>15</sup> Flexibility allows medical schools to contribute to the sum total of national needs in their own way and to use their finite resources to implement programs directed at their selected diversity categories.

In summary, LCME accreditation requirements for diversity allow flexibility, enabling medical schools’ diversity policies to reflect local differences, including those imposed by their legal and regulatory environments. This flexibility does not mitigate the requirement that schools seek diversity but rather allows variation in how individual schools define and act to achieve diversity. LCME accreditation requirements, as specified in Element 3.3, are framed to address decision points that directly or indirectly promote diversity by requiring medical schools to do the following<sup>13</sup>:

1. Develop pipeline programs that support the preparation and counseling of individuals from targeted diversity groups for entry into medicine.
2. Create policies and implement practices that focus on recruitment, admission, retention, and support for students from targeted diversity groups.
3. Recruit, hire, and support faculty and administrators from the targeted diversity groups to support the ability to attract and retain a diverse student body.

Element 3.3 can influence recruitment and retention of a diverse student body through medical schools’ actions long before students matriculate.

### **How the LCME Evaluates Diversity Efforts**

The LCME utilizes both process and outcome measures in evaluating medical school performance with respect to Element 3.3. The LCME expects schools to collect data on the numbers of applicants and entrants in their identified diversity categories. How, potentially, can this information be used to judge success? The Association of American Medical Colleges publishes national data on percentages of applicants, enrolled students, and graduates by race and ethnicity,<sup>16</sup> so a given school’s success could be judged based on its meeting or exceeding an average percentage of enrolled students for each of its diversity categories, if such data exist. However, differences among schools in missions and in locations, including state laws and requirements, make relying solely on national comparison data problematic, and such data are lacking for some of the diversity categories that schools might include, such as socioeconomically or educationally disadvantaged. In addition, national averages are low and therefore do not provide an appropriate threshold. For example, while the number of enrolled male and female medical students in many diversity categories (eg, Black/African American and Latinx) increased between 2016-2017 and 2020-2021,<sup>16</sup> there remain concerns about the adequacy of the current level of diversity in medical schools.<sup>17</sup>

Instead of relying on normative data, the LCME examines quantitative diversity data for each medical school both at a single point in time and as a trend. In trend evaluation, there is consideration of whether the number and percentage of entering students and employed faculty in each diversity category are increasing, remaining the same, or decreasing over a set number of years. Decisions regarding achievement of success include consideration of the trend line and whether the school has processes in place to identify and address the root causes of poor performance. Such processes include

evaluating activities and resources available for pipeline programs, outreach in recruitment, mentorship, and other support for enrolled students.

### **Performance Determination**

In judging performance on its diversity standard, the LCME considers if there are appropriate policies and processes in place to support diversity and if outcomes are adequate or trends sufficiently promising to support a positive accreditation decision. The LCME has identified specific criteria for judging performance.<sup>18</sup> The lack of policy, activity/resource allocation, or monitoring/achievement of outcomes results in a finding of “unsatisfactory” performance. Schools strive to achieve diversity by making offers of acceptance to applicants and offers of employment to potential faculty from their identified diversity categories. If these offers do not result in enrollments/hires, they are not included in a school’s diversity outcomes data. The LCME recognizes, however, that these offers are indications of the school’s commitment and effort to enhance its diversity. The LCME therefore asks for numbers of individuals from a school’s diversity categories who were offered admission or who were offered employment for all available faculty and administrative positions and whether these offers were accepted. Effort that results in progress may raise a school from an “unsatisfactory” finding to one in which performance on Element 3.3 is deemed “satisfactory with a need for monitoring.”<sup>18</sup> The diversity standard is complex, with a number of expectations. All of these must have been met for the performance on the element to be “satisfactory.” In the period encompassing the 2015-2016 to 2020-2021 academic years, of the 112 medical schools reviewed, the performance of 26 was judged to be satisfactory for Element 3.3, 40 to be satisfactory with a need for monitoring, and 46 to be unsatisfactory (LCME, unpublished data, 2021).

Another expectation is that schools will create programs and partnerships to **enhance the pool of qualified applicants** from the school-identified diversity categories. Such activities, often referred to as pipeline programs, are an LCME requirement, as specified in Element 3.3. Pipeline programs are defined as follows by the LCME:

A pipeline program is directed at students from selected level(s) of the educational continuum (middle school-level through college) and aims to support their becoming qualified applicants to a medical school and/or, depending on the level of the program, to another health professions program or a STEM/biomedical graduate program.<sup>13</sup>

Medical schools are expected to monitor whether their pipeline programs contribute to diversity in their own student body and in the national applicant pool. Data from the 2019-2020 academic year showed that 138 of 153 LCME-accredited medical schools had pipeline programs.<sup>19</sup> The LCME considers a school’s Element 3.3 performance to be satisfactory when graduates of its pipeline program(s) enroll in any medical school. Among 2018 and 2019 matriculants, 872 pipeline program participants entered their program’s medical school and 580 entered another MD- or DO (doctor of osteopathic medicine)-granting medical school (LCME, unpublished data, 2020).

### **Roles of Accreditors**

Among the many groups that could contribute to a diverse physician workforce, accreditors should and do have a role. Analysis of LCME data revealed that Element 3.3 stimulates schools to identify, recruit, and retain a diverse student body.<sup>7</sup> But an accreditation requirement does not itself guarantee success in motivating or achieving diversity. The temptation to make accreditation standards more prescriptive (eg, by mandating specific diversity categories and defining quantitative diversity outcomes)

should be resisted since, even if legally permissible, such standards would not guarantee schools' satisfactory performance in Element 3.3. The LCME acknowledges that a single definition of diversity does not accommodate medical schools well, given the variation in their histories, locations, and the populations they hope their graduates will serve. The LCME also acknowledges that individual schools can promote and contribute to physician workforce diversity in ways unique to their missions.

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**HEALTH LAW: PEER-REVIEWED ARTICLE**

**How Has American Constitutional Law Influenced Medical School Admissions and Thwarted Health Justice?**

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**Abstract**

Medical schools have sought to diversify their classes to motivate inclusion, to draw upon the educational benefits of diversification, to promote educational opportunity, to facilitate representation of persons with minoritized identities in the US physician workforce, and to advance racial and ethnic equity in health status and access to health services regionally and nationally in the United States. The US Supreme Court has allowed schools' race-conscious admissions when their purpose is to diversify an incoming class but not to remediate inequity. This article explains why this limit to affirmative action laws' implementation blunts medical schools' capacity to do their part to secure health justice for all in the United States. Since the Supreme Court is poised to rule more narrowly on affirmative action law again, this article also considers key threats to health justice posed by further limiting or eliminating race-conscious admissions.

**Always Unequal**

Kevin Outterson has argued that “[f]or as long as records have been kept, studies have reported racial differences in health care access and health status in the United States.”<sup>1</sup> Evidence for this claim is thoroughly documented in the Institute of Medicine’s seminal 2003 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*.<sup>2</sup> The report states: “[a]t no time in the history of the United States has the health status of minority populations—African Americans, Native Americans, and, more recently, Hispanics, and several Asian subgroups—equaled or even approximated that of white Americans”<sup>2</sup> and recognizes inequity as a result of **structural racism** in American society.

One way to promote health equity is to make the physician workforce and medical student bodies more representative of the US population. For example, Black physicians are still underrepresented relative to Black people’s share in the population.<sup>3</sup> In 2018, only 5% of the physician workforce was African American, although African Americans composed 13% of the US population.<sup>4</sup> Increasing physician diversity is key to health equity, as patient-physician **racial concordance** can make a “difference between life and death.”<sup>5</sup> For example, that “[i]nfant mortality is halved when Black newborns are cared

for by Black rather than White physicians”<sup>5</sup> represents a significant narrowing of an egregious mortality gap that should reinforce efforts to increase diversity in medical school classes, which can positively influence population health downstream and thereby reduce health inequity.

This article discusses the harms caused by lack of racial diversity in the physician workforce, landmark Supreme Court cases involving affirmative action policies, and the possible fate of race-conscious medical school admissions at the hands of a newly constituted Supreme Court.

### **Physician Diversity**

Medical school faculty remain predominantly White, and the environment of academic medicine is hostile to many Black, Indigenous, and people of color (BIPOC).<sup>6</sup> For example, in January 2020, Uché Blackstock, the founder and chief executive officer of Advancing Health Equity, left medicine, noting a “toxic and oppressive work environment that instilled in me fear of retaliation for being vocal about racism and sexism within the institution.”<sup>7</sup> Many academic health centers’ displays of portraiture represent “whiteness, elitism, maleness, and power,” suggesting to many BIPOC students that “[t]his institution was never meant for me.”<sup>8</sup>

In light of the racial inequity in and unwelcoming environment of academic medicine, physicians in academic health centers are becoming more aware of how racial inequity is built into health care and into health professions education, recognizing that the “next frontier for health justice” is “structural and policy change.”<sup>9</sup> One key change will require recruitment and enrollment of diverse students. Marc Nivet, former chief diversity officer at the Association of American Medical Colleges, notes that there are “three distinct phases in the evolution of diversity” in medical school admissions.<sup>10</sup> The first phase began in response to civil rights movements and focused on changing “institutional head counts and student retention rates”; the second phase began in the 1980s, when medical schools started incorporating initiatives to foster the success of minority students and faculty, thereby increasing schools’ “openness to the notion that diversity and excellence are not only complementary but inextricably linked.”<sup>10</sup> Nivet argues that medical schools are poised to enter a third phase that “requires a mental shift that frames diversity as a means to address quality health outcomes for all, rather than an end goal in and of itself.”<sup>10</sup> According to Nivet, “[d]iversity work must be seen as more than just solving the problem of inadequate representation and alleviating the barriers facing disadvantaged and marginalized populations” and must focus on “developing a culture of inclusion” that “enhances the experience of all medical students, faculty, and, most important, patients.”<sup>10</sup>

A diverse and inclusive health care workforce is, as Terri Laws notes, “fundamental to implementing the revolutionary change required to achieve health equity.”<sup>11</sup> Black patients report higher levels of distrust in physicians and the health care system than White patients,<sup>12</sup> and, as the authors of the study note, “[t]hese differences are generally attributed to current and historical evidence of inequitable treatment.”<sup>12</sup> Because “trust has long been recognized as a fundamental component of the physician-patient relationship,” it is associated with treatment adherence and health status.<sup>12</sup> Racial or ethnic concordance promotes not only trust,<sup>13</sup> but also “patient satisfaction, better communication, and shared decision making,” which in turn produce better health outcomes.<sup>11</sup> Diversity also enhances cultural humility by “enabling health care and social service workers to provide effective access and care to patients with diverse

values, beliefs, and practices,” with the primary goal being to “contribute to the elimination of racial and ethnic gaps in health outcomes.”<sup>14</sup> Yet diversification has been **legally challenged** on equal protection grounds, and medical schools must abide by court rulings about race-conscious admissions.

### **Constitutional Law**

Race-based affirmative action cases have been key in equal protection constitutional jurisprudence for over 50 years. In the 1960s and 1970s, universities increased diversity on their campuses in the wake of the civil rights movement.<sup>15</sup> It was not long before race-based affirmative action policies were challenged in courts, alleging violation of the Fourteenth Amendment’s Equal Protection Clause.<sup>16</sup> The US Supreme Court “was repeatedly asked to consider whether ‘benign’ race-conscious policies [eg, affirmative action] were constitutionally distinct from the race-based classifications that characterized Jim Crow and ‘separate but equal.’”<sup>17</sup> Such challenges lead to the seminal case, *Regents of University of California v Bakke*,<sup>18</sup> in which the Supreme Court issued its first major ruling on race-based affirmative action policy that has informed decisions about such policies’ legality ever since.

*Bakke decision.* The *Bakke* decision grew out of a case challenging the University of California Davis School of Medicine’s race-based admission policy that used a quota.<sup>18</sup> The medical school’s policy aimed to remedy past social wrongs by explicitly carving out space in its classes for BIPOC students. The court, applying strict scrutiny, ultimately rejected the school’s admission policy, with Justice Lewis Powell finding “societal discrimination” to be “an amorphous concept of injury that may be ageless in its reach into the past.”<sup>18</sup> However, the court accepted that “a university properly may consider” diversity for purposes of “attaining the goal of a heterogeneous student body.”<sup>18</sup> A fundamental legal legacy of *Bakke* is that, while it allowed affirmative action to promote diversity within a class, the remedial rationale for diversity is significantly circumscribed, and, as Jennifer Jones notes: “since 1978 courts and universities have diverted their attention from mitigation of the impact of past and present racial discrimination to safeguarding the diversity rationale.”<sup>3</sup>

*Rationales for race-conscious admissions.* In the years since *Bakke*, the Supreme Court has upheld diversity as a rationale for race-conscious admissions that survives strict scrutiny. Twenty-five years after *Bakke*, the Supreme Court sanctioned “holistic” review of applicants in *Grutter v Bollinger*,<sup>19</sup> requiring admissions committees “to show that they had conducted a holistic review of candidates in which race was one factor among many considered” while eschewing quotas and considering “race-neutral alternatives.”<sup>3</sup> Subsequently, *Fisher v University of Texas at Austin (Fisher I)*<sup>20</sup> required that “admissions committees convince the trial court that the use of race is necessary to achieve the compelling state interest it aims to serve.”<sup>3</sup> *Fisher I* established 3 governing principles for assessing the constitutionality of affirmative action programs: (1) racial classifications are “necessary to achieve the state’s interest” (ie, the constitutional strict scrutiny standard); (2) quotas are impermissible, although admission programs are entitled “some judicial deference”; and (3) “universities are owed no deference in determining whether their use of race is narrowly tailored.”<sup>3</sup> Instead, universities must “bear the significant burden of proving that a ‘nonracial approach’ [to their attempts to diversity admissions] would not effectively promote the state interest in its admissions model.”<sup>3</sup> These principles make clear that, while the Supreme Court allows race to be used in admissions decisions, the constitutional standard for its use is strict and not without burden.

Most schools meet this standard by implementing **holistic review** of candidates, as sanctioned in *Grutter*. This approach, which “the vast majority of medical schools” use today in some form “in their admissions process”<sup>21</sup> can incorporate consideration of race and culture, along with other factors. Ideally, holistic review encourages selection based on a candidate’s “experiences, attributes, and academic metrics equally,”<sup>22</sup> and functions as a “flexible, individualized way of assessing an applicant’s capabilities.”<sup>21</sup> Although holistic review has been sanctioned by the Supreme Court as constitutionally permissible,<sup>21</sup> in practice, it is not wholly effective, given persistent racial inequity in the physician workforce and medical student bodies. Systemic inequity requires an approach mindful of race and racial inequity when making admissions decisions and policy—seeking diversity in a class is not enough. For example, there is evidence that admissions committee members’ implicit racial bias exacerbates “relative lack of diversity in medical school,”<sup>23</sup> underscoring medical schools’ need to do more to motivate inclusion.

Constitutionally permissible practices (ie, using the diversity rationale and employing a holistic approach to diversity) are insufficient to remedy systemic inequity. One critic of the *Bakke* legacy notes that, by sanctioning the diversity rationale and eliminating the remedial rationale, the Supreme Court “wrote into law resistance to the notion that America has moral debts to account for” and instead “introduced a colorblind approach to its analysis of affirmative action in higher education.”<sup>3</sup> Jones explains that, by endorsing “a false equivalency between laws intended to subordinate Black people [ie, Jim Crow] and laws intended to remedy the effects of anti-Black discrimination [ie, affirmative action],” the Supreme Court effectively created a “weaponization of the Equal Protection Clause’s original meaning.”<sup>3</sup>

### **Reasons for Concern**

Some scholars see an opening for the Supreme Court to allow a rationale for race-conscious admissions whose main purpose is to effectuate health equity. Former Secretary of Labor Tom Perez calls for the court to sanction a rationale that would base affirmative action policies on a goal of “increasing access to health care for the poor, underserved, and minority communities and progress in eliminating racial and ethnic disparities in health status.”<sup>24</sup> Perez notes that such an “access rationale” has a potential opening in the *Bakke* opinion itself, as the court “did not dismiss this [remedial] rationale out of hand” and explained that it may be constitutional when there is sufficient evidence to demonstrate that “a state’s interest in increasing access to health care in underserved communities ‘is sufficiently compelling.’”<sup>24</sup> Back in 1978, the court found no sufficient evidence, but, since that time, “a wealth of empirical data has emerged, demonstrating that increasing racial and ethnic diversity in the health professions will increase access to health care in underserved, minority communities,” and facilitate health equity.<sup>24</sup> Were such a rationale to be found by the court to be constitutional, it would likely have greater impact on physician workforce equity and health outcomes equity than the diversity rationale.

While it is theoretically possible that the Supreme Court could strengthen race-conscious admissions by sanctioning an access- or health justice-based rationale that satisfies the Equal Protection Clause, there is an actual risk that race-conscious admissions for any purpose could be eliminated by the US Supreme Court. The court is considering ruling on an affirmative action case filed against Harvard University,<sup>25</sup> in which the claimants allege that Harvard’s use of race in admissions violates the civil rights of some groups, particularly Asian Americans.<sup>26</sup> Nancy Zisk discusses the possibility of the court

overturning precedent for constitutionally sanctioned race-conscious admissions to “ban any consideration of race in admission[s decisions].”<sup>27</sup> In June 2021, the Supreme Court delayed taking up the Harvard case, requesting the Biden administration’s solicitor general to first weigh in. If the court does review the case, it will do so absent Justices Anthony Kennedy and Ruth Bader Ginsberg, whose presence on the court narrowly upheld race-conscious admissions in *Fisher II*.<sup>28,29</sup> While it is unknown what the court will do, the court’s 6-3 conservative majority composition could roll back race-conscious admissions somewhat, if not entirely. If Justice Stephen Breyer does not retire during a democratic administration (or Senate majority), a 7-2 conservative court is also possible.<sup>30</sup>

Harms caused by blocking race-conscious admissions are already well documented. In 1996, California voted to ban racial preference admissions at its state universities; this act decreased numbers of Black and Hispanic students in University of California schools.<sup>31,32</sup> One provost noted: “The quality of our education experience is absolutely affected, as well as our obligation to the citizens of this state.”<sup>26</sup> If the Supreme Court further erodes race-conscious admission considerations to a level analogous to the California ban, medical schools and the profession of medicine will need other means of averting homogeneity and perpetuating health inequity.

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### POLICY FORUM: PEER-REVIEWED ARTICLE

#### Does the AAMC's Definition of "Underrepresented in Medicine" Promote Justice and Inclusivity?

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##### Abstract

In 2003, the Association of American Medical Colleges reframed the concept *underrepresented minorities* as *underrepresented in medicine* (URiM), which defines representation in medicine relative to representation in the US population. Schools are permitted to construct URiM definitions, suggesting the importance of regarding them as fluid works in progress as US demographics evolve. Where medical school admissions processes consider applicants' backgrounds and experiences of identity minoritization to be valuable, progress toward inclusive representation has been made. This article considers whether school-based URiM definitions are ethically sufficient and canvasses possible next steps in realizing equitable representation in medical education.

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##### Introduction

Fostering student diversity in medical school admissions is fundamentally linked to the creation of a diverse health care workforce and is therefore a valuable endeavor, as underscored by Jordan Cohen, former president and chief executive officer of the Association of American Medical Colleges (AAMC): "Given that our primary obligation to society is to furnish it with a physician work force appropriate to its needs, our mandate is to select and prepare students ... who, in the aggregate, bear a reasonable resemblance to the racial, ethnic, and, of course, gender profiles of the people they will serve."<sup>1</sup> Rumala and Cason assert that increasing racial diversity is squarely "on the agenda" of US medical schools.<sup>2</sup> Creating a diverse workforce that reflects the demographic makeup of the communities served in turn has implications for learning. Whitla and colleagues found that medical students felt that having a diverse student body allowed them to "work more effectively with those of different backgrounds," enhanced classroom discussions, and "foster[ed] serious discussions of alternative



viewpoints.”<sup>3</sup> In programs instituting **cultural sensitivity training**, Guiton and colleagues found that the factor with the greatest impact on students’ perceptions of the experiences of minorities in health care was informal instructional interactions with peers from diverse backgrounds.<sup>4</sup> Thus, even as schools instituted cultural sensitivity curricula, the presence of students from diverse backgrounds had greater influence on their learning.

The benefits of diversity in patient care are well documented. In 2004, the Sullivan Commission on Diversity in the Healthcare Workforce released a report, *Missing Persons: Minorities in the Health Professions*, which called for an increase of persons from historically underrepresented and underserved backgrounds at all levels of the health care workforce.<sup>5</sup> The report stated that diversity among students entering the health professions “will improve the overall health of the nation.”<sup>5</sup> Echoing this claim, Thomas and Dockter argued that diversity in the health care workforce helps to reduce health disparities.<sup>6</sup> In a recent review, Gomez and Bernet concluded that diversity of health professionals can improve patient health outcomes, quality of care, and financial performance.<sup>7</sup> Despite evidence supporting the benefits of diversification of students entering medical school, the path to achieving this aim has been stalled at worst and meandering at best. This paper explores whether the AAMC’s shift from a definition of *underrepresented minorities* (URM) to a definition of *underrepresented in medicine* (URiM) is ethically sufficient for motivating justice and inclusiveness in medical education.

### **Diversification History**

One barrier to diversification in medical schools is that schools and society still grapple with overcoming present-day **legacies of US racism** and a history of discrimination.<sup>8</sup> Challenges to diversification in higher education persist, despite court decisions. The idea that student body diversity serves as a compelling interest in higher education and that the limited use of race in admissions is permissible was established in 3 Supreme Court cases: *Regents of the University of California v Bakke* (1978),<sup>9</sup> *Grutter v Bollinger* (2003),<sup>10</sup> and *Gratz v Bollinger* (2003).<sup>11</sup> These cases’ rulings have shaped practices in higher education institutions, including medical schools. *Bakke* specifically spoke to medical school admissions processes, and, while rejecting quotas for underrepresented populations, upheld the use of race as a factor in admissions decisions.<sup>9</sup> The AAMC and several national health professions organizations have aligned their policies accordingly.<sup>6,8</sup>

### **From Desegregation to Diversification**

With few exceptions, prior to 1960, African Americans and other minorities were de facto excluded from enrolling in US medical schools.<sup>8</sup> Amidst the desegregation movement of the 1960s, higher education institutions established policies, programs, and practices that sought to achieve increased student diversity.<sup>6</sup> The AAMC’s definition of *underrepresented minority* (URM) as referring to “Blacks, Mexican-Americans, Native Americans ... and mainland Puerto Ricans”<sup>12</sup> informed schools’ development of initiatives to recruit and prepare URM students for medical school.<sup>6</sup> In 2003, the AAMC reframed URM as *underrepresented in medicine* (URiM), and, in 2004, following the *Grutter v Bollinger* ruling, clarified that URiM refers to “racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population.”<sup>12</sup> This terminological change was implemented in response to changes in racial and ethnic categories used by the US Census Bureau and was intended to provide schools with the flexibility to use local demographics to foster diversity.<sup>13</sup>

Virginia Commonwealth University School of Medicine (VCU SOM) provides a case example of how the AAMC's definitional change from URM to URiM influenced admissions. VCU SOM used 2010 US Census data to determine which populations in central Virginia are URiM. The analysis resulted in VCU SOM retaining the 4 demographic groups delineated in the original URM definition but prompted deeper exploration of and conversations about the school's admissions practices, which led to VCU SOM's use of additional student demographics (eg, socioeconomic status) to inform VCU SOM class diversification.

### **Contextualizing Justice and Inclusion**

Considering race in admissions in higher education prompts the question: Who deserves a place in higher education institutions?<sup>14</sup> According to AAMC data, 53 030 people applied for 22 239 places in 155 US medical schools during 2020-2021.<sup>15</sup> Of concern has been the decline in the representation of Black men. As noted in the AAMC report, "Altering the Course: Black Males in Medicine," between 1978 and 2014, the number of Black men applying to medical school dropped from 1410 to 1337, and the number of Black men enrolling in medical school dropped from 542 to 515.<sup>16</sup> It is worth considering whether the AAMC's definitional shift from URM to URiM played a role in Black men's declining enrollment, since justice should be viewed within the social mission framework in which medical schools endeavor to motivate **admissions equity**,<sup>17</sup> consistent with the AAMC's assertions that diversity enhances students' learning and improves health care for all.<sup>6</sup> Yet, as Razack and colleagues note, there is a tension between inclusive and exclusive medical school admissions processes,<sup>18</sup> which should prompt deeper ethical analysis of how the URiM definition increases access to medical school, both generally and for historically underrepresented groups. Broadening URM to URiM benefits all applicants, but does URiM promote justice and inclusion?

The AAMC's narrow focus on 4 racial and ethnic identities defining of URM, though accepted at that time, risked marginalizing applicants minoritized due to socioeconomic status, disability, rural background, or identifying as a sexual or gender minority. The AAMC's shift to URiM arguably helps to mitigate further marginalization of some demographic groups, and it accords current trends to extend norms of diversity beyond race to include plural and intersectional identities. In addition, the shift to URiM led to targeted medical school recruitment initiatives, such as pipeline programs (eg, the federally funded Health Careers Opportunity Program)<sup>19,20</sup>; more inclusive admissions practices, such as the holistic review of candidates' dossiers<sup>6,21</sup>; and targeted retention efforts. These efforts were concomitant with the federal government and philanthropic organizations acting to increase access to higher education for persons with minoritized and underrepresented identities. The net effect of these efforts has been a more diversified medical student body, an increase in co-learning, and a richer exchange of ideas that supports the aim of inclusivity. The percentage of URiM medical school matriculants rose from 11.3% in 1980 to 13.7% in 2016,<sup>22</sup> and, though this trend is sluggish, it is in the right direction and offers good reason to promote additional funding and support for URiM outreach and inclusion.

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## AMA Journal of Ethics®

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### MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

#### What Does It Mean for Medical School Admissions to Be Socially Accountable?

Mark C. Henderson, MD, Charlene Green, PsyD, and Candice Chen, MD, MPH

##### Abstract

Health care workforce diversity is a critical determinant of health equity and the social mission of medical education. Medical schools have a social contract with the public, which provides significant financial support to academic medical centers. Although a focus on diversity is critical in the admissions process for health professions schools, most US medical schools have failed to achieve racial-ethnic or economic diversity representative of the general US population. This article discusses limitations of holistic admissions, structural challenges for diverse learners in medical education, and how to implement socially accountable admissions.

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##### Diversity and Equity

Increasing access to health care, establishing a foundation of cultural humility, and furthering systems-level changes are all needed to address health disparities in our country. Health care workforce diversity is another critical determinant of health equity. Black, Hispanic or Latinx, and Native American health professionals are more likely to practice in underserved communities<sup>1,2</sup>—an important factor in improving access, given that 83 million people in the United States live in health professional shortage areas.<sup>3</sup> Student and faculty diversity, as well as positive interracial interactions, increases medical students' self-rated cultural competence and decreases their implicit bias.<sup>4,5</sup> A more diverse health care workforce—along with a culture of equity and inclusion—also brings the diversity of perspective, experience, and expertise needed to address the pervasive problem of structural racism in health care and, with it, health inequities. Although the responsibility to diversify the workforce is shared by all schools, it has been effectively accomplished only by a subset of schools, including historically Black colleges and universities and a few public institutions that truly embrace this mandate.<sup>6,7</sup>

This mandate is part of each school's social mission, or the contribution of an institution's programs, graduates, faculty, and leadership in addressing the health disparities of society.<sup>8</sup> When US medical schools are evaluated using a social mission

metric (eg, the percentage of graduates from racial and ethnic groups underrepresented in medicine [URiM] or who are working in health professional shortage areas or practicing primary care), most of those ranked highly by *US News and World Report* (USNWR) and in terms of National Institutes of Health funding are in the bottom quartile.<sup>7</sup> Over the past 2 decades, as US medical school enrollment has expanded and the population has become more diverse, the percentage of entering medical students from URiM groups, a key metric of social mission, has fallen from 15% to 13%.<sup>9</sup> Even in the most diverse states, the physician workforce does not adequately reflect the population.<sup>10</sup> This lack of representative diversity is itself a product of structural racism and of the culture and systems that perpetuate racial inequality. It is also fundamentally an inequity of economic opportunity. In 2017, 51% of entering US medical students came from the upper quintile of parental income and just 5% from the lowest quintile,<sup>11</sup> revealing a striking economic disparity that has not changed significantly for decades.<sup>12</sup> The health care professions that struggle most with diversity are higher-income professions (eg, physicians, dentists, advance practice clinicians).<sup>13</sup>

Health professions education institutions have an overarching social and ethical responsibility to both help dismantle the **systems that perpetuate racism** and advance policies that will right past wrongs, particularly in their local communities. To become socially accountable, health professions schools will need to change multiple facets of their institutions: their investments in pathway programs and community engagement; their curricula, culture, faculty, and leadership; the metrics they use to predict and ultimately evaluate student success; and their lack of attention to how diversity affects health outcomes. However, the admissions process remains the gatekeeper of access to the profession. In this article, we discuss the limitations of holistic admissions, the challenging environment of medical education for diverse learners, and tools for implementing socially accountable admissions processes, which lay a critical foundation for achieving health professions diversity.

### Limitations of Holistic Admissions

National calls for increasing diversity in medicine are not new,<sup>14,15,16,17,18,19,20</sup> which raises the question: Why haven't we made more progress? In 2010, the Association of American Medical Colleges (AAMC) established "holistic" review practices to help medical schools make fundamental changes to their admissions criteria, align those criteria with institutional mission and goals, and realize the benefits of diversity.<sup>21</sup> Holistic review requires consideration of how each applicant might contribute value as a medical student and future physician by attaching value to lived experience (E) and personal attributes (A) apart from traditional metrics (M), such as grades and Medical College Admissions Test® (MCAT) scores. The EAM framework is flexible and seeks to support each institution's mission, particularly as it pertains to diversity and inclusion. However, there is wide variation in its implementation and little accountability for outcomes. Scores on the MCAT—a convenient and psychometrically sound instrument<sup>22,23</sup>—are influenced by a host of structural influences, including limited academic opportunities and resources reaching as far back as elementary school for students from minority communities.<sup>24</sup> Unfortunately, **MCAT scores** continue to play a key role in medical school admissions decisions, effectively keeping many students of color from becoming physicians,<sup>6</sup> despite little evidence that such scores predict clinical performance beyond a weak-to-moderate association with scores on other multiple-choice examinations—namely, the steps of the US Medical Licensing Examination®.<sup>25</sup> MCAT scores also remain part of the influential USNWR rankings, creating an additional

incentive for schools to continue to place outsize importance on such scores despite their limited predictive value for important workforce or social outcomes.

Attaching greater value to an applicant's attributes and experiences, the other 2 components of the AAMC's holistic (EAM) rubric, makes intuitive sense; the problem is how to operationalize this strategy. Considering personal attributes, such as race and ethnicity—factors we know correlate with important workforce outcomes<sup>1,2</sup>—is prohibited by **anti-affirmative action** statutes in several states, including California, Texas, and Washington.<sup>26</sup> Even in states without such laws, the threat of being sued is likely “chilling” efforts to change admissions diversity criteria.<sup>27,28</sup> Evaluating applicants' experiences can also be quite challenging, especially when access to advising, research, and clinical health care experiences is limited by structural and environmental influences, as the COVID-19 pandemic has dramatically illustrated. Access to opportunities is often just the beginning; many URiM learners need to juggle work or family responsibilities with academics.<sup>29</sup> In effect, the deck is stacked against them. To be successful, these students need time, resources, and access to academic development opportunities. How can schools possibly evaluate these learners holistically without accepting these challenges as part of their narrative?

### **Welcoming Diverse Learners**

Once admitted to medical school, URiM learners enter less supportive social environments and less positive learning environments and are subject to discrimination and racial harassment at higher rates than their counterparts.<sup>30</sup> Most medical schools sorely lack sufficient minority faculty representation.<sup>31</sup> Faculty members influence the learning experience of all students, but, for minority students, educators who affirm their individuality and values might make the difference between success and failure.<sup>32</sup> Faculty with shared lived experience and understanding of the structural barriers faced by URiM students are more likely to provide the compassion and support needed for these students to succeed. The medical education environment is also rife with grading disparities<sup>33,34,35</sup> and lack of access to professional opportunities, including awards and honors,<sup>36</sup> leading to underdevelopment of URiM learners. In the clinical environment, these students not only witness systemic racism but also may unwittingly participate in it or need to remain silent to avoid putting a grade in jeopardy, again shouldering their community's disproportionate burdens.

Like minority faculty,<sup>37</sup> underrepresented students face additional “taxes” in medical education.<sup>38</sup> While frequently given opportunities to serve on committees, diverse learners are burdened by a disproportionate responsibility to improve the institutional climate and fix the broken system that adversely affects them. They shoulder greater financial stress, feelings of not belonging, microaggressions, stereotype threat, and absence of faculty mentors. Lack of underrepresented faculty likely has an even more profound effect on patient care for communities of color.<sup>39</sup> Unfortunately, the investment and disruption required to nurture and retain learners from marginalized communities may discourage institutions from making necessary structural changes to the learning environment. Bluntly speaking, continuing to educate the economically privileged is easier and cheaper, at least in the short term.

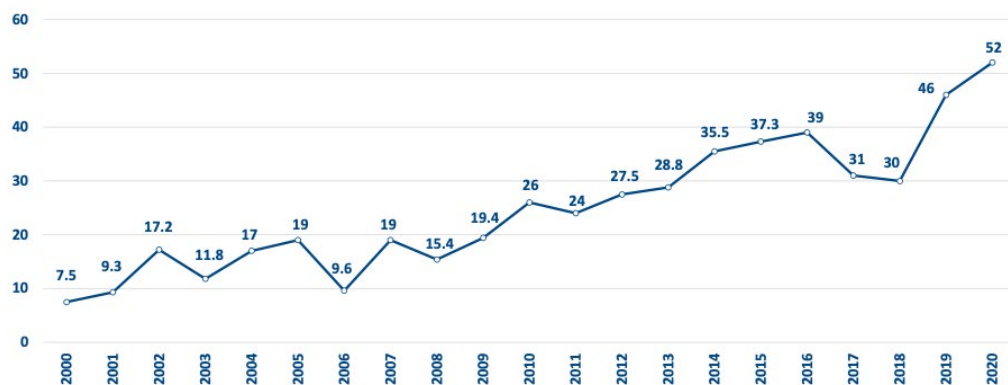
### **Social Accountability in Admissions**

Social accountability refers to the obligation of medical schools to direct their education, research, and service activities toward addressing the priority health concerns of the community, region, or nation they have a mandate to serve.<sup>40</sup> US medical schools have

a social contract with the public, which provides significant financial support to academic medical centers for education and training. States provide direct funding to public medical schools, and the federal government provides student loans, grants for education and research, and graduate medical education support to teaching hospitals.<sup>41</sup> To produce the health care professionals and medical researchers that society needs, medical schools must change admissions practices, particularly the emphasis on metrics such as the MCAT and USNR rankings.

In 2006, the University of California Davis School of Medicine (UC Davis) began implementing a series of structural changes to admissions to enhance diversity and better meet its social mission, resulting in progressive increases in enrollment of URiM students and better representation of California's population (see Figure). These changes included having admissions personnel participate in the AAMC holistic admissions workshop, appointing new associate and assistant deans of admission, implementing multiple mini-interviews, enhancing diversity of admissions personnel, actively involving students in the admissions process, and developing an admissions mission statement that committed to matriculating a class of future physicians who would address the diverse health care workforce needs of the region. UC Davis also developed a socioeconomic disadvantage score,<sup>42</sup> which systematically attaches value to lived experiences of economic or educational disadvantage, shifting admissions criteria away from grade point average and MCAT scores to a proxy for grit, resilience, and perseverance. More generally, schools' emphasis on alternative metrics, including multiple mini-interviews and other socially conscious criteria, might result in greater economic and racial-ethnic diversity among medical students.<sup>42,43</sup> In 2020, 35% of entering UC Davis medical students qualified for the AAMC Fee Assistance Program,<sup>44</sup> reflecting significant financial need, compared to 13% of the general pool of US applicants.

**Figure.** Percentage of UC Davis School of Medicine Matriculants From URiM Groups, 2000-2020<sup>a</sup>



<sup>a</sup> Data from UC Davis School of Medicine Admissions Office records; race/ethnicity tabulated from American Medical Colleges Application Service applications. URiM groups include students who identify as American Indian/Alaskan Native, Black/African American, Hispanic/Latinx, Native Hawaiian, or Filipino.

With a mission that explicitly prioritizes needs of the community, institutions can then partner with those communities to cultivate the next generation of clinicians. By working with local community colleges and academic enhancement programs,<sup>45</sup> providing funding for community-based prehealth initiatives, and bridging otherwise siloed pathway programs, several institutions are attempting to cultivate “hometown”



physicians who are likely to return to serve their communities.<sup>9,46,47,48</sup> Other successful strategies for **addressing health workforce shortages** include selecting students from communities that have the greatest health needs<sup>49,50</sup>; locating programs in or near the communities they serve,<sup>51</sup> particularly in primary care settings; integrating social determinants of health into the curriculum; and emphasizing a commitment to public service and social accountability across the institution.<sup>52</sup>

Ultimately, social accountability must be an institutional priority or mission area in addition to education, research, and clinical care. While policies related to an inclusive campus climate are ubiquitous, accountability is lacking. On the road to social accountability, we must start with soul searching, going beyond course evaluations and learner surveys to critically examine health outcomes and equity measures within our institutions, including how diverse learners and physicians affect patient care outcomes. We must share these outcome measures transparently with community partners and work on solutions together. We must also make investments in financial aid, scholarships, faculty development, antiracism training, and robust community partnerships. As a medical community, we must commit to empowering, supporting, and retaining diverse learners to become future leaders in health care and equity champions.

### Conclusion

While calls for increasing representation in medicine are nearly universal, medical schools have lost ground in terms of diversity and inclusion, thereby failing to achieve their social mission.<sup>7</sup> Nowhere is the social mission more critical than in the admissions process or entryway to health professions schools. Unfortunately, holistic admissions efforts may be misdirected, resulting in short-term gains in diversity statistics without fundamentally changing the institutional culture and local health outcomes. To achieve true health equity, medical schools and their affiliated health systems must commit to helping dismantle the structural impediments facing diverse learners and patients. Doing anything less makes them complicit in propagating the stark injustices of the US health care system.

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### MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

#### How to Eliminate a Deficit-Centered Mindset About Medical Students of Color

Martha Elks, MD, PhD, Zita Lazzarini, JD, MPH, and Cinnamon Bradley, MD

##### Abstract

Approaches to responding to racial and ethnic health inequity in the United States have had limited impact over the past 40 years. Efforts to increase the number of medical students of color are undermined by hyperfocus and overreliance on and misinterpretation and misuse of standardized examination scores. Structural racism and persistence of deficit-focused interventions undermine appreciation of the value that students and physicians with minoritized identities bring to medicine and to US health care's systemic capacity to motivate equity.

##### Diversity Motivates Equity

Although the US health care system is characterized by high technology and high resource investment, the United States has the lowest life expectancy and highest infant mortality of 11 of the highest-income nations.<sup>1</sup> Health inequity contributes to this lag, and increasing the number of physicians in training from **groups underrepresented in medicine** (URiM), such as African Americans/Blacks, Latinos, and Native Americans, is key to promoting health equity.<sup>2,3,4</sup> Our nation cannot possibly achieve its potential without responding to health needs in underserved communities, addressing social and political determinants of health (eg, **structural racism**), and increasing physician workforce diversity.

Over the past 40 years, several initiatives have been undertaken to increase the number and proportion of URiM physicians (and physicians in training), including—but not limited to—targeted recruitment, summer support programs, general academic support, and holistic admissions processes.<sup>5</sup> In this article, we will focus on the limitations posed by the current approach to recruiting, training, and assessing medical students and physicians based on overreliance on and misinterpretation of standardized tests and a corresponding lack of appreciation for the importance of diverse views in addressing the health of our nation.

##### Overreliance on Testing

Medical students and physicians in training must master a constantly expanding knowledge base in order to be effective practitioners. Theoretically, standardized examinations, such as the Scholastic Aptitude Test® (SAT) and the Medical College Admissions Test® (MCAT), are intended to assess students' capacity and readiness for

the next stage of education. The MCAT, in particular, aims to test both knowledge and critical thinking, which many have identified as foundational to medical education success.<sup>6</sup> In reality, however, standardized tests' results perpetuate inequity and bias. Although standardized testing was developed to expand the applicant pool beyond the financially privileged,<sup>7,8</sup> family income remains the best predictor of SAT scores.<sup>9</sup> Income and privilege lead to better access to education, guidance, and preparation materials and also afford more study time, all of which are key to higher scores on standardized tests. The impact of income disparities on test scores highlights that standardized tests are one feature of structural racism that systematically disadvantages minoritized students and students with low income. Academic performance metrics (eg, scores on standardized tests) have been recognized as barriers to the recruitment, matriculation, and progress of URiM learners. Data from the Association of American Medical Colleges (AAMC), for example, show that average MCAT scores for URiM applicants and matriculants during the academic year 2020-2021 were lower than those from groups already well represented in medicine.<sup>10</sup>

The use of successive tests to predict performance—the SAT or American College Tests for college, the MCAT for medical school, the United States Medical Licensing Examination® (USMLE) Step 1 and Step 2 clinical knowledge (CK) for residency and Steps 1 to 3 for licensure, and written subspecialty exams for board certification—could very well be misguided. Careful reviews of revisions to the MCAT, for example, demonstrate that MCAT scores are the single best predictor of performance on subsequent standardized tests, especially Step 1,<sup>11,12,13,14</sup> and that Step 1 scores, in turn, are the single best predictor of performance on subsequent examinations, including Step 2 CK, Step 3, residency in-service examinations, and board certification examinations.<sup>13</sup> Nevertheless, in these studies, in which correlations between scores on the tests range from 0.5 to 0.6, any one predictor accounts for only about 25% to 30% of the variance in scores on another test. Test scores are thus globally but not precisely predictive of success in medicine, and overemphasizing their importance is unjust. Data from studies of MCAT scores are revealing. While first-time fails on Step 1 are rare for those with higher MCAT scores,<sup>13</sup> the majority of Step 1 test takers with MCAT scores in the 9th percentile or above pass.<sup>13</sup> Moreover, as discussed later, MCAT scores do not predict physician excellence.

### **Better Clinicians Is the Goal, Not Higher Scores**

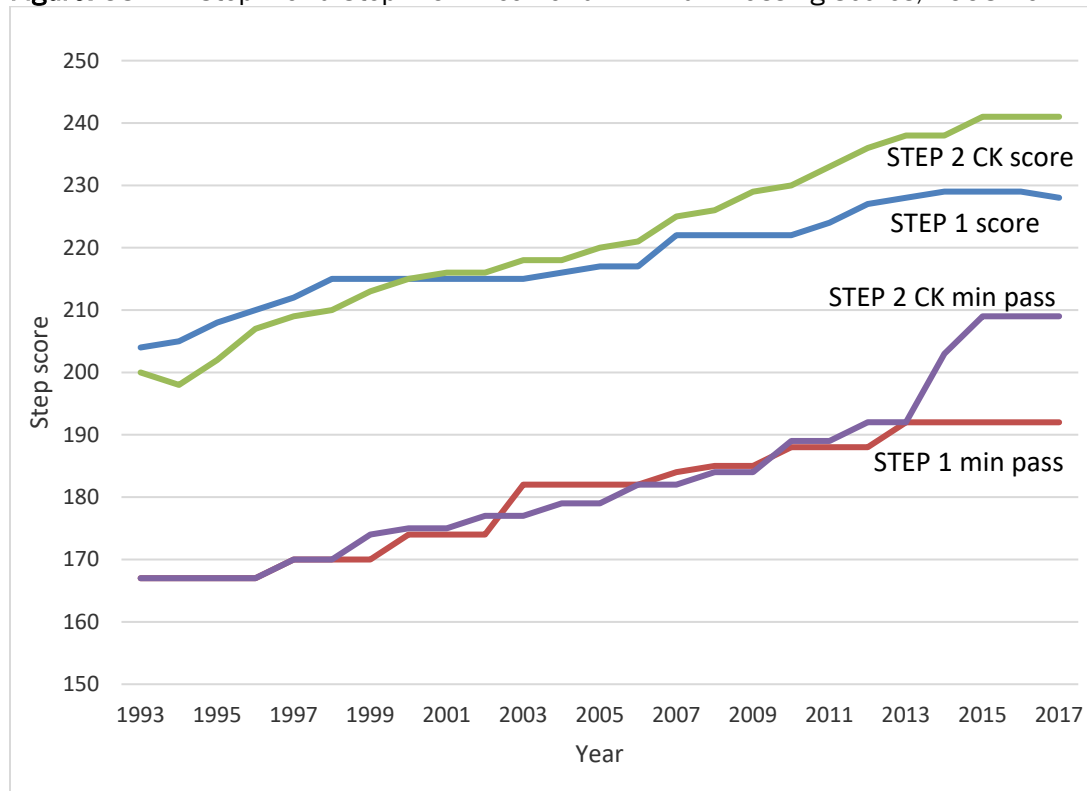
Tests have an unintended side effect of diverting the energies of learners and faculty into “chasing the numbers” rather than focusing on foundational concepts and competencies needed by practicing physicians. Mounting evidence suggests that competitive entry into US medical schools prompts a “game of scores” in which information is learned merely to earn scores that open up the next opportunity, not because it is germane to the goal of serving patients well. As the number of medical school applicants per seat has grown, the average entering student MCAT score has increased.<sup>12</sup> Yet 42% of medical school applicants from 2018 to 2020 had MCAT scores and grade point averages high enough to be accepted into medical school.<sup>13</sup>

Since establishment of the USMLE licensure sequence 30 years ago, there has been intense inflationary pressure on examinees' scores. Initially, the mean of each step was set at 200, with a standard deviation of 20; a minimum passing score was 167. Over time, passing scores for all parts of the examination have been periodically reassessed, with the current minimum passing score for Step 2 CK being 209, which exceeds the mean set 30 years ago (see Figure). This inflationary trend means there are physicians



practicing today whose examination score is no longer regarded as a passing score. Ideally, a score on a high-stakes test should be meaningful as a measure of mastery of knowledge and not in relation to scores of other examinees.

**Figure.** USMLE Step 1 and Step 2 CK Mean and Minimum Passing Scores, 1993-2017<sup>a</sup>



<sup>a</sup> Data from US Medical Licensing Examination, 1993-2017.

In his book, *Are We Getting Smarter? Rising IQ in the Twenty-First Century*,<sup>8</sup> James Flynn argues that we are getting better at “teaching to the test,” with the result that average scores on standardized tests of abstract problem-solving skills are rising without a corresponding increase in intrinsic intelligence. Some medical schools, recognizing the impact that cultural and educational environments have on scores on standardized tests, have instituted reforms that provide a cautionary lesson about underestimating students’ readiness or capacity for learning or for assuming professional responsibility on the basis of test scores. For example, after the Morehouse School of Medicine instituted an inclusive and supportive learning environment, the range of 2009-2014 graduates’ USMLE Step 1 scores “shift[ed] a full standard deviation compared with the predicted range based on their MCAT scores.”<sup>15</sup> This finding challenges the view of MCAT scores as a fixed and linear predictor of academic performance. Because many minoritized students lack supportive learning environments, structural racism could explain the observed differences between mean scores of minoritized (excluding Asian) applicants and White applicants.<sup>13</sup>

It is difficult to measure the relationship between standardized test scores and physician quality (however that is defined) due in part to the lack of metrics for physician quality and the fact that some desirable outcomes, such as specialty choice and site of practice, are not predicted by available metrics. As a result, medical schools are

excluding some applicants on the basis of performance on exams that has not been shown to be related to desired final outcomes—such as rural practice or primary care.<sup>16</sup> Thus it seems foolhardy for any medical school admissions committee to **overemphasize MCAT performance**.

### Addressing Underrepresentation

In 40 years of only partial success in increasing the number of URiM students and physicians, many recruitment and retention programs have focused on narrowing score gaps rather than on recognizing and valuing the insights, experiences, wisdom, and skills that physicians with minoritized identities bring to medicine. In its blindness to structural racism, American academic medicine has failed to identify, value, and incorporate the knowledge, perspectives, and ways of being in the world by a sufficiently diverse array of people who have much to offer professions and patients. Interventions to increase representation of URiM groups have not included a broad-based understanding of characteristics that not only position medical students for success in school but also contribute to good health outcomes. We know how to address structural racism<sup>17</sup>; certainly, awareness and recognition of it are key first steps. Holistic admissions processes are important.<sup>18,19,20</sup> Addressing structural racism at multiple levels—including eliminating barriers to educational achievement throughout the educational pipeline and shifting attention from “deficits” to recognizing each learner’s gifts and strengths—is vital. We also must expand the set of tools we use to assess physician service and performance in responding to individuals’ and communities’ health needs.

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## AMA Journal of Ethics®

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### MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

#### Why Disability Must Be Included in Medical School Diversification Efforts

Nicole D. Agaronnik, Shahin A. Saberi, Michael Ashley Stein, JD, PhD, and Dorothy W. Tolchin, MD, EdM

##### Abstract

Individuals living with disabilities are underrepresented in the physician workforce, despite benefits of inclusion. This article describes how both ableism in admissions processes and expectations set by technical standards can perpetuate harm. The authors advocate for active attention to disability diversity and equity in medical school admissions.

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##### Disability Is Part of Diversity

Building a diverse physician workforce that reflects the demographic characteristics of the US population can improve access to quality care.<sup>1</sup> As noted by former American Medical Association president, Barbara McAneny: “One requirement to advance health equity is to promote greater diversity among medical school applicants and enrollees.”<sup>2</sup>

Approximately 61 million Americans (1 of 4 adults)<sup>3</sup> and 1 billion individuals worldwide have disabilities,<sup>4</sup> composing what the United Nations describes as the “world’s largest minority.”<sup>4</sup> Yet, notably, patients with disabilities receive substandard health care and unequal access to health care services.<sup>5</sup> This inequity has prompted efforts to improve the quality of disability training in medical education, including initiatives that highlight ways in which socioenvironmental factors shape the disability experience.<sup>6,7,8</sup> Greater representation of clinicians with disabilities in the physician workforce could amplify these efforts by dispelling the ableism<sup>9</sup>—the disability-based stigma that results in discriminatory attitudes and behaviors—entrenched in the medical profession. The infusion of the disability perspective could also foster the humility and shared experience necessary to merge the disability studies and medical approaches to disability,<sup>10</sup> in turn bolstering a more enlightened overall approach to respectful inclusion in medicine of both clinicians and patients with disabilities.

Despite potential **benefits of increasing representation** of people with disabilities in the physician workforce, however, students with disabilities remain underrepresented in US medical schools. In 2019, only 4.6% of students in US allopathic medical schools reported disabilities.<sup>11</sup> Students with disabilities (including physical or sensory disabilities, chronic illness, mental illness, and others) encounter multiple barriers to pursuing medical education—from the admissions process through enrollment and application to residency. Barriers include erroneous assumptions about their ability to serve as physicians, challenges navigating disclosure, and **inadequate accommodations**.<sup>12</sup> Barriers can also differ depending on a student's specific type of disability (eg, students with certain neurodiverse identities may experience profoundly different barriers and degrees of stigma than students with physical disabilities).

### **Ethical Benefits**

Increasing the number of medical students with disabilities, who in turn would contribute to a more representative physician workforce, can help the medical community align its actions with its ethical imperatives of beneficence, nonmaleficence, and justice. Patient-physician racial concordance leads to greater patient satisfaction and use of health care by patients from racial minority backgrounds.<sup>13,14</sup> Concordance in disability status might similarly foster greater use of health care and satisfaction in the patient-physician relationship, especially as it relates to clinician understanding of patient needs for accessible care. Patient-physician disability concordance could also reduce discriminatory assumptions about patients' lives and needs and lead to reduced disparities and better health outcomes,<sup>15</sup> at once promoting both beneficence and nonmaleficence. Moreover, in accordance with the principle of justice, patients should have fair access to clinicians who share aspects of their identity, including disability status. Physicians with disabilities, as stakeholders within the profession, can also foster increased justice for patients with disabilities by using their uniquely informed perspective to attune colleagues to considerations related to decision making, resource allocation, applicable laws, access, and inclusion. Importantly, attention to these factors can improve quality of care for all patients and workplace quality for all clinicians, not just patients and clinicians with disabilities.

Given the benefits at all levels of the health care system of including disability in diversity efforts—and given that admission to medical school is the gateway for clinicians to enter the profession—we focus next on barriers to an accessible, equitable admissions process for applicants with disabilities. We share observations from current medical students and provide recommendations for enhancing diversity in medical school admissions.

### **Students' Experience of Admissions Processes**

During informal conversations, students who identify as having disabilities permitted the first coauthor (N.D.A.) to quote them in what follows. Students shared their experiences applying to medical schools across the United States; their examples evidence alarming ableist tendencies in admissions processes and raise concerns that applicants with disabilities are being disproportionately turned away. The students also offered recommendations about how schools can respond to ableism and foster more equitable admissions processes. Currently, there is no uniform interviewer training on how to approach disability during admissions interviews. A recent study showed implicit racial bias in admissions<sup>16</sup>; our students' experiences suggest the existence of disability bias, too, which is manifest in inaccurate assumptions about disability and implicit, inequitable demands that interviewees disclose personal health information.

One student with a disability described a conversation with an admissions officer: “He highly recommended that if I receive any interview invitations, if at all possible, I should wear the prosthesis rather than come in the wheelchair.” In this student’s experience, several admissions officers seemed to have reservations about students with disabilities pursuing medical training: “It [a disability] was a huge deal to them and a complete non-issue to me.” While students with non-visible disabilities could choose to “pass” or hide their conditions, students with non-visible disabilities also shared concerns about bias, as well as challenges with disclosure. Another student related: “I went to great lengths to hide my disability.... I was certain that if my mental illness were disclosed it would affect my admissions prospects.” Concerns about disclosure and subsequent misperceptions make it challenging to describe living with disability in the application essay—even if the experience itself may have sparked an interest in medicine. The same student noted: “I also shied away from meaningful topics on my admissions essays that would have better represented my identity and values.”

Risks of disclosure make it difficult to discuss important topics, such as accommodations, to which a student might be legally entitled. As noted by one interviewee: “I had to choose a med[ical] school with almost no knowledge of how I would be supported after enrolling.” A student whose personal statement explored how their condition influenced their interest in medicine describes one interview as peppered with pointed, inappropriate clinical questions about their personal health. Specifically, the interviewer inquired about the severity of the student’s condition and whether a colleague was the student’s clinician. Although content included in an applicant’s personal statement is “fair game” for discussion during an interview, it should be acknowledged that interview power dynamics can make difficult for a student to insist that personal health disclosure boundaries are worthy of respect.

### Technical Standards

Attitudinal **barriers faced by applicants with disabilities** can sometimes be masked by schools’ purported compliance with “neutral” technical standards, which outline outdated expectations for abilities and skills required for admission to medical school. Guidelines for technical standards were set forth by the Association of American Medical Colleges (AAMC) in 1979 and were updated in 1993 after passage of the Americans With Disabilities Act.<sup>17</sup> These guidelines delineate 5 categories of necessary abilities and skills to be present in admitted medical students: sensory, communication, motor, conceptual/integrative/quantitative, and behavioral/social.<sup>17</sup> While these guidelines were developed with the aim of protecting service user safety, they were vague, did not offer evidential support, and were not completely prescriptive, which led to heterogeneity among the technical standards developed and followed by individual medical schools.<sup>18,19</sup> Anecdotally, from our collective experience, the resultant variability in language, concepts, and presentation in online admissions materials has also led to confusion and frustration among applicants with disabilities.

Technical standards can also be unnecessarily exclusionary toward applicants with disabilities. In its 1979 report, the AAMC described a need to ensure that the medical degree remained a “broad, undifferentiated degree attesting to the acquisition of general knowledge in all fields of medicine and the basic skills requisite for the practice of medicine.”<sup>20</sup> This desire to produce the “undifferentiated” graduate discriminates against applicants with disabilities. For example, in *McCulley v University of Kansas School of Medicine*, a medical student was denied admission because of her inability to meet the program’s motor technical standard of performing cardiopulmonary

resuscitation (CPR) chest compressions without accommodations.<sup>21</sup> There are a number of medical specialties in which CPR is not a principal duty, and reasonable accommodations, such as an assistant for physical maneuvers, would allow for adequate care. The undifferentiated nature of the medical degree positively ensures that medical students receive access to a breadth of knowledge pertaining to the medical field. In practice, however, applicants with disabilities who are able to pursue some medical specialties face unfair discrimination.

### Recommendations

Students who shared the experiences just described also offered recommendations, for example, to “advertise disability and mental health programs” in admissions materials distributed on interview day. One student stated that it would help students answer pressing questions about reasonable accommodations to “offer students the option of speaking with a representative of the disability and inclusion office, but don’t directly ask about student disability.” We recommend that well- and uniformly trained disability officers be made available to respond to applicants’ questions about accommodations before interviews and to act as a resource for admissions committee members’ questions about disability and accommodations.

To further improve equity in admissions for applicants with disability, institutions should uniformly require training for admissions officers that explicitly acknowledges biases associated with disability and how to address them. For example, even starting with an Implicit Association Test could heighten awareness of the biases that can affect admissions decisions.<sup>16</sup> Institutions should articulate the value of **enriching every medical student class** with students with disabilities. Moreover, to demonstrate a commitment to embracing students from the widest possible range of backgrounds, experiences, and perspectives, schools should consider revising technical standards to allow for more inclusive language while continuing to ensure the medical profession’s duties of probity and patient safety. For example, changing “ability to perform CPR” to “ability to *direct or perform* CPR” could reduce discrimination toward applicants with disabilities.<sup>22</sup>

There is an ethically urgent need to increase the number of medical students with disabilities, both to provide fair access to an underrepresented minority and, ultimately, to improve care for patients with disabilities. The barriers described in this article suggest specific ways to facilitate greater representation of clinicians with disabilities in the physician workforce. Explicitly including disability as a valued part of diversity would help dispel ableism, limit inaccurate assumptions, and better promote beneficence, nonmaleficence, and justice in health care.

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### MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

#### How Should We Build Disability-Inclusive Medical School Admissions?

Lisa M. Meeks, PhD and Christopher Moreland, MD, MPH

##### Abstract

Students with disabilities add rich diversity to medical education and help motivate health equity. Unjust obstacles faced by many of these students along pathways to medicine begin during medical school admissions. Deeply embedded ableist notions of what it means to be a physician keep archaic practices in place that serve as systemic barriers to the admission of members of this population. This article summarizes the prominent obstacles for applicants with disabilities and suggests ways in which thoughtful, inclusive admission policies and practices can ultimately contribute to a clinical workforce that is more appropriately diverse and prepared to provide just and patient-centered health care.

##### Diversity and Disclosure

Physicians of the 21st century need the skills and knowledge that are fostered in diverse learning and work environments.<sup>1</sup> Research shows that diversity contributes to creativity and development of problem-solving skills, with more diverse groups outperforming more homogeneous ones,<sup>2,3,4</sup> a fact that should influence how we select members of medical school classes. In 2016, 25.7% of the US adult population included persons with a disability.<sup>5</sup> Medical students with disabilities, training among diverse faculty and colleagues, would positively contribute to the preparedness of physicians and their colleagues to meet the unique needs of patients with disabilities, facilitate shared decision making, and contribute to innovation—and do so with greater empathy.<sup>6,7,8,9,10,11,12,13,14</sup> Despite ongoing inclusion efforts,<sup>15</sup> the numbers of medical students<sup>16,17,18</sup> and **physicians with disabilities** remain small,<sup>19</sup> and unjust obstacles persist for persons with disabilities looking to matriculate in medical school.<sup>20,21,22,23,24,25,26,27,28</sup>

This article summarizes prominent obstacles for medical school applicants with disabilities and suggests ways in which thoughtful, inclusive admission policies and practices can ultimately contribute to a clinical workforce that is more appropriately diverse and prepared to provide just and patient-centered health care.

##### Underrepresented in Medicine

US legal protections for persons with disabilities preclude monitoring progress in inclusive admissions, given the bar on preadmission inquiry into applicants' disability

status.<sup>29</sup> A downside to these protections is that monitoring how many medical school applicants with disabilities become matriculants with disabilities is not easy. We can, however, seek to understand the admissions experiences of persons with disabilities through retrospective analyses of school-centered<sup>30</sup> and trainee-physician<sup>15</sup> research and via commentaries.<sup>8,9,10,11,12,13,14,31</sup> While we cannot monitor the number of candidates with disabilities who are accepted to medical school, we can monitor the retention of students with disabilities who matriculate.

Among those who do matriculate, not all will feel safe disclosing their disabilities. An anonymous Association of American Medical Colleges (AAMC) survey of graduating students revealed that 7.6% identified as having a disability,<sup>32</sup> yet data collected directly from medical schools show that only 4.6% of students in MD (doctor of medicine) programs and 4.3% of students in DO (doctor of osteopathic medicine) programs disclose their disability to the school and request reasonable accommodations.<sup>16,18</sup>

The pathway from education to practice is murky, given the dearth of information. One recent study of emergency medicine resident physicians found that 4.1% disclosed a disability and requested accommodation.<sup>33</sup> The number attenuates along the pathway from education to practice, with recent data showing that only 3.1% of physicians self-identify as having a disability.<sup>19</sup> These data suggest that educational and professional development pathways are fraught with barriers,<sup>19,33,34</sup> despite legal protections and reasonable accommodations required under the Americans with Disabilities Act (ADA).<sup>35</sup> One might ask: If including individuals with disabilities carries such promising benefits, why are so few individuals with disabilities in medicine? Identifying barriers to their admission to medical school is key.

### **Ableism Undermines Access**

Long before people with disabilities apply to medical school, it's likely that many of them experienced formal education accompanied by informal lessons on how to navigate disability-related obstacles, such as lack of access to technical and advocacy (including self-advocacy) resources; lack of opportunities to take science, technology, engineering, and mathematics courses; scarcity of role models with disabilities succeeding in hierarchies of science professions<sup>19,31,33,34</sup>; and historically entrenched systemic ableism reinforced by social, cultural, and interpersonal messaging—implicit or explicit, intentional or unintentional—that disability means inability.<sup>23,24,25,26,27,28,36,37</sup> Disabled learners commonly experience ableist bias as stigmatizing and oppressive in their early childhood, adolescent, college, and graduate and professional education encounters; inequitable access to shadowing opportunities<sup>38</sup>; and high-stakes testing that is burdensome and time-consuming for them, as it requires far more documentation than is required under the law.<sup>36,39</sup>

For those who persevere through the application process, new barriers may preclude them from entering medicine, such as the need to disclose disability status and sensitive details about their disability in exchange for access<sup>23,36</sup> or technical standards that block their matriculation<sup>40,41,42,43,44,45,46,47,48</sup> even if they are highly qualified. In addition to these barriers, many students lack mentors with expertise in effectively advocating for disability-related needs, especially in hierarchical settings with immense power differentials.

## Technical Standards

Prior to matriculation, many medical schools require students to attest to their ability to meet the school's technical standards, some of which explicitly forbid use of accommodations, such as intermediaries and interpreters.<sup>41</sup> Although technical standards may only be used to disqualify an applicant if they are nondiscriminatory and if no reasonable accommodation would allow an applicant to meet them,<sup>42</sup> technical standards have thwarted matriculation (and even the initial decision to apply) of many qualified applicants to many medical schools.<sup>40,41,42,43,44,45,46,47,48</sup>

Abundant research and commentaries have problematized technical standards as outdated, discriminatory,<sup>40,41,42,43,44,45,46,47,48</sup> and unnecessarily geared to patient safety<sup>49</sup> in yet another expression of systemic ableism. Some analyses illuminate how medical schools' **technical standards undermine equity**<sup>44,45</sup> or propose alternatives.<sup>40,41</sup> Others offer guidance, exemplars, and resources on how to make inclusive, nondiscriminatory technical standards.<sup>46,47,48</sup> For example, one article advises a medical school's technical standards to (1) make a statement about the school's valuing disability as an expression of diversity, (2) communicate the school's process for facilitating students' disability disclosures and requests for reasonable accommodations, (3) avoid language that might prompt persons with disabilities to self-select out of the school's class, and (4) be posted online.<sup>46</sup> It is also important that consideration of disabilities includes psychological, learning, or chronic health disabilities, as these are represented in a majority of documented disabilities in medical school.<sup>18</sup>

## Rising to a Legal Minimum is Not Inclusion

Medical schools that are only willing to do the legal bare minimum<sup>8,50</sup> to reasonably accommodate students with disabilities fail to embrace the spirit of the law, the goals of inclusion, and disability itself as an important element of diversity. A compliance-based approach to disability inclusion is ethically insufficient to promote students' comfort with disclosure and nourish the kind of productive engagement students with disabilities deserve in response to their requests for reasonable accommodations.<sup>51</sup> Medical schools fully expressing a good faith commitment to disability as diversity—over and above the bare minimum—are actively creating student services infrastructure and the faculty education and training needed to support students' disability disclosures and accommodation requests.<sup>15</sup> Schools' policies and practices should also be reviewed and amended when needed to align with best practices. Medical schools looking to promote holistic review of applicants can help innovate medical education by hosting workshops on holistic admissions; in fact, those that have done so have demonstrated sustained growth in diversity among their students.<sup>52</sup>

*Evaluating applicants with disabilities.* Medical schools' admissions policies and practices must be procedurally just before they can effectively promote equity and inclusion. Anti-ableist training is a must for all admissions committee members, just as holistic review<sup>31</sup> of applicants is a must for reframing disability as value added to medical schools looking for students with resilience and grit.<sup>53</sup> Outreach efforts to identify, recruit, and retain students from diverse backgrounds should seek out students who have cultivated these character traits by navigating life with a disability in an ableist world.<sup>51</sup>

*Accommodations' reasonableness.* Whether an accommodation would fundamentally alter a program or pose undue administrative or financial burdens on a school are not

admissions decisions<sup>51</sup> and should be adjudicated by an informed disability resources professional in partnership with the program.<sup>15,54</sup> Moreover, accommodation decisions are ancillary to the academic and personal characteristics evaluated by admissions committees; evaluation of the reasonableness of a person's request for accommodations, therefore, should occur between an offer of admission and the student's matriculation.<sup>46</sup> Indeed, disability equity and inclusion require schools to make clear distinctions between their admissions and student services operations.

### Practicing Equity

Inclusion of individuals with disabilities in medicine is a highly influential way to promote equity.<sup>6,7,8,9,10,11,12,55</sup> Increasing representation among students, trainees, and physicians with disabilities so as to be more reflective of the people they serve can also mitigate harmful effects of clinician bias on colleagues, patients, and their loved ones during clinical encounters.<sup>56,57,58,59,60,61</sup> There is value in the disabled person's dual lived experience as a patient and as a professional that can motivate clinicians and colleagues to be more informed practitioners, the medical profession to be more just, and society to resolve health care disparities.

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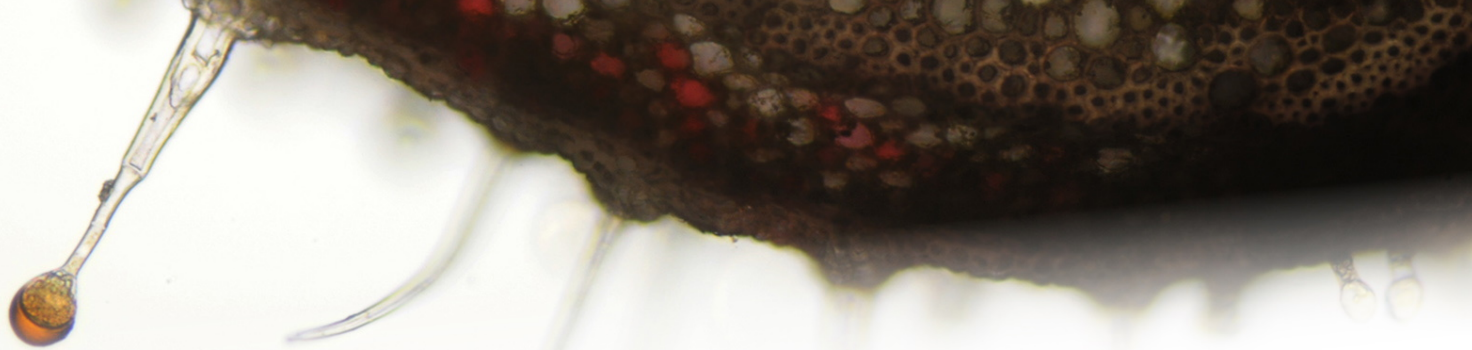
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### HISTORY OF MEDICINE: PEER-REVIEWED ARTICLE

#### Living Histories of Structural Racism and Organized Medicine

Robert Baker, PhD and Matthew K. Wynia, MD, MPH

##### Abstract

This article reassesses and recontextualizes findings of an independent writing group commissioned in 2005 by what was then known as the Institute for Ethics of the American Medical Association (AMA). The authors were members of this group, which uncovered a paradigm case of structural racism that has perpetuated health inequity since the issue of admitting African Americans was first raised at the AMA's national meetings immediately after the Civil War ended, in 1868. Upon publication of the writing group's findings, the AMA publicly apologized for its social, cultural, and political roles in the racist history of organized medicine. Now, in 2021, the authors of this article seek to situate this aspect of the AMA's history as it prepares itself for antiracist leadership in the health care sector.

##### Historical Record

It is tempting to believe that since the medical profession is dedicated to employing the biomedical sciences to prevent and heal illnesses, the inherently benevolent goals of the profession would serve to insulate it from bigotry and racism. Sadly, the historical record suggests otherwise. Recognizing this, in 2005, the Institute of Ethics of the American Medical Association (AMA)—then led by the second author—commissioned an independent panel, the Writing Group on the History of African Americans and Organized Medicine, to analyze the AMA's history on issues of race.<sup>1</sup> In this article, the authors—both of whom identify as White men who participated in the original study—reassess and recontextualize these research findings,<sup>1</sup> recognizing them as describing a paradigm case of structural or systemic racism—terms not widely used at the time. (Stokely Carmichael and Charles V. Hamilton first coined the term *institutional racism* in their 1967 book, *Black Power*, and this term is largely synonymous with systemic racism.<sup>2</sup>) In short, the Writing Group's research clearly documented the AMA's role in creating structural racism, defined as “a system in which public policies, institutional practices, cultural representations, and other norms work in various, often reinforcing ways to perpetuate racial group inequity.”<sup>3</sup>

After the research group reported back to AMA's Board of Trustees, in July 2008, immediate past President Ronald Davis issued a formal public apology to the National

Medical Association (NMA),<sup>1</sup> the historically Black medical society created in 1895 when most Black physicians were unable to join the AMA.

I humbly come to the physicians of today's National Medical Association to tell you that we are sorry.... on behalf of the American Medical Association, I unequivocally apologize for our past behavior. We pledge to do everything in our power to right the wrongs that were done by our organization to African-American physicians and their families and their patients.<sup>4</sup>

Davis also wrote a moving commentary that accompanied the Writing Group's article describing this history, and both pieces were published by the *Journal of the American Medical Association (JAMA)* in the July 18, 2008, issue. In his commentary, Davis summarized the Writing Group's findings about how "the AMA failed, across the span of a century, to live up to the high standards that define the noble profession of medicine" as follows:

(1) in the early years following the Civil War, the AMA declined to embrace a policy of nondiscrimination and excluded an integrated local medical society through selective enforcement of membership standards; (2) from the 1870s through the late 1960s, the AMA failed to take action against AMA-affiliated state and local medical associations that openly practiced racial exclusion in their memberships—practices that functionally excluded most African American physicians from membership in the AMA; (3) in the early decades of the 20th century, the AMA listed African American physicians as "colored" in its national physician directory and was slow to remove the designation in response to protests from the National Medical Association; and (4) the AMA was silent in debates over the Civil Rights Act of 1964 and put off repeated NMA requests to support efforts to amend the Hill-Burton Act's "separate but equal" provision, which allowed construction of segregated hospital facilities with federal funds.<sup>5</sup>

This brief list omitted several of the panel's other salient findings, such as AMA support for the Flexner Report as part of a broader education reform movement that contributed to the closure of all but 2 historically Black medical schools.<sup>6,7,8</sup> In addition, as our reports were limited to the mistreatment of Black physicians, we did not describe the AMA's support for other racist policies, such as the Chinese Exclusion Act<sup>9</sup> or eugenic policies.<sup>10</sup> Nevertheless, reflecting back on the research that we and our colleagues in the Writing Group carried out, we now believe that the deeper point we unearthed was that the AMA played a key role in establishing and encouraging foundationally racist structures for organized medicine, even while sometimes arguing against interpersonal racism. The history of how a powerful social organization can decry racism, even while reinforcing social structures that **predictably create racist outcomes** may be of value today as we consider how best to move forward in addressing persistent racial and ethnic health disparities. To illustrate some key lessons, we review the 4 points listed by Davis to show how each fomented and defended a racist infrastructure that continues to perpetuate the racial divide in American health care and health outcomes to this day.

### **Exclusion of Black People From Medicine**

Immediately upon its founding in 1847, the AMA became the national organizational base for allopathic medical practitioners, medical schools, and health care facilities (eg, asylums, clinics, dispensaries, hospitals).<sup>11</sup> During this period of American history, several major egalitarian movements were founded, among them the American Anti-Slavery Society (1833), and the first wave of American feminism emerged, announcing its birth in the Declaration of Sentiments of 1848.<sup>12</sup> In the 2 decades following the establishment of the AMA, the conflict over slavery erupted into US civil war, which ended in the defeat of the Confederacy and the passage of the Thirteenth Amendment ending slavery outside of penal settings in 1865 and the Fourteenth and Fifteenth Amendments in 1866, which gave newly freed Black men equal rights to citizenship.

After a 2-year hiatus in its national meetings during the war, in 1868 the AMA was faced with whether to admit to its national meeting female physicians and Black physicians, all holding medical degrees from allopathic (as opposed to homeopathic) medical colleges. Seeking to resolve the issue, Nathan Smith Davis, who fashioned himself the “Father of the AMA,”<sup>1</sup> proposed that since the AMA “had never taken action on any matter which distinguished practitioners either on account of sex or color, if any local association saw fit to enact a law restricting its members, that was a matter for such societies to determine” and the national society should not intervene.<sup>12</sup> His motion passed.<sup>12</sup> Thus, 2 years later, in 1870, when 4 representatives of the allopathic National Medical Society (NMS) of Washington, DC—Robert Reyburn, a White veteran of the Union army and dean of Howard University Medical College, and 3 Black colleagues—presented credentials to the AMA national conference, they should have qualified for admission. However, a White Washington, DC, medical society challenged their admission to the conference, charging that the NMS had violated canons of collegiality by complaining to the US Congress about the White medical society’s discriminatory refusal to admit Black physicians. The dispute went to an AMA ethics committee, which ruled against admitting delegates from the racially integrated society to the national conference.<sup>13</sup>

To clarify the precedent being set, a motion was proposed stating that “no distinction of race or color shall exclude from the Association [the AMA] persons claiming admission.”<sup>13</sup> This motion was rejected (tabled, 106 to 60). A second motion—that “consideration of race and color has had nothing whatsoever to do with the decision of the question of the Washington delegates”—passed (adopted, 112 to 34).<sup>13</sup> The AMA thus rejected members of a racially integrated local society, voted down a statement of nondiscrimination, and then—mindful that this act appeared to be blatantly racist—whitewashed its actions, officially denying that members’ racist votes had anything to do with “race and color.”<sup>13</sup> In 1872, Reyburn and his Black colleagues from Howard Medical College again sought entrance to the AMA’s national meetings but were again rebuffed. Reyburn then exhorted the AMA to “consider well what they were doing ... [since] every human being should be allowed the right to the very highest development that God has made him capable of.”<sup>12</sup>

Irritated by the distraction caused by Black (and female) physicians seeking to attend the AMA’s national meetings, in 1873 and 1874, Davis initiated rules giving state societies complete control over “which local societies should be officially recognized by the AMA,”<sup>13</sup> thereby ensuring that debates over racial (and gender) admission would not disturb the good fellowship of the AMA’s national meetings. This structural change had the immediate effect of permitting Southern societies to exclude Black physicians from the AMA—and, despite many subsequent statements against racism, the AMA defended this fundamentally racist policy, treating discrimination as an immutable fact of life, until forced to abandon it by the civil rights laws of the 1960s.<sup>1</sup>

Thus Davis, seeking to secure reunion with well-established White medical societies of the South (and, based on his actions, perhaps personally sympathetic to the view that medical societies were in part social clubs to which Black people and women should not be allowed entrance), gave up the civil rights of Black physicians, trashing the integrationist ideals of White Union soldiers like Reyburn and his Black colleagues in the process. Predictably, in the South, AMA policy led to nearly a century of formally **race-segregated medical societies** during a period when membership in an AMA-affiliated medical society conferred de facto admitting privileges at local hospitals and access to business loans and advanced training opportunities, thereby systematically

disadvantaging Black doctors and their patients.<sup>13</sup> This structure of discriminatory policies led to a century of intentionally 2-tiered medicine throughout the South, separate and unequal, and to the informal but still structural racial segregation of health care that persists today.

### **Nationalization of Racial Stigma**

Professionals have letters affixed to their names—DDS, MD, MPH, PA, PhD, RN. Like the diplomas and certificates that adorn doctors' office walls, these are indicators of educational and professional qualifications and attainments. Yet, in 1906, when the AMA began publishing a directory of all allopathic physicians practicing in the United States, some of the names had "col" affixed to them. These 3 letters were not indicators of educational or professional attainment; they were indicators of a physician's race—*col* meant *colored*, thereby marking Black physicians as other than White. The *col* designation generated social stigma, and the fact that some of the effects of this stigma were outside the direct control of the AMA did not diminish their very real impact. According to the NMA, the *col* designation "worked several hardships" for Black doctors, including "the cancellation of their [physicians'] malpractice insurance and in their being refused credit."<sup>6</sup> Like the yellow Star of David and the pink triangles that Nazis forced on Jewish and gay people, respectively, the *col* designation functioned as a stigma, a mark of the other. The AMA's decision to designate physicians as *col* was a policy decision that created a social structure that facilitated, if not actively encouraged, racist norms and behaviors. Today, many will also recognize the *col* designation as overtly racist in its own right, since designating someone as "colored" implies a meaningful distinction between people based on skin color. That this racist implication was not noted at the time may be an indicator of how entrenched the notion of biological differences between "races" had become by the 1930s—and foreshadows ongoing problems in medicine of using the social construct of race as though it has significant biological or genetic meaning.<sup>14</sup>

### **Battle of Oaths**

The final item of Davis' apology singles out the AMA's failure to support the NMA's attempts to change the funding of racially separate and overtly unequal health care facilities. Yet the AMA's resistance to **civil rights laws** was more insidious than merely failing to support the NMA's policy position against the Hill-Burton Act, which allowed for racially segregated hospitals; it took a form that might be called "the battle of the oaths." As part of its plan to ensure compliance with new civil rights laws, the US Department of Health, Education and Welfare (HEW) forbade "racial discrimination in the selection of physicians as interns, residents, and admitting staff, nor could they legally exclude or segregate patients on the basis of race," and the proposed regulations "required all recipients of federal funds, including physicians, to sign a statement of compliance, formally forswearing racially discriminatory practices."<sup>6</sup>

The AMA House of Delegates opposed this requirement and voted against integrating hospital physicians and house staff and against signing statements of compliance. It directed its staff to "oppose actively and forcefully this and any future attempts by HEW or any other federal agency to impose conditions and pledges upon the medical profession," deeming oaths of compliance with civil rights laws to be "'discriminatory' towards physicians and 'degrading,' because physicians already had a code of ethics that forbade discrimination."<sup>6</sup> HEW dropped the requirement: physicians were thereby exempted from a key provision of the Civil Rights Act of 1964—an exemption that our writing group noted "persists, and has repercussions, to this day"<sup>6</sup>—and the AMA took

credit for physician offices being able to flout requirements of the Civil Rights Act under the guise of protecting professional autonomy.<sup>6</sup>

**Figure 1.** Annual Meeting of the American Medication Association, 1966<sup>a</sup>



<sup>a</sup> Reprinted with permission from the American Medical Association Archives.

**Figure 2.** Protestors at the Annual Meeting of the American Medical Association, 1966<sup>a</sup>



<sup>a</sup> Reprinted with permission from the American Medical Association Archives.

Yet the AMA's core argument—that oaths of compliance were not needed and were insulting because its *Code of Medical Ethics* already prevented discrimination—was patently specious. The argument's flaws should have been evident from the AMA's long acceptance of segregated medical societies and its tolerance of clinics, emergency rooms, and hospitals with “Whites only” signs on their walls. The members of the AMA's House of Delegates were virtually all White at the time (see Figure 1), and AMA meetings of this era were routinely picketed for their lack of attention to blatant racial discrimination then widespread in medicine (see Figure 2). Moreover, nothing in the traditional Hippocratic Oath or in the AMA *Code of Medical Ethics* operative at that or at any prior time prohibited discrimination against patients or physicians based on race or ethnicity. In fact, discrimination against patients was specifically permitted by Section Five of the 1957 AMA Principles of Medical Ethics, which stated: “A physician may choose whom he will serve.”<sup>15</sup> The HEW's deference to the AMA on this point is a testament to the capacity of professional arrogance and power to reinforce White privilege with the argument that racism among physicians doesn't exist.

### **Dismantling Structures Perpetuating Racism**

The Writing Group limited its formal historical review to the period 1847 to 1968, but the group also acknowledged a number of important events between 1968 and 2008—such as the election of Lonnie Bristow as the AMA's first Black president in 1994 and the AMA's work with the NMA to form the Commission to End Health Care Disparities in 2004—and noted that “this history is still being written.”<sup>1</sup> This sentiment is as true today as it was in 2008. Indeed, some important history has been written in the years since the AMA issued the apology. For instance, in 2005, 3 years before the AMA's apology, Black people composed 12.3% of the US population but only 2.2% of US physicians and medical students, and, in 2006, they composed a mere 1.8% of AMA members.<sup>6</sup> By 2019, Black people composed 4.2% of all physicians and medical students and 4.6% of AMA members.<sup>16</sup> The fact that there are more Black physicians and more Black AMA members today than in 2008 is progress, but Black people remain dramatically underrepresented within the profession. Similarly, the appointment of Aletha Maybank Harris as the AMA's first chief health equity officer in 2019<sup>17</sup> and the election of Patrice Harris to the AMA presidency in 2019—the first Black woman to hold the position<sup>18</sup>—were moments to be celebrated, as was the AMA's recent decision to remove the bust of Nathan Smith Davis from its prominent place in the headquarters building and to rename an award named for him,<sup>19</sup> as well as the AMA's first formal declaration, in 2020, that racism in the US is a public health crisis.<sup>20,21</sup> Yet the fact that these “firsts” took place so recently is more a reminder of how far the organization has to go than a reason to celebrate how far it has come.

The contours of the hard road ahead for the AMA were reinforced in early 2021, when *JAMA* (which, like the *AMA Journal of Ethics*, is editorially independent of the AMA) issued a Tweet claiming “No physician is racist” to promote a podcast in which a deputy editor argued that the phrase “structural racism” is “an unfortunate term” because it makes him and other White physicians feel offended.<sup>22</sup> Both the AMA and the AMA's chief health equity officer expressed outrage and promised further investigation and action.<sup>22</sup> The Tweet and podcast were rapidly deleted, *JAMA*'s editor-in-chief issued an apology, the deputy editor involved resigned, and the editor-in-chief eventually did, too.<sup>23</sup> These events demonstrate just how prescient was Davis' 2008 *JAMA* commentary in describing the most profound challenge that would face the AMA on its path to becoming an antiracist organization (a term not yet coined at the time<sup>24</sup>). He noted:



Psychological research suggests that whites and African Americans tend to view changes in the racial milieu in different ways. Whites tend to see full equality of opportunity as an idealized goal, and they measure progress by comparing the present and the past, noting how far society has come; but African Americans and other nonwhites are more likely to see racial equality as a necessary condition for justice and to judge current racial inequalities against a future of equal opportunity, which still seems far off.<sup>25</sup>

Davis didn't quite say it at the time, but we now believe he might have recognized that the challenge facing the AMA, then and now, is the same as that facing all White people—or, more accurately, facing all those whom the journalist and author Ta-Nehisi Coates refers to as “people who have been brought up hopelessly, tragically, deceitfully, to believe that they are white.”<sup>26</sup> It is the challenge of confronting our created and enforced separation by skin color. In other words, for White physicians leading the AMA, it is relatively easy to proclaim a desire to become an antiracist organization and even to take some actions to support Black physicians. But becoming antiracist requires first that those with often-unrecognized privilege take full ownership of a shared history in which some were systematically marginalized and disadvantaged—recognizing that the story of Black physicians and the AMA is not Black history, it is the history of American medicine and of America. Only with this **level of ownership** of the history can the organization's leaders then take up the second and even more daunting challenge of seeing with open eyes and feeling with open hearts that there are social and professional structures today that arise directly from this history and that continue to sustain and nurture racism in health care—and that these structures must be torn down and rebuilt, not because they harm Black and other marginalized physicians but because they harm all of us, including those who continue to benefit from them.

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## ART OF MEDICINE

### Personification of a Duality

Jamaljé Rohnquist Bassue

#### Abstract

This watercolor self-portrait visually characterizes an irony faced by clinicians who are underrepresented minorities. Tasked with saving patients' lives during the COVID-19 pandemic, they belong to communities inequitably burdened by the SARS-CoV-2 virus and by many Americans' unwillingness to follow public health recommendations that would protect them, their communities, and their patients.

Figure. *The Duality of the URM*



**Media**

Acryla-gouache and watercolor on 140 lb, cold press paper, 11" x 15".

**Caption**

As medical students, we spend hours upon hours belaboring the pathology and pathophysiology of a host of different disease processes. As an underrepresented minority (URM) student, I spend even more time thinking about how many of these disease processes disproportionately affect people who look like me. I'm forced to think of the possibility of an infectious case involving my mother, my brother, my aunt, or a close friend. During the peak of the COVID-19 pandemic, I was reminded yet again that COVID-19 is another disease process exacerbating already obvious **health care inequities** that exist today. This self-portrait represents URM frontline workers who live with the duality of being clinicians who belong to racial and ethnic groups that receive the worst health care.

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