


tries. Patients are becoming more engaged in all aspects of their care and are making choices on the basis of their own experiences. How we make patients feel matters more now than ever before. Patient-experience data are vitally important to both large health care organizations and small medical practices. The best way to interpret those data and the optimal benchmarks remain elusive, however, given variability in practice environments, patient and clinician diversity, and bias. Awareness and

 An audio interview with Dr. Poole is available at [NEJM.org](https://www.nejm.org)

acknowledgment of trends suggestive of bias are important, and the subject of provider choice based on race, ethnic group, and gender deserves more attention, though it should be handled very carefully so as not to lead to discrimination and racism. For now, though, “keep in mind these data are reflective of patients’ perception of their care; whether or not we, as medical providers, agree, that perception is legitimate” — or is it?

Disclosure forms provided by the author are available at [NEJM.org](https://www.nejm.org).

From the Department Medicine, Mayo Clinic Arizona, Phoenix.

1. LaVeist TA, Nuru-Jeter A, Jones KE. The association of doctor-patient race concordance with health services utilization. *J Public Health Policy* 2003;24:312-23.
2. Laveist TA, Nuru-Jeter A. Is doctor-patient race concordance associated with greater satisfaction with care? *J Health Soc Behav* 2002;43:296-306.
3. Alsan M, Garrick O, Graziani G. Does diversity matter for health? Experimental evidence from Oakland. NBER working paper no. 24787, June 2018 (<https://www.nber.org/papers/w24787>).
4. United States Census Bureau. QuickFacts (<https://www.census.gov/quickfacts/fact/table>).
5. AAMC facts & figures 2016: diversity in medical education. Washington, DC: Association of American Medical Colleges, 2016 (<http://www.aamcdiversityfactsandfigures2016.org>).

DOI: 10.1056/NEJMp1813418

Copyright © 2019 Massachusetts Medical Society.

Closing the Gap — Making Medical School Admissions More Equitable

Efrain Talamantes, M.D., M.B.A., Mark C. Henderson, M.D., Tonya L. Fancher, M.D., M.P.H., and Fitzhugh Mullan, M.D.

Large segments of the U.S. population face persistent inequalities in health care quality and access. Nonwhite physicians care for a disproportionate share of people from underserved populations, thereby helping to reduce disparities in access to care.¹ However, certain racial and ethnic minorities remain underrepresented in the U.S. physician workforce. Blacks make up 14% of the general population but just 4% of physicians; disparities are similar for Hispanics or Latinos (17% of the population vs. 4% of physicians) and American Indians or Alaska Natives (2% of the population vs. <0.4% of physicians).²

Between 1997 and 2017, the number of matriculating students at U.S. allopathic and osteopathic medical schools who were from racial and ethnic groups underrepresented in medicine increased by 30% (from 2850 to 3713). Be-

cause overall matriculation in medical school increased by 54% (from 18,857 to 29,118), however, the proportion of entering medical students who were from underrepresented groups actually dropped from 15% to 13% (see table). As a result, the rate of medical school attendance among members of underrepresented groups fell by nearly 20% (from 4.3 to 3.5 per 100,000 people), and the absolute numbers of black male medical students and American Indian or Alaska Native medical students decreased — signs that medical education is losing ground with respect to diversity and inclusion.

Not surprisingly, the same populations that are underrepresented in medicine continue to experience stark health disparities. There is growing evidence that minority patients report better communication, greater satisfac-

tion, and better adherence to medical treatment when they are cared for by racially and linguistically concordant physicians. A recent study showed that increasing the number of black physicians could reduce the gap in cardiovascular mortality between black men and white men in the United States by 19% and the gap in life expectancy by approximately 8%.³ Such potential gains in health equity are of growing importance to health plans, payers, and providers. Medical schools can prepare the workforce to care for a socioeconomically divided, racially and ethnically diverse populace by redoubling their efforts to recruit applicants from underrepresented groups. To do so, however, schools will have to fundamentally change the way they evaluate applicants.

Disparities in medical school admissions encompass more than

Underrepresented Groups in Medical School, 1997 and 2017.*			
Variable	1997	2017	Percent Change
No. of first-year medical school slots	18,857	29,118	54
No. of matriculants from underrepresented groups	2850	3713	30
Percent of matriculants from underrepresented groups	15	13	-16
No. of people from underrepresented groups in U.S. population	65,497,000	106,835,890	63
No. of matriculants from underrepresented groups per 100,000 population	4.3	3.5	-20

* Underrepresented groups are defined as American Indians or Alaska Natives, blacks, and Hispanics or Latinos. Data are from the Association of American Medical Colleges, the American Association of Colleges of Osteopathic Medicine, and the U.S. Census Bureau.

racial and ethnic gaps. Most medical school matriculants come from middle- and upper-income families, but black and Hispanic medical students are three times as likely as their white counterparts to come from families with combined parental incomes of less than \$50,000, according to data from the Association of American Medical Colleges (AAMC). Black and Hispanic students are much more likely than white students to have attended high-poverty primary and secondary schools; such environments strongly affect their educational achievement, often leaving them less competitive on traditional academic measures such as Medical College Admission Test scores and grade-point averages. Community college attendance is often viewed negatively by medical schools in the admissions process, despite being a critical educational pathway for many students from underrepresented groups. Moreover, admitting a greater proportion of students who attended community college could be a potential strategy for bolstering the primary care workforce, since such students are more likely to undertake residency training in family medicine than their peers who did not attend community college.⁴

Academic health centers can

expand opportunities for young people from disadvantaged backgrounds by designating a local community of commitment — a neighborhood or other area where the health center dedicates resources and develops partnerships to address health and educational disparities. Local elementary schools, high schools, community colleges, and universities are often willing partners in establishing pipeline and academic-enrichment programs for disadvantaged students. Medical schools can develop programs that value, nurture, and celebrate the experiences of students from underrepresented groups. Since 1972, the Medical/Dental Education Preparatory Program at the Southern Illinois University School of Medicine has mentored more than 1000 educationally and economically disadvantaged students who matriculated at medical or dental school. The University of New Mexico's combined B.A. and M.D. degree program recruits high school students from rural areas to an 8-year program that includes conditional acceptance to its medical school, with the goal of bringing greater ethnic and economic diversity to the medical school. Since 2007, the University of California Programs in Medical Education have offered

specialized coursework, structured clinical experiences, and advanced independent study and mentoring for students committed to working with underserved communities, supporting many medical students from underrepresented groups.

Race-conscious admissions policies, which the U.S. Supreme Court has determined are legal strategies for enhancing diversity, are now prohibited in eight states, including California. In this environment, the AAMC has promoted holistic review in the admissions process, which involves considering each applicant's background, experiences, attributes, academic metrics, and "distance traveled" (i.e., how far a student has come in light of discrimination or a lack of resources or support) to broadly assess how that person might contribute value as a medical student and physician. Although practices vary widely, a national survey of health professional schools showed that institutions incorporating "many elements of holistic review" reported increases in class diversity as compared with institutions incorporating few or no elements.⁵ Other inclusive admissions practices include training committee members in implicit bias, blinding interviewers to applicants'

academic metrics, conducting multiple mini-interviews, and involving diverse groups of patients or community members in the admissions process.

Several new tools are available for assessing the socioeconomic and educational challenges that many disadvantaged applicants face on the road to becoming physicians. The American Medical College Application Service allows applicants to identify themselves as socioeconomically or educationally disadvantaged and to explain their disadvantage in a brief essay. The AAMC has introduced a socioeconomic status indicator that uses standard occupational classification categories for parents and guardians to capture some of the social determinants of individual academic achievement. To quantify socioeconomic and educational disadvantage without consideration of race and ethnic group, the University of California, Davis, School of Medicine (where three of us work) has developed a continuous scale that incorporates information on parental education level, family participation in public-assistance programs, family income level, whether applicants spent their childhood in an underserved area, applicant contribution to family income, receipt

of financial-need scholarships for college education, and whether applicants had their medical school application fee waived. Such tools deserve further dissemination as potential strategies for advancing equity in the admissions process.

In the current era of medical school expansion, the growing gap between the racial, ethnic, and socioeconomic makeup of medical school classes and that of the general population means medical education is slipping further out of reach for many poor and minority students, despite the efforts of many people and institutions. To address these disparities, medical schools can redesign their admissions criteria and processes and commit to educating classes of students that more closely mirror the U.S. population. Academic leaders should address structural barriers within their institutions that limit the success of students and faculty from underrepresented groups. And academic health centers can make greater investments in educational outreach, collaboration, and community engagement to nurture and develop a more diverse workforce. We believe those of us responsible for training the next generation of U.S. physicians must rededicate ourselves to the mission of equity of opportunity

in medicine — for the benefit of future students, disadvantaged communities, and the country as a whole.

Disclosure forms provided by the authors are available at [NEJM.org](http://www.nejm.org).

From the Center for a Diverse Healthcare Workforce (E.T., M.C.H., T.L.F.) and the Office of Admissions and Outreach (M.C.H.), University of California, Davis, School of Medicine, Sacramento; and the Department of Health Policy and Management, Milken Institute School of Public Health, the School of Medicine and Health Sciences, and the Health Workforce Institute, George Washington University, Washington, DC (F.M.).

1. Marrast LM, Zallman L, Woolhandler S, Bor DH, McCormick D. Minority physicians' role in the care of underserved patients: diversifying the physician workforce may be key in addressing health disparities. *JAMA Intern Med* 2014;174:289-91.
2. Association of American Medical Colleges. Diversity in the physician workforce: facts & figures 2014. 2017 (<http://www.aamcdiversityfactsandfigures.org/>).
3. Alsan M, Garrick O, Graziani GC. Does diversity matter for health? Experimental evidence from Oakland. NBER working paper no. 24787. Cambridge, MA: National Bureau of Economic Research, June 2018 (<https://www.nber.org/papers/w24787>).
4. Talamantes E, Jerant A, Henderson MC, et al. Community college pathways to medical school and family medicine residency training. *Ann Fam Med* 2018;16:302-7.
5. Drees B, Nairn R, Nivet M, Danek J. Holistic admissions in the health professions: findings from a national survey. Washington, DC: Urban Universities for Health, September 2014 (http://urbanuniversitiesforhealth.org/media/documents/Holistic_Admissions_in_the_Health_Professions.pdf).

DOI: 10.1056/NEJMp1808582

Copyright © 2019 Massachusetts Medical Society.

Racist Like Me — A Call to Self-Reflection and Action for White Physicians

Deborah Cohan, M.D., M.P.H.

I am racist. I would love to believe otherwise and can find evidence that I am not — my career dedicated to caring for underserved women of color, my sup-

port of colleagues and trainees who are people of color, my score on the implicit-association test.¹ My mission as a white physician is to be humble and respectful to-

ward my patients, not only as an act of compassion but as a revolutionary act against racism, elitism, and hierarchy. And yet I am racist, shaped by the sometimes