

Poor Representation of Blacks, Latinos, and Native Americans in Medicine

José E. Rodríguez, MD; Kendall M. Campbell, MD; Wendi J. Adelson, JD, MPhil

BACKGROUND AND OBJECTIVES: In this article, the authors discuss how various systems in medicine are limiting representation of blacks, Latinos, and Native Americans. Flat and decreasing percentages of Underrepresented Minorities in Medicine (URMM), especially in the black and Native American populations, is concerning for family medicine since members from URMM groups care for minority and underserved populations in greater numbers. Underrepresentation is not only noted in the medical community but also in our medical schools when it comes to numbers of URMM faculty. The changing definition of “disadvantaged” in medical school admissions has also played a part in limiting URMM representation. In addition, the Medical College Admissions Test (MCAT) excludes black, Latino, and Native American students in greater numbers. The authors support these arguments with evidence from the medical literature. Although unintentional, these systems effectively limit representation of blacks, Latinos, and Native Americans in medicine. Effective changes are suggested and can be implemented to ensure that URMM individuals have equal representation in careers in medicine.

(Fam Med 2015;47(4):259-63.)

In “Accommodating Bigotry,” an opinion piece recently published in *JAMA*, the author discusses patients’ refusal of care by clinicians solely on the basis of race or culture. The article is nuanced and well crafted, and the author concludes that, in some circumstances, patient-centered care can justify tolerating bigotry.¹ Accommodating bigotry in the medical encounter, however, can reinforce behaviors and systems in medicine that exclude persons of color from both academic medicine and medical practice in general. In short, these systems and behaviors can limit opportunities for black, Latino, and Native American physicians and students.

Academic medical systems can also limit Underrepresented Minorities in Medicine (URMM) participation by concentrating leadership, higher salaries, academic faculty positions, and medical student representation in the non-URMM population. The absence of URMM faculty has a negative effect on all medical students and faculty. These negative effects include limited exposure to underserved care, reduced research with minority patients, and fewer mentors for URMM students. Pipeline programs depend on URMM faculty who provide support for URMM students in the form of role models, educators, and mentors.² Since URMM faculty teach students to care for

underserved/minority patients by caring for those patients themselves, their relative absence among the faculty also has a negative effect on patient care. Increasing URMM faculty can in turn increase the quality of health care, as diversity of experiences creates a more effective physician workforce. This essay will discuss systems and behaviors that make it difficult for URMM students and faculty to participate in medicine. We will examine four systems that limit URMM participation in medicine: Medical Faculties, Disadvantaged Status, Admissions Testing, and the Dismantling of Affirmative Action. We will define URMM as black, Latino, or Native American. We will also define Latino as those whose origins are in the Spanish-speaking countries of Africa and the Americas.

Medical Faculties

Over the last 20 years, there has been a very slight increase in URMM faculty representation in academic medicine, from 7% in 1993 to 8% in 2013.³ Compared to the general US population, those groups in the same period rose from 23.1% to 31.4%.^{4,5} In the past, URMM faculty were defined as African American, Mexican American, Native

From the Department of Family Medicine and Rural Health, The Center for Underrepresented Minorities in Academic Medicine at the College of Medicine (Drs Rodríguez and Campbell) and the College of Law (Dr Adelson), Florida State University.

American, and Mainland Puerto Rican.⁶ One of the predictors of URMM faculty representation is medical student representation in the prior 10 years.⁷ Student diversity gains have been reported frequently by the Association of American Medical Colleges (AAMC,) and there were greater gains in 2012 than in previous years.⁸ These gains are largely reflective of the Latino medical student population, which increased from 6.56% in 2003 to 8.25% in 2010.⁹ In that same time period, however, there has been no significant increase in the percentage of medical students from black or Native American backgrounds (black 7.28% in 2003 and 7.23% in 2010, Native American 1.016% in 2003 and 1.023% in 2010).⁹ For black students this is part of an ongoing downward trend, beginning in 1994 when black student enrollment peaked at 8.1%.¹⁰

URMM physician faculty share certain characteristics, including higher amounts of time spent in clinical work,¹¹ as well as caring for minority and underserved patients in higher numbers when compared to their non-URMM counterparts.¹² They also are the principal defenders of their institutions' service mission.¹³ URMM faculty at academic centers with missions including service to underserved and minority populations have a greater burden to bear. URMM faculty are also more likely to be found in primary care specialties.¹⁴ URMM faculty serve as mentors for URMM and other medical students and can be instrumental in a student's choice of medical school.¹⁵ These characteristics make them desirable for medical schools across the country, but since there has not been any increase in black or Native American medical students in the last 20 years, we cannot expect an increase in URMM faculty. Since URMM faculty choose to serve the underserved in greater numbers, the effect of this decrease can translate to a decrease in providers for a growing minority population. Fewer providers in service to the underserved,

in effect, can serve to increase health disparities.

URMM faculty are still promoted at lower rates and are less likely to be found in senior faculty positions.³ Racism, isolation, lack of mentors, and diversity pressures have all been cited as reasons for the low numbers of URMM faculty.¹⁶ Increased clinical responsibilities when compared to their non-URMM counterparts leads to less time for URMM to engage in promotion-earning activities.¹³ This causes URMM faculty to have lower salaries in aggregate, because they are more commonly concentrated in the lower-paying junior faculty ranks.³ The sum of these factors, often referred to as the "minority tax," make academic careers unattractive to URMM students and, unfortunately, to URMM faculty members even after accepting academic positions.¹⁷

URMM faculty development programs have been well described in the literature and have been evaluated by survey³ and by systematic review.¹⁸ URMM faculty development programs are well intentioned and necessary, as they have been instrumental in our (JR and KC) continued presence in academic medicine. However, they are based on "fixing" the individual URMM faculty member—changing her/him to be more competitive, addressing skill deficits, etc. This "skill deficit" model can perpetuate a false assumption that URMM faculty are somehow inferior to other faculty and does not address potential deficits that may exist in the institution of academic medicine. The "inferiority insinuation" can keep advancement and career building opportunities away from URMM faculty, inhibiting their progress and impeding their upward mobility in academic medicine. Opportunities for advancement are not offered to people who have "skill deficits" or are invisible to administrative leaders in academic medicine.¹⁹

Disadvantaged Status

Disadvantaged status is a self-identification status based on several

factors,²⁰ and individual medical schools determine how they use this information.²¹ Before 2003 that status was limited to the ethnic groups listed above as defined by the AAMC. The category of URMM was broadened by the AAMC in 2003 in an effort to make medical schools more responsive to local communities and to help make data more congruent for the ease of making comparisons.⁶ In many institutions, URMM became synonymous with "disadvantaged status." New groups were given "disadvantaged status," and among them were "other Hispanic."

Other Hispanic

What does the term "Hispanic" actually mean? In many universities, this term refers to all people who come from Spanish-speaking countries, including Spain. This broad definition of Hispanic can allow students and faculty of European descent, who are not URMM, to be classified as URMM and receive resources designated for URMM when they are actually not an underrepresented group in medicine. In 1994, there were 1,311 (8.1%) black, 141 (0.86%) Native American, and 703 (4.3%) Hispanic (at that time limited to Mexican American and Mainland Puerto Rican), medical students in medical colleges across the United States. After 2003, when all Hispanics were considered underrepresented, we saw a significant gain in the newly defined Hispanic population of URMM students. Mexican Americans still make up the majority of Hispanics in the United States (63%), with Puerto Ricans as a distant second (9.2%).²² In terms of total US population, Mexican Americans as a group comprise 10.30% (31,798,258) and Puerto Ricans comprise 1.50% (4,623,716) of the US population of 308,745,538. As a group, Mexican Americans have increased in their proportion of the Hispanic population over the last decade. Because 10.3% of the US population is of Mexican heritage, it follows that the Mexican American representation in medical school

should be close to that percentage. In reality, including all “Hispanics” with Mexican Americans in one category creates the illusion that, in the case of Hispanic students, population parity is approached (8.25% Hispanic medical students versus 10.3% of the general population being of Mexican American descent). However, if comparison were made to the Hispanic percentage of the US population as a whole (50,477,594 or 16.3%, medicine as a career lags far behind the general population (8.25% Hispanic medical students versus 16.3% Hispanics in the general population).

Admissions Testing

Perhaps one of the more important obstacles for URMM students is the Medical College Admission Test (MCAT). The MCAT has become a rite of passage for all those who desire a medical education, as the SAT/ACT has become for those who desire an undergraduate education. Like MCAT scores, SAT/ACT scores are used as filters to eliminate those thought to be less competitive for medical or undergraduate school, respectively. Both tests are computer based, multiple hour standardized tests, and a lower score on either makes it difficult to be admitted to a competitive program. The SAT/ACT tests Reading, Mathematics, English, and Science, at the high school level, while the MCAT tests those areas at the university level with more detail and complexity.

The validity of the SAT/ACT has recently been called into question. In a landmark study on the SAT/ACT²³ the authors conclude that students who do not submit their SAT/ACT scores (non-submitters) have grades and graduation rates comparable to submitters, and that high school grade point average (GPA) is a better predictor of college GPA and who will graduate college than SAT/ACT scores. Non-submitters are more likely to be poor, minorities, or students with learning disabilities. Black, Latino, and Native American students tend to do worse on the MCAT than other students,²⁴

and the MCAT can be an obstacle for them. In fact, it could be a major contributing factor for declining black student enrollment. It may also contribute to poorer outcomes for minority patients,²⁵ as the MCAT may exclude URMM students from the field of medicine who would otherwise make excellent physicians.

Some medical schools in the United States (Tufts, Icahn, and SUNY Upstate, among others) waive the MCAT requirement for students who are accepted through their early assurance programs. Early assurance is acceptance to medical school while still enrolled in undergraduate training. Most programs require that the student finish their undergraduate program with a certain GPA before enrolling in medical school. We can use early assurance programs as a model for determining the quality of the applicant for medical school. Early assurance programs base their admissions on high school GPA, letters of recommendation, personal statements, university science and total GPA, and experiences in health care settings. We suggest that similar methods can be used to determine the quality of URMM and other applicants. In addition, there are two Canadian medical schools that no longer require MCAT scores, and their students do not seem to have been adversely affected, with over 90% getting their first choice specialty selection in the residency match.²⁵ These programs are evidence that MCAT is not necessary to determine the quality of the medical school applicant and that institutions are not adversely affected for waiving the MCAT requirement. Removing the MCAT as an admissions requirement can help increase URMM enrollment in medical school and, in the future, increase URMM faculty.

The Dismantling of Affirmative Action

Affirmative Action has its origins in two executive orders, one by John F. Kennedy in 1961, and a second one in 1965 by Lyndon B. Johnson.

These anti-discrimination orders became the justification for a “quota” system that reserved “slots” for students or employees of certain racial or ethnic backgrounds.

There have been a number of recent court cases addressing affirmative action, and although the facts differ, the main issue in those cases involves what role race can or should play in the admissions process. In the seminal Supreme Court case of the University of California v. Bakke, the Court examined the legality of a race-based quota system. Bakke was a 35-year-old white male who was rejected from the University of California at Davis College of Medicine twice. He contended that his qualifications exceeded those of the 32 minority students who were admitted in the 2 years he was rejected. His argument, in appeal, was heard in the US Supreme Court in 1977. The Court, in a split decision, found for Bakke—granting him admission—but upheld the use of affirmative action to compensate for unlawful exclusion of minorities from the medical profession. That decision also made racial quota systems illegal but maintained that race could be a factor in admission.

Critics of affirmative action have stated that the “help” that comes with weighing race heavily in the admission process minimizes student and faculty accomplishments. It has been used as an insult against URMM students and faculty in a variety of settings. However, despite the unconscious bias of low expectations that come with the assumption that a URMM student or faculty member has their position because of affirmative action, we still argue that race/ethnicity, in the context of socioeconomic status, must continue to be a factor in medical school admissions. Recent court decisions on affirmative action policies by universities have called the practice into question. In Grutter vs. Bollinger (2003), a qualified female law school applicant sued the University of Michigan School of Law because she was denied admission and argued that the denial was

a direct violation of her 14th amendment right to equal protection under the law. After a lengthy lower court battle, the US Supreme Court found in favor of the University of Michigan, stating that their program was not a “quota” system and therefore legal. At the time, it seemed likely that the court would overturn all affirmative action policies, but like the Bakke decision, it also upheld affirmative action.

In April 2014 the Supreme Court upheld a Michigan law banning the use of race criteria in college admissions. In this case, the justices found that a lower court did not have the authority to set aside the measure approved in a 2006 referendum supported by voters in Michigan to bar publicly funded colleges from granting “preferential treatment to any individual or group on the basis of race, sex, color, ethnicity, or national origin.” In this case and similar ones, the debate hinged on whether the university diversity goals had been met. Given the scarcity of URMM students and faculty in medicine, it is evident that the goals of diversity have not been met. This approved state referendum is likely to be bad for URMM representation in medicine. We share the views of Justice Sotomayor in her dissent who stated that “This refusal to accept the stark reality that race matters is regrettable. The way to stop discrimination on the basis of race is to speak openly and candidly on the subject of race and to apply the Constitution with eyes open to the unfortunate effects of centuries of racial discrimination . . . [and] we ought not sit back and wish away, rather than confront, the racial inequality that exists in our society.”²⁶

Impact Summary

The authors recognize that the systems and behaviors that encourage poor participation of URMM students and faculty are not intentional. We certainly do not believe that institutions purposely create challenges for URMM faculty, or change diversity definitions to

exclude URMM students or faculty. We do not believe that the MCAT or URMM faculty development programs were designed for that end. We do recognize, however, that even in the absence of intention, these systems and behaviors do exist, and it is clear that for the last 20 years, little progress has been made for blacks, the majority of Latinos, and Native Americans.

The recent Supreme Court decisions have indicated that as a nation we are quickly moving away from affirmative action and similar programs designed to increase diversity in universities and medical colleges throughout the country. The limited progress in diversifying the medical field and medical faculties over the last 20 years suggests that affirmative action has made some steps forward, but we are not in a position where population parity (or even half parity) has been reached—and in the case of Native American and black medical students, we are moving in the opposite direction. All of these factors suggest that our retreat from affirmative action can only make things worse and serve to worsen the poor participation of black, Latino, and Native Americans in medicine.

Family medicine has a history of being counter-culture and for speaking up for those who have no voice. We have advocated for our patients and clients, and taken care of the underserved, uninsured, and minority patients in great numbers. Our academic family medicine departments are known for their ethnic/racial diversity^{14,27} and have been very inclusive. Perhaps it is time to return to those counter-culture roots and increase our advocacy for our black, Latino, and Native American patients, to include changing the culture of medicine to make it more welcoming to faculty and students from those backgrounds. This will require careful examination of current practices and the formation of systems and programs that work to facilitate participation by those who have traditionally been given

limited access. The National Initiative on Gender, Culture, and Leadership in Medicine (C-change) has done excellent work in this area and has been successful in reversing practices that promoted poor representation of blacks, Latinos, and Native Americans in academic medicine.^{28,29} C-change initiatives in five medical schools led to improvements in faculty development and mentoring, increased communication to and among faculty, changes in policies, procedures, and administrative structures, and increased data collection and management efforts in diversity, gender, and culture.²⁸ The time to take action is now. We, in family medicine, have the opportunity to lead the change that others can follow. Changes that should be made to empower and value URMM applicants, students and faculty include:

(1) Improve preparation for medical school through proven pipeline programs for URMM students.³⁰

(2) Give more emphasis to grades, serious consideration to community college graduates,^{31,32} and de-emphasize the MCAT in medical school admissions.³³

(3) Encourage and support URMM students and residents who show an interest in an academic career through:

(a) Targeted training in ways to overcome isolation, lack of mentorship, diversity pressures, and racism.

(b) Extracurricular publishing opportunities, through the Family Physicians Inquiries Network³⁴ or other sources.

(4) Teach junior faculty about existing literature-documented challenges (listed in #3) that URMM faculty face and methods to overcome those challenges.

(5) Foster creativity in and commitment to an academic career through instrumental mentoring.³⁵

(6) Clearly define specific activities and skills (ie, limiting clinical practice, understanding institutional culture, publishing) necessary to climb the ladder of academic success.

(7) Help URMM and other faculty avoid premature or unmerited promotion to senior rank, to prevent early stagnation, burnout, and career handicapping.

(8) Implement faculty debt relief, which can make it easier for all to choose a career in academic medicine.¹⁸

(9) Recognize and value the unique contributions that URMM and other faculty offer through modification of the promotions process to include:

(a) “Underserved patient care advocacy” pathways to promotion, valuing clinical care, community service, and research with underserved and minority patients.

(b) Increased time and value assigned to URMM and other student mentoring.

With models like these, family medicine has the unique opportunity to lead the academy increasing the representation of blacks, Latinos, and Native Americans among our medical students, academic medical faculties, and physician workforce to better serve our patients and our communities.

CORRESPONDING AUTHOR: Address correspondence to Dr Rodríguez, Florida State University, Department of Family Medicine and Rural Health, The Center for Underrepresented Minorities in Academic Medicine at the College of Medicine, 1115 West Call Street, #3210 M, Tallahassee, FL 32306. 850-645-6850. jose.rodriguez@med.fsu.edu.

References

- Lane-Fall M. A piece of my mind. Accommodating bigotry. *JAMA* 2014;311(2):139-40.
- Mahoney MR, Wilson E, Odom KL, Flowers L, Adler SR. Minority faculty voices on diversity in academic medicine: perspectives from one school. *Acad Med* 2008;83(8):781-6.
- Guevara J, Adanga E, Avakame E, Carthon M. Minority faculty development programs and underrepresented minority faculty representation at US medical schools. *JAMA* 2013;310(21):8.
- Resident population estimates of the United States by sex, race, and Hispanic origin: April 1, 1990 to July 1, 1999, with short-term projection to November 1, 2000. <https://http://www.census.gov/population/estimates/nation/intfile3-1.txt>. Accessed September 9, 2014.
- State and county quickfacts. <http://quickfacts.census.gov/qfd/states/00000.html>. Accessed September 9, 2014.
- AAMC. The status of the new AAMC definition of “underrepresented in medicine” following the Supreme Court’s decision in Grutter. https://services.aamc.org/AMCAS2_2010/WebApp/Help/WebHelp/Disadvantaged_Status.htm. Accessed January 31, 2014.
- Page KR, Castillo-Page L, Wright SM. Faculty diversity programs in US medical schools and characteristics associated with higher faculty diversity. *Acad Med* 2011;86(10):1221-8.
- Ward L. Medical school enrollment shows diversity gains. 2012. <https://www.aamc.org/newsroom/newsreleases/2010/152932/101013.html>. Accessed November 26, 2013.
- Ward L. First-year enrollees to US medical schools, 2003-2010. 2010. https://www.aamc.org/download/152934/data/enrollment_data_2010.pdf. Accessed January 29, 2014.
- Carlisle DM, Gardner JE. The entry of African-American students into US medical schools: an evaluation of recent trends. *J Natl Med Assoc* 1998;90(8):466-73.
- Pololi LH, Evans AT, Gibbs BK, Krupat E, Brennan RT, Civian JT. The experience of minority faculty who are underrepresented in medicine, at 26 representative US medical schools. *Acad Med* 2013;88(9):1308-14.
- 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 Feb 1;174(2):289-91.
- Richert A, Campbell K, Rodríguez J, Borowsky IW, Parikh R, Colwell A. ACU workforce column: expanding and supporting the health care workforce. *J Health Care Poor Underserved* 2013;24(4):1423-31.
- Marbella AM, Holloway RL, Sherwood R, Layde PM. Academic ranks and medical schools of underrepresented minority faculty in family medicine departments. *Acad Med* 2002;77(2):173-6.
- Sánchez JP, Peters L, Lee-Rey E, et al. Racial and ethnic minority medical students’ perceptions of and interest in careers in academic medicine. *Acad Med* 2013;88(9):1299-307.
- Pololi L, Cooper LA, Carr P. Race, disadvantage and faculty experiences in academic medicine. *J Gen Intern Med* 2010;25(12):1363-9.
- Cropsey KL, Masho SW, Shiang R, et al. Why do faculty leave? Reasons for attrition of women and minority faculty from a medical school: four-year results. *J Womens Health (Larchmt)* 2008;17(7):1111-8.
- Rodríguez JE, Campbell KM, Fogarty JP. Underrepresented minority faculty in academic medicine: a systematic review of URM faculty development. *Fam Med* 2014;46(2):100-4.
- Carr PL, Palepu A, Szalacha L, Caswell C, Inui T. “Flying below the radar”: a qualitative study of minority experience and management of discrimination in academic medicine. *Med Educ* 2007;41(6):601-9.
- AAMC. AMCAS Socioeconomic Status Disadvantaged Indicator. <https://http://www.aamc.org/download/351766/data/amcassesdisadvantagedindicator.pdf>. Accessed March 12, 2014.
- AAMC. Disadvantaged status. https://services.aamc.org/AMCAS2_2010/WebApp/Help/WebHelp/Disadvantaged_Status.htm. Accessed March 12, 2014.
- Ennis SR, Rios-Vargas M, Albert NG. The Hispanic population: 2010. Washington, DC: The United States Census Bureau, 2011.
- Hiss WC, Franks VW. Defining promise: optional standardized testing policies in American college and university admissions. <http://www.nacacnet.org/research/research-data/nacac-research/Documents/DefiningPromise.pdf>2014.
- Davis D, Dorsey JK, Franks RD, Sackett PR, Searcy CA, Zhao X. Do racial and ethnic group differences in performance on the MCAT exam reflect test bias? *Acad Med* 2013;88(5):593-602.
- Rodríguez JE, Campbell KM. Does the continued use of the MCAT hinder care for minority patients? *Journal of Immigrant and Minority Health* 2014 Jun 6 [Epub ahead of print].
- Howe A. Divided court upholds Michigans’s ban on affirmative action: In Plain English 2014. <http://www.scotusblog.com/2014/04/divided-court-upholds-michigans-ban-on-affirmative-action-in-plain-english/>. Accessed July 11, 2014.
- Lewis-Stevenson S, Hueston WJ, Mainous AG 3rd, Bazell PC, Ye X. Female and underrepresented minority faculty in academic departments of family medicine: are women and minorities better off in family medicine? *Fam Med* 2001;33(6):459-65.
- Krupat E, Pololi L, Schnell ER, Kern DE. Changing the culture of academic medicine: the C-Change learning action network and its impact at participating medical schools. *Acad Med* 2013;88(9):1252-8.
- Pololi LH, Krupat E, Schnell ER, Kern DE. Preparing culture change agents for academic medicine in a multi-institutional consortium: the C-Change learning action network. *J Contin Educ Health Prof* 2013;33(4):244-57.
- Campbell KM, Berne-Anderson T, Wang A, Dormeus G, Rodríguez JE. USSTRIDE program is associated with competitive black and Latino student applicants to medical school. *Medical Education Online* 2014;19(24200):4.
- Saguil A, Kellermann AL. The community college pathway to medical school: a road less traveled. *Acad Med* 2014;89(12):1589-92.
- Talamantes E, Mangione CM, Gonzalez K, Jimenez A, Gonzalez F, Moreno G. Community college pathways: improving the US physician workforce pipeline. *Acad Med* 2014;89(12):1649-56.
- Rodríguez JE, Campbell KM. Does the continued use of the MCAT hinder care for minority patients? *J Immigr Minor Health* 2014 Jun 6 [Epub ahead of print].
- Family Physicians Inquiries Network. <http://www.fpin.org>. Accessed September 16, 2014.
- Daley SP, Broyles SL, Rivera LM, Brennan JJ, Lu ER, Reznik V. A conceptual model for faculty development in academic medicine: the underrepresented minority faculty experience. *J Natl Med Assoc* 2011;103(9-10):816-21.