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Addressing Structural Racism in the Health Workforce

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ne of the greatest challenges facing the United States are health inequities among racial/ethnic and other marginalized populations. The deep-rooted structural racism embedded in our social systems, including our health care system and health workforce, is a core cause of racial health inequities. Among many definitions of institutionalized or structural racism, Dr Jones² best defines it as: "Differential access to goods, services and opportunities of society by race ... It is structural, having been codified in our institutions of custom, practice, and law, so there need not be an identifiable perpetrator." Dr Jones further explains that to set things right in our country, we have to address this type of racism that is embedded in all of our systems. Historical and existing structural obstacles have significantly reduced access to health professions education among marginalized populations in the United States.^{3,4} This has rendered an underrepresentation of Black, Latino, and Native persons in health professions schools, practice, and leadership.^{5,6} This commentary presents the evidence of and potential avenues for beginning to address structural racism in the health care workforce. We discuss how historical and present-day racism impacts recruitment and retention of historically excluded groups in the health professions (eg. Black, Latino, and Native people) and the investments needed to dismantle the impacts of structural racism on the diversity of our health workforce.

PERMEATION OF STRUCTURAL RACISM IN THE HEALTH WORKFORCE Lack of Diversity

It is important to begin viewing the continuing impact of racism on our health workforce through a historical lens. The 1910 Flexner Report directly impacted success rates of historically Black medical schools⁷; this led to the closure of 7 of the 10 medical schools training Black doctors at the time and resulted in a significant decline in the number of Black doctors produced in the United States.⁸ This regressive approach started us down the road and acted as a catalyst to the ongoing disproportionately low numbers of Black, Latino, and Native students applying, accepted to, and graduating from health professions schools,⁹ as well as the proportion that graduate and attain leadership positions.^{6,10–13}

Pay Inequities and Debt Accumulation

Inequities in salaries/pay among underrepresented minorities are reported in many sectors, and medicine is no exception. Consistently Black and Latino physicians and nurses report lower incomes compared with their White and Asian counterparts. ^{14–16} In addition, Black and Latino medical students and dental students often incur higher anticipated education debt compared with other racial groups. ^{17,18} Structural racism, therefore, impacts not

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only the diversity of the workforce it affects the economic opportunity of health professionals through racial pay inequities and greater debt burden.

Racism Experienced by Students and Health Care Providers From Historically Excluded Groups

Additional evidence of structural racism is noted in the cumulative experiences of racism and discrimination frequently reported by Black, Latino, and Native students and health care providers within health professions schools, academic health centers, and health care settings. Health care providers from historically excluded groups are more likely to experience discrimination from their peers and patients with little to no recourse. 19,20 This perpetration of racism and discrimination against health professions students and providers of color has a negative impact on their physical and mental health²¹ and ultimately affects their retention in the workforce. 4 In a gut-wrenching commentary, Dr Blackstock 22 described why she (and so many other Black physicians) had made the incredibly difficult decision to leave academic medicine. Such known and unknown instances continue to highlight the need for strong and urgent efforts to increase the diversity of our health workforce, immediately address pay inequities, and strive to improve experiences of Black, Latino, and Native health professions students and health care providers that have been neglected and undervalued for decades.

POLICY AND PRACTICAL IMPLICATIONS

Recognize, Address, and Educate on the Pervasive Legacy of Racism in Health Care and Health Professions Education

The foundation of medicine in the United States cannot be separated from this nation's history with slavery and segregation. At the time of the Flexner Report, medical institutions were segregated, and Black hospitals/medical schools were strained due to limited funding and resources. While segregation was deemed illegal in 1964, it was met with hostility and violence delaying its implementation. If 5 of the 7 historically Black medical schools that closed after the release of the Flexner Report would continue to operate and expand, ~28,000-35,000 Black medical students would have graduated from those between the year of their closure and 2019.8 In an effort to incorporate education on structural racism in medicine, some undergraduate institutions, medical schools, and professional associations have been creating curriculums for health care professions students and providers, alike. At Vanderbilt University, the faculty created an interdisciplinary undergraduate prehealth major (ie, Medicine, Health, and Society) that encourages students to think critically about how structural factors impact health and health care.²³ Rutgers New Jersey Medical School is an excellent example of an evidence-based Health Equity and Social Justice program for medical students that extends from preclerkship to the clerkship year.²⁴ Faculty and staff at the University of Washington School of Nursing participated in workshops about antiracism to improve the sociopolitical climate. 25 Other medical schools and organizations have been exploring ways to educate medical and nursing students on building trust with native communities and the unique needs that Native students may have as they enter the health professions. ^{26,27} In another example, Dr Boyd, ²⁸ a physician who studies the relationships between racism and health inequities, recently posted that she had received a question on her board certification for pediatrics about systemic racism. Other professional boards should consider following suit of the American Board of Pediatrics and consider knowledge and understanding of how structural racism affects health as a core competency to practice in our country.

Institute Stronger Workforce Policies Against Explicit and Implicit Racism From Patients, Other Providers, and Faculty to Improve Organizational Climate

Students and providers both experience racism and discrimination perpetrated by peers, faculty, and patients. ^{29,30} Biased patient behaviors can be reflected as an outright refusal of care and can exert a heavy psychological toll on providers of color, resulting in provider burnout and negative impacts on the providers' mental health. ^{19,31–33} To move toward a health care workforce that is representative of our country, organizations and institutions should espouse values and listen to health professionals and students from historically excluded groups and create concrete policies and actions that change their experience within the health care system.

Examine Hiring and Promotion Policies to Create and Execute a Plan to Increase Diversity of Those Holding Leadership Positions

Among health care leaders, one study found that only 8% of individuals on hospital boards and executive leadership positions are Black, 3% are Hispanic, 1% are multiracial, 2% are Asian, and <1% are American Indian or Alaskan Native.⁶ Along with improving organizational climate, health care systems should promote individuals from historically excluded groups into leadership positions. In fact, a new tool, developed to better meet the needs of American Indian and Alaskan Native students, was developed by American Indian and Alaskan Native faculty in leadership at 4 different universities.³⁴ Organizations that invest in diverse leadership may be able to cultivate a more culturally responsive health care organization and begin to eliminate health disparities.³⁵

Invest in Schools That Graduate More Black, Latino, and Native Students (ie, Historically Black Colleges, Hispanic Serving Institutions, and Tribal Associated Schools)

Three of the top 5 medical schools that graduate the most Black medical students are Historically Black College and Universities (HBCUs; Meharry Medical College, Howard University College of Medicine, and Morehouse School of Medicine). In addition, of the top 5 medical schools that graduate the most Hispanic graduates, 4 are located in Puerto Rico. In nursing, HBCUs have been training Black nurses since 1863 and continue to set precedents, with 2 HBCUs being the first in their state to award bachelor's degrees in

nursing³⁷ (Hampton University and Tuskegee University). These schools should be viewed as exemplars, and their success in diversifying our health workforce should be supported through appropriate investments. Setting a stellar example is the recent announcement of the \$100 million partnership between Morehouse School of Medicine and CommonSpiritHealth to develop and train more Black physicians.³⁸ Similar investments in supporting existing schools or opening new health professions schools with HBCUs, Hispanic Serving Institutions, and Tribal Associated Schools will move the needle towards training a diverse pipeline of health professionals.³⁹

Invest in the Systematic Study of Pipeline Programs for Historically Excluded Groups

Pipeline programs supported by the Health Resources and Services Administration (HRSA), as well as other federal programs, are widely regarded as crucial to improving the diversity of the student population and eventually the health workforce. 40 However, much remains to be learned about their success in improving diversity and one critical question is the timing of the start of this pipeline. Many programs are focused on high school and undergraduate populations, but as Dr Poll-Hunter states in an AAMC article, "Interventions that start in high school and college are still important, but if we wait until then, unfortunately, we have already lost some students."41 A potential challenge is that pipeline programs could be serving as gatekeepers and elevating students with the resources to apply to these programs while keeping out those who do not have those same resources. This calls for a more systematic study of pipeline programs, and we offer a few questions related to these programs that need further exploration:

- Which programs are most successful? What are the mechanisms through which they achieve success? What is their theory of change?
- Is there a longitudinal tracking of students who complete the program and an evaluation of the impact on increasing diversity of the workforce?
- What are the experiences of students from historically excluded groups in these pipeline programs?
- How are pipeline programs connected with medical schools and the communities in which they reside?

While these programs are incredibly valuable and have rightly gained policy attention as a mechanism to improve diversity; many lessons remain to be learned from pipeline programs as future investments in strategies to address structural racism in the health workforce are being considered.

CONCLUSIONS

Leading health professional organizations, such as the Association of American Medical Colleges, the American Medical Association, 42 American Psychiatric Association, 43 and the American Dental Association 44 have acknowledged and/or apologized for their role in racism in health care. Health professional organizations and schools should strive to be active participants in social justice and advocacy for racial equity, especially as it relates to diversity and representation in education and practice. 45 This looks like more than simply

having pipeline programs and admitting more students from underrepresented backgrounds. The suggestions and policy implications above are not exhaustive and should be seen as a starting point off of which to dismantle the racial foundation on which health professions education was built and create a safe environment for students and the workforce from historically excluded groups to feel valued and supported as a crucial part of the workforce. The onus of establishing active policies to recruit and retain Black, Latino, and Native students and providers and fostering growth through professional opportunities like mentoring and promotions to leadership positions should not simply be placed on HBCUs or other institutions that serve Hispanic and native people—but should be widely adopted across health care institutions.

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REFERENCES

- 1. Phelan JC, Link BG. Is racism a fundamental cause of inequalities in health? *Annu Rev Sociol.* 2015;41:311–330.
- 2. Jones CP. Levels of racism: a theoretic framework and a gardener's tale. *Am J Public Health*. 2000;90:1212–1215.
- Associated Medical Schools of New York. Addressing the challenges to a diverse physician workforce. 2020. Available at: https://amsny.org/wpcontent/uploads/2020/02/addressing-the-challenges-to-a-diverse-physicianworkforce-amsny-optimized.pdf. Accessed March 8, 2021.
- White BJ, Fulton JS. Common experiences of African American nursing students: an integrative review. Nurs Educ Perspect. 2015;36:167–175.
- Lett LA, Murdock HM, Orji WU, et al. Trends in racial/ethnic representation among US medical students. JAMA Netw Open. 2019;2:e1910490.
- Institute for Diversity in Health Management, Health Research & Educational Trust. Diversity and disparities: a benchmarking study of US hospitals in 2015; 2016:1–34. Available at: https://ifdhe.aha.org/system/files/media/file/ 2020/03/Diverity_Disparities2016_final.pdf. Accessed September 18, 2020.
- Savitt T. Abraham Flexner and the Black medical schools. J Natl Med Assoc. 2006;98:10.
- Campbell KM, Corral I, Infante Linares JL, et al. Projected estimates of African American medical graduates of closed historically Black medical schools. JAMA Netw Open. 2020;3:e2015220.
- Salsberg E, Richwine C, Westergaard S, et al. Estimation and comparison of current and future racial/ethnic representation in the US Health Care Workforce. *JAMA Netw Open.* 2021;4:e213789.
- Hlavinka E. Racial bias in Flexner Report permeates medical education today. MedPage Today; 2020. Available at: www.medpagetoday.com/ publichealthpolicy/medicaleducation/87171. Accessed March 8, 2021.
- Association of American Medical Colleges (AAMC). Figure 2. Percentage of applicants to US medical schools by race/ethnicity (alone), academic year 2018-2019. Diversity in Medicine: Facts and Figures 2019; 2019. Available at: www.aamc.org/data-reports/workforce/interactive-data/figure-2-percentage-applicants-us-medical-schools-race/ethnicity-alone-academic-year-2018-2019. Accessed March 8, 2021.
- Mertz EA, Wides CD, Kottek AM, et al. Underrepresented minority dentists: quantifying their numbers and characterizing the communities they serve. *Health Aff (Millwood)*. 2016;35:2190–2199.
- Mitchell DA, Lassiter SL. Addressing health care disparities and increasing workforce diversity: the next step for the dental, medical, and public health professions. Am J Public Health. 2006;96:2093–2097.
- Medscape. Medscape Physician Compensation Report 2017; 2017. Available at: www.medscape.com/slideshow/compensation-2017-overview-6008547#7. Accessed December 4, 2020.
- Ly DP, Seabury SA, Jena AB. Differences in incomes of physicians in the United States by race and sex: observational study. BMJ. 2016;353:i2923.
- Moore J, Continelli T. Racial/ethnic pay disparities among registered nurses (RNs) in US hospitals: an econometric regression decomposition. *Health Serv Res.* 2016;51:511–529.

- Dugger RA, El-Sayed AM, Dogra A, et al. The color of debt: racial disparities in anticipated medical student debt in the United States. *PLoS One*. 2013;8:e74693.
- Toretsky C, Mutha S, Coffman J. Reducing Educational Debt Among Underrepresented Physicians and Dentists. San Francisco, CA: Healthforce Center at UC San Francisco; 2019:1–33.
- Wheeler M, de Bourmont S, Paul-Emile K, et al. Physician and trainee experiences with patient bias. *JAMA Intern Med.* 2019;179:1678.
- 20. Wilson DW. From their own voices: the lived experience of African American registered nurses. *J Transcult Nurs*. 2007;18:142–149.
- Serafini K, Coyer C, Brown Speights J, et al. Racism as experienced by physicians of color in the health care setting. Fam Med. 2020;52: 282–287.
- Blackstock U. Why Black doctors like me are leaving academic medicine. First Opinion; 2020. Available at: www.statnews.com/2020/ 01/16/black-doctors-leaving-faculty-positions-academic-medical-centers/. Accessed March 8, 2021.
- Metzl JM, Petty J, Olowojoba OV. Using a structural competency framework to teach structural racism in pre-health education. Soc Sci Med. 2018;199:189–201.
- DallaPiazza M, Ayyala MS, Soto-Greene ML. Empowering future physicians to advocate for health equity: a blueprint for a longitudinal thread in undergraduate medical education. *Med Teach*. 2020;42: 806–812
- Schroeder C, DiAngelo R. Addressing whiteness in nursing education: the Sociopolitical Climate Project at the University of Washington School of Nursing. Adv Nurs Sci. 2010;33:244–255.
- Campaign for Action. A pathway to promote academic success for American Indian/Alaska Native Nursing Student Mentoring Toolkit for nursing faculty

 —Leading health equity for Native American nurses. *Campaign for Action*;
 2020. Available at: https://campaignforaction.org/leading-health-equity-for-native-american-nurses/. Accessed March 10, 2021.
- 27. Lewis M, Prunuske A. The development of an indigenous health curriculum for medical students. *Acad Med.* 2017;92:641–648.
- 28. Boyd R. I JUST HAD A BOARD QUESTION ON RACISM. (Boards are certification exams that assess doctors' competency to practice a specialty, in my case pediatrics). That means ... UNDERSTANDING SYSTEMIC RACISM IS NOW A COMPETENCY TO PRACTICE PEDIATRICS IN THE US!! I'm in tears. @RheaBoydMD; 2020. Available at: https://twitter.com/RheaBoydMD/status/1335635251377229824. Accessed March 8, 2021.
- Montenegro RE. My name is not "Interpreter". JAMA. 2016;315: 2071–2072.
- 30. Teherani A, Hauer KE, Fernandez A, et al. How small differences in assessed clinical performance amplify to large differences in grades and awards: a cascade with serious consequences for students underrepresented in medicine. Acad Med. 2018;93:1286–1292.
- Watson S. Credentials don't shield doctors, nurses from bias. WebMD;
 Available at: www.webmd.com/a-to-z-guides/news/20171018/ survey-patient-bias-toward-doctors-nurses. Accessed March 9, 2021.

- Reddy S. How doctors deal with racist patients. Wall Street Journal;
 2018. Available at: www.wsj.com/articles/how-doctors-deal-with-racist-patients-1516633710. Accessed March 9, 2021.
- Nunez-Smith M, Curry LA, Bigby J, et al. Impact of race on the professional lives of physicians of African descent. *Ann Intern Med*. 2007;146:45.
- 34. Vasquez Guzman C, Lewis M, Yancey D, et al. The time is now: transforming recruitment and retention of American Indian and Alaska Native Medical students using the medicine wheel model. *J Health Sci Educ*. 2020;4:10.
- Dotson E, Nuru-Jeter A. Setting the stage for a business case for leadership diversity in healthcare: history, research, and leverage. J Healthc Manag. 2012;57:35–46.
- 36. Association of American Medical Colleges (AAMC). Table 6. US medical schools with 150 or more Black or African American graduates (alone or in combination), 2009-2010 through 2018. 2019. Available at: www.aamc.org/data-reports/workforce/data/table-6-us-medical-schools-150-or-more-black-or-african-american-graduates-alone-or-combination-2009. Accessed March 8, 2021.
- 37. Tyson T, Kenon CJ, Nance K. Nursing at historically Black colleges and universities. *J Prof Nurs*. 2018;34:167–170.
- Morehouse School of Medicine. MSM partners with National Health System to train more Black physicians. Morehouse School of Medicine; 2020. Available at: www.msm.edu/RSSFeedArticles/2020/December/ images/msmpartnerswithcommonspirit.php. Accessed March 8, 2021.
- 39. Yancy CW, Bauchner H. Diversity in medical schools—need for a new bold approach. *JAMA*. 2021;325:31.
- Gardner O. Pipeline programs and system reform: a path to improving health equity. AAMC; 2018. Available at: www.aamc.org/news-insights/ pipeline-programs-and-system-reform-path-improving-health-equity. Accessed February 25, 2021.
- 41. Weiner S. Pre-Premed: pipeline efforts steer elementary school students into medicine. AAMC. 2018. Available at: www.aamc.org/news-insights/pre-premed-pipeline-efforts-steer-elementary-school-students-medicine. Accessed March 8, 2021.
- Madara JL. Reckoning with medicine's history of racism. American Medical Association. Leadership; 2021. Available at: www.ama-assn.org/about/ leadership/reckoning-medicine-s-history-racism. Accessed March 3, 2021.
- American Psychiatric Association. APA's apology to Black, indigenous and people of color for its support of structural racism in psychiatry; 2021. Available at: www.psychiatry.org/newsroom/apa-apology-for-itssupport-of-structural-racism-in-psychiatry. Accessed February 26, 2021.
- Wyckoff WB. ADA "Sorry" for allowing discrimination in '60s. *NPRorg*; 2010. Available at: www.npr.org/sections/health-shots/2011/ 02/15/131039590/dentist-group-says-it-should-have-stood-against-racial-discrimination. Accessed March 3, 2021.
- 45. Steinecke A, Terrell C. Progress for whose future? The impact of the Flexner Report on medical education for racial and ethnic minority physicians in the United States. *Acad Med.* 2010;85:236–245.