

my oncologist. She is the sort of clinician I'm happy to trust with my life, and she answered my questions about ovarian cancer risk with compassion and precision. By the time I'm 40, she explained, my cumulative risk of ovarian cancer will have risen to 3%. That number sounds so tiny, and yet it's the basis on which doctors warn me to have my ovaries removed by the time I'm 40. I would be furious if, in the name of treating me "equitably," my doctors told me that my risk was 3% when it was really 6%, or 1%, because my most critical life de-

isions hinge on those numbers. So I want for other patients what I want for myself: give us your best estimate of our risk, engaging deeply with the context-specific inequities that distort risk predictions, so we can decide what to do.

Disclosure forms provided by the author are available at NEJM.org.

From the Department of Computer Science, Cornell Tech, and the Department of Population Health Sciences, Weill Cornell Medical College — both in New York.

This article was published on January 6, 2024, at NEJM.org.

1. Pfohl SR, Foryciarz A, Shah NH. An empirical characterization of fair machine

learning for clinical risk prediction. *J Biomed Inform* 2021;113:103621.

2. Roberts DE. Abolish race correction. *Lancet* 2021;397:17-8.

3. Vyas DA, Eisenstein LG, Jones DS. Hidden in plain sight — reconsidering the use of race correction in clinical algorithms. *N Engl J Med* 2020;383:874-82.

4. Movva R, Shanmugam D, Hou K, et al. Coarse race data conceals disparities in clinical risk score performance. In: *Proceedings and Abstracts of the 2023 Machine Learning for Health Care Conference*, August 11–12, 2023. New York: Machine Learning for Health Care, 2023.

5. Chen IY, Pierson E, Rose S, Joshi S, Ferryman K, Ghassemi M. Ethical machine learning in healthcare. *Annu Rev Biomed Data Sci* 2021;4:123-44.

DOI: 10.1056/NEJMp2311050

Copyright © 2024 Massachusetts Medical Society.

Centering Women of Color to Promote Excellence in Academic Medicine

Christina Mangurian, M.D., Nancy D. Spector, M.D., and Ruth S. Shim, M.D., M.P.H.

The recent U.S. Supreme Court decision striking down the use of affirmative action in university admissions threatens decades of progress in the areas of diversity, equity, and inclusion in academic medicine. Although women accounted for the majority of medical school enrollees in 2022, they represented only 28% of full professors, 23% of department chairs, and 27% of deans that same year,¹ and gender-based disparities in compensation persist at the highest levels of academic medicine.² Similarly, 11% of full professors and 13% of department chairs and deans in 2022 were members of racial or ethnic groups that are underrepresented in medicine.¹ Only about 3% of full professors and department chairs were women from underrepresented groups, including Black, Latina, and Indigenous women.¹

Beyond the Supreme Court decision, leaders in academic medicine have long recognized the

importance of diversity, but they have had difficulty with focus. This lack of focus has led to diffusion of efforts and to "condensation," the process by which any number of loosely related elements are consolidated under a single concept.³ Broad definitions of "diversity" can result in academic institutions making little progress on racial equity specifically.³ Existing inequities made more evident by the Covid-19 pandemic and the murder of George Floyd led to a renewed focus on recruitment of Black faculty members, cohort hires, and temporary policy reforms to support caregivers, many of whom are women. Although recent efforts represent progress, they continue to be piecemeal and have failed to support retention of faculty members from groups that are underrepresented in medicine by creating a truly inclusive and equitable climate in which all faculty members can thrive.

We propose centering efforts on

retaining and advancing women of color (and, in particular, Black women) at multiple levels (including among students, trainees, staff, faculty, and institutional leaders) in academic medicine. By "centering" women of color, we mean that leaders should focus attention, decision making, and policy interventions specifically on dismantling the structural racism and sexism that exist in academic medical institutions. Using an intersectional lens to examine how racism and sexism interact makes it clear that, throughout many industries, the experience of women of color diverges the most from that of White men. Women of color face multiple forms of discrimination and have less access to career-enhancing work than do members of other groups. Women of color also tend to face more external pressures, including responsibility for domestic work and caregiving — not just for children, but for parents and extend-

ed family members. In medical education and training, discrimination often begins early; recent evidence suggests that with increases in the number of coexisting marginalized identities, medical school attrition rates increase.⁴

Institutional leaders can center women of color in their diversity efforts by implementing or enhancing policies and procedures in several areas. First, they could establish institutional declarations and action plans. Institutions should have statements affirming that structural discrimination — specifically, racism and sexism — persists in academic medicine and must be expelled. These declarations are a first step, but they aren't sufficient. Another critical step involves developing racial equity action plans to dismantle structural racism, a process that includes reviewing policies and procedures through the lens of disparate effects on women of color. For example, a review of promotion-related policies could consider longstanding inequities between Black scientists and White scientists in the receipt of National Institutes of Health (NIH) funding, and policies could be updated to acknowledge foundation or other nonfederal funding as equivalent to NIH funding for the purposes of evaluating merit and making decisions about promotion.⁵

Second, leaders could take steps to identify and eliminate potential funding disparities within their institution. Internal grants could be awarded on the basis of a holistic review that takes into account the importance of faculty diversity. In addition to conducting institutional salary-equity reviews, which are common among health professions schools, leaders could collect data on funding amounts for endowed chairs,

hard money (guaranteed salary from the institution), and start-up and retention packages. Annual analyses of these data could focus on inequities for women of color and other inequities based on gender, race, or ethnicity.

Department chairs could also begin to track sponsorship — or access to opportunities — based on gender, race, ethnicity, and intersectional identities (such as women of color). This step would include reporting on the number of women of color who are asked to attend meetings with donors or who are appointed to, or selected for, leadership roles. Leaders should be encouraged to examine their own executive teams to determine whether women of color are included as team members at the highest level — and not just in the tokenized role of chief diversity officer.

In addition, universities could recognize work related to diversity, equity, inclusion, and anti-racism throughout each of the traditional domains of faculty evaluation (research, service, education, and clinical care) for advancement and promotion. For example, clinician-educators should be recognized for the development of quality-improvement projects aimed at improving outcomes among patients from marginalized racial and ethnic groups or new seminar series on antiracism for trainees. Institutions could review cases in which women of color are denied on-time advancement or promotion to ensure that equity issues and structural discrimination aren't impeding growth.

Institutional leave policies could be revised to ensure adequate paid leave for childbearing and childrearing. As the U.S. population ages, policies provid-

ing paid leave for care of older adults should be developed to support faculty members who are informal caregivers.

Institutions should also recognize that women of color are often subject to a “minority tax,” which refers to the burden associated with engaging in more (unpaid) mentorship and committee service than other faculty members. Departments could track committee service for all faculty members to reduce this burden. Alternatively, faculty members who are “super mentors” or take on a disproportionate amount of committee-related work should receive additional compensation, and such work should be considered in promotion and tenure decisions.

Finally, foundational training on structural discrimination and effective ways to mitigate it should be required for all institutional leaders and encouraged for all other faculty members. Clinical, research, and education leaders could work together to identify appropriate people and groups to conduct this training.

Leaders could invest funds in implementing these plans and gathering relevant data. Ultimately, success will involve achieving salary parity and representation of women of color in academic medicine leadership roles at rates reflecting the diversity of the United States.

Although we intentionally include all women of color (e.g., Latina, Indigenous, and Asian women) in our descriptions of these efforts, we recommend that a primary focus be on Black women. A focus on Black women — the group that we contend has experienced significant marginalization and structural discrimination in academic medicine — could help promote inclusive

policies and procedures that would benefit other women of color and members of other historically marginalized groups (e.g., sexual and gender minorities, immigrants, and people with disabilities). Improved family-leave policies, for example, could benefit people of all genders and sexual orientations.

As three women with diverse racial and ethnic identities, we have experienced structural discrimination in the form of sexism and racism our whole careers. Because academic medical institutions weren't created with us in mind, we have witnessed White men with less experience and fewer skills get promoted and advance, while our colleagues from historically excluded groups are devalued and marginalized.

If we truly want to support excellence for everyone in academic medicine and promote health equity for all patients, a justice- and equity-focused approach will be required. We believe institutions must center efforts on women of color to dismantle structural racism and sexism so that Black women and other women of color can thrive in academic medicine.

Disclosure forms provided by the authors are available at NEJM.org.

From the Department of Psychiatry and Behavioral Sciences, Weill Institute for Neurosciences, University of California, San Francisco School of Medicine, and the Center for Vulnerable Populations, Zuckerberg San Francisco General Hospital, San Francisco (C.M.), and the Department of Psychiatry and Behavioral Sciences, University of California, Davis (R.S.S.) — all in California; and the Department of Pediatrics and Executive Leadership in Academic Medicine,

Drexel University College of Medicine, Philadelphia (N.D.S.).

This article was published on January 6, 2024, at NEJM.org.

1. Faculty roster: U.S. medical school faculty. Washington, DC: Association of American Medical Colleges, December 31, 2022 (<https://www.aamc.org/data-reports/faculty-institutions/interactive-data/us-medical-school-faculty-trends-percentages>).
2. Gottlieb AS, Dandar VM, Lautenberger DM, Best C, Jagi R. Equal pay for equal work in the dean suite: addressing occupational gender segregation and compensation inequities among medical school leadership. *Acad Med* 2023;98:296-9.
3. Thomas JM. Diversity regimes: why talk is not enough to fix racial inequality at universities. New Brunswick, NJ: Rutgers University Press, 2020.
4. Nguyen M, Chaudhry SI, Desai MM, et al. Association of sociodemographic characteristics with US medical student attrition. *JAMA Intern Med* 2022;182:917-24.
5. Stevens KR, Masters KS, Imoukhuede PI, et al. Fund Black scientists. *Cell* 2021;184:561-5.

DOI: 10.1056/NEJMp2309206

Copyright © 2024 Massachusetts Medical Society.

Buddy System

Eleanor R. Menzin, M.D.

At the idyllic lakefront camp where I spent childhood summers, free swim was the highlight of the day. Campers were assigned a swimming-skills peer to be their swim buddy. At regular intervals, the lifeguard blew a piercing whistle, stood on the peeling white chair, and called, "Buddy check!" The swimmers had a few frantic seconds to locate their buddies, grab their hands, and hold the clasped hands above their heads. For the staff, this was a safety check. For a shy camper like me, it guaranteed that someone had to swim close enough to find my hand; often, the buddy turned into a friend.

Medical training provides us with automatic buddies for many years. College lab partners, anatomy dissection groups, coresident teams, and fellowship classes all

supply the support of built-in companions with shared interests and experiences. Often, parallel career trajectories result in shared life experiences outside medicine, and thus people with whom to commiserate over finding apartments, planning a wedding, or surviving infant sleep training. But when the PGY-numbered years end, doctors often find themselves adrift in the sea without an assigned swim buddy.

I was fresh out of residency when I joined my practice 23 years ago, and about as prepared for outpatient medicine as I would have been to swim across the Atlantic. Each of my partners played a role in my education — teaching me about rashes, rounding, or writing school letters. I learned from, and am grateful for, all of them. But no single experience

was as transformative as having a buddy.

My buddy and I are not temperamentally similar: she has the careful analytic style of an almost-engineer, and I have the impatient decisiveness of an almost-surgeon. She had been in practice longer and taught me plenty, such as how to write orders that prevented midnight wake-up calls with nonessential lab results. But the value of the relationship lay (and lies) in the relationship itself, not the skills I learned.

Initially, my buddy and I each had 1 day off and rounded for each other 1 day a week to protect one another's nonclinical day. Eventually (in a process much longer and more painful than a single sentence suggests), we both had children and negotiated working 3 days a week each; she