Reflect and Reset: Black Academic Voices Call the Graduate Medical Education Community to Action

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Abstract

The COVID-19 pandemic highlighted the great achievements that the biomedical community can accomplish, but raised the question: Can the same medical community that developed a complex vaccine in less than a year during a pandemic help to defeat social injustice and ameliorate the epidemic of health inequity? In this article, the authors, a group of Black academics, call on the graduate medical education (GME) community to reset its trajectory toward solutions for achieving diversity, improving inclusion, and combating racism using education as the new vector. Sponsoring institutions, which include universities, academic medical centers, teaching hospitals, and teaching health centers, are the center of the creation and dissemination of scholarship. They are often the main sources of care for many historically marginalized communities. The GME learning environment must provide the next generation of medical professionals with an understanding of how racism continues to have a destructive influence on health care professionals and their patients. Residents have the practical experience of longitudinal patient care, and a significant portion of an individual's professional identity is formed during GME; therefore, this is a key time to address explicit stereotyping and to identify implicit bias at the individual level. The authors propose 3 main reset strategies for GME—incorporating inclusive pedagogy and structural competency into education, building a diverse and inclusive learning environment, and activating community engagement—as well as tactics that sponsoring institutions can adapt to address racism at the individual learner, medical education program, and institutional levels. Sustained, comprehensive, and systematic implementation of multiple tactics could make a significant impact. It is an academic and moral imperative for the medical community to contribute to the design and implementation of solutions that directly address racism, shifting how resident physicians are educated and modeling just and inclusive behaviors for the next generation of medical leaders.

The extraordinary effort to develop a COVID-19 vaccine and launch global vaccination efforts has shown what is possible when the diverse biomedical community comes together to swiftly address a crisis. It is especially inspiring to residents working on the front line of the pandemic to learn firsthand how difficult problems can be solved with collaboration. Yet, while these efforts have renewed faith in science, they have raised the question: Can similar vigor in the medical community be marshaled to respond to other crises; for example, can the same medical community that developed a complex vaccine in less than a year during a pandemic help to defeat social injustice and ameliorate the epidemic of health inequity? In this article, we, a group of Black academics, call on the graduate medical education (GME) community to reset its trajectory toward solutions for achieving diversity, improving inclusion, and combating racism using education as the new vector. Sponsoring institutions, which include universities, academic medical centers, teaching hospitals, and teaching health centers, are the center of the creation and dissemination of scholarship. They are often the main sources of care for many historically marginalized communities. The GME learning environment must provide the next generation of medical professionals with an understanding of how racism continues to have a destructive influence on health care professionals and their patients.

The COVID-19 pandemic teaches a familiar lesson on health inequity and social injustice. Black Americans are one of the historically marginalized groups that are suffering disproportionately from COVID-19 infections and deaths.[1] However, it is racism—not genetics or the nonbiological social construct of race—that greatly contributes to disease burden.[2] Racism is manifested at multiple levels throughout the medical system, from the individual to the medical education program and institutional levels[3]; therefore, its historical context must be recognized and it must be defined and addressed at each of these levels.

Individual racism stems from conscious and unconscious personal prejudices. The spectrum of manifestations of individual racism (e.g., biased thinking, discriminatory behavior) can be modulated by the individual; however, this will not eradicate institutional and structural racism.[4] Institutional and structural racisms are both manifestations of systemic influences (e.g., historic and current unfair institutional practices and policies that disproportionately hurt Black individuals). In coining the term, Kwame Ture (formerly known as Stokely Carmichael) noted that institutional racism originates in the operation of established and respected forces in society and thus receives far less

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public condemnation than individual racism.[5] Even more than individual racism, institutional racism demands intervention to create sustained and profound change.[6] Structural racism refers to the cumulative effects of societal factors including history, dominant culture privilege, public policies, and institutional practices that perpetuate racial inequity.[7] It is a manifestation of how racism is embedded in the history and fabric of American society. All of these forms of racism are interlinked and have far-reaching consequences. Thus, ending health inequity in medicine starts with addressing racism in society. Solutions should begin with education, including comprehensive training in GME. While this perspective reflects on concepts central to the experiences of Black physicians, several of the proposed reset strategies could help providers and patients from all historically marginalized identities, including Indigenous individuals, people of color, religious minorities, and people across the spectrum of gender identity, as well as Black individuals. Everyone benefits from a more equitable system and the history of the civil rights movement proves that gains in the Black community often facilitate parity for other historically marginalized groups.[8]

Reflect

Racism affects the clinical learning environment through its impact on the mental and physical health of providers, especially those in training. During the pandemic, most residents have been working on the frontlines. However, unlike their White counterparts, at the start of the pandemic, Black individuals in medicine had personal risks that transcended the general concerns of inadequate personal protective equipment and exposure to infection.[9] For example, many live in communities that have been labeled hotspots for the virus.[9] Black physicians face the risk of contracting COVID-19 within their neighborhoods and daily clinical practice and witness the added perils that bias contributes to patient outcomes at their own institutions. That is, Black patients are approximately 2.5 times more likely to be hospitalized and 1.7 times as likely to die from a COVID-19 infection than White patients.[1] These outcomes have a profound effect on Black physicians because the affected individuals are not just their patients but also their family members, neighbors, and friends. Black residents see structural racism in the inequities in patient outcomes and experience individual racism through differences in how they are treated professionally. They experience a double consciousness[10]; they are both providers of health care in a racist system and targets of this same racism.[11] When at work, Black physicians are often not treated as equal colleagues (an example of microinvalidations) and are often passed over for recruitment, retention, and promotion opportunities (an example of microassaults).[12–14] For example, a survey of U.S. surgical residents reported significant discrimination by race, ethnicity, and gender, with Black residents reporting the highest rates of discrimination.[15] Of Black residents surveyed, 62.4% reported being mistaken for nonphysicians compared with 1.5% of White residents. Further, Black residents reported receiving a higher rate of racial slurs from patients and patients' families than any other resident group. Black residents were also more likely to report being evaluated by a different standard than their White counterparts and being mistaken for other Black colleagues by attending physicians, nurses, and staff (both examples of microaggressions). Residents affected by discrimination had higher rates of burnout, thoughts of attrition, and suicidal ideation.[15] It has been shown that isolation and inadequate workplace support can impede professional growth,[16] which may help to explain why only a small number of Black physicians choose to remain on faculty at academic medical institutions.[12]

Reset

The significant toll that racism takes on patient outcomes and provider well-being[17,18] illustrates why a reset of institutional practices must happen. Change can start through education. Those who are either knowingly or unknowingly perpetuating racist actions must be educated and systems must be remediated to address individual- and system-level manifestations of racism. Those affected by racism must be part of any system-level change that aims to increase the number of diverse physicians, give voice to diverse opinions, and engage diverse communities. The best way to make system-level changes is for institutions to avoid biased processes and to be intolerant of discriminatory behaviors.[19] Medically centered, socially conscious learning begins in undergraduate medical education. However, residents have the added practical experience of longitudinal patient care, so they see the inconsistency between what is taught and what is practiced. Further, a significant portion of an individual's professional identity is formed during GME[20]; therefore, this is a key time to address explicit stereotyping and to identify implicit bias at the individual level. It is also the time to empower those who have witnessed or experienced discrimination to speak up without fear of intimidation or retaliation, as mandated by the Accreditation Council for Graduate Medical Education.[21] GME learning environments can positively shape emerging physicians' thinking about what ethical professional behavior entails and can potentially change the perspective of all practicing providers.[22]

Three main strategies for achieving diversity, improving inclusion, and combating racism should be used in GME: (1) incorporating inclusive pedagogy and structural competency into education, (2) building a diverse and inclusive learning environment, and (3) activating community engagement. List 1 shows proposed tactics that sponsoring institutions can adapt to address racism at the individual learner, medical education program, and institutional levels. Sustained, comprehensive, and systematic implementation of multiple tactics could make a significant impact. Further, while no single combination of tactics will work for all sponsoring institutions, each institution can tailor an inventory of tactics to fit their unique needs.

Incorporating inclusive pedagogy and structural competency into education

Bias in the medical education curriculum must be addressed with inclusive pedagogy allowing residents to feel comfortable challenging historical perspectives to create new learning and shared experiences. Structural competency, defined as the trained ability to discern how a host of issues occurring upstream impact downstream outcomes,[23] should be incorporated into GME.[24,25] Learning the history of health disparities that are rooted in slavery, segregation, economic exploitation, racialized violence, and an unjust legal

List 1

Tactics That Graduate Medical Education Sponsoring Institutions Can Adapt to Address Racism at the Individual Learner, Medical Education Program, and Institutional Levels

Incorporating Inclusive Pedagogy and Structural Competency Into Education

1. Provide safe spaces for facilitated conversations and shared experiences, led by professional moderators (e.g., psychologists).
2. Teach the history of racism, including how structural racism has shaped local and national policies that impact every aspect of society. Design a longitudinal curriculum to do this, including grand rounds, journal clubs, and interactive workshops.[23–25]
3. Understand and deconstruct heuristics and algorithms rooted in biological constructs of race.[2]
4. Use departmental or institutional conferences, grand rounds, journal clubs, and retreats to address social injustice, racial inequities, and discrimination. Support these conferences, etc., with protected time and resources.
5. Address compassion fatigue and burnout due to interpersonal and structural racism.[35]
6. Promote awareness of and reporting and accountability for implicit bias and micro- and macroaggressions, including periodic training for all to address these (including upstander training).[49]
7. Use a health equity lens for quality improvement and patient safety outcomes dashboards. Reform health care practices based on the findings from these dashboards.[32]
8. Assess the learning environment for triggers of imposter syndrome in diverse learners and eliminate implicit messages and barriers that reinforce these triggers. Promote understanding and inclusivity to reverse stereotype threat.
9. Identify effective means to remediate individuals who perpetuate cultural insensitivity and unprofessional behavior. Act decisively to ensure fairness and resolution. Use restorative justice practices.
10. Provide tools to deescalate and eliminate racialized negative behavior of patients toward staff. Provide support for victims of such behavior.

Building a Diverse and Inclusive Learning Environment

1. Build on what exists to connect the pathway from medical school, to residency, to fellowship, and to faculty positions. Use cluster hiring as a way to build a diverse workforce more quickly and establish a critical mass of URiM physicians.[50]
2. Update program and institution websites and published materials with an inclusivity lens. Intentionally feature the research of historically marginalized faculty and residents.
3. Promote the academic success of URiM physicians. Elevate the value of scholarship that addresses marginalized populations, which is often performed by URiM physicians. Provide mentorship, sponsorship, training, protected time, and financial resources to promote the scholarship of URiM physicians.
4. Actively recruit URiM physicians.[48] Share successful recruitment practices within professional groups and across sponsoring institutions. Allocate adequate resources to these recruitment efforts.
5. Conduct climate surveys to assess the degree of inclusion and belongingness of URiM physicians. Publish strategies for improvement based on the findings of these surveys and provide periodic updates on progress.
6. Measure and publish employment and retention data as metrics of success. Link progress on these metrics to leadership compensation incentives.
7. When using a competency-based framework for resident evaluation, recognize that implicit bias may obscure assessments and take intentional steps to mitigate its effect.
8. Provide credit toward promotion for service on institutional and hospital committees. Use clinical excellence, innovation, and productivity as an opportunity for promotion and tenure.
9. Hold journals accountable if they publish papers that perpetuate racist concepts.
10. Engage community physicians, who may not be designated as core faculty but who teach in clinical settings, to serve as additional mentors and role models for URiM learners.
11. Observe system-wide celebrations that promote honoring diverse groups. Ensure event calendars recognize religious and cultural observances.

Activating Community Engagement

1. Perform community needs assessments, spatial analysis, and mapping of diseases to understand the role of practices, policies, and resources on disease prevalence.
2. Collaborate and build trust through meaningful relationships with community leaders and nonphysician health care workers. Develop STEM pathway programs,[43–45] support neighborhood economic improvement, focus on hiring individuals from the community, and support diverse businesses by using them for procurement and services.[52]
3. Take health care to the community through health fairs, mobile units, and innovative delivery platforms.
4. Use technology, including telemedicine, to increase access and obtain insights into the social determinants of health through observing the homes and lives of patients. Promote health literacy programs, including community grand rounds, online forums, YouTube presentations, podcasts, social media posts, and radio programming. Create health IT Genius Bars to demystify technology (e.g., apps, IoT) for patient education.
5. Tackle food insecurity through hospital-led interventions to support food pantries, promote farmers' markets, and invest in community markets.
6. Expand research efforts to include diverse patients and provide opportunities for URiM investigators to serve on research teams and leadership.
7. Reinvest financial gains from clinical services and research efforts back into local diverse communities.
8. Drive policy change via institutional advocacy and organized efforts with legislators, policy makers, and insurers to remove barriers to health care access and to address key social determinants of health, including economic, housing, food, safety, and transportation concerns. Promote interacademic community accountability for eliminating disparities by including diversity and equity as measures in assessments of organizational progress.

Abbreviations: URiM, underrepresented in medicine; STEM, science, technology, engineering, and math; IT, information technology; IoT, internet of things.

system helps all physicians understand how racism leads to increased health risks. For example, residents should be educated about how redlining, the practice of limiting access to housing based on race, created segregated neighborhoods with higher rates of asthma and disproportionate rates of obesity due to exposure to environmental pollutants and inadequate access to healthy food choices.[26–30] Individuals and institutions must acknowledge how discriminatory practices and policies have eroded community trust and continue to have adverse effects on the way historically marginalized patients interact with health care teams. Sponsoring institutions can rebuild trust through sustained corrective actions that address social justice and community engagement.

Each element of the educational environment has a role to play. Educators must combine teaching the history of racism in medicine with skills development to mitigate health care inequities, improve patient outcomes, and enhance the workplace environment. Institutions should dismantle unwritten normative frameworks that were not built with diversity in mind (e.g., the use of United States Medical Licensing Examination scores as a threshold for residency candidate selection) because these frameworks operationalize structural racism.[31] Resident physicians can improve patient care by learning to review and revise discriminatory decision-making tools and heuristics that assume a greater likelihood of some conditions because of false racial assumptions and dominant culture normative standards.

Understanding the social determinants of health can help physicians change practice patterns and identify factors that are modifiable to help close the gap on health care disparities.[32] To this end, the role of implicit bias and compassion fatigue on the treatment of patients must be recognized.[33] Implicit bias mitigation training, which may include implicit association testing,[34] can help physicians increase awareness of their own biases and the role they play in personal and professional actions. Resilience training can help individuals recognize and combat compassion fatigue.[35] Education can help remediate implicit bias and compassion fatigue, but only through longitudinal training and corrective actions.[18,36] While education and training do not guarantee immediate change, they can be powerful tools for identifying, reporting, and correcting unacceptable behavior.

Building a diverse and inclusive learning environment

Diverse teams bring multiple unique perspectives together to solve complex problems and increase the applicability and effectiveness of solutions.[37] Developing pathways to increase the supply of physicians who are underrepresented in medicine (URiM), defined by the Association of American Medical Colleges as those from racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population,[38] can enhance the patient care experience and make racially concordant care possible.[39] Racially concordant care has been associated with better communication, improved patient adherence, less perceived discrimination, and overall better health outcomes among historically marginalized patients.[39–42] Pathways to increase URiM physicians will need to employ both short- and long-term strategies to be effective.

Long-term strategies to increase URiM physicians include investing in local school programs. An example of this is the $28 million partnership between the Ochsner Health System and Kenner Discovery schools.[43] This partnership involves institutional support of kindergarten through 12th grade science, technology, engineering, and math (STEM) skills enrichment at a branch location for the parish school near Ochsner's main campus. Education and mentorship in STEM at the precollegiate level foster greater success in these courses in college and therefore a higher chance of successful entry into medical school, especially for Black students.[44] With institutional sponsorship, GME teams can develop career mentoring programs by adopting middle and high schools, assigning resident physicians as advisors, and tracking the career progress of the students who were paired with GME teams longitudinally. In addition, offering high school and college students compensated work and partnerships with faculty and residents to experience research or to shadow them in a clinical environment provides opportunities for longitudinal mentorship and exposes them to role models, which helps students achieve career success.[45]

Short-term strategies to increase URiM physicians include building partnerships and connecting existing pathways with URiM medical student organizations.[46] All sponsoring institutions should financially support visiting clerkships for URiM candidates who cannot afford the expense of travel and housing. Linking medical students to residency peer groups that focus on diversity can also build a supportive network of peer mentors. Sponsoring institutions can set diversity as a priority in recruitment, train selection committees to mitigate implicit bias, use holistic review for candidates in the applicant pool, and demonstrate support for their current diverse residents and faculty.[47] The celebration of the research of historically marginalized residents and faculty on the department's landing page or the use of cluster hiring for faculty to build a diverse workforce more quickly speaks to an investment in URiM individuals and their inclusion being central to the mission of the department.

Sponsoring institutions should establish inclusive environments to enhance retention, promotion, and professional satisfaction.[48] GME URiM learners must see themselves reflected at all levels of the learning environment. Whether in the laboratory, clinic, office, or C-suite, developing a critical mass of diverse talent is essential. A nurturing learning environment includes mentorship and sponsorship opportunities and accountability for instances of discrimination.[48,49] To help ensure that they stay within the academic community, URiM learners should also be encouraged to pursue their scholarly goals. During residency, URiM learners should receive instruction on how promotion pathways work and be advised how to be productive in a scholarly career. Often URiM residency graduates and early-career faculty at teaching institutions spend significant time performing clinical work and acting as the sole representative of diversity on institutional and hospital committees. These time-consuming services have a positive effect for the sponsoring institutions but are not typically credited toward promotion or tenure. Because of the opportunity cost involved in

institutional service and diversity, equity, and inclusion leadership, sponsoring institutions should develop a broader view of what constitutes scholarship that leads to promotion.

All resident physicians should be encouraged to participate in research during their training to create a foundation for future academic success. Longitudinal partnerships that extend beyond training, especially with residents who are URiM, should be facilitated. Established researchers should avoid using URiM colleagues to help recruit and enroll diverse subjects only to exclude them from the grant application process and manuscript preparation. Sponsoring institutions should provide financial support for protected scholarly time for early-career URiM faculty to successfully start up a research program leading to independent funding. The work of studying and solving racial health disparities must include URiM scholars in the hypothesis, design, methodology, and analysis of studies.[50] Without their inclusion, actions taken by dominant culture researchers may be misinterpreted by community participants, and racially biased scholarship can have detrimental effects on patient care, community trust, and early-career physician–scientist engagement with scholarly communities.[51]

Sponsoring institutions should build diversity into every level, including governing boards, as diversity cannot be improved if senior leadership teams reflect only the dominant culture. Change happens with metrics, so, in addition to publishing the demographics of their students, sponsoring institutions should have a public database of the racial and ethnic composition of residents, faculty members, and leaders. Sponsoring institutions should strive to achieve demographics that are comparable with those of the communities they serve. Diversifying leadership at sponsoring institutions could also prompt national benchmarking organizations like the *U.S. News & World Report* to not only report diversity demographics, but to incorporate diversity and equity as parameters for rankings in their yearly reports of the top medical schools and hospitals.

Activating community engagement

In reenvisioning GME, sponsoring institutions must engage all members of their learning communities to combat racism and promote health equity.[52] Engagement means not only providing medical service but also addressing social needs (e.g., through partnering with the community to find solutions to health inequities and when designing scholarly activities). Community needs assessments can identify high-risk areas for disease and elucidate barriers to health care, such as disparate access to housing due to historical redlining practices and limited technology access in poorly resourced neighborhoods. These assessments highlight areas ripe for community partnerships. Institutional leaders cannot assume that they know what a community needs based solely on disease processes but should ask and listen to members of the community.[53] Often this means forming meaningful relationships with community leaders and working with policymakers on innovative solutions to build trust in medical institutions.[54] GME can be an important part of the solution. Residents can extend their impact beyond the hospital by working along with faculty and community health care workers to provide education on healthy lifestyles in local neighborhoods. Community grand rounds, home visits, and mobile health care delivery units can help learners see the direct impacts of the social determinants of health. Creating partnerships with the community and mapping its resources are essential to ensuring that its members have equitable access to the things they need, including adequate food supplies, pharmacies, and health care facilities.

Conclusions

In summary, it is an academic and moral imperative for the medical community to contribute to the design and implementation of solutions that directly address racism. As the spotlight on social injustice grows stronger, the reset strategies discussed here are broadly applicable to sponsoring institutions serving all underrepresented groups. Let this be a call to action to these institutions to shift how they educate resident physicians and to model just and inclusive behaviors for the next generation of medical leaders.

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