Health Equity Network Alliance (HENA)

James L. Madara, MD
Chief Executive Officer & Executive Vice President, Pathology
American Medical Association (AMA)
330 N. Wabash Ave., Suite 39300
Chicago, IL 60611-5885

Dear Dr. Madara:

The Health Equity Network Alliance founded by American Muslim Health Professionals, collaborates with the Islamic Medical Association of North America, Nashville - Campaign Against Racism and concerned physicians and medical students along with other public health organizations. This Alliance would like to thank the American Medical Association for its commitment to health equity and the recent updates to the medical education guidelines related to the misuse of race in treatment and diagnostic algorithms. In order to ensure the translation of these extraordinary changes to clinical care, we would like to propose tangible next steps for consideration to improve care delivery and ultimately patient outcomes.

American Muslim Health Professionals (AMHP) is a non-profit, non-partisan, public health organization that provides a platform for American Muslim health professionals to advocate and work for improvements in the healthcare of all Americans. American Muslims represent a significant minority of diverse backgrounds, including Black Americans. As a public health organization, we are committed to supporting efforts to implement evidence-based practices in clinical care and strive towards eliminating policies that can lead to potential harm.

The **Islamic Medical Association of North America (IMANA)** is one of the largest non-profit health organizations for American Muslim physicians in the US, with a large medical relief arm. IMANA's mission is to foster health promotion, disease prevention, and health maintenance in communities worldwide through direct patient care, health programs, and advocacy. Many of the programs are focused on impacting disadvantaged minority communities.

The **Institute for Healing and Justice in Medicine** is an interdisciplinary hub - a community, a research epicenter, and a dialogue space. We center around publishing and uplifting perspectives related to healing, social justice, and community activism, envisioning a new medicine and public health praxis. We foster space for vibrant dialogue and debate, consciousness-raising, and movement building, seeking to sharpen our collective and develop

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methods to critique structures of power in medicine through community scholarship and solidarity.

Our organizations share the vision to build racial equity in healthcare delivery and practice in the US. To that end, we applaud the steps taken by AMA and collaborators to reform medical education related to treatment algorithms based on racist criteria and want to propose next steps to reform healthcare delivery on those same lines. **We recommend a 'systems approach' which means to employ feedback mechanisms using current health data from diverse populations to re-examine treatment guidelines with the intent to update existing guidelines and furthermore incorporating mechanisms to anticipate future updates.** To understand this approach, the aforementioned changes to medical education executed by the AMA and collaborating organizations represents an instance where scientific data was used to reform medical education in collaboration with relevant stakeholders. However since the use of these algorithms has a direct correlation with clinical care therefore, even though revising medical curricula is an important initial step, in order to fully implement the systems approach healthcare delivery should also be reformed on those same lines along with a commitment to refresh guidelines with evolving data.

Impact Overview: It Is Unacceptable to Have Race Adjustment Without Understanding What Race Represents.

The recent publication in The New England Journal of Medicine (NEJM)[1] highlighted key discrepancies in using race as a health risk in models and was the basis for the changes by the AMA. Overall the examples highlighted in the NEJM review emphasize the impact of using these algorithms in clinical care and the negative health outcomes in Black patients as a result of these practices:

1. The American Heart Association (AHA) Heart Failure Risk Score allocates additional points for any patient identified as "nonblack" in predicting the risk of death after admission to the hospitals, thereby categorizing all Black patients as lower risk which could potentially direct black patients away from additional care. Such guidelines could

[1] Vyas, Darshali A., Leo G. Eisenstein, and David S. Jones. "Hidden in plain sight—reconsidering the use of race correction in clinical algorithms." NEJM (2020).

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be contributing to the increased mortality rate of black patients which is 2.6-2.97-fold higher than white patients with heart failure[2].

2. Renal function algorithms differentially account for higher reported eGFR values (suggesting better kidney function) for anyone identified as Black and delays in referral. As noted in a study conducted by physicians at Brigham and Women's hospital and Penn Medicine would lead to a reclassification of about 1 in 3 black patients as having more severe CKD[3]. This highlights the possibility of delayed treatments for black patients. Similarly, the Kidney Donor Risk Index has used race to predict that a kidney graft will fail. This has led to Black patients' lower likelihood of receiving a transplant.
3. Maternal mortality among Black women in the US rivals that of developing nations. Tools like the Vaginal Birth after Cesarean algorithm (VBAC), a predictive estimate of labor risk for someone who has previously undergone cesarean section, continue to predict a lower likelihood of success for vaginal births specifically for Black or Hispanic mothers, therefore leading to higher rates of cesarean sections and consequently contributing to higher maternal mortality rates which are three times that of white women in the US[4].

These differences in healthcare guidelines translate to discrepancies in patient experience as well, which is exemplified in our real life patient encounters. Dr, Marium Husain who is Vice President of IMANA and a Hematology-Oncology fellow at Ohio State University, recounts a conversation with a middle-aged Black patient who had uncontrolled hypertension during her Internal Medicine residency: "We had been taught that nitrates, specifically the combination of hydralazine and Isordil dinitrate (Bidil), were found to have improved blood pressure controls amongst Black Americans compared to White Americans. When I discussed this with my patient, he was very skeptical. He immediately stated: 'Why are you treating me differently from other patients, just because I'm Black?' I rushed to explain that although there is a racial difference, there was an improved outcome. He then began to discuss the infamous Tuskegee experiment and how Black men contracted syphilis intentionally, and he did not want to be experimented upon by doctors. He kept mentioning how the 'system' doesn't always 'do right' by Black Americans and that I should treat him the same way I treat White patients. At that time, I

[2] Nayak, Aditi, Albert J. Hicks, and Alanna A. Morris. "Heart Failure Risk and Treatment in Black Patients" Circulation (2020);13.
[3] Ahmed S, Nutt CT, Eneanya ND, Reese PP, Sivashanker K, Morse M, Sequist T, Mendu ML. Examining the Potential Impact of Race Multiplier Utilization in Estimated Glomerular Filtration Rate Calculation on African-American Care Outcomes. J Gen Intern Med. 2020 Oct 15. doi: 10.1007/s11606-020-06280-5. Epub ahead of print. PMID: 33063202.
[4] Jamila Taylor, Cristina Novoa, Katie Hamm, and Shilpa Phadke. "Eliminating Racial Disparities in Maternal and Infant Mortality - A Comprehensive Policy Blueprint." Center for American Progress (2019).

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focused on what the data had shown instead of understanding my patients' individual perspective. This man wanted to be treated the same as any other patient, not based on his skin color. The entire encounter left me feeling very conflicted about treating patients differently, even though it was with the best of intentions. Was hypertension truly different based on genetic markers, or was it more along the lines of dietary and societal patterns that influenced patients' lives and health outcomes? As I progressed through residency and worked as an attending, reality became more evident. It was clear that the advanced stages of illnesses presented by patients were a reflection of the impact of socioeconomic factors and healthcare access, as well as disparities in the management of these patients."

This racial bias also extends to newer healthcare delivery models that leverage artificial intelligence to analyze large volumes of health data over time. A 2019 study in the journal *Science* reported how such an algorithm, commonly used by health systems to assess healthcare needs, wrongly assigned Black patients the same level of risk as their white counterparts, even though Black patients were sicker.[5] Health systems have used this algorithm for some 100 million people across the country. In this case, not using race as a necessary factor to highlight the disproportionate investment by hospitals to care for Black patients led to a gross misinterpretation of data and a lack of acknowledgment of the discrimination in our healthcare system.

These models of clinical care and healthcare delivery employ race-adjustment without understanding the underlying biological mechanism and social context potentially contributing to disparate patient outcomes along racial lines.

Proposal: A Systems Approach to Improve Existing Risk Models

The Alliance recognizes the progress that has been made in dismantling the misuse of race in medicine. However in order to effect tangible change in patient outcomes, it requires revisiting the current clinical decision-making guidelines that exist in practice. Based on the prejudiced algorithms described above, poor clinical care is provided to Black patients, leading to higher morbidity and mortality rates in this community and an unnecessary burden on the health system for all. Historically, these algorithms are devoid of any understanding of the broader

[5] Obermeyer et al. "Dissecting racial bias in an algorithm used to manage the health of populations"; *Science;*2019 : 447-453

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social determinants of health and its correlation to race, that have perpetuated systemic racism in care delivery and highlight a broader systems issue.

The solution proposed is a 'systems approach' to create decisive mechanisms for reviewing care models and algorithms, driven by scientific evidence and diversity principles. This method will bridge care management with latest scientific evidence and also incorporate feedback mechanisms from diverse populations to anticipate future updates.

Tangible next steps should include:

1. Review treatment guidelines to incorporate micro- (biological, behavioral, individual, interpersonal) and macro- (community, socio-cultural environment, built environment, societal, health system) levels of influence that affect health outcomes.
2. Address practice disparities arising from racial-adjustment by updating guidelines derived from evidence-based medicine
3. Current risk tools and models should be re-examined through a multi-disciplinary systems science approach to guide policy and programs in the United States and elsewhere.

Outcome: Updating Current Risk Assessment Algorithms in Clinical Care

Based on the above data and an understanding of the systems approach, we recommend closing the loop in the systems model by reviewing and reassessing all algorithms that input a patient's race on the individual level, by employing evidence-based medicine. A preliminary list for consideration is provided:

1. American Heart Association (AHA) Heart Failure Risk Score should reassess the use of race as a factor.
2. The race correction for eGFR values needs to be reassessed per the American Society of Nephrology (ASN) and National Kidney Foundation (NKF) task force recommendations.
3. The Kidney Donor Risk Index should be reassessed per the ASN and NKF task force recommendations.

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4. Vaginal Birth after Cesarean algorithm (VBAC) should reassess race as a factor especially in light of the high maternal mortality rates for Black mothers in America relative to their Caucasian counterparts.
5. The STONE algorithm and a similar algorithm for pediatric patients used to predict UTI should reassess race as a factor.
6. Reassess use of race correction for spirometry.

The current COVID crisis has amplified the healthcare disparities that were pre-existing in our communities and it is incumbent on us to re-evaluate our system of care as a contributing factor in these disparities. A systems approach utilizing scientific data, social determinants of health and health policy can evolve the development and implementation of treatment guidelines by employing an adaptable and patient-centered method, which will be an advantage for the healthcare system as a whole. **Engaging with the various scientific leaders and creating policy to change medical care that is evidence based will optimize healthcare for all.**

Sincerely,

Members of Health Equity Network Alliance:

American Muslim Health Professionals (AMHP)
Islamic Medical Association of North America (IMANA)
Nashville - Campaign Against Racism (CAR)
Institute of Healing and Justice in Medicine (IHJM)

Additional Signatories:

Center for Health Progress
Columbia University Medical Center
Design 4 Active Sacramento
Kinding Sindaw Heritage Foundation, Inc.
Medicare Rights Center
Partners in Health
South Asian Public Health Association (SAPHA)
University of Florida