October 2, 2020
TO: Ways and Means Committee

There have been growing concerns about the way patients are treated by medical professionals and the way that race is taught in medical education. Health professionals that misuse race can misdiagnose and ineffectively treat patients. One well-documented example is the racial disparity in pain medication management; one reason for this disparity is the false belief that black patients experience less pain than their white counterparts due to differences in pain nerve endings. This belief reflects the notion that race is a biological construct and is also associated with unconscious and conscious racial biases towards patients.

Within medical education, negative framing is more often applied when describing black patients. A study by Barr et. al., (2005) found that race is often presented to students in a negative context when characterizing black patients. Ripp & Braun (2017) uncovered racialized questions in the United States Medical Licensing Exam (USMLE), STEP 1, question bank, highlighting the negative characteristics. Specifically, they found that when a question used race as a risk factor (or "clue") for a diagnosis, the race specified was more likely to be African-American and a genetic mutation was more likely to be noted as part of the diagnosis. This contributes both to the false notion that race is biological *and* that it is more important for black patients than their white counterparts.

There is great need for change in the medical educational system to reduce the promulgation of the notion that race is a valid biological construct. Health organizations need to understand how their workforce and employees are educated and how they are subsequently practicing medicine. The more acknowledgment this issue receives, the more reforms can be made to prevent adverse health outcomes.

At our public medical school in the Northeastern United States, we conducted a qualitative research project with participants who identify as Black, Indigenous, Latinx and other People of Color (BIPOC). Our preliminary results illustrate how the mode and method of teaching about race may relate to how medical students perform in the future. Based on these results, we offer ways students can be taught to achieve a more positive impact on marginalized communities of different races, instead of potentially harming them.

One strategy we proposed is to develop and implement national guidelines for medical education and training around the construct of race and racism. It is important that the notion that "race" is anything other than a social construct be dispelled once and for all. In addition, awareness of and training to recognize and remediate implicit and explicit racial bias early in medical education is crucial. Future health professionals need the tools to mitigate and minimize implicit and explicit biases, which often emerge and are exacerbated by stress and chaos, contexts that often characterize urgent medical care. Medical students should also be taught how to disentangle health outcomes from individual-level characteristics (e.g., race, social class and sex/gender) from the social systems that produce both the

characteristics and the outcomes, while analyzing the drivers of racial disparities in health and well-being. A final strategy is more and deeper instruction into how diseases and symptoms manifest among a wide variety of patients of color. Recognizing how symptoms of the same disease manifest on light-skinned vs. darker-skinned patients is critical to optimal clinical care. For example, a visual indicator of Lyme disease infection after a tick bite may be a bullseye rash or a bruise, depending upon the skin tone of the patient.

In sum, racial disparities in health and health care are driven in part by how we educate medical students. We have offered just a few concrete examples of what may be driving these disparities, as well as some potential solutions. It is important that optimal healthcare be provided to all patients, which we argue requires awareness of the meaning and function of race while attending to real differences that are consequential to optimal medical care and treatment of people of color.

Signed,

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References

Barr DA. The practitioner's dilemma: can we use a patient's race to predict genetics, ancestry, and the expected outcomes of treatment? *Ann Intern Med*. 2005;143(11):809-815. doi:10.7326/0003-4819-143-11-200512060-00009

Ripp K, Braun L. Race/ethnicity in medical education: an analysis of a question bank for step 1 of the united states medical licensing examination. *Teach Learn Med*. 2017;29(2):115-122. doi:10.1080/10401334.2016.1268056