

Prioritizing Equity video series: Examining Race-Based Medicine

In the AMA's Oct. 29, 2020, Prioritizing Equity panel, health care leaders held a critical conversation on approaches to dismantling race-based medicine across clinical practice, education and research.

Panel

- **Nwamaka Eneanya, MD, MPH, FASN**, assistant professor of medicine and epidemiology, director of health equity, anti-racism and community engagement; Twitter: @AmakaEMD
- **Rohan Khazanchi, BA, MD/MPH candidate**, medical student at the University of Nebraska Medical Center & University of Minnesota School of Public Health; member of the AMA Council on Medical Education and the AMA Medical Student Section's Region 2 delegation chair; Twitter: @rohankhaz
- **Michelle Morse, MD, MPH**, co-founder, EqualHealth; assistant professor, Harvard Medical School Robert Wood Johnson Foundation Health Policy Fellow; Twitter: @michellemorse
- **Jennifer Tsai, MD, MEd**, emergency medicine physician, writer, educator and advocate in New Haven, Connecticut; Twitter: @tsaiduck77
- **Darshali Vyas, MD**, second-year resident physician at Massachusetts General Hospital in Boston, MA; Twitter: @DarshaliVyas

Moderator

- **Aletha Maybank, MD, MPH**, AMA chief health equity officer and vice president

Transcript

Oct. 29, 2020

Dr. Maybank: Good morning to some of you. Good afternoon, almost, to some others. Thanks for joining us today on Prioritizing Equity. My name is Dr. Aletha Maybank and I am chief health equity officer at the American Medical Association. And I'm really looking forward to this show. I usually have a lot of updates to give ahead of time, but I'm not going to do those because I really want to get into the conversation today and speak to our wonderful guests that are here from all over the country. This is a highly anticipated conversation. I've had several folks reach out, so I think this is going to be fantastic. We know for a long time clinical diagnostic tools that assess our common health conditions, affecting whether it's our kidneys, our lungs, our hearts have been adjusted based on race.

However, we know now that race is really a socio-political and power construct with really little biological or no biological or genetic basis. And there's a growing awareness and evidence that the use of race-based algorithms can cause harm. And so, today I'm really grateful to have this powerful and brilliant panel of physician and student leaders from across the country who are seeking solutions and solidarity to dismantle these race-based practices in medicine. So we have, and what I'm going to ask is just to wave your hand just a little bit so folks can pick you up, just in case they don't see your names for whatever reason.

We have Dr. Nwamaka Eneanya, who is assistant professor of medicine and epidemiology and director of health equity at Anti-racism and Community Engagement. We have Rohan Khazanchi, he is an MD, MPH student at the University of Nebraska Medical Center and University of Minnesota School of Public Health. And he currently serves as a member on the AMA Council of Medical Education, an AMA medical student and just really one of the shining hopes. I go to Rohan a lot as it relates to AMA.

And Michelle Morse, Dr. Michelle Morse, who is co-founder of Equal Health and assistant professor at Harvard Medical School. And she is a Robert Wood Johnson Foundation Health Policy fellow, and a dear friend. And Dr. Jennifer Tsai who is an emergency medicine physician, a writer, educator and advocate in New Haven, Connecticut. And Dr. Darshali Vyas, who is a second-year resident physician at Massachusetts General Hospital. We have a good spectrum across our medical ways of being, so I'm really excited for this. So usually, I start on asking, how are you all doing? But there's so much I want to get into the conversation.

I do want you to answer how you are all doing, but I do want you to contextualize it a little bit, just in the context of talking about race and power and privilege. I think part of the roots of this conversation, we look at the political climate, we look at the executive order that was released, I think a couple of weeks ago now, on race and sex and gender. The pointing out of Critical Race Theory and putting it forward as if it's a bad thing and a negative thing, asking folks to not do trainings on diversity and equity. How are you all doing with all that? Because our work is about that. How are you all doing? So I'm going to start with, let's start with Dr. Morse.

Dr. Morse: Yeah. Thank you so much for inviting all of us, Dr. Maybank. It's incredible to be here. A true honor to see all of you, and inspiring. And so honestly, I would say part of how I'm doing is finding energy and courage and hope from conversations like these with colleagues like you. I think is one of the only things that's keeping me going right now. I think we recognize that we don't have the power we need to make the changes that are necessary to advance racial health equity and health equity in general. And yet at the same time, there has clearly been a growing sense of the impact and importance of theories like Critical Race Theory and how effective they are in helping us to truly understand the biases, the just implicit copy-paste of information generation creation to generation without a questioning of it, And the underlying ideologies that are actually driving a lot of what we learn and what we teach and how we practice without us always recognizing it.

So of course, it's really disastrous to see such reckless targeting of incredibly important intellectual heritages like Critical Race Theory. And at the same time, I think it means that we're on a path to winning, and I know we're going to win. And again, like being on with you all today is what's giving me hope and courage in these ridiculous and tragic times.

Dr. Maybank: Thank you. Dr. Vyas?

Dr. Vyas: I would say I'm feeling nervous. I think we're within a week of election week, and it's been hard to focus at work. I'm really excited to be here with everyone here and be part of a conversation around this shared mission. And with the executive order, I just think it's such a disconnect between, I feel like there's been such incredible scholarship coming out around race and medicine, and it's such a disconnect from where our administration's head is at. So I'm feeling nervous, but also very glad to be here to get started talking about this.

Dr. Maybank: Great. Thank you. Rohan.

Khazanachi: Yeah, I think I'll echo Dr. Morse and Dr. Vyas in saying I'm humbled to be here. Just really energized to be in the same space as all of you. I think seeing students around the country connecting over the course of the pandemic on this issue and many other issues, just seeing the way that our networks have coalesced has been really inspiring. That's one of the maybe positive consequences of being on Zoom all the time, is, we can all be on a panel sitting across the country. I can connect with folks in California and in New York at the same time. It's just been inspiring for me to get to know folks around the country. So definitely feeling energized. But I agree, nervous, anxious, ready to get back to work and have a little bit less to worry about.

Dr. Maybank: Great. Dr. Eneanya.

Dr. Eneanya: Yes. So thank you for the invitation again. I echo everyone's sentiments. I feel incredibly energized. I think I'm also just a very energetic person. In particular, the younger generations, I feel like it's so heartwarming. And I personally think that we have way more energy than some of the older

populations that just don't quite understand the concepts that we're talking about. So I'm feeling incredibly inspired. I feel like I've made friends virtually. Michelle Morse and I are very good friends, we go back, but I also feel like I've connected with so many of you on social media or email or research collaborations. So I'm inspired and I feel like we can't be stopped.

Dr. Maybank: Awesome, Dr. Tsai.

Dr. Tsai: I absolutely agree with everything people have said. So honored to be here. Thank you so much. And I totally agree, Rohan and I were just talking about this the other day, about how in this strange environment, community really has emerged in surprising and new ways. A couple people here connected on Twitter, on email and so excited to be thinking together, working alongside each other. It is a strange time where I feel in some ways, cautiously optimistic about the fact that this new scholarship is going on, that there's renewed attention, that there's new advocacy and passion and energy. I think the fear is that it won't be sustained. But certainly, I think it begs reflection on why things are coming up to your attention now and how do we keep it that way?

This is on a topic that I've been interested in since college for years. And I know that there are scholars that we look up to who have been doing this work for decades who never got published in the kind of journals that are paying attention to this now. And why is that, and how do we keep that momentum?

Dr. Maybank: Yes, thank you for that. And I think that's an important part of this work of equity, is that narrative busting and bringing out the truths of who has been able to, who's had the power and the privilege to be able to put this work forward. And this work of equity, oftentimes it's projected like it's not out there, or it doesn't exist, or it's just not good enough. And that's just not the case, it just hasn't been paid attention to. We can talk more about that. Dr. Vyas, I want to start with you with a question. So the New England Journal of Medicine Piece titled Hidden In Plain Sight: Reconsidering The Use Of Race Correction In Clinical Algorithms, I want to make sure I get the title right, has been read and shared by many.

And I wanted to talk... If you just to share with people, what brought you all to write that piece. And then I'm going to get into, can you just share then, what is the evidence that you know, based on how you built that piece, as it relates to race-based algorithms in the first place?

Dr. Vyas: Sure. Thanks so much. With your first question about how we came to write this piece, I would say the origin of the piece really began for me in medical school. I think for a lot of us and not just in my medical school, but I think for a lot of trainees, there's really a strong tension between how we're taught about race in our social medicine curriculum, or even in our work before medical school about race as a social construct. And as you mentioned in your introduction, a political construct. It's a very relevant construct for medicine. But then to see that disconnect, once we entered clinical rotations and seeing how it was being instrumented as a biological one in many tools.

So for the coauthors of this paper, for me, the way that we got together was through the Racial Justice Coalition, which was a group of our medical school classmates who are interested in these topics. For me, my first introduction for this was really through the eGFR work that so many folks on this call have been very instrumental in. For me, there were three of my classmates, Leo Eisenstein, who's one of our coauthors, as well as Danika Barry and Cameron Nutt, who from the student side really pushed to end race-based eGFR reporting in 2017 at the BI. And that was the first time I had really been exposed to this idea of race correction.

And then for me, the next year I saw another example through the VBAC algorithm, which is the Vaginal Birth After Cesarean algorithm, then that also corrects race. And then from there, I think entering training and residency, there were just countless other examples of tools and algorithms and guidelines that correct their outputs based on race. And so it's interesting once you transitioned from the classroom into a clinical setting and seeing these tools used on a daily basis to decide things like who gets a medication or when to screen someone for a mammogram, and seeing the behind the scenes work of when we're inputting variables into these tools online or through a lab.

Dr. Vyas (continuing): And so, looking at these tools, and getting into your second question, I think looking into these tools individually, there does seem to be this logic that's applied to implementing race adjustment. And I think one of the things that was really surprising and looking into the tools individually is that in many cases, the authors didn't even really mention the decision to include race in the tools and much less justify it and gets to this default assumption of assuming that race is relevant to include in tools along with biological variables like BMI or age. And I think one of your questions was, what is the intended consequence of this practice? From my review of the literature and talking to some of the tool developers, I think the goal that they have in mind when they're creating these tools is to create a model that has the best fit, and to create a tool that produces the most accurate outcomes.

I think the unintended consequences was the focus of our paper and to really challenge what race stands for in these tools, and that it's being used in a way that assumes it's relevant to biologic outcomes, but actually represents the effects of structural racism. And putting those variables into a predictive tool has a lot of unintended effects. And so the goal of the paper was twofold. I think the first was to lay out and fine print all of these, all of these examples and just say very clearly how race is being used in those tools and what the potential effects could be. I think the long-term goal, which people are already working on is to look at each tool in close detail and to understand the consequences at play for each of the tools, work that doctors Morse and Eneanya are doing for tools like eGFR and going through systematically and understanding what the harm done from these tools are.

And then more long-term, I think medicine is moving towards computerized models of risk assessment and these algorithmic tools. And I do think there needs to be a broader consensus statement or guidelines as a field about how to use race moving forward, because I think this question will continue

to come up.

Dr. Maybank: Absolutely. I can see what's going to happen now, because I want to hear from several other... I can see the smiles and the shaking of their heads, I know you want to jump in. This is for the audience, what do you think race historically was being used for as a proxy? And I'm going to go with Rohan, go ahead.

Khazanachi: Yeah. I think there are a couple of terms that are maybe worth defining for the audience. And these are distinct concepts. So race, ancestry, and biological traits, these are three distinct concepts. And a lot of times we think, "Oh, race is maybe a proxy for your ethnic ancestry. Oh, maybe race is a proxy for genetic traits." And in reality, we've probably since the Human Genome Project that this is likely not the case. When I think about what race-based medicine tells me, if I go into a clinic and I need to do spirometry to test my lung function, then what I'm being told is because I'm of Asian race, that my lung function should be corrected differently than that of a white or a black person.

And that implies that there's something different about my lungs than that of somebody else and it implies that there's a biological trait that is different in me than somebody else, just because I'm Asian, which is a very broad racial group that reflects multiple lines of ancestry of which one is Indian American, which is my own. I think we just need to think about how like nonsensical this is in a biological and scientific sense. Race is not equivalent to ancestry, race is not equivalent to genetics. And I think it's important to know that race has changed throughout time in American.

It's not even a stable category, like the census changes its definition of race every 10 years and we get different racial groupings as a result of that. So thinking about the fact that this proxy, not really getting at what maybe is the primary cause of racial differences in disease, which is structural racism, and is rather coming up with these biological explanations or justifications for differences in disease outcome or disease severity. It's just something that I think we need to reflect upon when thinking about these algorithms.

Dr. Maybank: Absolutely. So Dr. Tsai, it brings me to you. I've really valued reading your pieces over the last couple of months during this COVID time, they're very powerful. I really liked *There Is No 'African American Physiology': The Fallacy of Racial Essentialism*. Can you speak to that? And how it serves to, in quotes, reinforce those beliefs in innate genetic abnormalities, especially within black bodies.

Dr. Tsai: Yeah, absolutely. And I think this ties in with what we were just talking about. I think some of this issue goes deeper than just the misrepresentation of structural racism, although that's something that all of us agree on. This hashtag even of racism not race. Certainly, that's part of the issue, this idea of like, what are we talking about when we talk about race? Are we being technical? Do we actually know the distinctions and delineations? But also this point of a lot of these data, a lot of these clinical algorithms really want to make the best model and are interpreting accurate data.

There's a more implicit and more concerning issue that's illuminated by that, which is a longstanding and dangerous assumption about innate difference that guides so much of our scientific interrogation. It's really circular logic and something that we really wanted touch on in this letter, which I worked on with Rohan, is the fact that a lot of these publications or manuscripts or clinical decision algorithms are making genetic inferences outside of any kind of genetic data, which is just not very thoughtful science. We're seeing this in COVID scholarship as well.

There are tons of journals coming out saying, "Is it the ACE-2 receptor? Is it lung physiology? Is it something to do with how our bodies and tissues are structured and what differences happen when you have different answers for your different race?" Which completely obfuscates some of the much more obvious issues of social inequity testing, occupational hazards, exposures. And it's confusing and it shows how dangerous it is. The scholarship that's being perpetuated, not only in COVID, but in every organ system as we've seen is really perpetuating this problem. And I think importantly, it's intuitively changes the way you think about solutions, you think about the problem, you think about the source of illness and suffering.

Scholarship has proven that people who are taught about notions of biologic essentialism have more apathy people who are marginalized, have less concern or less interest in supporting social justice. And that makes sense, if you think people are suffering because of innate essential issues that no amount of welfare, no amount of justice, no amount of kindness or concern can change, why would you support those manifestations of effort or work or advocacy? It doesn't make sense. And I think that speaks to a lot of our concerns and a lot of why so many of us are passionate about it. It's really dangerous in the way that it changes your thinking about, where does this problem come from and how do we solve it?

Dr. Maybank: One second. You all hear me? Okay, great. Dr. Vyas, I'm going to just going to ask you while you're not talking, to put your phone on mute because-

Dr. Vyas: Oh, sorry.

Dr. Maybank: ... we can't figure out where it's coming from. So I put mine on mute as well. But Dr. Eneanya I think you had something you wanted to add to this.

Dr. Eneanya: Yeah. So, I think in addition to everyone's comments, which are spot on. When you really do a deep dive into some of the populations that have been recruited for these large epidemiological population health studies, it really makes you scratch your head. And I've learned from the race and eGFR deep dive, that many of the black participants, for instance, came from a longitudinal cohort trial of entirely African-Americans, The African-American Study Of Kidney Disease and Hypertension, the AASK trial. And if you look at a lot of the data that's been published, ancestry is very similar among the entire cohorts. And when you get down to the biological variables like urine protein excretion, all the nerdy things that nephrologists like to talk about, there are differences that

are seen in this study, and it makes you think of how are we recruiting our patient population and then using those populations to represent all racial groups in the United States?

I think it's problematic. And I think, especially for me as a researcher, there's a lot of pressure from the NIH or from the body to just get more, get more diverse populations. And you really can focus on just like, tell your friend, tell your cousin, tell everyone that lives in your neighborhood, tell your church members. And we're not really actually getting representative of, for instance, black participants in some of these studies. And so, it's very problematic when you then use those relatively small proportion of black patients to then, again, represent the entire race. And we are not a monolith, so we need to really approach science differently as well.

Dr. Maybank: Absolutely. And thanks for that addition. Dr. Morse, we're going to come to you the speak to, why is it so difficult to end the scientific racism and these values and beliefs that are held by the science community, even as evidence starts to build on its impact on medicine and the health of people?

Dr. Morse: Yeah. I just have to lift up everything that everybody has said on the panel already. I learned so much from all of you, and every time I have this conversation, I learn something new, so I really appreciate the comments so far. But to your question, Dr. Maybank, I think that's why people, white supremacists, are scared of Critical Race Theory because Critical Race Theory is theory that helps you to ask the question that you're trained and taught not to ask. Like again, racism is the air that we breathe, it's the water that we're swimming in. So, when theories like Critical Race Theory give you the tools to call out, "Wait a minute, this is an assumption that doesn't make sense."

And Dr. Eneanya and I can speak to this right, as medical students, we were sitting in the classroom too, just like everybody else, thinking, "Huh, that's funny. Black eGFR's different? That doesn't sound quite right." So again, this is why Critical Race Theory and other theories like it, again, I don't want to conflate all critical theories at all or say that Critical Race Theory is more helpful than other critical theories, but it is one of the tools that we need to ask better questions and stop reflexively doing what our mentors and supervisors have taught us and told us to do when the context in which those things, those practices, those skills, those norms and algorithms were created is a context of normalized racial hierarchy.

So again, I think it's a tool that all of us have to keep on learning how to use, and it's certainly something we used when I was co-chair of the health equity committee in the department of medicine at Brigham and Women's. We used Critical Race Theory and Public Health Critical Race Practice from Dr. Chandra Ford to ask better questions and assume that racism at our institution was pervasive. And so instead of trying to do studies that showed that was true, the starting point was, we know that racism is operating here, so what are the questions and research we should be doing? Rather again than continuing to document inequity after inequity after inequity.

So that's how we got involved and learned, of course, of the work of Darshali and Cameron and Leo, and many, many other students around eGFR in particular, and started to take up the helm. Because we also felt like, "Gosh, this is a practice we can't explain to patients." If you're sitting in a consultation room with a patient, and then you're adding this multiplier for their eGFR and aren't clear about why you're doing it and can't really even explain it to the patient or can't explain to the patient how it might impact the referral to a nephrologist or evaluation for a transplant, you know you're in trouble,

When we can't really honestly explain this to our patients and when patients aren't a part of the conversation, and I think of my dad who is an amputee and whose kidney function is being corrected even though it probably shouldn't be, or it definitely shouldn't be. So I just wanted to call out the aspect around patients being involved in this conversation as well.

Dr. Maybank: Thank you for that. And just for those who... I've gotten this question before, and you did a good job at contextualizing Critical Race Theory. Can you just define it for folks because it's just so new to folks? Could you just do that real quickly?

Dr. Morse: I can share my general summary of it. I think some of the... It's a theory that was developed by legal scholars in the 1970s and '80s, Derek Bell, who was actually the first ever black law faculty member at Harvard University was one of the founding leaders and thinkers in *Critical Race Theory*. It has several tenets; it's evolved over time. I would say just a couple of the tenets that are relevant are the social construction of race, which has been mentioned by everyone already. In addition, *Critical Race Theory* really talks about how important it is to center the margins. *Critical Race Theory* also brings in thought concepts and tenets like intersectionality, interest convergence.

There are numerous kinds of tenets and aspects to the theory, but it really is a theory that helps us to understand racism as a system that is thoroughly embedded in society, pervasive and maybe even permanent, particularly in US society, and helps us to consider racism as a thing that shouldn't be hush-hushed about, but actually that's so important in shaping every aspect of every day, including medicine. That everything essentially needs to be critically examined because objectivity in a society and a system where racism is thoroughly embedded and pervasive is very, very questionable. So that question of objectivity, I think one of the most important aspects of it.

Dr. Maybank: Absolutely. Now I'm going to move to skepticism and resistance, and what does that look like? Rohan, I'll go with you. I've heard much skepticism, I mentioned already, in regards to the evidence that exists to doing this. And all of you I'm sure are going to be able to chime in. And you've spoken to some of the evidence already. Are there any other pieces of evidence that are building that you all know of in your spaces, in places around doing this work? I know Michelle or Dr. Morse, you just also released a piece as well. But Rohan, I'll start with you and then you all can chime into that question.

Dr. Morse: Yeah. I definitely want Dr. Morse and Dr. Eneanya to talk about their study, because I think that was a really important piece of the, I guess, consequentialist side of this, the potential harm that we do by keeping race corrections, race adjustments in our algorithms. So, I think I want to come back to a point that Dr. Eneanya made earlier, which is flaws in research design. I think that is evidence in and of itself. So one example that I get taught about in medical school is that BiDil, which is a medication for hypertension should be prescribed specifically for black patients. It has actually an FDA approved indication specifically for black patients.

And the interesting history here is that the original study that led to that FDA approval actually did not have a comparison group. So, it was a study on just black patients and that drew a conclusion that black patients should be prescribed this medication specifically. Now, this is without knowing if the medication works exactly the same on other patient populations. I think it's just interesting, as Dr. Eneanya mentioned, to think about who is in our studies and what conclusions we're drawing based on the population in our studies. Having no comparison group is a deep flaw with a clinical trial that could be easily adjusted or addressed, but still led to this conclusion from the authors that, "Oh, self-identified race among black patients probably mirrors some sort of biological difference that shapes their reaction to this drug."

But as we've talked about over and over on this call, there is no biologic difference that is inherent in a racial group. So it's important that we don't draw those sorts of conclusions based on flawed research design. And the danger, again, is that as a society, we convince ourselves that we can treat our way out of racial disparities in hypertension with a medication. When in reality, the driver of disparities in hypertension is structural racism, is the fact that there are food deserts that impact our predominantly black communities, that there are just a number of these factors that are compounding the differences in disease burden.

So I think that's maybe the point that I'll make, and I would love to hear from Dr. Morse or Dr. Eneanya about their study, which I think proves that the status quo is not equity either. The status quo of using race-based connection is not a place where we're having equitable treatment of patients.

Dr. Maybank: Dr. Morse or Dr. Eneanya, do you want to talk about the study?

Dr. Eneanya: I see her mouthing and she's saying, "Go for it." It came out of Brigham And Women's Hospital was a collaboration between University of Pennsylvania and Brigham and funded under the leadership of Dr. Morse. But we wanted to look at how removing the race correction would impact black individuals with chronic kidney disease. And we found that up to a 33% of black individuals would be reclassified into a more severe stage of chronic kidney disease. We also looked at that critical cut point around in eGFR 20, which is what is used for patients to gain transplant, wait listing time.

And we found that 167 or so patients would have been reclassified from above 22, equal to, or below 20. And what was very interesting about this study is that those patients that were reclassified eGFR equal to 20 or less, none of them were referred for any type of transplant evaluation, referral, or transplant wait listing. Now, it's an observational study, so you can't really say for sure that that was eGFR, but to have that number of patients that were 60, it was 67, 67 patients that had no outcome, makes you think that clinicians are indeed using one value to determine when to refer their patients.

And I know that for sure, it's a path of least resistance in nephrology. We have very, very complicated patients. We have one value, we have guidelines that say, "Use this value," even though they list several criteria when to refer patients for specialty care, people are going to go for the easiest one, it's quick. And so I think that study was very striking and showing that there are large implications. I know we all have personal anecdotes of patients that have not been referred for a certain outcome because of their eGFR. I have family members, this is very personal for me.

But on the flip side, as you've already asked, there is research, there's a lot of people that are trying to prove the opposite that if we do remove race correction, that patients won't get novel therapies like SGLT2 inhibitors or Metformin, because the FDA uses these eGFR cut points. My response to that is that instead of making excuses for a flawed method that we know for sure is causing harm, we know implicit bias is absolutely being introduced into the clinical encounter when you use race, it's just there, that we should be advocating for more menu of options when we're thinking about medications to the FDA.

Stop using these strict easier eGFR cut points, eGFR by the way, is an estimate. It's not a hard and fast sell, there's a margin of error around 30%. And so why are we so stuck on this method that's an estimate? And we should be asking the FDA, "Hey, can we use other methods of quantifying kidney function to get my patient the medication that they need? Because that is what I do as a nephrologist, but we need that more broadly in medicine, so we're not just sticking to these values and being so restrictive.

Dr. Maybank: Absolutely. Go ahead. Go ahead.

Dr. Morse: I just want to add two tiny, quick points to that. And again, I just think, when you hear it described and explained, it's clear. It's shocking to me how much debate there is about something which should at this point be so obvious and so clear. And I just want to make two tiny additions, which is first, when doctors hear this story here, the background here, the history of the research that actually led to the establishment of the race modifier in eGFR and then hear the impact and all of the negatives and downsides of using this automatic reflexive practice in an increasingly diverse and certainly like not easy to categorize community and population, they vote to stop it actually.

When I gave grand rounds about this with support from Darshali and several others, including Cameron Nutt and Danika, the audience of physicians, there were at least 200 doctors in the

audience, 97% of them at the end of this hour-long conversation about the roots of this practice, 97% voted that it should be ended immediately. Again, this gets back to the automatic thinking, the way that our knowledge and training copy pastes practices from even 200 years ago without questioning it. So I just want to make that point that when doctors understand the history of this, they want to end it. That's point number one.

The second is just how important it is for us to remember that a reflexive and automatic practice like this has tremendous and unintended consequences. And you're going to hear some people tell you, "Well, there is a lot of scary unintended consequences," to Dr. Eneanya's point, "of ending this practice." What we have quantified and made very, very clear is that continuing this practice is tremendously harmful. And so I think we need to continue to focus the conversation back on that fact.

Dr. Maybank: To build on that, Dr. Tsai and Dr. Vyas, I would want you to speak to... And I think what its building is like, what does resistance look like? And from your experience, you're in your clinical settings, what has that resistance looked like, felt like, and the experience of it? Dr. Tsai.

Dr. Tsai: I think in some ways, it looks like this. I really, really do believe that my strongest communities and the people that I look up to most are people who have a very keen sense of justice and this critical eye. And it's inspiring, I think there's a difference between walking the walk and talking the talk, and I am really, really, truly grateful for the way that this work has brought me together with people that are role models to me. Again, it's interesting how it's played out and changed over the past six years that I've been doing this work, at the beginning being like a very nervous first-year medical student, talking to people in the cardiology department about this and being told, "You're just a first-year medical student, you have no idea what you're doing."

I think this really goes back to the question that we just talked about, which is the burden of evidence and the burden of proof. We know from previous scholarship that a large majority, 99% of these studies that invoke ideas of biological centralism and racial biology never define race, never talk about how they're identifying it, never talk about why they started looking at it. And so when you get these critiques about, "Oh, but this evidence is bad here." The work that we have to do, and the work that Dr. Morse and Dr. Eneanya just did, has to be perfect because it's so scrutinized and surveilled and critiqued endlessly.

And yet, so much of the opposing scholarship doesn't even define their major operating variable. And so, what does that say about the ways that these ideas are really, really ingrained in our culture and our practice? I think the resistance looks a lot like... Also advocating for this idea of the precautionary principle are hazard. Why is the burden of proof on us to prove that it's faulty when there's so much critique and so much going against some of this existing data? Why is it that they're not held to the same standard? And they being a general amorphous context right now.

But I think resistance, again, has to do with sustainability and sustaining this energy and not relenting. I think, again, it's so heartening... In some ways, it's heartening and heartening to see both people who I really look up to, who have been doing this work for decades, as well as new pre-medical students, high school students, medical students, really interested in this work both as like, "Wow, what an incredible continuum." But also, why is motion so slow that this problem that we identified 100 years ago, 50 years ago, 40 years ago, is still moving at a snail's pace, and how do we make sure that it continues and more quickly?

Dr. Maybank: Absolutely. And Dr. Vyas... It's interesting about the question I just asked, and it's a beautiful way that you responded Dr. Tsai. When I was in resistance in my mind, was thinking about what are the powers that are resisting us moving in this direction. And you naturally and inherently, and it makes total sense with being a physician and activist, that I was like, "Okay, what is our resistance?" Because that's what it feels as well. So I love the duality of a resistance. So Dr. Vyas, you can go either way with the resistance, because I actually think Dr. Tsai you did a good job at addressing both of them in your response, but Dr. Vyas. You're on mute. There you go. Perfect.

Dr. Vyas: I think one thing that's been really interesting in the response to the paper and the work that I've seen, it seems like in putting race into the tools, there often isn't really a standard that's required to justify it. But I do find that the act of taking it out of tools seems to require a lot of justification and evidence, and it's an interesting contrast, because I think in a lot of cases, putting race into the tools in some cases, almost seems like it was done naturally as a reflex without really needing to justify it. But now that we are having ongoing conversations about removing race, it does seem very contentious in some cases.

I guess I'll say that, I think sometimes, the initial response has been a layer of defensiveness about what are we saying and saying that the inclusion of race could have these negative outcomes. But I think that looking at between example that I know of that it's successfully been thought about amending this, and that's eGFR in feedback, the vaginal birth after cesarean calculator. In both those cases, I think those are examples of fights that have had good outcomes and taking it out. And I think it has been really...

I think the things that have been helpful have been going back to the evidence and the literature of not just how was race included in this model, but as much as we can, quantifying what the negative outcomes could be. And I think in the VBAC case, what's really damning about including race in that tool is that there are such striking racial inequities in maternal mortality and morbidity in this country. And then to put race into a tool that underestimates the possibility of a successful vaginal birth is really striking concerning.

I think that the resistance, I think that what has been helpful in both those cases is the outcome that I... People that reached out after both of those papers, I think in a lot of cases, people were very uncomfortable already with putting race into the VBAC tool. I just heard from people from medical

students to residents, to attendees who have all along been very uncomfortable putting race into the VBAC tool. I think the momentum around knowing that there are people who share that discomfort has been helpful. But I think getting past the first knee jerk reaction of being defensive about what are we saying about the two creators.

And moving beyond that, to really looking at the data and being open in both those cases, they have to really rethinking that. And I think that it's hard to go first, I think, in any case, I think it's hard to be the first to say we should rethink the way these tools were created. And I think I give a lot of credit to the MFMU who is now revising the VBAC tool and they've made a statement that they are going to release the tool without race. And I think the more people that do that, the easier it is for further tool.

Dr. Maybank: Thanks for that. Is there a way to, understanding that there's resistance and resistance in terms of making sure there's solidarity and dismantling, but also resistance we understand too preventing us from even having some conversations within our institutions that are meaningful slowing down conversations, etc. Dr. Morse, are there ways, and this could really be open to anyone, of which we can hold institutions accountable for doing this work from a policy perspective, knowing that you're at RWJ policy fellow, what's possible?

Dr. Morse: Thank you so much for that question, and curious to hear what the other panelists think as well. I think there are so many untapped levers and I'll just say that my placement for my fellowship has been on the ways and means committee majority staff. And that committee is a committee that has established a rural and underserved communities health task force over a year ago and has really made commitments to advancing health equity and looking at these issues, including a hearing about this disproportionate impact of COVID back in May, a report that really looked at the deep and long-standing health inequities, and all of the different levers, I guess, from workforce to clinical medicine, to payment policy.

And really, that report left out barriers to health equity for rural and underserved communities, really, I think set up a stage for the committee and many other committees like it, be it in the House of Representatives or in the Senate to do serious work on this issue. And I think accountability is always the big question, but as we know, and this is something that I certainly experienced at Brigham and Women's, there's tremendous infrastructure at our hospitals and health systems and clinics for quality improvement, for example, as well as for payment policies and payment structures.

And using those tools to really advance health equity and hold institutions accountable, I think is incredibly important. I certainly consider racial health inequities and all health inequities to be a patient safety emergency. And so why aren't we using our quality improvement infrastructure, be it at the institutional level or at a much larger state or federal policy level to really, again, advance accountability and outcomes, because again, and you all have stated this, there's tremendous research documenting these differences and inequities over decades and generations. And now the leap is, how do we actually fix them and what is the role of our institutions.

And again, our Federal State and local policies to acknowledge and then actually do something to fix these issues, these inequities, these injustices. And again, that's why they're inequities, they're avoidable, unfair, unjust, remediable etc. So I really hope to see more of that, and I'm excited to see what everybody else thinks as well.

Dr. Eneanya: I'll jump. I know I've spoken to you, Michelle, about this on some of our calls, specifically for race in eGFR. I think that the question is what to do next. And that's part of my work on the American Society of Nephrology and National Kidney Foundation Race GFR task force is to make sure that we in line with quality and safety are doing things in the same manner. Right now, there's a huge variability in terms of institutions who have access to certain biomarkers, who are using different eGFR equations, the institutions that have removed race, some of them have done it in a very different way.

And that's not good, and I think we all need to get on the same page and think about, again, what's the most equitable option that will be safe for our patients. I think I can't speak on to the deliberations that we've had on the task force, but I can say that it is a very wide range of opinions that include pharmacist, that include quality and safety, experts, patients just like Dr. Morse said that their voice has been missing this whole time. And we hope to release recommendations by the end of the year so that everyone is doing the same thing. And I can speak to that.

Now, in terms of health policy, we do have a race free biomarker that can quantify kidney function as cost of Cystatin C. The pushback that people will say is, it's expensive. So the differential between Cystatin C and creatinine is about 10 to one. And so just learning from this COVID pandemic process of how we get very expensive tests to test for COVID. It's a very serious disease that has a huge public health impact. Why can't we do the same for race eGFR? There's a huge impact here. And costs really as one of the leaders said, I won't say the person's name, but if Cystatin and C is too expensive, we need to make it less expensive. That's it?

We have a bio marker, so why can't we use that? And I think that's where health policy can be very, very helpful in making sure that one, the cost is reasonable and that there's widespread access across the country to that biomarker.

Dr. Maybank: Thank you for that. Rohan, you're very engaged and others on this call, very engaged in organized medicine. And organized medicine clearly has a strong role in connection to race-based medicine. And so, what do you think is a potential role moving forward for organized medicine who were so impactful in terms of policy at the state level, as well as the national federal level?

Khazanachi: Yeah. I appreciate that question. And I just want to say, I agree with what Dr. Eneanya, and Dr. Morse said. I think it's really important that we recognize there are levers we can pull at a policy level. This is not just a house of medicine problem; this is a societal problem for the whole of our country. So we need to be using every option that we have. I know this is a call for the AMA, and so I

think I want to make a little bit of a pitch-

Dr. Maybank: It doesn't have to be a call for the AMA, I asked organized medicine.

Khazanchi: The panel is being hosted by the AMA, so I feel like I got to say something about the AMA. But I think looking at the policy that we have as an organization, the word racism appears twice right now in our entire policy compendium. One is to support the campaign against racism, and the other is about racism and music. And the first step as Dr. Eneanya mentioned is, acknowledging that racism is a crucial public health problem. Now, our board of trustees did a phenomenal job with their statement this summer, really coming out strong and saying racism is a crucial issue and we are committed as an organization to addressing it.

And I think addressing race-based medicine is part of what we can do. So an organization like the AMA does not change clinical guidelines and the task force that the ACE and the NKF have is going to produce really robust recommendations in that regard, but we can commit more broadly to the idea that race and biology are two different things, and the whole of medicine needs to appreciate the evidence that supports that. Furthermore, we can encourage specialty societies to do what the ACE and the NKF are doing, and really look at algorithms that have raised within their algorithm.

So this is an organized medicine issue because specialty societies are the ones writing these diagnostic algorithms and advising clinicians on what to do. So I think there's a crucial role for organized medicine to play, to look within, to say, "What can we do to clean up what's going on in our own decision-making and how can we use that to really provide the best evidence for our clinicians to make the right decisions when they're treating individual patients?" In the same vein, we have to take that same evidence-based lens and apply it to the policy we advocate.

We should advocate that we can make tests like Cystatin C and see more accessible and more cost-effective for institutions, so that when folks are going to their individual institutions, we don't meet the same resistance of costs and of barriers to accessing these really crucial diagnostic tests that could change the way that we address these conditions. I think there's a role for everybody to play, I think this is grassroots and it's organizational and its policy level, but absolutely, there's a role for organized medicine.

Dr. Maybank: Great. Thank you, Dr. Tsai. And we're almost closing on time, so if there's anything that you all wanted to say that you didn't get a chance to say, this will be the moment. But Dr. Tsai, just curious as, again, I think you're a great communicator, especially around any kind of sharing a lot of this information and it being digestible and accessible to many different folks in the way that you frame it, you're very powerful. Do you have anything coming up in terms of writing and communicating? I think policy is absolutely connected to that and how well we do that, clearly advocacy and activism is, so just curious of where you're at in all that.

Dr. Tsai: Thank you so much, those are very kind words. And as Dr. Morse said before, I think one of the reasons why I'm so interested in education, so interested in writing is, it's so clear if you're confronted with it, and I certainly am incredibly grateful for the teachers that I had in opening up a whole new world for me. And the way that I describe it is, these old spine movies where there's like a gem or a fabulously egg in the middle and all these lasers that you can't see that you have to dodge in the museum. But you can't see them unless you have this special spray or this thing where you can see the lasers.

And that to me is what Critical Race Theory, what good education, what good teaching is all about, is how do we give people the sprays so they can see this thing that becomes so obvious if you're trained to see it. So I really appreciate you saying those words. I think there are a few things cooking, I feel really excited about the writing that I'm doing about Critical Race Theory, about the eGFR race correction, about COVID scholarship. It is always difficult and an uphill battle to figure out how to get them out into the world and who will take them and give them a home.

But I hope that they'll be useful to other people and it'll come out soon. I think one of the issues that I run into as well is that I think argumentative essays that show context, that show discussion, that draw from history are not in the format that a lot of medical journals are used to. They're not used to talking about theory, they're not used to saying, "Okay, these are the persuasive arguments and why I think this is compelling. These are the rebuttals, this is that." Certainly, there are analytical or commentaries, but a lot of those are by invitation only, or limited in their references, or just not something that medical journals are used to publishing.

So it's something that I'm still figuring out, I can't say that I have solved any of those problems, but I think going back to our last question as well, organized medicine, it's so powerful, I think largely because of the authority and privilege that physicians are given. And also, the fact that our daily actions, our clinical decisions are really responsible for perpetuating these ideas of biologic essentialism. But I think one important thing from my experience at Brown in Providence, I was there for eight years for undergrad and medical school, is that it took me a long time to recognize how I can be not only a citizen of Brown University but a citizen of Providence.

Dr. Tsai (continuing): So in addition to organizing medically and organizing with physicians, I think it's so important to think about how we talk to teachers, lawyers, policy people, neighbors people around us that can become community. And that will be so much stronger for the sustainability of justice. And then I would also like to add that, yes, while I understand Cystatin C can be 10 times more expensive, I've talked to laboratory experts about this. And the difference is between 10 cents and a dollar.

And as people have mentioned, if it becomes more standardized, it's likely that that price will fall as well. It's like when you're in high school and you're buying t-shirts, if you buy 25, they're \$30, but if you buy 100, it quickly goes down in price. So I think, yes, the 10 to one is a significant ratio, but when you

look at the difference between 10 cents and a dollar, if we're talking about thousands of people getting more precise, more accurate, better care, that difference is not negligible, but something that can't sway how we approach this problem.

Dr. Maybank: Thank you. Dr. Vyas, and just to close with you because we started with you with the article and the conversation. And as I said, many folks have read and it spurred many a conversation and hopefully, action in some places, but at least, at minimum, a critical conversation about how to move forward in this. What do you want to post this article, all the action that's happening, what do you all want as authors of that particular piece?

Dr. Vyas: Yeah. I think many things. I think one of the goals has been to contribute to and be part of this systematic review of these tools and in any case, where race is used, I think it does merit revisiting each tool and deciding what's to be done with race, and that hopefully involves societies being open to amending these tools. I think some of that work will require the kind of scholarship that has been done for eGFR, but for the other tools as well. And then the second question of like, what do we do for tools and guidelines and things that are yet to come, I think is a bigger question.

I think policy is certainly a big part of that, and it's great that we have leadership in both sides of Congress. I think one place that I've really been stuck is trying to think, should each professional society be doing what is being done for nephrology and coming up with consensus guidelines for their field? Or is there a way to have changed that on a broader scale through something like the AMA? And what is the jurisdiction and who is going to own that job of creating a group of people that involves doctors and policymakers and critical race theorists and trainees to come up with that and who's going to take ownership of that?

I think that's sort of question that I also have and would love to hear what other people think. But I think in general, I think that the tools that exist now need to be revisited and then we need to come up with whatever solution for tools moving forward.

Dr. Maybank: Great. Well, thank you. We have come to the hour, usually we've been doing it 30 minutes, but I knew this was an hour-long conversation, probably could be a two-hour conversation or at least a part two. But I thank you all for joining and taking time out of your busy schedules, and so I'm in admiration of every single one of you. And really thank you for your leadership in this equity and justice space. Just want to remind viewers of our Health Equity Resource Center on COVID-19 that's on the AMA website, also to download a copy of our new Center for Health Equity Latinx COVID report, a lot of qualitative interviews of leaders across the country to have a deeper dive into the experiences of those physicians, but as well as the patients that they're serving.

And I encourage you to join us next week. We're breaking our pattern because we want to make sure we have a conversation after the results of the election. Hopefully, we have the results of the election by the fifth. And we think it's a meaningful conversation, especially in the space of health equity. So we



look forward to next week. Again, thank you all, and everyone be well.

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