



March 9, 2023

Road Map Bulletin: Kidney Function and Race: Not All Mathematical Equations Are Impartial

Happy Thursday, Mount Sinai Community—

Today is [World Kidney Day](#), so we wanted to take this opportunity to explore an important topic at the intersection of kidney health and health equity. If you are a frequent *Bulletin* reader, you've probably already seen us discuss how race is a factor in many aspects of a patient's health: whether it's their [sleep health](#), [body size](#), [vision care](#), [mental health](#), or more. All of this means you might not be surprised to read the following sentence: ***race may be a predetermining factor for kidney health, as well.***

While you might not be shocked by the fact that there is a connection between kidney health and a patient's race, a contributor to this disparity is unique and startling. We've written previously about how race is connected to health outcomes because of pre-existing factors called social determinants of health—like exposure to health hazards or lack of access to fresh foods—that are partially determined by a patient's race. However, for today's *Bulletin* on kidney function, **Kirk Campbell, MD, Professor of Medicine and Pharmacological Sciences and Vice Chair of Medicine for Diversity, Equity, and Inclusion at the Icahn School of Medicine at Mount Sinai** explained how a supposedly unbiased tool used *during diagnosis and treatment* created racial disparities that negatively impact patient outcomes.



Kirk explained that there is a mathematical formula for the estimated Glomerular Filtration Rate (or eGFR for short) of patients' kidneys. In other words, this equation shows how well someone's kidneys are functioning. While this is a seemingly impartial tool, eGFR equations have caused dangerously unequal treatments and outcomes for Black patients because for decades, they have included a "race-based factor" grounded on false

—and often racist—assumptions. As a result, older eGFR equations provided kidney function estimates that were dangerously off course. **In some cases, the results were so incorrect they caused delays for patient referrals and waitlisting for kidney transplants, with potentially deadly outcomes.**

The good news is that the most updated eGFR equation, the CKD-EPI 2021, currently in use in Mount Sinai Health System labs, is more accurate and does not include a race correction factor. The change started in 2020, when medical students, other advocates and leaders from the Icahn School of Medicine at Mount Sinai who read about the dangers of race-based factors in kidney formulas, formed a workgroup to study and address the issue. Thanks to their advocacy and work, Mount Sinai's labs have been ahead of our peers nationally, first removing the race coefficient over two years ago, and implementing evidence-based reporting using the updated eGFR equation just months after it became available. These changes have provided our patients and clinicians with far more equitable results.

Kirk told us he was particularly pleased with how swiftly the Health System acknowledged that using the race coefficient was an issue and made a change. “It's been quite reassuring to see how quickly the Mount Sinai Health System recognized these concerns and moved to rectify use of this race-based clinical algorithm,” he said. “It is a testament to how seriously Mount Sinai values equity in the clinical space. There is still much work to be done, but these efforts illustrate the constant need to assess individual and collective clinical practices to deliver the best and most equitable care.”

It is crucial for all of us to re-examine our own algorithms—especially those we assume are unbiased—to ensure we are supporting anti-racism in all that we do. And when better, evidence-based solutions become available, it's important we follow the Health System's lead and be willing to implement changes that benefit of our patients and the communities we serve.

This week, we also wanted to share that following our [Bulletin on sleep health disparities](#), Icahn Mount Sinai's Levy Library added the digital edition of [Rest is Resistance: A Manifesto](#) to their collection, which is now available for the entire Health System to read free of charge.

All the best,

Angela and Shawn

Join Us for an Upcoming Event

The Heritage of Latinx Alliance (HOLA) Employee Resource Group Presents the Rising Stars Panel — The HOLA ERG has brought together an extraordinary panel of Rising Star women in the Mount Sinai Health System. Join your colleagues on **Monday, March 13, 1-2 pm**, Ashley Michelle Fowler, MEd, Diana Persaud, Hazel Rogers, MPH, and Katari Villanueva as they discuss the daily challenges and successes of women in the workplace. [Register here](#) for this virtual event.

Chats for Change: Racism x Homelessness — Chats for Change is a production of the Icahn School of Medicine's Racism and Bias Initiative. Join facilitators Ashley Michelle Fowler and Leona Hess, PhD, on **Tuesday, March 14 from noon-1 pm**. Join us as we critically deconstruct a current newsworthy topic related to racism and bias. We will use the What? So What? Now What? critical reflection model to explore what happened, what we learned from the event or topic, how we can apply this learning to our day-to-day, and if there is follow-up needed. One week prior to the session, we will share the newsworthy topic on [ChangeNow](#). Register [here](#).

The Importance of Building Relationships Panel — The Black Women Leaders Connect Employee Resource Group will host a panel on **Tuesday, March 23 from 1-2 pm** on the importance of building relationships in the workplace by sharing experiences and offering tips. The Panel will be moderated by Lyndia Hayden, MS, PMP, Senior Director of Data Integrity and Equity Analytics in the Office for Diversity and Inclusion, and will feature LeWanza Harris, MD, MPH, MBA, MS, Vice President of Quality and Regulatory Affairs, Wendy O'Brien, Vice President and Chief Nursing Finance Officer and Kimberley Ennis, DNP, APRN-BC, Senior Director of Nursing at Mount Sinai Queens. [Register here](#) for this virtual event.

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