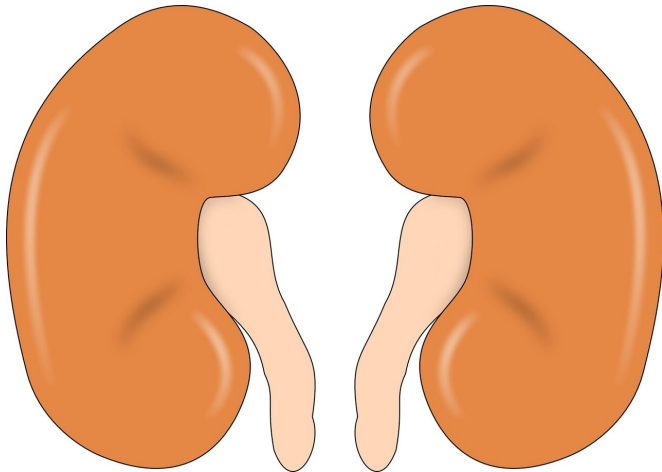


Study reveals the influence of race correction in kidney disease care

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A new study examines whether the "race multiplier" correction factor for Black patients, used when estimating kidney function, may contribute to disparities in care for these patients with chronic kidney disease (CKD). Black patients with CKD have worse outcomes than other racial groups, including higher rates of anemia and hypertension, longer waits for referral to nephrology, and poorer access to transplantation. A research team led by investigators from Brigham and Women's Hospital examined whether removing the race multiplier from calculations that estimate kidney function would change the way Black patients were classified. They found that up to one in every three Black patients would be reclassified as having a more severe stage of CKD, with one-quarter of Black patients going from stage 3 to stage 4—an important jump that could lead to more advanced kidney care and in some cases, key conversations about dialysis. Results of the study are published in *The Journal of General Internal Medicine*.

"Our findings suggest that using this racial correction can impact care for Black patients with

advanced CKD and may delay important referrals and critical conversations," said corresponding author Mallika Mendu, MD, MBA, executive medical director of Clinical Operations at the Brigham. "Considering the inequities in kidney care and outcomes for Black patients, use of the eGFR race correction factor needs to be reconsidered."

In June, Mass General Brigham announced that it had eliminated use of race correction for kidney disease function, joining several leading institutions, including University of Washington and Vanderbilt University. But the use of race correction remains common at [health systems](#) throughout the country.

Physicians use estimated glomerular filtration rate (eGFR) as a convenient way to quickly assess kidney health or the stage of CKD. When a physician reviews a patient's eGFR in the medical record and identifies that patient as Black, they may receive an automatic prompt or notation to use a "race multiplier" when calculating eGFR. The race multiplier is based on studies conducted 10 to 20 years ago that concluded that Black patients had different levels of GFR than white patients—without a clear biological explanation. The race multiplier is a number—1.159—that's meant to adjust values for Black patients to make them more equivalent to the value of other race groups.

To determine the impact of the race multiplier on the care of patients with advanced CKD, the investigators looked at the health records of more than 56,000 Mass General Brigham patients who had been seen before June 2019. Of those patients, 2,225 self-identified as African-American. The team then compared how their stage of CKD compared when the race multiplier was used and when it was eliminated. If the race multiplier had not been used, they found that 743 patients (33 percent) hypothetically, would have been reclassified as having a more severe CKD stage and 64 patients would have met criteria to be

referred for kidney transplant evaluation. With the race multiplier in place, zero of those 64 patients had been referred, evaluated or waitlisted for [kidney](#) transplant.

"Race is a social, not a biologic construct, and the [kidney function](#) race multiplier ignores the substantial genetic diversity within self-identified Black patients," said co-author Thomas Sequist, MD, chief patient experience and equity officer for the Department of Quality and Patient Experience at Mass General Brigham. "Research studies have not provided an acceptable scientific rationale for making clinical decisions based on the social construct of race."

The authors note that their study was conducted at a single health care system with a relatively small proportion of Black patients, and additional studies in other health care systems are needed.

"Our hope is that this work will inspire others to conduct their own investigations about the race multiplier and its effect in more diverse settings," said Mendu. "The risk of underdiagnosis and delays in care for Black patients is critical—and given a history of poor clinical outcomes in this patient population, it is imperative that we do all we can to mitigate and ultimately eliminate disparities in patient care."

More information: Salman Ahmed et al, Examining the Potential Impact of Race Multiplier Utilization in Estimated Glomerular Filtration Rate Calculation on African-American Care Outcomes, *Journal of General Internal Medicine* (2020). DOI: [10.1007/s11606-020-06280-5](https://doi.org/10.1007/s11606-020-06280-5)

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