



UMB News

UM Medicine to Eliminate Race from Kidney Function Estimates

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University of Maryland Medicine, composed of the [University of Maryland Medical System \(UMMS\)](#) and the [University of Maryland School of Medicine \(UMSOM\)](#), has announced that it will end the use of a longstanding clinical standard that factors a patient's race into the diagnosis of chronic kidney disease. The change could increase access to specialty care, including eligibility for kidney transplantation for thousands of Black people living with advanced kidney disease.



Stephen Seliger, MD, MS, associate professor in the Department of Medicine, Division of Nephrology, UMSOM, and an attending nephrologist at UMMC

By late January, the system, including its flagship academic hospital, the [University of Maryland Medical Center \(UMMC\)](#) will transition to new a standard of evaluating kidney function, eliminating whether a patient is "African American or non-African American" as a factor. The move follows a review by UMSOM clinicians and scientists of recently released recommendations from professional societies.

By one estimate, approximately 720,000 African Americans might be treated earlier for kidney disease if race were removed from the calculations of kidney function. In Maryland, and the Mid-Atlantic region more broadly, thousands of people could be impacted by this transition to race-free eGFR (estimate glomerular filtration rate).

"This is a significant development for University of Maryland Medicine and for academic medicine in general," said [Mohan Suntha, MD, MBA](#), president and CEO of UMMS. "We are in a period of evolution toward truly understanding the scope and impact of race-based disparities in health care and taking steps to address inequities. I commend our physician leadership and University of Maryland School of Medicine partners who have taken swift and decisive action to operationalize this change across our system hospitals, programs, and clinical partners. We are proud to be among the nation's first academic medical systems leading this imperative."

Since 1999, nephrologists across the country have used an equation to estimate glomerular filtration rate (eGFR), which reflects how well a person's kidneys filter waste. This equation relies on levels of creatinine — a byproduct of muscle and protein metabolism — from the blood. In addition to age and gender, the calculation takes into account whether a patient is "African American or non-African American" and assigns a multiplier based in part on a discredited notion that Black people tend to have more muscle mass than people of other races. This higher value often overestimates the health of Black patients' kidneys, pushing them above the threshold for diagnosis of advanced

kidney disease, and, therefore, leading to delayed referral for specialty care, or even disqualification for kidney transplant.

After a report last year in [The New England Journal of Medicine](#), the [National Kidney Foundation](#) and the [American Society of Nephrology](#) formed a joint task force to review the use of race in eGFR calculations. In September, the group endorsed a new calculation without the race coefficient. A committee of UM Medicine researchers, kidney specialists, clinical quality leaders, and health equity champions quickly convened to closely review the new guidance and drive forth a strong recommendation for change. This change also was enthusiastically endorsed by the Quality and Safety Committee of the UMMS Board.

"We are working expeditiously but responsibly to take race out of the equation," said [Stephen Seliger, MD, MS](#), associate professor, Department of Medicine, Division of Nephrology, UMSOM, and an attending nephrologist at UMMC. "But, anytime we advance change, we need to make sure we are not introducing unintended consequences. We have engaged a multidisciplinary team to develop a road map that will ensure a strong degree of accuracy in our evaluation of chronic kidney disease and its severity for all patients. We also want to ensure that our systems, internal and external stakeholders are all aligned. While the shift in the numbers seems small, the implications are not trivial. The elimination of race-based adjustments will alter reality for many of our patients."

Nationally, African American adults are three times more likely to suffer from kidney failure — making up roughly a third of U.S. dialysis patients, while comprising only 13 percent of the population. Delays in diagnosis exacerbate this gap — one reason UMMS experts say that while time is of the essence, getting this transition right is equally important.

UM Medicine acting to implement this change so quickly is a testament to the leadership roles the institution has in the academic medicine and health system arenas. UMSOM is a [participating site](#) in the [APOL1 Long-Term Kidney Transplantation Outcomes Network \(APOLLO\)](#), led by the National Institute of Diabetes and Digestive and Kidney Diseases at the National Institutes of Health.

Many African American persons who eventually need kidney transplants have a genetic variant called APOL1, short for apolipoprotein L1. In Africa, APOL1 protects against African sleeping sickness, which is transmitted by the tsetse fly. In the United States, APOL1 seems to increase the risk of kidney disease. APOLLO participants — kidney donors and recipients of kidney donations — have DNA tests to determine the variant's effects on kidney transplant outcomes.

"We know that African American persons historically suffer disproportionately from chronic kidney disease, and we have long sought a solution to improve outcomes. Changing the very method we use to diagnose kidney disease could be a game changer for many patients whose eGFRs may have appeared to be in normal range previously. If they do, in fact, have kidney disease, finding out earlier could make a difference in the person's long-term health," said [E. Albert Reece, MD, PhD, MBA](#), executive vice president for medical affairs, University of Maryland, Baltimore, and the John Z. and Akiko K. Bowers Distinguished Professor and dean, UMSOM. "The decision to stop using race-based eGFR calculations at UM Medicine could effectively level the playing field, which was sorely needed. I commend our entire team of faculty, clinicians, scientists, UMMC staff, and UM leadership colleagues."

For UMMS chief diversity, equity, and inclusion officer [Roderick K. King, MD, MPH](#), the consequences of race-based medicine are impossible to ignore.

"This is a historic step forward, and one I hope will bring greater awareness to the inherent flaws in many medical measurements that can foster the disproportionate toll chronic disease takes on people of color. Achieving equity in the diagnosis and treatment of kidney disease will clearly require interventions beyond the adoption of a race-independent eGFR calculation," King said. "But I am encouraged by the far-reaching impact this will have in the communities we serve and honored to work alongside colleagues who share my dedication to driving progress."

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