

Recommendation for Clinical Laboratories to Immediately Implement the CKD-EPI Creatinine Equation Refit Without the Race Variable

SITUATION: Historically, the laboratory formula used to calculate an individual's glomerular filtration rate (GFR) included a variable accounting for the individual's race. A recent recommendation from a joint task force of The National Kidney Foundation (NKF) and the American Society of Nephrology (ASN) is for all clinical laboratories in the United States to immediately implement the CKD-EPI creatinine equation refit without the race variable.

BACKGROUND: Estimated GFR (eGFR) is one of the key tests for diagnosing kidney disease. The earlier kidney disease is detected, the better the chance of managing it or keeping the condition from getting worse.

Race was originally included in eGFR calculations because clinical trials demonstrated that people who self-identify as Black/African American can have, on average, higher levels of creatinine in their blood. It was thought the reason why was due to differences in muscle mass, diet, and the way the kidneys eliminate creatinine. Since a patient's race is not always used when laboratory tests are ordered, laboratories used different eGFR calculations for African American and non-African American and included both numbers in their lab results.

ASSESSMENT: In considering the inclusion of race in this important calculated lab value, the following concerns were identified:

- Race is not a biological concept, but a social construct.
- A disproportionate number of Black or African American, Hispanic or Latino, American Indian or Alaska Native, Asian American, and Native Hawaiian or other Pacific Islander have been diagnosed with kidney disease.
- Using race as a factor for calculating eGFR does not account for the diversity within communities of color. Also, people who self-identify as multiracial might not want to be put in a single racial bucket.

RECOMMENDATION: Immediately implement the CKD-EPI creatinine equation refit without the race variable. Also consider the use of cystatin C combined with serum (blood) creatinine as a confirmatory assessment of GFR or kidney function.

See the American Journal of Kidney Diseases Special Report: Volume 79, Issue 2, P268-288. [A Unifying Approach for GFR Estimation: Recommendations of the NKF-ASN Task Force on Reassessing the Inclusion of Race in Diagnosing Kidney Disease \[ajkd.org\]](#) and [NKF and ASN Release New Way to Diagnose Kidney Diseases \[kidney.org\]](#).