

Kidney failure risk equation bests eGFR for predicting ESKD

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(HealthDay)—The four-variable Kidney Failure Risk Equation (KFRE)

better predicts the two-year risk for end-stage kidney disease (ESKD) than estimated glomerular filtration (eGFR) alone, according to a study published online Jan. 11 in the *Annals of Internal Medicine*.

Joshua D. Bundy, Ph.D., M.P.H., from the Tulane University School of Public Health in New Orleans, and colleagues compared ESKD prediction performance of different eGFR equations in an observational prospective cohort study conducted at seven U.S. clinical centers involving 3,873 participants with [chronic kidney disease](#). eGFR was calculated using five Chronic Kidney Disease Epidemiology Collaboration equations based on [serum creatinine](#) and/or cystatin C, with or without adjustment for race; KFRE was used to predict the two-year risk for ESKD.

The researchers found that 856 participants developed ESKD during a maximum follow-up of 16 years. The KFRE score was superior for predicting the two-year incidence of ESKD compared with eGFR alone across all eGFR equations (area under the curve ranges, 0.945 to 0.954 versus 0.900 to 0.927). The prediction performance of KFRE scores was similar using different eGFR equations, but calibration was improved among Black participants by using the creatinine equation without race adjustment. A KFRE score of >20 percent had similar specificity and higher sensitivity for predicting ESKD than an eGFR

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