

News

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Clinical Laboratory Test Update

New Estimated Glomerular Filtration Rate (GFR) Calculation

Effective 10/25/2021, UCHealth will exclusively use the new 2021 CKD-EPI creatinine eGFR equation (IDMS-traceable) to provide an estimate of GFR for individuals 18 years of age and older when creatinine is measured. The National Kidney Foundation (NKF) and American Society of Nephrology (ASN) recently recommended use of this newly developed equation to provide an estimate of GFR without inclusion of a race variable. This calculation produces a value that is considered unbiased and a generally acceptable approximation of kidney function.

Like the previous calculations used to estimate GFR that are being replaced, this calculated value can be more than +/-30% different from a measured GFR for an individual. The estimate can be unreliable when a person is acutely ill or pregnant. Also, the estimate assumes that the person consumes a regular diet and has a "normal" male or female body with average muscle mass for their sex, which can be untrue for many patients.

When diagnosing or staging kidney disease, additional assessment of kidney function using cystatin C to estimate GFR and/or considering the albumin to creatinine ratio in urine is indicated. The eGFR Calculator for standardized creatinine assays on the NKF website is recommended to obtain a better estimate of kidney function that can adjust for a person's height and weight and/or when both creatinine and cystatin C values are available:

https://www.kidney.org/professionals/kdogi/gfr calculator

For persons under 18 years of age, a pediatric GFR calculator must be used.

Please refer to https://www.kidney.org/news/nkf-and-asn-release-new-way-to-diagnose-kidney-diseases for more details, or contact Dr. Greg Bocsi (720-848-7050) with specific questions.

Issued: 10/21/2021