

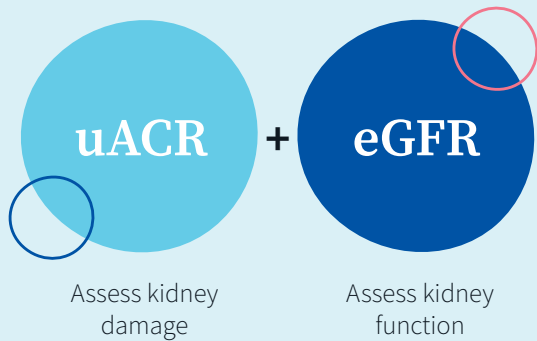


PRIMARY CARE

It only takes two
recommended tests
for chronic kidney
disease detection



It only takes two tests together to detect kidney disease



Guidelines and experts recommend annual testing for chronic kidney disease (CKD) using two key tests—the urine albumin-creatinine ratio (uACR) and the estimated glomerular filtration rate (eGFR)—for people with:¹

- Diabetes
- Hypertension
- Cardiovascular disease
- Family history of CKD

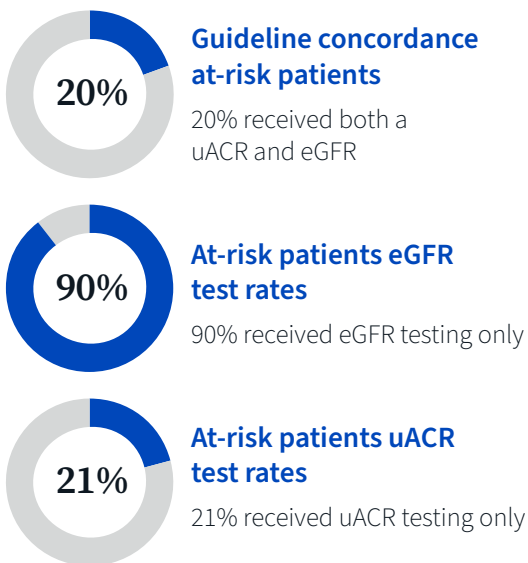
Together, the uACR and eGFR provide important information about kidney health, diagnosis and treatment to help prevent or slow the progression of CKD.

An opportunity for improvement

Despite CKD screening guideline recommendations, testing for CKD with both the uACR and eGFR remains low.^{2,3}

In a study evaluating 28.2 million at-risk patients, 80.3% did not receive both assessments.³ This may be partially due to a lack of appreciation for the clinical utility of uACR.¹

CKD testing rates³

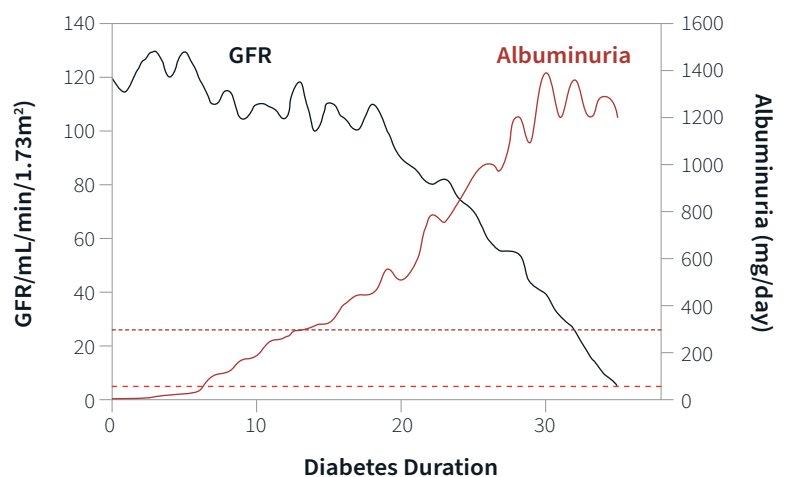


uACR—a sensitive marker for early CKD detection

Guidelines recommend assessing and monitoring urine albumin as it:

- **Detects an early signal of CKD:** An elevated uACR is often one of the earliest signs of CKD and can be present even before a decrease in eGFR is observed⁴
- **Delivers sensitive results:** Unlike urine protein dipstick testing, uACR is unaffected by variation in urine concentration and can detect albuminuria that is missed by less sensitive tests⁵
- **Provides a quantitative measurement:** uACR helps diagnose CKD and is required to appropriately stage kidney disease

Diabetic kidney disease and marker progression⁴



Rising uACR often occurs several years before a detectable decline in eGFR and can be an early indicator of kidney disease in patients with diabetes.⁴

Note: Illustration adapted from Pediatric Nephrology—Jan 2015

Guideline-recommended testing requires both the eGFR and uACR once per year

American Diabetes Association (ADA) screening recommendations:

ADA CKD and Risk Management: Standards of Medical Care in Diabetes—2022 ⁶	
11.1a: Type 1 diabetes with duration of ≥ 5 years and all Type 2 diabetes patients	Annual uACR and eGFR screening
11.1b: All patients with diabetes that have uACR >300 mg/g and/or an eGFR of 30–60 mL/min/1.73 m ²	Twice annual uACR and eGFR screening

The National Committee for Quality Assurance (NCQA)

HEDIS Kidney Health Evaluation for Patients with Diabetes (KED) measure: HEDIS measure to address gaps in care and improve CKD ⁷	
Who: All people (18–85 years old) with diabetes (Type 1 and Type 2) Measure: Receive an annual kidney health evaluation that includes both tests—uACR and eGFR—to diagnose CKD	<ul style="list-style-type: none"> • uACR to assess kidney damage • eGFR to assess kidney function

HEDIS = Healthcare Effectiveness Data and Information Set

Both tests are required for CKD classification⁸

Risk of chronic kidney disease progression and frequency of assessment

[according to eGFR and uACR]

CKD is classified on the basis of:

- GFR (G)
- Albuminuria (A)

GFR categories (mL/min/1.73m ²) Description and range	Albuminuria categories Description and range			A1	A2	A3
	A1	A2	A3			
G1 Normal or high ≥ 90	Normal to mildly increased <30 mg/g <3 mg/mmol	Moderately increased 30–299 mg/g 3–29 mg/mmol	Severely increased >300 mg/g >30 mg/mmol	1	1	2
G2 Mildly decreased 60–89	1	1	2			
G3a Mildly to moderately decreased 45–59	1	2	3			
G3b Moderately to severely decreased 30–44	2	3	3			
G4 Severely decreased 15–29	3	3	4+			
G5 Kidney failure <15	4+	4+	4+			

Note: Adapted from the NKF Intercept Chronic Disease Change Package

Adults with diabetes, hypertension, older than 60 or a family history of kidney disease

Request Kidney Profile (eGFR and ACR)

Albuminuria categories
Description and range

A1	A2	A3
Normal to mildly increased	Moderately increased	Severely increased
<30 mg/g <3 mg/mmol	30–299 mg/g 3–29 mg/mmol	>300 mg/g >30 mg/mmol



Labcorp's Kidney Profile: One convenient order code, two recommended tests

The Labcorp Kidney Profile includes uACR and eGFR tests in one order code to help support the detection, diagnosis and management of kidney disease.⁹ It complies with recommended guidelines delivering uACR and eGFR results together to help you diagnose kidney disease and classify your patients.

Test Name	Test No.	Profile Constituents
Kidney Profile	140301	Urine Albumin/Creatinine Ratio+eGFR
Kidney Profile + BMP	140302	Urine Albumin/Creatinine Ratio+eGFR+Basic Metabolic Panel (BMP)
Kidney Profile + CMP	140303	Urine Albumin/Creatinine Ratio+eGFR+Comprehensive Metabolic Panel (CMP)
Cardiorenal-Glycemic Status Profile (fasting not required)	245292	Urine/Albumin/Creatinine Ratio+eGFR+Lipid with non-HDL+Hemoglobin A1c

Provide answers for your patients

Align with recommendations from the ADA, the NIH National Institute of Diabetes and Digestive and Kidney Diseases and other endocrinology societies: Test your patients with diabetes and hypertension at least annually to detect or monitor potential kidney damage.^{6,10}

Labcorp is your source for comprehensive CKD testing

References

1. Vassalotti J, Boucree, S. Integrating CKD into US primary care: Bridging the knowledge and implementation gaps. *Kidney Int Rep.* 2022; 7: 389-396. <https://doi.org/10.1016/j.ekir.2022.01.1066>.
2. United States Renal Data System. 2021 USRDS annual data report. Epidemiology of Kidney Disease in the United States. National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases: 2021.
3. Alfego D, Ennis J, Gillespie B, et al. Chronic kidney disease testing among at-risk adults in the U.S. remains low: real-world evidence from a National Laboratory database. *Diabetes Care.* 2021;44:2025-2032. <https://doi.org/10.2337/dc21-0723>
4. Afkarian M. Diabetic kidney disease in children and adolescents. *Pediatric Nephrology.* 2015; 30(1): 65-74. <https://doi.org/10.1007/s00467-014-2796-5>
5. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). Assess Urine Albumin. 2010. Accessed November 28, 2022. <https://www.niddk.nih.gov/health-information/professionals/clinical-tools-patient-management/kidney-disease/identify-manage-patients/evaluate-ckd/assess-urine-albumin>
6. The American Diabetes Association. 11. Chronic Kidney Disease and Risk Management: Standards of Medical Care in Diabetes—2022. *Diabetes Care.* 2022;45(1):S175–S184. <https://doi.org/10.2337/dc22-S011>
7. Brock M. Kidney Health: A New HEDIS Measure. NCCQA. July 16, 2020. Accessed November 28, 2022. <https://www.nccqa.org/blog/kidneyhealth/>
8. National Kidney Foundation CKD Intercept Chronic Kidney Disease Change Package. 2018. Accessed November 28, 2022. https://www.kidney.org/sites/default/files/02-11-8036_jbl_ckd_change-pack-v17.pdf
9. Miller W, Bachmann L, Delanghe J, et al. Optimal use of biomarkers for chronic kidney disease. *Clin Chem.* 2019;65:949-955. <https://doi.org/10.1373/clinchem.2018.299073>
10. Diabetic Kidney Disease. The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) of the National Institutes of Health (NIH). Accessed November 28, 2022. <https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems/diabetic-kidney-disease>

Visit the online Test Menu at **Labcorp.com** for full test information, including CPT codes and specimen collection requirements.

