

Let's Talk About Diabetes and Kidney Health Ready – Set – Test



Approximately **1 in 3** adults with diabetes may have chronic kidney disease.¹



African Americans, American Indians and Hispanics/Latinos develop diabetes, kidney disease and kidney failure at a higher rate than Caucasians.²

Diabetes Increases Risk for Kidney Disease

Diabetes is prevalent in 10% of U.S. adults (34 million people) and is a leading cause of chronic kidney disease (CKD).³ Although CKD results in progressive loss of kidney function, it is often asymptomatic until the late stages of the disease;¹ 90% of adults with CKD are unaware they have it. CKD increases the risks of heart disease, stroke and early death and can lead to kidney failure.⁴ Because early diagnosis and treatment can prevent or delay progression of CKD, ongoing monitoring of kidney health is crucial for people with diabetes.

Assessing Kidney Health

Clinical practice guidelines from the American Diabetes Association and the National Kidney Foundation (NKF) recommend screening patients with diabetes for kidney disease every year using estimated Glomerular Filtration Rate (eGFR) and urine Albumin-to-Creatinine Ratio (uACR). Patients with diabetes can have changes in eGFR or in uACR, or in both, so it is important to track both.^{6,7}

Kidney damage is assessed using uACR based on a spot urine sample as recommended by guidelines because it is unaffected by variation in urine concentration. Other tests for albumin, such as a dipstick, are not recommended because they are less sensitive and do not detect lower uACR levels.⁸

Kidney function is assessed using eGFR based on the patient's serum creatine level, age and sex. Historically race was included in the calculation, but in 2021, an NKF-ASN (American Society of Nephrology) Task Force recommended that race modifiers be removed from the equation.⁹

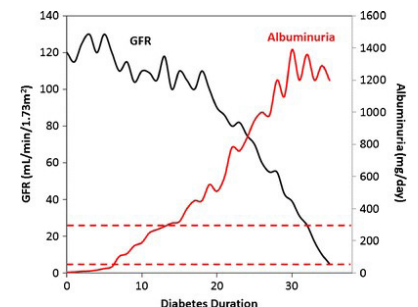
Together, these two tests provide key information regarding kidney health, including determining the stage of CKD and the risk of progression.

Two Tests for Kidney Health

eGFR	Blood test to assess kidney function	serum creatinine (mg/dL) with equation (mL/min/1.73m ²)
	uACR	Urine test to assess kidney damage

In 2020, laboratories collaborated to create a standardized [Kidney Profile](#) that bundles these components in one request.⁵

Elevated uACR is often the earliest sign of CKD



Rising uACR (≥ 30 mg/g) detection occurs about 10 years before a detectable decline in eGFR and thus is an early indicator of kidney disease in patients with diabetes.¹⁰

Diabetes Performance Measure Incorporates Both Kidney Tests

Evidence shows that despite clinical guidance, fewer than half of people with diabetes receive an annual kidney assessment that includes both eGFR and uACR.¹¹ [Kidney Health Evaluation for Patients With Diabetes \(KED\)](#) addresses this gap.¹² KED was introduced in HEDIS^{®13} for Measurement Year 2020. Early results for the measure are consistent with research and indicate that many patients with diabetes are not receiving annual kidney evaluations. The Centers for Medicare & Medicaid services incorporated KED in its 2021 Star Ratings.¹⁴

Interpreting Test Results

The KDIGO Heat Map is a tool for staging, risk stratifying and monitoring kidney disease.¹⁵ CKD is defined by kidney damage and/or abnormal kidney function over a 3-month period. Because patients with diabetes are at increased risk for CKD, they should be tested at least every year to assess kidney health. Patients with eGFR <60 and/or uACR ≥30 mg/g should be tested every year to monitor CKD progression and guide treatment.

As shown in the Heat Map, for each level of eGFR, the uACR result determines the risk of CKD progression. For example, a patient with eGFR 50 (CKD stage 3a) and uACR <30 mg/g should be considered moderate risk, treated, and monitored once a year. A patient with eGFR 50 and uACR 30-200 mg/g should be considered high risk, treated, and monitored twice a year. A patient with eGFR 50 and uACR ≥ 300 mg/g should be considered very high risk, treated, monitored at least three times a year and potentially referred to nephrology services.

Test results are used to diagnose and code a patients' CKD stage and are often secondary to a code for the underlying cause, such as diabetes or hypertension. Test results can also be used to educate patients about kidney disease and the elevated risk for those with diabetes. Educational resources to support conversations, including videos addressing the risk of kidney disease and handouts explaining kidney test results, are available from the [National Institute of Diabetes and Digestive and Kidney Diseases](#).¹⁶

ADA-KDIGO Heat Map

Risk of progression by intensity of coloring + Frequency of screening or monitoring (number of times per year) + Treatment and referral decision making by GFR and albuminuria category				Albuminuria categories		
				Description and range		
				A1	A2	A3
				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
GFR categories (mL/min/1.73m ²) Description and range	G1	Normal or high	≥90	Screen 1	Treat 1	Treat and refer 3
	G2	Mildly decreased	60-89	Screen 1	Treat 1	Treat and refer 3
	G3a	Mildly to moderately decreased	45-59	Treat 1	Treat 2	Treat and refer 3
	G3b	Mildly to severely decreased	30-44	Treat 2	Treat and refer 3	Treat and refer 3
	G4	Severely decreased	15-29	Treat and refer* 3	Treat and refer* 3	Treat and refer 4+
	G5	Kidney failure	<15	Treat and refer 4+	Treat and refer 4+	Treat and refer 4+

■ Low risk (if no other markers of kidney disease, no CKD) ■ High Risk
■ Moderately increased risk ■ Very high risk

New HEDIS Measure: Kidney Health Evaluation for Patients with Diabetes

NUMERATOR: Members who received an annual kidney health evaluation, including both eGFR and uACR

DENOMINATOR: Members 18–85 years of age with diabetes (type 1 and type 2)

ICD-10-CM Codes for CKD Stages¹⁷

DIABETES WITH CKD

Type 1 (E10.22) or Type 2 (E11.22)

Stage 1 (G1): N18.1
 Stage 2 (G2): N18.2
 Stage 3 (G3): N18.3
 Stage 4 (G4): N18.4
 Stage 5 (G5): N18.5

Monitoring and Managing Kidney Disease

Primary care practices play a key role in treating kidney disease through managing risk factors such as hypertension or hyperglycemia, prescribing medications as needed and encouraging a healthy lifestyle. Primary care clinicians also play a pivotal role in determining when to refer patients with kidney disease to nephrologists. Following KDIGO Heat Map guidance for referrals, which is based on eGFR and uACR levels, has proven to reduce hospitalizations and costs of care for people with CKD.¹⁸

Why Code CKD Stage?

Complete coding of CKD improves:

- Care coordination
- Care planning
- Inclusion in patient registries
- Population management
- Risk adjustment and reimbursement

Information gathered from the Centers for Disease Control and Prevention (CDC), the National Kidney Foundation (NKF) and the National Institute of Diabetes, Digestive and Kidney Diseases (NIDDK).

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