

NEW ICD-9 CODES FOR CHRONIC KIDNEY DISEASE

FIND IT, STAGE IT, CODE IT, ACT!

| Stage | ICD-9-CM Code | Description | Classification of CKD by Severity | | | Action* |
|-------|---|------------------------------------|--------------------------------------|---|-------------------------------|--|
| | | | GFR (mL/min/1.73 m ²) | Clinical Presentations* | Classification by Treatment** | |
| 1 | 585.1 Chronic kidney disease, Stage I | Kidney damage with normal or ↑ GFR | ≥90 | Markers of damage (Nephrotic syndrome, Nephritic syndrome, Tubular syndromes, Urinary tract symptoms, Asymptomatic urinalysis abnormalities, Asymptomatic radiologic abnormalities, Hypertension due to kidney disease) | T | Diagnosis and treatment, Treatment of comorbid conditions, Slowing progression, CVD risk reduction |
| 2 | 585.2 Chronic kidney disease, Stage II (mild) | Kidney damage with mild ↓ GFR | 60–89 | Mild complications | T | Estimating progression |
| 3 | 585.3 Chronic kidney disease, Stage III (moderate) | Moderate ↓ GFR | 30–59 | Moderate complications | T | Evaluating and treating complications |
| 4 | 585.4 Chronic kidney disease, Stage IV (severe) | Severe ↓ GFR | 15–29 | Severe complications | T | Preparation for kidney replacement therapy |
| 5 | 585.5 Chronic kidney disease, Stage V 585.6 ESRD | Kidney failure | <15 (or dialysis) | Uremia, Cardiovascular disease | T D | Replacement (if uremia present) |

Adapted from National Kidney Foundation. K/DOQI Clinical Practice Guidelines for Chronic Kidney Disease: Evaluation, Classification and Stratification. Am J Kidney Dis 39, 2002 (suppl 1).
Levey, A.S., et al. Definition and Classification of Chronic Kidney Disease: A position statement from Kidney Disease: Improving Global Outcomes (KDIGO). Kidney International 67, 2005, 2089-2100.

*Includes presentations and actions from preceding stages. Chronic kidney disease is defined as either kidney damage or GFR <60 mL/min/1.73 m² for ≥3 months. Kidney damage is defined as pathologic abnormalities or markers of damage, including abnormalities in blood or urine tests or imaging studies.

**Classification 'T' is added for all kidney transplant recipients, at any level of GFR (CKD stages 1-5); Classification 'D' is added for CKD stage 5 patients treated by dialysis. Abbreviations: CVD, cardiovascular disease; ESRD, end stage renal disease; GFR, glomerular filtration rate.

Additional Codes

585 Chronic kidney disease

Use additional codes to identify kidney transplant status, if applicable (V42.0)

585.9 Chronic kidney disease, unspecified

Chronic renal disease
Chronic renal failure NOS
Chronic renal insufficiency

285.2 Anemia in chronic illness

285.21 Anemia in chronic kidney disease
Anemia in end stage renal disease

403 Hypertensive kidney disease (see note below)

Use additional code to identify the stage of chronic kidney disease (585.1-585.6), if known

The following fifth-digit subclassification is for use with category 403:

0 without chronic kidney disease
1 with chronic kidney disease

404 Hypertensive heart and kidney disease (see note below)

Use additional code to specify type of heart failure (428.0-428.43), if known
Use additional code to identify the stage of chronic kidney disease (585.1-585.6), if known

The following fifth-digit subclassification is for use with category 404:

0 without heart failure or chronic kidney disease
2 with chronic kidney disease
3 with heart failure and chronic kidney disease

NOTE: Following the finalization of the titles it has been determined that since the codes under category 585 include the entire continuum of CKD it will be necessary to modify the titles for the fifth digits in categories 403 and 404 again to reflect this. All patients with hypertensive kidney disease have both hypertension and some stage of CKD, so the current code titles for fifth-digit 0 for categories 403 and 404 are invalid. Until new titles become effective only fifth-digit 1 for category 403 should be used. For category 404 only fifth-digits 2 and 3 should be used for patients with CKD.

When using any code under category 403 with fifth-digit 1 and any code under category 404 with fifth-digits 2 or 3, a secondary code from category 585 should be used to identify the stage of CKD.

Please review the full ICD-9-CM official coding guidelines for full sequencing instructions. The address for the NCHS classification website is <http://www.cdc.gov/nchs/icd9.htm>

UNDIAGNOSED CKD CAN KILL.

How many of **YOUR** patients with diabetes, hypertension or cardiovascular disease have undiagnosed chronic kidney disease?

What Can You Do?

1. Determine Risk

Diabetes
Hypertension
Family history of diabetes, hypertension or CKD
U.S. ethnic minority status

2. Do 3 Simple Tests

Urinalysis to detect protein
Blood Pressure Measurement
Serum Creatinine to estimate GFR

3. Implement an Action Plan (see reverse)

4. Consider co-management with a nephrologist

if the clinical action plan cannot be carried out.
Refer to a nephrologist when GFR <30 mL/min/1.73 m².

The recommended method to estimate GFR is the MDRD Study equation:

Estimated GFR (mL/min/1.73m²)

$$= 186 \times (S_{Cr})^{-1.154} \times (\text{Age})^{-0.203} \times (0.742 \text{ if female}) \times (1.210 \text{ if African - American})$$

$$= \exp[(5.228 - 1.154 \times \ln(S_{Cr}) - 0.203 \times \ln(\text{Age}) - (0.299 \text{ if female}) + (0.192 \text{ if African-American})]$$

S_{Cr} , serum creatinine in mg/dL; age, in years.

- **GFR is usually accepted as the best overall index of kidney function in health and disease.** Normal GFR varies according to age, sex, and body size; in young adults it is approximately 120–130 mL/min/1.73 m² and declines with age. A decrease in GFR precedes the onset of kidney failure; therefore a persistently reduced GFR is a specific indication of CKD. Below 60 mL/min/1.73 m², the prevalence of complications of CKD increases, as does the risk of cardiovascular disease.
- The MDRD Study equation has not been validated in children (age <18 years), pregnant women, the elderly (age >70 years), racial or ethnic subgroups other than Caucasians and African Americans, in individuals with normal kidney function who are at increased risk for CKD, or in normal individuals. Despite these limitations, **GFR estimates using equations are more accurate than serum creatinine alone.**
- **There are several significant limitations to estimating kidney function solely from serum creatinine.** Serum creatinine concentration is affected by factors other than GFR, such as tubular secretion, generation and extra-renal excretion of creatinine. Due to variation in these processes amongst individuals and over time within individuals, especially creatinine generation, there is a relatively wide range for serum creatinine in normal persons. As well GFR must decline to approximately half the normal level before the serum creatinine concentration rises above the upper limit of normal.

ONLINE AND DOWNLOADABLE TOOLS FROM THE NATIONAL KIDNEY FOUNDATION FOR IMPROVING PATIENT OUTCOMES

GFR Calculator
Clinical Action Plans for CKD with/without hypertension and/or diabetes
KDOQI Clinical Practice Guidelines
www.kidney.org/kls/professionals/tools.cfm

Frequently Asked Questions about GFR Estimates
www.kidney.org/professionals/kls/gfr.cfm
Free community screening: Kidney Early Evaluation Program (KEEP)
www.kidney.org/news/keep/index.cfm



www.kidney.org
800.622-9010