

Medicare Risk Adjustment Coding Focus

Diabetic renal disease

According to the *National Chronic Kidney Disease (CKD) Fact Sheet*, it is estimated that more than 15% of adults in the United States (30 million people) may have CKD, of various severity levels.¹ Diabetes and hypertension are the leading causes of CKD.

About the kidneys

Kidneys are part of the urinary tract system. Inside the kidneys are millions of tiny blood filtering units called nephrons. In each nephron, blood is continually filtered through a microscopic cluster of looping blood vessels called a glomerulus.

The primary function of kidneys is to filter the blood to remove waste products that are then excreted in the urine. Useful substances, such as protein and red blood cells, stay in the blood as they are too big to pass through the filter. Diabetes can cause damage to nephrons and alter the glomerular filtration process. These changes lead to leakage and loss of some proteins into the urine. One of the earliest proteins to leak into the urine as a result of diabetic renal disease is albumin.

The presence of small amounts of albumin in the urine is called microalbuminuria; the presence of larger amounts is called macroalbuminuria.²

Treatment and tests

The most important treatment for diabetic renal disease (also known as diabetic nephropathy) is to maintain control of blood glucose and blood pressure. If blood pressure can't be controlled with weight loss, decreased salt consumption, avoidance of alcohol and tobacco, and regular exercise, an angiotensin-converting enzyme (ACE) inhibitor, such as captopril or enalapril, may be prescribed.

The routine urine and blood tests listed below may be used to evaluate kidney disease and monitor kidney function:³

- Urine albumin, urinalysis or urine total protein (urine protein to creatinine ratio)

- Estimated glomerular filtration rate (eGFR)
- Urea (blood urea nitrogen or BUN)- included in basic and comprehensive metabolic panels (BMP and CMP)
- Creatinine-included in BMP and CMP

When the kidneys lose their function, patients develop kidney failure and waste products begin to build up in the blood. End-stage renal disease (ESRD) is the most advanced stage of kidney failure and requires dialysis (a treatment to filter blood by a machine) or a kidney transplant.

Coding guidance

ICD-10-CM contains combination codes that include the type of diabetes mellitus, the body system affected and the complication(s) affecting that body system. Diabetes with a renal complication leads to category E08-E13 (diabetes, by type) with subcategory of .2- for diabetic kidney complications. Additional characters are required to indicate the specific kidney complication as listed below.⁴ Provider documentation must include all the necessary details to code diabetic renal complications to the highest specificity. When documenting diabetic CKD, providers should also include the stage of CKD.

Type 2 diabetes mellitus with kidney complications	
E11.21	Type 2 diabetes mellitus with diabetic nephropathy
E11.22	Type 2 diabetes mellitus with diabetic CKD*
E11.29	Type 2 diabetes mellitus with other diabetic kidney complication
*Code also stage of CKD (N18.1-N18.6)	

Resources

- 1 Centers for Disease Control and Prevention, National Chronic Kidney Disease Fact Sheet 2017: <https://www.cdc.gov/diabetes>
- 2 American Diabetes Association website: *Kidney Disease (Nephropathy)* (accessed August 2020): <https://www.diabetes.org>
- 3 Lab Tests Online website: *Kidney Disease* (accessed August 2020): <https://www.labtestsonline.org>
- 4 Optum 360° (2019), *ICD-10- CM Expert for Physicians*, The complete official code set.

Reference the ICD-10-CM Codebook, CMS-HCC Risk Adjustment Model(s) and AHA Coding Clinic for complete code sets and official coding guidance.