

Coding spotlight: diabetes — provider guide to coding the diagnosis and treatment of diabetes

Diabetes mellitus is a chronic disorder caused by either an absolute decrease in the amount of insulin secreted by the pancreas or a reduction in the biologic effectiveness of the insulin secreted.

Facts

- According to 2017 *Diabetes Report Card*, the rates of new cases of diabetes among adults living in the U.S. has decreased, and the rates of new cases among children and adolescents has increased.¹
- Diabetes is the seventh leading cause of death in the United States.²
- Diabetes is the leading cause of new cases of blindness in adults.²

Risk factors

- Age
- Obesity or being overweight
- Sedentary lifestyle
- Family history
- Ethnic background
- Impaired glucose intolerance
- Gestational diabetes
- Polycystic ovary syndrome³

Diagnosis and treatment

The American Diabetes Association (ADA) has recommended screening for the following people:

- Anyone with the body mass index higher than 25 (regardless of age), who has additional risk factors such as high blood pressure, a sedentary lifestyle, high cholesterol levels, a history of heart disease, a history of polycystic ovary syndrome, having delivered a baby who weighed more than nine pounds
- Anyone over the age of 45.

Diabetes tests:

- Glycated hemoglobin (HbA1c) test
- Random blood sugar test
- Fasting blood sugar test
- Oral glucose tolerance test

1 *Diabetes Report Card*. CDC. <https://www.cdc.gov/diabetes/library/reports/reportcard.html>

2 *Diabetes: What is it?* <https://www.cdc.gov/diabetes/diabetesatwork/pdfs/DiabetesWhatIsIt.pdf>

3 *What increases my risk of diabetes?* <https://www.webmd.com/diabetes/guide/risk-factors-for-diabetes#1>

- Screening test for gestational diabetes in pregnant patients:
 - For high-risk patients: given at the first prenatal visit
 - For average-risk patients: given between 24 to 28 weeks of pregnancy

Diabetes treatment and management:

- Maintaining a healthy weight through diet and exercise
- For type 1 diabetes, insulin injections or the use of an insulin pump, frequent blood sugar checks and carbohydrate counting
- For type 1 diabetes, a pancreas transplant may be an option
- For type 2 diabetes, monitoring the blood sugar along with diabetes medications
- For gestational diabetes, controlling blood sugar levels to avoid complications during delivery⁴

HEDIS® quality measure for diabetes

Comprehensive Diabetes Care (CDC) is a measure that evaluates members ages 18 to 75 with type 1 or type 2 diabetes. Each year, members with type 1 or type 2 diabetes should have:

- HbA1c testing and result
- Blood pressure monitoring
- Medical attention to nephropathy (micro/macro urine, angiotensin-converting enzyme/angiotensin receptor blockers therapy) in the measurement year
- Retinal eye exam performed by an ophthalmologist or optometrist in measurement year or year prior.⁵

Tips for providers:

- Evaluate diabetes services needed at each visit.
- Adjust therapy to improve HbA1c and blood pressure levels.
- Consider ordering labs prior to scheduled patient appointment times.
- Screen yearly for nephropathy and treat if necessary.
- Evaluate eye exam results.
- Document any reasons why the above-listed exams were not done.
- Educate members on medication adherence and healthy diet and exercise.

ICD-10-CM information

General coding and documentation

In ICD-10-CM, diabetes is classified in categories E8 through E13. The diabetes mellitus codes are combination codes that include the type of diabetes mellitus, the body system affected and the complications affecting the body system.

⁴ *Diabetes: Diagnosis and treatment.* <https://www.mayoclinic.org/diseases-conditions/diabetes/diagnosis-treatment/drc-20371451>

⁵ *HEDIS Benchmarks and Coding Guidelines for Quality Care.* Developed by UniCare Health Plan of West Virginia, Inc.

The ICD-10-CM presumes a causal relationship between diabetes and several acute and chronic conditions. The term “with” means “associated with” or “due to” when it appears in a code title, the alphabetic index or an instructional note in the tabular list. However, if the physician documentation specifies that diabetes is not the underlying cause of the other condition, the condition should not be coded as a diabetic complication. The documentation should indicate if the two conditions are related or not.⁶

ICD-10-CM diabetes categories:

- E08 Diabetes mellitus due to an underlying condition
- E09 Drug or chemical induced diabetes mellitus
- E10 Type 1 diabetes mellitus
- E11 Type 2 diabetes mellitus
- E13 Other specified diabetes mellitus⁷

ICD-10-CM tips:

- If the medical record documentation does not specify the type of diabetes, the default is category E11 type 2 diabetes mellitus according to the ICD-10-CM *Official Coding Guidelines*.
- Secondary diabetes due to an underlying condition is coded to category E08 with the underlying condition coded first. Underlying conditions include congenital rubella (P35.0), Cushing’s syndrome (E24.-), cystic fibrosis (E84.-), malignant neoplasm (C00 through C96), malnutrition (E40-E46), and pancreatitis and other diseases of the pancreas (K85-, K86.-).
- Secondary diabetes mellitus that is due to pancreatectomy is coded to E89.1, postprocedural hypoinsulinemia. A code from category E13 should be assigned and either code Z90.410 acquired total absence of pancreas or code Z90.411 acquired partial absence of pancreas as additional diagnoses.⁶
- Secondary diabetes drug-induced or chemically induced is coded to category E09. For example, steroid-induced diabetes mellitus due to prolonged use of prednisone for an unrelated condition is coded as E09.9 drug or chemical induced diabetes mellitus without complications followed by code T38.0X5- adverse effect of glucocorticoids and synthetic analogs.
- Type 1 diabetes mellitus (category E10) can also be described as ketosis-prone, juvenile-onset, idiopathic diabetes or brittle diabetes.
- Type 2 diabetes mellitus (category E11) may also be described as insulin-resistant. Code Z79.84 long-term (current) use of oral hypoglycemic drugs is assigned when the patient requires oral hypoglycemic medication. When a patient with type 2 diabetes routinely uses insulin, assign code Z79.4 long-term (current) use of insulin. If the patient is treated with both oral medications and insulin, only the code for insulin should be assigned.

⁶ Leon-Chisen N. (2017). ICD-10-CM and ICD-10-PCS Coding Handbook 2018. American Hospital Association: Chicago, IL

⁷ ICD-10-CM Expert for Physicians: the complete official code set. (2018). Optum 360.

Patients with diabetes often suffer several complications concurrently, in which case multiple codes from categories E08 through E13 are assigned to identify all the associated diabetic conditions.

- **Renal complications:** Diabetic renal complications are coded to E08 through E13 with .21 for diabetic nephropathy, .22 for chronic kidney disease, and .29 for other kidney complications.
- **Diabetic eye complications:** Diabetic eye complications are coded to E08 through E13; the fourth and fifth characters indicating unspecified retinopathy, nonproliferative diabetic retinopathy and proliferative diabetic retinopathy. The sixth character provides information to identify the presence or absence of macular edema. The seventh character designates the laterality of the condition.

ICD-10-CM presumes a causal relationship between diabetes and cataracts. Diabetes and cataracts should be coded as related even when the provider is not specifically linking them, unless the documentation clearly states that the conditions are not related.

Diabetic neurological complications

Peripheral, cranial and autonomic neuropathy are chronic manifestations of diabetes mellitus. The subclassification for neurological complication is the following:

- E08 through E13 with .40 unspecified diabetic neuropathy
- E08 through E13 with .41 diabetic mononeuropathy
- E08 through E13 with .42 diabetic polyneuropathy
- E08 through E13 with .43 diabetic autonomic (poly)neuropathy
- E08 through E13 with .44 diabetic amyotrophy
- E08 through E13 with .49 other diabetic neurological complication⁷

Diabetic circulatory complications

- Diabetic peripheral vascular disease without gangrene is coded as E08 through E13 with .51.
- Diabetic peripheral vascular disease with gangrene is coded as E08 through E13 with .52.
- Diabetes with other circulatory complications is coded as E08 through E13 with .59.

Other manifestations of diabetes mellitus

Common chronic complications of diabetes, besides renal, ophthalmic, neurological or circulatory, are classified as E08 through E13 with the following:

- E08 through E13 with .61 diabetic arthropathy
- E08 through E13 with .62 diabetic skin complications
- E08 through E13 with .63 diabetic oral complications⁷

Diabetes and skin ulcers

When a patient has diabetes with skin ulcer, the ICD-10-CM classification presumes a causal relationship between the conditions unless the documentation clearly states that two conditions are not related.

The code for the diabetic foot ulcer complication (E08 through E13 with .621) is assigned first with an additional code of L97.4-, L97.5- indicating the specific site of the ulcer. If gangrene is present, code E08 through E13 with .52 should be assigned as an additional code. Other diabetic skin ulcers are coded to E08 through E13 with .622 and an additional code to identify the site of the ulcer (L97.1 through L97.9, L98.41 through L98.49).

Complications due to insulin pump malfunction

Failure or malfunction of the pump may result in underdosing or overdosing of insulin. Both of these situations are mechanical complications and are assigned a code from subcategory T85.6 mechanical complication of other specified internal and external prosthetic devices, implants and grafts. The appropriate T85.6- code is selected depending on the type of malfunction as the following:

- T85.614 Breakdown (mechanical) of insulin pump
- T85.624 Displacement of insulin pump
- T85.633 Leakage of insulin pump⁷

In addition, codes are assigned to specify underdose (T38.3x6-) or overdose (T38.3x1-) as well as the code for the type of diabetes mellitus and any associated complications.

Uncontrolled Diabetes

There is no default code for uncontrolled diabetes in ICD-10-CM. Uncontrolled diabetes is classified by type and whether it is hyperglycemia or hypoglycemia.

Type 2 diabetic ketoacidosis

Codes E11.10 type 2 diabetes mellitus with ketoacidosis without coma and E11.11 type 2 diabetes mellitus with ketoacidosis with coma were created to identify ketoacidosis in patients with type 2 diabetes.

Diabetes complicating pregnancy

Diabetes mellitus complicating pregnancy, delivery or the puerperium is classified in chapter 15 of ICD-10-CM. Pregnant women who have diabetes mellitus should first be assigned a code from category O24 diabetes mellitus in pregnancy, childbirth and puerperium followed by an appropriate diabetes code(s) (E08 through E13) from chapter 4 of ICD-10-CM to indicate the type of diabetes.

Gestational diabetes

Subcategory O24.4 gestational diabetes is assigned for this condition. No other code from category O24 should be assigned with a code from category O24.4.

Subcategory O24.4 is subdivided whether the gestational diabetes controlled by diet, insulin or oral hypoglycemic drugs and whether it occurs in pregnancy, childbirth or the puerperium.

An abnormal glucose tolerance in pregnancy, without a diagnosis of gestational diabetes, is assigned a code from subcategory O99.81 abnormal glucose complicating pregnancy, childbirth and the puerperium.⁷