Diabetes

Diabetes Complications

- Stroke
- Heart Attack
- Peripheral Neuropathy
- Peripheral Artery Disease
- Diabetic Retinopathy
- Diabetic Nephropathy
- Diabetic Foot
- Cataracts
- Glaucoma
Agenda

• American Diabetes Association
• Diabetic Complications
• Diabetes Coding Guidelines & ICD-10 Codes
• Documentation
Overall Numbers, Diabetes and Prediabetes

- **Prevalence:** In 2012, 29.1 million Americans, or 9.3% of the population, had diabetes.
  - Approximately 1.25 million American children and adults have type 1 diabetes.

- **Undiagnosed:** Of the 29.1 million, 21.0 million were diagnosed, and 8.1 million were undiagnosed.

- **Prevalence in Seniors:** The percentage of Americans age 65 and older remains high, at 25.9%, or 11.8 million seniors (diagnosed and undiagnosed).

- **New Cases:** 1.4 million Americans are diagnosed with diabetes every year.

- **Prediabetes:** In 2012, 86 million Americans age 20 and older had prediabetes; this is up from 79 million in 2010.

- **Deaths:** Diabetes remains the 7th leading cause of death in the United States in 2010, with 69,071 death certificates listing it as the underlying cause of death, and a total of 234,051 death certificates listing diabetes as an underlying or contributing cause of death.
Complications/Co-Morbid Conditions

- **Hypoglycemia**: In 2011, about 282,000 emergency room visits for adults aged 18 years or older had hypoglycemia as the first-listed diagnosis and diabetes as another diagnosis.
- **Hypertension**: In 2009–2012, of adults aged 18 years or older with diagnosed diabetes, 71% had blood pressure greater than or equal to 140/90 millimeters of mercury or used prescription medications to lower high blood pressure.
- **Dyslipidemia**: In 2009–2012, of adults aged 18 years or older with diagnosed diabetes, 65% had blood LDL cholesterol greater than or equal to 100 mg/dl or used cholesterol-lowering medications.
- **CVD Death Rates**: In 2003–2006, after adjusting for population age differences, cardiovascular disease death rates were about 1.7 times higher among adults aged 18 years or older with diagnosed diabetes than among adults without diagnosed diabetes.
- **Heart Attack Rates**: In 2010, after adjusting for population age differences, hospitalization rates for heart attack were 1.8 times higher among adults aged 20 years or older with diagnosed diabetes than among adults without diagnosed diabetes.
- **Stroke**: In 2010, after adjusting for population age differences, hospitalization rates for stroke were 1.5 times higher among adults with diagnosed diabetes aged 20 years or older compared to those without diagnosed diabetes.
- **Blindness and Eye Problems**: In 2005–2008, of adults with diabetes aged 40 years or older, 4.2 million (28.5%) people had diabetic retinopathy, damage to the small blood vessels in the retina that may result in loss of vision.
- **Kidney Disease**: Diabetes was listed as the primary cause of kidney failure in 44% of all new cases in 2011.
  - In 2011, 49,677 people of all ages began treatment for kidney failure due to diabetes.
  - In 2011, a total of 228,924 people of all ages with kidney failure due to diabetes were living on chronic dialysis or with a kidney transplant.
- **Amputations**: In 2010, about 73,000 non-traumatic lower-limb amputations were performed in adults aged 20 years or older with diagnosed diabetes.
  - About 60% of non-traumatic lower-limb amputations among people aged 20 years or older occur in people with diagnosed diabetes.
Diabetic Eye Complications

Glaucoma

People with diabetes are 40% more likely to suffer from glaucoma than people without diabetes. The longer someone has had diabetes, the more common glaucoma is. Risk also increases with age.

Cataracts

Many people without diabetes get cataracts, but people with diabetes are 60% more likely to develop this eye condition. People with diabetes also tend to get cataracts at a younger age and have them progress faster.

Retinopathy

Diabetic retinopathy is a general term for all disorders of the retina caused by diabetes. There are two major types of retinopathy: nonproliferative and proliferative.
Diabetic Eye Complications

Type 2 Diabetes Mellitus with Ophthalmic Complications E11.3-

Majority of codes from this category require 7 digits to identify laterality

E11.32-- Type 2 DM with Mild Nonproliferative Diabetic Retinopathy
E11.33-- Type 2 DM with Moderate Nonproliferative Diabetic Retinopathy
E11.34-- Type 2 DM with Severe Nonproliferative Diabetic Retinopathy
E11.35-- Type 2 DM with Proliferative Diabetic Retinopathy
E11.36 Type 2 DM with Diabetic Cataract
  • Does not require 7 digits
E11.37-- Type 2 DM with Diabetic Macular Edema, Resolved Following Treatment
E11.39 Type 2 DM with Other Diabetic Ophthalmic Complications
  • Does not require 7 digits
  • Use additional code to identify manifestations such as: Diabetic Glaucoma (H40-H42)
Diabetic Neurological Complications

**Autonomic Neuropathy**

Autonomic neuropathy affects the nerves of the autonomic body system, such as the heart, lungs, blood vessels, bone, and gastrointestinal and genitourinary system. Causes Erectile Dysfunction (ED), Diarrhea, Constipation, Incontinence, Gastroparesis. Symptoms affecting the heart and vascular system can range from mild to life-threatening, such as those related to the heart and arteries failing to appropriately adjust the heart rate and vascular tone to keep blood continually and fully flowing to the brain.

**Compression Mononeuropathy**

Nerves of people with diabetes are more prone to compression injury. Damage can arise when blood vessel disease caused by diabetes restricts blood flow to a part of the nerve. Common manifestations include wrist or foot drop, cranial nerve palsy, or a recurrent laryngeal nerve problem.

**Femoral Neuropathy**

A pain may develop in the front of one thigh. Muscle weakness follows, and the affected muscles waste away.

**Amyotrophy**

Occurs when there is damage to the nerves of the thigh, hips, buttocks, and upper legs. Common symptoms include weakness followed by wasting of pelvic and femoral muscles, with associated pain.

**Focal Neuropathy**

Focal Neuropathy affects a nerve or group of nerves causing sudden weakness or pain. It can lead to double vision, a paralysis on one side of the face called Bell's palsy, or a pain in the front of the thigh or other parts of the body.

**Thoracic/Lumbar Radiculopathy**

Thoracic or lumbar radiculopathy is another common mononeuropathy. It is like femoral neuropathy, except that it occurs in the torso. It affects a band of the chest or abdominal wall on one or both sides. It seems to occur more often in people with type 2 diabetes.
Diabetic Neurological Complications

**Type 2 Diabetes Mellitus with Neurological Complications E11.4-**

- **E11.41** Type 2 DM with Diabetic Mononeuropathy
- **E11.42** Type 2 DM with Diabetic Polyneuropathy
- **E11.43** Type 2 DM with Diabetic Autonomic Neuropathy
- **E11.44** Type 2 DM with Diabetic Amyotrophy
- **E11.49** Type 2 DM with Other Diabetic Neurological Complications
Heart Disease

People with diabetes have a higher-than-average risk of having a heart attack or stroke. These strike people with diabetes more than twice as often as people without diabetes.

There’s a big link between diabetes, heart disease, and stroke. In fact, two out of three people with diabetes die from heart disease or stroke, also called cardiovascular disease.
Diabetic Complications

- Coronary Artery Disease (CAD)
  - CAD w/o Angina I25.10; CAD w/ Unstable Angina I25.110; CAD w/ Angina NOS I25.119
- Myocardial Infarction (MI) *Old MI ≥ 4 weeks
  - STEMI I21.3; NSTEMI I21.4; Old MI I25.2
- Congestive Heart Failure (CHF)
  - Chronic Systolic HF I50.22; Chronic Diastolic HF I50.32; Chronic Combined HF I50.42
- Hypertension (HTN)
  - Hypertension I10; Hypertensive Heart Disease I11.-; Hypertensive CKD I12.-; Hypertensive Heart and CKD I13.-
- Hyperlipidemia (HLD)
  - Pure Hypercholesterolemia E78.00; Pure Hyperglyceridemia E78.1; Mixed Hyperlipidemia E78.2
- Peripheral Angiopathy
  - Peripheral Vascular Disease I73.9; Atherosclerosis of Extremities I70.2-
- Stroke (CVA) *History Of CVA post discharge; Sequelea of
  - Personal History Cerebral Infarction without Residual Deficit Z86.73; Sequelea of Cerebral Infarction I69.3-

Provider documentation must link these conditions as “associated with” or “due to” in order to code them as related
Diabetic Circulatory Complications

**Type 2 Diabetes Mellitus with Circulatory Complications E11.5-**

- **E11.51** Type 2 DM with Diabetic Peripheral Angiopathy without Gangrene
- **E11.52** Type 2 DM with Diabetic Peripheral Angiopathy with Gangrene
- **E11.59** Type 2 DM with Other Circulatory Complications
  - Use additional code to identify complication
- **E11.69** Type 2 DM with Other Specified Complication
  - Use additional code to identify complication
Diabetic Skin Complications

**Bacterial Infections:**
- Styes (infections of the glands of the eyelid)
- Boils
- Folliculitis (infections of the hair follicles)
- Carbuncles (deep infections of the skin and the tissue underneath)
- Infections around the nails

**Fungal Infections:**
The culprit in fungal infections of people with diabetes is often Candida albicans. Common fungal infections include jock itch, athlete's foot, ringworm (a ring-shaped itchy patch), and vaginal infection that causes itching.

**Itching (Dermatitis):**
Localized itching is often caused by diabetes. It can be caused by a yeast infection, dry skin, or poor circulation. When poor circulation is the cause of itching, the itchiest areas may be the lower parts of the legs.
Diabetic Skin Complications

Acanthosis Nigricans
Acanthosis nigricans is a condition in which tan or brown raised areas appear on the sides of the neck, armpits and groin. Sometimes they also occur on the hands, elbows and knees.

Diabetic Dermopathy
Dermopathy often looks like light brown, scaly patches. These patches may be oval or circular. Some people mistake them for age spots. This disorder most often occurs on the front of both legs.

Necrobiosis Lipoidica Diabeticorum
Another disease that may be caused by changes in the blood vessels is necrobiosis lipoidica diabeticorum (NLD). NLD causes spots similar to diabetic dermopathy, but they are fewer, larger, and deeper. NLD often starts as a dull, red, raised area. After a while, it looks like a shiny scar with a violet border. NLD is a rare condition. Adult women are the most likely to get it.

Diabetic Blisters
Diabetic blisters can occur on the backs of fingers, hands, toes, feet and sometimes on legs or forearms. These sores look like burn blisters and often occur in people who have diabetic neuropathy.

Digital Sclerosis
Sometimes, people with diabetes develop tight, thick, waxy skin on the backs of their hands. Sometimes skin on the toes and forehead also becomes thick. The finger joints become stiff and can no longer move the way they should.
Diabetic Skin Complications

**Type 2 Diabetes Mellitus with Skin Complications E11.62-**

**E11.620** Type 2 DM with Diabetic Dermatitis

**E11.621** Type 2 DM with Foot Ulcer

  Use additional code to identify site of ulcer (L97.4-, L97.5-)

**E11.622** Type 2 DM with Other Skin Ulcer

  Use additional code to identify site of ulcer (L97.1-L97.9, L98.41-L98.49)

**E11.628** Type 2 DM with Other Skin Complications

  Code also the skin complication
Diabetic Complications

Depression

Feeling down once in a while is normal. But some people feel a sadness that just won't go away. Life seems hopeless. Feeling this way most of the day for two weeks or more is a sign of serious depression.

Does Diabetes Cause Depression?

At any given time, most people with diabetes do not have depression. But studies show that people with diabetes have a greater risk of depression than people without diabetes. There are no easy answers about why this is true.

The stress of daily diabetes management can build. You may feel alone or set apart from your friends and family because of all this extra work.

If you face diabetes complications such as nerve damage, or if you are having trouble keeping your blood sugar levels where you'd like, you may feel like you're losing control of your diabetes. Even tension between you and your doctor may make you feel frustrated and sad.

Just like denial, depression can get you into a vicious cycle. It can block good diabetes self-care. If you are depressed and have no energy, chances are you will find such tasks as regular blood sugar testing too much. If you feel so anxious that you can't think straight, it will be hard to keep up with a good diet. You may not feel like eating at all. Of course, this will affect your blood sugar levels.
Diabetic Complications

Provider documentation must link these conditions as “associated with” or “due to” in order to code them as related.

Major Depression, Single Episode, F32.-
Major Depression, Recurrent Episode, F33.-
Diabetes Guidelines

• Question: The ICD-10-CM Alphabetic Index entry for 'Diabetes with' includes listings for conditions associated with diabetes, which was not the case in ICD-9-CM. Does the provider need to document a relationship between the two conditions or should the coder assume a causal relationship?

• Answer: According to the ICD-10-CM Official Guidelines for Coding and Reporting, 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, and this is how it's meant to be interpreted when assigning codes for diabetes with associated manifestations and/or conditions. The classification assumes a cause-and-effect relationship between diabetes and certain diseases of the kidneys, nerves, and circulatory system. Assumed cause-and-effect relationships in the classification are not necessarily the same in ICD-9-CM and ICD-10-CM.

• However, if the physician documentation specifies diabetes mellitus is not the underlying cause of the other condition, the condition should not be coded as a diabetic complication. When the coder is unable to determine whether a condition is related to diabetes mellitus, or the ICD-10-CM classification does not provide coding instruction, it is appropriate to query the physician for clarification so that the appropriate codes may be reported. (See ICD-10-CM Official Guidelines for Coding and Reporting, Section I.A.15.)
Diabetes Guidelines

A new ICD-10 coding guideline became effective 10/1/2016

Coders are now *required* to assume a relationship between the diagnosis of diabetes mellitus and common diabetic complications which are adequately documented in the same medical record.

Example Problems List:

Diabetes Mellitus Type II-Uncomplicated  
Physician coded E11.9

Peripheral Vascular Disease  
Physician coded I73.9

*Based on the new guideline, the correct way to code this is*

Diabetes Mellitus Type II with Peripheral Angiopathy without Gangrene E11.51

*What does this new ICD-10 guideline mean to you?*

Coders must now assign a code for complicated diabetes even in the absence of the provider linking them, unless the documentation clearly states the conditions are unrelated.
Diabetes ICD-10-CM Categories

ICD-10-CM classifies several distinct types of diabetes, depending on the underlying cause

E08 Diabetes mellitus due to underlying conditions
   Diabetes mellitus may be due to another underlying condition such as chronic pancreatitis or other chronic pancreatic disorders, cushing’s disease, polycystic ovarian syndrome, hemochromatosis

E09 Drug or chemical induced diabetes mellitus
   Diabetes mellitus that is related to ingestion of a drug or chemical is classified as drug or chemical induced diabetes. These drugs may not, by themselves, cause diabetes but they may precipitate diabetes in patients with insulin resistance

E10 Type 1 diabetes mellitus
   Type 1 diabetes mellitus is a systemic disease that is the result of an inadequate secretion of insulin by the pancreas

E11 Type 2 diabetes mellitus
   Type 2 diabetes mellitus is a system disease whose causes are multifactorial. It comprises between 90 to 95 percent of diabetes cases in the US, and while the pancreas of a Type 2 diabetic produces insulin, the insulin secreted is not enough or the body is unable to recognize the insulin and use it properly

E13 Other specified diabetes mellitus
   Some types of diabetes mellitus are due to other rare conditions, such as those related to genetic defects of beta-cell function or to genetic insulin action disorders. In addition, some patients develop diabetes after a pancreatectomy or other procedure
Diabetes Documentation

Documentation should be clear, concise, and legible.

• Controlled Blood Pressure
  • Patients 60-85 years old should have a reading of <139/89
• BMI (every visit)
  • Patients 18-74 years old should have a BMI at least every two years
• Ankle-brachial index (ABI)
  • ABI is used to screen at risk individuals for asymptomatic lower extremity PAD
• Comprehensive dilated eye exam
  • Document where a dilated eye exam was performed, results, and name of ophthalmologist
  • Obtain Ophthalmology Note
  • Screen every 2 years if negative, every year if positive
• Comprehensive foot exam
  • Foot exam includes inspection, palpation of pedal pulses, testing to detect loss of protective sensation, which includes standard monofilament testing combined with an additional test, such as vibration, pinprick sensation or ankle reflexes
  • Recommended at least annually
• Monitoring glucose control with Hemoglobin A1C
  • Controlled HbA1c ≤ 9
  • Every 3 months
• Diabetic Nephropathy Screening
  • Urine test for albumin or protein, documentation of a visit to a nephrologist, documentation of renal transplant, evidence of ACE/ARB therapy, documentation of diabetic nephropathy, ESRD, CKD, renal insufficiency, proteinuria, albuminuria, ARF, renal dysfunction, dialysis
Questions

Please submit coding and documentation questions to RAFeducation@ntsp.com