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The Sweet Spot: Coding for Diabetes and Complications

Veradigm's Provider Engagement Team

Amanda Banister, CPC
SR MANAGER, PROVIDER PERFORMANCE AND TECH UTILIZATION

Previous Experience: Amanda has over 25 years of healthcare experience, including 15 years of practice administration for both private practice and regional healthcare systems. Amanda has extensive experience coaching teams in the implementation of process and quality improvement activities. She has worked directly with Providers and their teams to improve their care coordination, population health management and risk stratification efforts as well as improvements in documentation and accurate coding related to HCC's and HEDIS quality scores including 5 Star and Part D measures. .

Education: Amanda is a Lean Six Sigma in HealthCare Black Belt, a Certified Clinical Microsystems Coach and a Certified Professional Coder.

Aimee Fritz, CPC, CCS, CRC, CDEO
PROVIDER ENGAGEMENT SPECIALIST

Previous Experience: Aimee has over 20 years of experience in the healthcare field on the provider/clinic side as well as the insurance/payer side. She has been involved with the education and training of Providers, their staff and other medical coders on Risk Adjustment models, associated incentive programs, HCC coding guidelines and documentation requirements.   Aimee has also assisted with process flows in office, as well as RAF score improvement.

Education: Aimee is a Lean Six Sigma in HealthCare Green Belt, a Certified Professional Coder, a Certified Risk Adjustment Coder and a Certified Coding Specialist.

Ryan Stull
PROVIDER ENGAGEMENT SPECIALIST

Previous Experience: Ryan has over 20 years of experience in the healthcare field working in the business office of a large-scale health system, on the provider clinic side as well as the insurance/payor side. He has been involved with educating providers and their office staff on Quality and Risk, how to close gaps in care and process flow.

Education: Ryan has a bachelors degree in Management and Organizational Leadership and a Black Belt in Six Sigma

Cindy Guarino, CRC, LPN
PROVIDER ENGAGEMENT SPECIALIST

Previous Experience: Cindy has over 12 years of diversified healthcare experience, including HCC coding, HEDIS abstracting, and risk adjustment coding. As a nurse, she has experience in pediatrics, community health, Covid response, ambulatory care, and health coaching. She is a skilled preceptor and educator.

Education: Cindy earned an associate degree in nursing, is a Licensed Practical Nurse, and a Risk Adjustment Coder.

AGENDA

JULY 2025

- Pancreas Anatomy
- Types of Diabetes
- Manifestations/Complications of Diabetes
- Diabetes 'with'
- A1c Lab Test
- Medications
- Risk Adjustment Documentation
- Coding Scenarios
- Summary and Tips

Disclaimer

Educational Webinars

All documentation provided is researched and collected by today's presenter for the education of our customers. Any questions concerning the meaning or interpretation of coding requirements or application should be directed to your coding advisor or legal counsel.

The information included in the following slides is accurate as of 7/1/25.

ALL CODING GUIDANCE OBTAINED FROM THE AAPC ICD-10CM EXPERT
https://www.aapc.com/icd-10/

Speakers

Kim Felix, RHIA, CCS

Currently the Director of Education at e4health. Has over 30 years of HIM coding experience including coder, auditor, educator and manager at various University and Community Hospitals. For the past 8 years, has been the project manager for the CMS HHS-RADV audit.

Has been an adjunct faculty member at Temple University, Gwynedd-Mercy College, Pierce College, Thomas Jefferson University, Anne Arundel Community College, and Study Mentor at Western Governors University.

Over many years, she has presented at various state-wide and local Coding and CDI conferences.

Jeanie Heck, BBA, CCS, CPC, CRC

Jeanie has over 30 years of experience as an expert physician and coder educator for CPT, ICD-10-CM and an accomplished Evaluation and Management auditor.

The majority of Jeanie's career has been in the outpatient physician office arena

She has been the lead senior auditor for the CMS HHS-RADV (Risk Adjustment Data Validation) audit from 2016 to present

She is currently an adjunct faculty member at Camden County College, Santa Barbara City College & Temple University teaching various coding courses. Her management positions include Director of Education, Coding and Billing Director, Practice Manager, and Business Manager

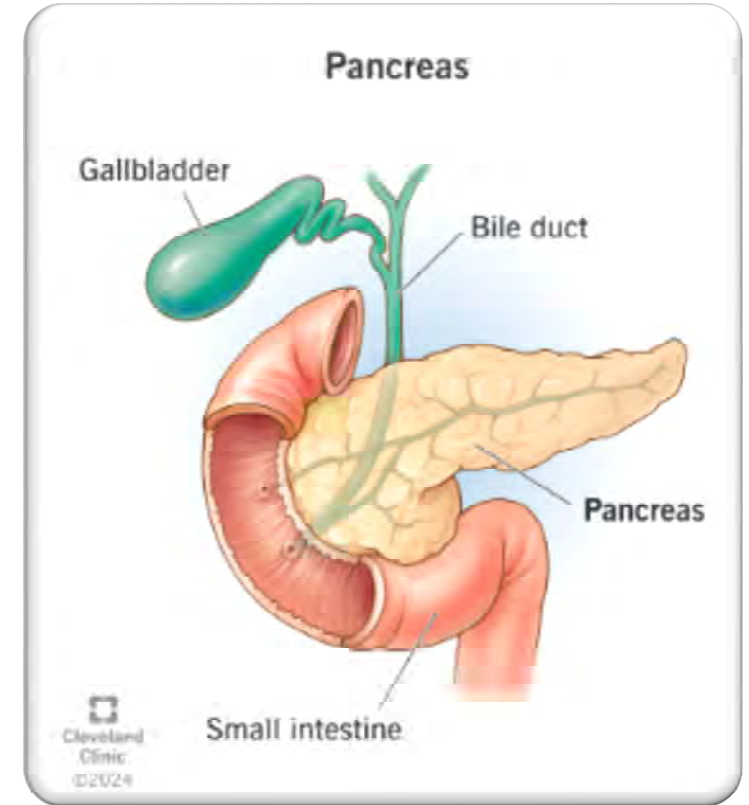# Pancreas Anatomy

Pancreas – Anatomy 101

- A small, tadpole shaped organ that sits behind your stomach & in front of your spine

- Aids in digestion

- Releases insulin & glucagon
  - Hormones that help regulate how much sugar is in your blood
  - Produces insulin to lower high levels and glucagon to raise low levels

Type 1 diabetes:

Occurs when your pancreas doesn't produce insulin

Type 2 diabetes:

Occurs when your body makes insulin but doesn't use it correctly

Pancreas
Gallbladder
Bile duct
Pancreas
Small intestine
Cleveland Clinic ©2024

[1]Pancreas: Function, Location, Anatomy & Living Without One

Types of Diabetes

Diabetes

Diabetes mellitus, classified in categories E08 through E13, is a chronic disorder of impaired carbohydrate, protein, and fat metabolism

Stems from two primary mechanisms:

- Insufficient insulin secretion by the pancreas

- Diminished biological activity of the insulin that is produced

Other conditions include the term "diabetes," such as:

- Bronzed diabetes
- Diabetes insipidus

A diagnosis of "diabetes" without further qualification should be interpreted as diabetes mellitus

[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14

Types of Diabetes

- There are three major types of diabetes mellitus: type 1 (or type I); type 2 (or type II); and secondary (e.g., due to an underlying condition or induced by a drug or chemical)

- The essential element in the selection of the codes in categories E08-E13 is the type of diabetes, not whether the patient is on insulin.

- The types are classified as follows:

E08 Due to underlying condition	E09 Drug or chemical-induced	E10 Type 1	E11 Type 2	E13 Other Specified
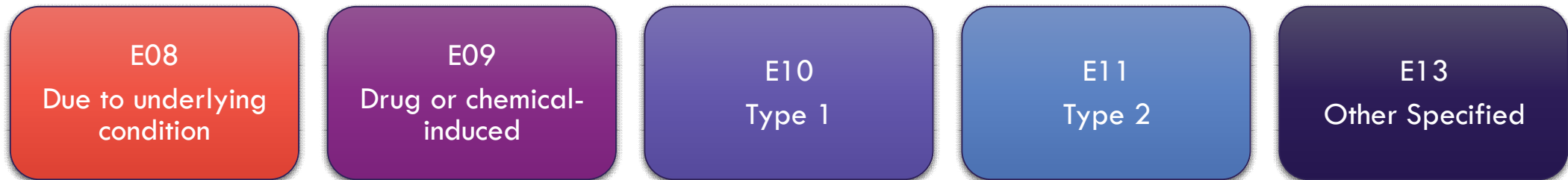
- If the type of diabetes is not clearly documented in the medical record, the default code assigned is E11, **Type 2 diabetes mellitus.**
- The presence of insulin therapy without a specified diabetes type would be coded as **Type 2; insulin use does not confirm a diagnosis of Type 1 diabetes**

Type 1 Diabetes

Type 1 diabetes mellitus (category E10) may also be described as:

Ketosis Prone	Juvenile Type	Juvenile Onset	Juvenile Diabetes
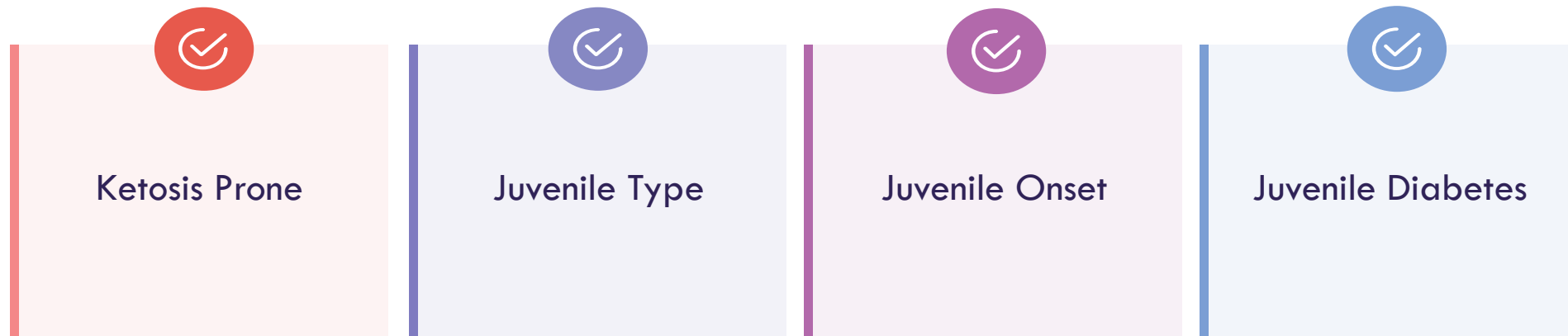
- While Type 1 diabetes is most commonly diagnosed in children and early teens (before puberty), it can develop at any age, so age should not be used as the sole deciding factor

- In type 1 diabetes, insulin production is absent or severely diminished due to the destruction of insulin-producing cells in the pancreas

- A code from category E10.A-, Type 1 diabetes mellitus, presymptomatic, is assigned for early-stage type 1 diabetes that precedes the onset of symptoms

[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14

Type 2 Diabetes

- Type 2 diabetes mellitus (category E11) is the most common type of diabetes; accounting for about 90-95% of all cases

- It may also be described as ketosis resistant
  - Does not typically lead to the development of ketosis or diabetic ketoacidosis

- Insulin is produced, but either not enough is made or the body cannot use it effectively

- Individuals with type 2 diabetes usually do not require insulin and are usually managed with:
  - Oral hypoglycemic agents
  - Diet
  - Exercise

- Code Z79.84, Long term (current) use of oral hypoglycemic drugs, is assigned when the patient requires oral hypoglycemic medication

Symptoms of Type 2 diabetes

[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14
[3]Type 2 Diabetes: What It Is, Causes, Symptoms & Treatment – Including image

Secondary Diabetes – Categories E08, E09 and E13

Secondary diabetes is always caused by another condition or event

This may be:
- Due to an underlying condition (E08)
- Drug or chemically induced (E09), due to an infection, or the result of therapy (like surgical removal of the pancreas)
- Some other specified type of diabetes (E13)
  - Diabetes type 1.5 is also assigned to category E13 (Type 1.5 has characteristics of type 1 and 2)
- Caused by an adverse effect of correctly administered medication, poisoning, or a late effect of using certain medications

E08 □ **Diabetes mellitus due to underlying condition**

CODE FIRST
Code first the underlying condition, such as:
- congenital rubella (P35.0)
- Cushing's syndrome (E24.-)
- cystic fibrosis (E84.-)
- malignant neoplasm (C00-C96)
- malnutrition (E40-E46)
- pancreatitis and other diseases of the pancreas (K85-K86.-)

USE ADDITIONAL
Use additional code to identify control using:
- injectable non-insulin antidiabetic drugs (Z79.85)
- insulin (Z79.4)
- oral antidiabetic drugs (Z79.84)
- oral hypoglycemic drugs (Z79.84)

EXCLUDES 1
- drug or chemical induced diabetes mellitus (E09.-)
- gestational diabetes (O24.4-)
- neonatal diabetes mellitus (P70.2)
- postpancreatectomy diabetes mellitus (E13.-)
- postprocedural diabetes mellitus (E13.-)
- secondary diabetes mellitus NEC (E13.-)
- type 1 diabetes mellitus (E10.-)
- type 2 diabetes mellitus (E11.-)

E09 □ **Drug or chemical induced diabetes mellitus**

CODE FIRST
Code first poisoning due to drug or toxin, if applicable (T36-T65 with fifth or sixth character 1-4)

USE ADDITIONAL
Use additional code for adverse effect, if applicable, to identify drug (T36-T50 with fifth or sixth character 5)

USE ADDITIONAL
Use additional code to identify control using:
- injectable non-insulin antidiabetic drugs (Z79.85)
- insulin (Z79.4)
- oral antidiabetic drugs (Z79.84)
- oral hypoglycemic drugs (Z79.84)

EXCLUDES 1
- diabetes mellitus due to underlying condition (E08.-)
- gestational diabetes (O24.4-)
- neonatal diabetes mellitus (P70.2)
- postpancreatectomy diabetes mellitus (E13.-)
- postprocedural diabetes mellitus (E13.-)
- secondary diabetes mellitus NEC (E13.-)
- type 1 diabetes mellitus (E10.-)
- type 2 diabetes mellitus (E11.-)

E13 □ **Other specified diabetes mellitus**

INCLUDES
- diabetes mellitus due to genetic defects of beta-cell function
- diabetes mellitus due to genetic defects in insulin action
- postpancreatectomy diabetes mellitus
- postprocedural diabetes mellitus
- secondary diabetes mellitus NEC

USE ADDITIONAL
Use additional code to identify control using:
- injectable non-insulin antidiabetic drugs (Z79.85)
- insulin (Z79.4)
- oral antidiabetic drugs (Z79.84)
- oral hypoglycemic drugs (Z79.84)

EXCLUDES 1
- diabetes (mellitus) due to autoimmune process (E10.-)
- diabetes (mellitus) due to immune mediated pancreatic islet beta-cell destruction (E10.-)
- diabetes mellitus due to underlying condition (E08.-)
- drug or chemical induced diabetes mellitus (E09.-)
- gestational diabetes (O24.4-)
- neonatal diabetes mellitus (P70.2)
- type 1 diabetes mellitus (E10.-)

[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14

Monogenic and Post-Transplant Diabetes

Monogenic Diabetes

- Refers to a group of less common forms of diabetes caused by mutations in a single gene
- E13.- Other specified diabetes mellitus

Post-Transplant Diabetes Mellitus (PTDM)

- PTDM can develop after organ transplants, particularly kidney transplants
- E89.1 Postprocedural hypoinsulinemia

Manifestations/Complications of Diabetes

Manifestations/Complications of Diabetes

Type 1 and type 2 diabetes mellitus, as well as secondary diabetes mellitus, can lead to a variety of complications that involve:

| Acute metabolic derangements (E08-E13) with .0- or .1- | Long-term complications (E08-E13) with .2- or .6- |

- Sequence the diabetes mellitus code & the code for its complication/manifestation according to the main reason for the current encounter
- Assign all applicable codes from categories E08-E13 to fully capture each of the patient's related conditions

Acute Metabolic Complications

Hyperosmolarity | **Hypoglycemia** | **Ketoacidosis (DKA)**
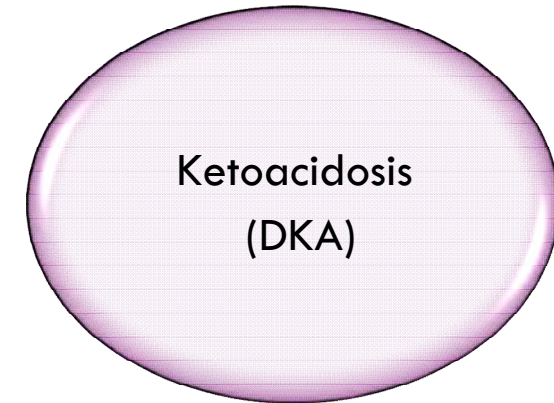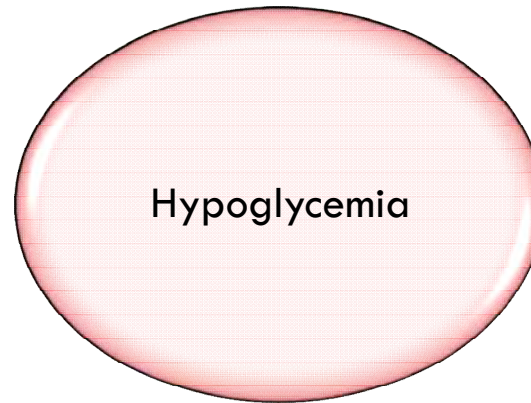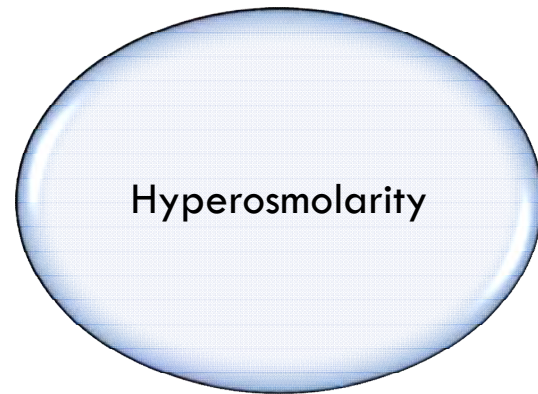
- Diabetes with hyperosmolarity is a condition in which there is hyperosmolarity and dehydration without significant ketosis
  - Coma may or may not be present
  - Typically associated with type 2 DM
  - A separate code is NOT assigned for hyperglycemia when a patient is diagnosed with hyperglycemic hyperosmolar ketotic state

- Ketoacidosis (DKA)
  - An acute, life-threatening complication of diabetes that occurs most commonly in patients with type 1 DM, but it *can* occur in patients with type 2 DM or other types of diabetes
  - The ICD-10-CM Index to Diseases and Injuries advises to code "diabetes, by type, with ketoacidosis" when referencing ketoacidosis.
    - For example, if type 2 DM with ketoacidosis is documented, assign a code from subcategory E11.1, Type 2 DM with ketoacidosis

- Diabetes with hypoglycemia
  - May occur when an excessive amount of insulin is given, when the patient misses a meal, or when the patient is under stress
  - The condition may progress to coma
  - ICD-10-CM provides codes for diabetic hypoglycemia with coma (E08-E13 with .641) or without coma (E08-E13 with .649)

Neuropathy

Peripheral, cranial, and autonomic neuropathy are chronic manifestations of diabetes mellitus

Diabetic neuropathy is a serious diabetes complication that may affect as many as 50% of people with diabetes

Peripheral neuropathy is the most common type of diabetic neuropathy

Diabetes-related peripheral neuropathy symptoms

Pain.

Muscle weakness.

Numbness.

Slow-healing leg or foot sores.

Pins and needles sensation.

Cleveland Clinic
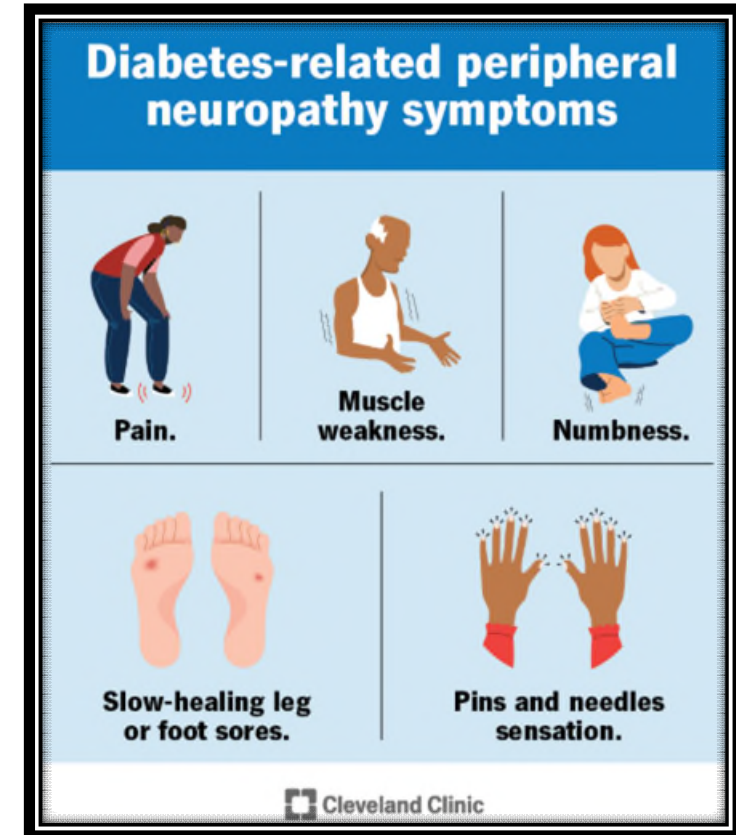
[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14
[4]Diabetes-Related Neuropathy: What It Is, Symptoms & Treatment – Including image
[5]https://www.mayoclinic.org/diseases-conditions/diabetic-neuropathy/symptoms-causes/syc-20371580

Neuropathy Codes

Code Category Ranges	Descriptions
E08-E13 with .40	Unspecified diabetic neuropathy
E08-E13 with .41	Diabetic mononeuropathy
E08-E13 with .42	Diabetic polyneuropathy (Unspecified peripheral neuropathy)
E08-E13 with .43	Diabetic autonomic (poly)neuropathy
E08-E13 with .44	Diabetic amyotrophy
E08-E13 with .49	Other diabetic neurological complication

[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14

Circulatory Complication Codes

- Diabetes accelerates the process of atherosclerosis, increasing the risk of vascular issues like PVD

- Atherosclerosis is a buildup of plaque deposits in the arteries containing:
  - Cholesterol
  - Fatty substances
  - Cellular waste
  - Other material

- As plaque accumulates, the arteries harden and become thicker, restricting blood flow and oxygen delivery
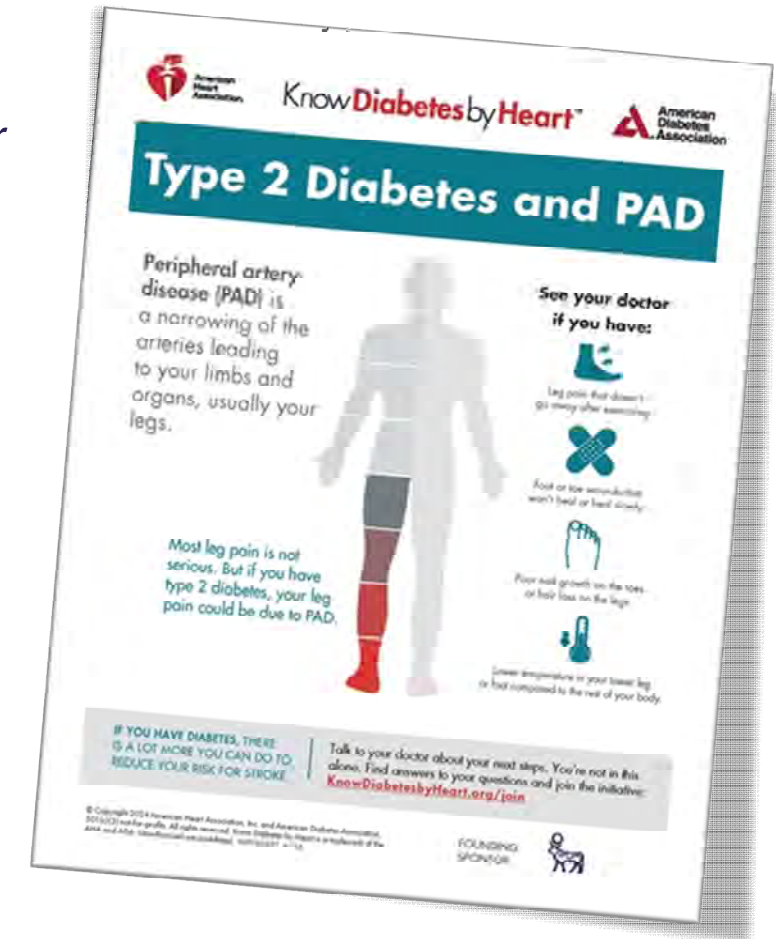
[6]https://www.medicalnewstoday.com/articles/diabetes-peripheral-vascular-disease#diabetes-and-pad
[7]Peripheral Artery Disease and Diabetes | American Heart Association - Image

Circulatory Complications – cont'd

Peripheral vascular disease (PVD) is a frequent complication of DM

Arteriosclerosis occurs earlier and more extensively in patients with DM

Diabetes can increase the risk of CAD, cardiomyopathy, and stroke, but these aren't always direct complications.

The conditions would be coded separately unless the physician documents a causal relationship with DM

Circulatory Complication Codes

Code Category Ranges	Notes
E08-E13 with .51 (without gangrene) E08-E13 with .52 (with gangrene)	**Includes:** PVD/Atherosclerotic peripheral artery disease
An additional code from subcategory I70.2, Arteriosclerosis of native arteries of extremities, is also assigned if applicable **with claudication, rest pain, ulceration**	
E08-E13 with .59	Other circulatory complications
CAD, cardiomyopathy, and cerebrovascular disease are not always complications of diabetes and are not included here	

Renal Complications

Nephritis
An inflammation of the kidney that develops slowly, over a long period of time

Nephrosis
An advanced stage of renal disease characterized by massive edema and marked proteinuria

Chronic Kidney Disease
Often the ultimate progression of nephritis and nephrosis

- When the patient has diabetes, hypertension, and chronic kidney disease and the provider documents a causal relationship between the diabetes and the chronic kidney disease in terms such as "diabetic CKD" or "diabetic nephropathy," the chronic kidney disease is not coded as hypertensive chronic kidney disease.

- A code from category I12 or I13 is not assigned; the hypertension is reported separately

Glomerulus
Collecting tubules
Healthy kidney

Scar tissue
Damaged glomerulus
Damaged tubules
Diseased kidney

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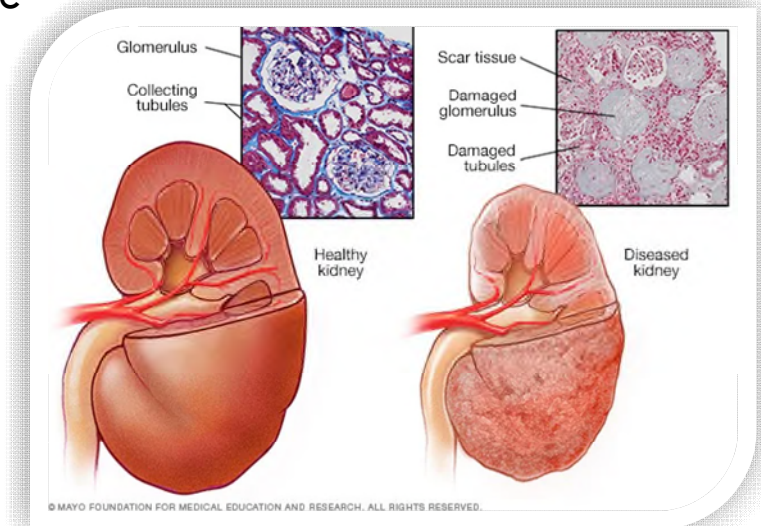
[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14
[8]Diabetic nephropathy (kidney disease) - Symptoms and causes - Mayo Clinic

Renal Complication Codes

- Patients with both diabetes & hypertension are at increased risk of developing CKD

- In this case, three codes are required:

One code for the diabetes with renal manifestation

A second code from category I12 or I13 with a fourth character to indicate the stage of CKD

A third code from category N18 to indicate the specific stage of CKD
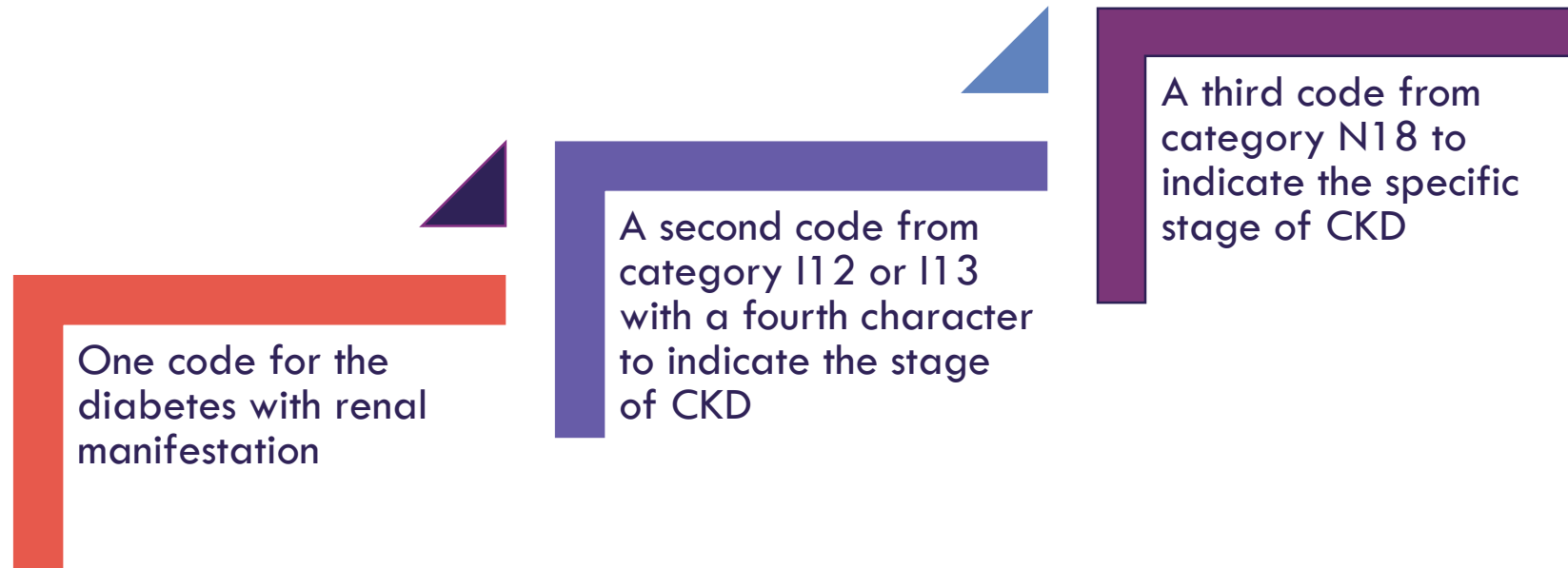
See next slide for examples

Renal Complication Codes

Code Category Ranges	Descriptions
E08-E13 with .21	Diabetic nephropathy
Includes: intercapillary glomerulosclerosis/glomerulonephrosis and Kimmelstiel-Wilson disease	
E08-E13 with .22	Chronic kidney disease (CKD)
Use additional code to identify stage of CKD (N18.1-N18.6)	
E08-E13 with .29	Other kidney complication
I12.9, N18.-, E11.22	HTN + Type 2 DM + CKD , stage 1-4
I12.0, N18.5 or N18.6, E11.22	HTN + Type 2 DM + CKD , stage 5 or ESRD

Diabetic Eye Complications

Diabetic retinopathy frequently develops as a result of long-term diabetes and is a leading cause of vision problems among people with diabetes

Diabetes elevates both the risk and development of cataracts, making cataracts a major cause of vision problems among diabetic patients

Diabetes and cataracts should be **coded as related** even in the absence of provider documentation explicitly linking them
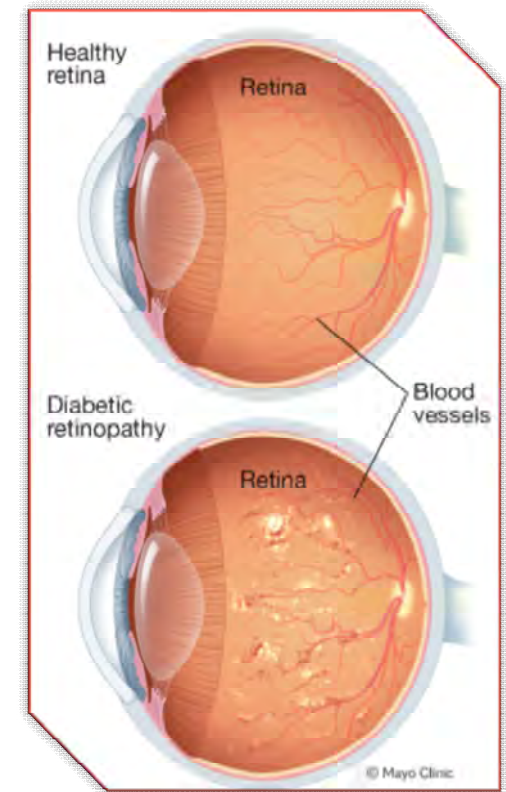
[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14
[9]Diabetic retinopathy - Symptoms & causes - Mayo Clinic

Diabetic Eye Complication Codes

Nonproliferative diabetic retinopathy may be classified as

- Mild
- Moderate
- Severe

Proliferative diabetic retinopathy

- The sixth character in the ICD-10-CM code provides additional information to identify the presence or absence of macular edema
- The seventh character designates the laterality of the condition (i.e., right eye, left eye, bilateral, or unspecified eye)

Unspecified diabetic retinopathy is coded to E08–E13 with .31-

Diabetic Eye Complication Codes

Code Category Ranges	Descriptions
E08-E13 with .32-	Mild non-proliferative diabetic retinopathy
E08-E13 with .33-	Moderate non-proliferative diabetic retinopathy
E08-E13 with .34-	Severe non-proliferative diabetic retinopathy
E08-E13 with .35-	Proliferative diabetic retinopathy
E08-E13 with .31-	Unspecified diabetic retinopathy
All codes above include 'with' or 'without' macular edema as the six character *Seventh character identifies laterality (1- right eye, 2- left eye, 3- bilateral, 9- unspecified)*	

Diabetic Ulcers

Foot ulcers are a well-known and prevalent complication of DM, especially involving the feet

Ulcers are often associated with PVD and/or with neuropathy

A causal link between diabetes and skin ulcers is presumed unless documentation specifies otherwise

[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14

Diabetic Ulcer Codes

Code Category Ranges	Descriptions
E08 through E13 with .621	Diabetic foot ulcer
Use additional code to identify the site of the ulcer: L97.4- or L97.5-	
E08-E13 with .622	Other diabetic skin ulcers
Use additional code to identify the site of the ulcer: L97.1-L97.9, L98.41-L98.49	
E08-E13 code with .52	Gangrene with ulcer

Diabetes with Pregnancy – Gestational Diabetes

- A diagnosis of gestational diabetes refers to abnormal glucose tolerance that appears during pregnancy in women who were NOT previously diabetic

- Gestational diabetes mellitus is not considered a true, chronic form of diabetes
  - It usually develops during the second or third trimester due to hormonal or metabolic changes unique to pregnancy

- Gestational diabetes can cause pregnancy complications similar to those seen in pre-existing diabetes like:
  - High blood pressure
  - Preeclampsia
  - The need for cesarean delivery
  - It also increases the mother's risk of developing diabetes later in life
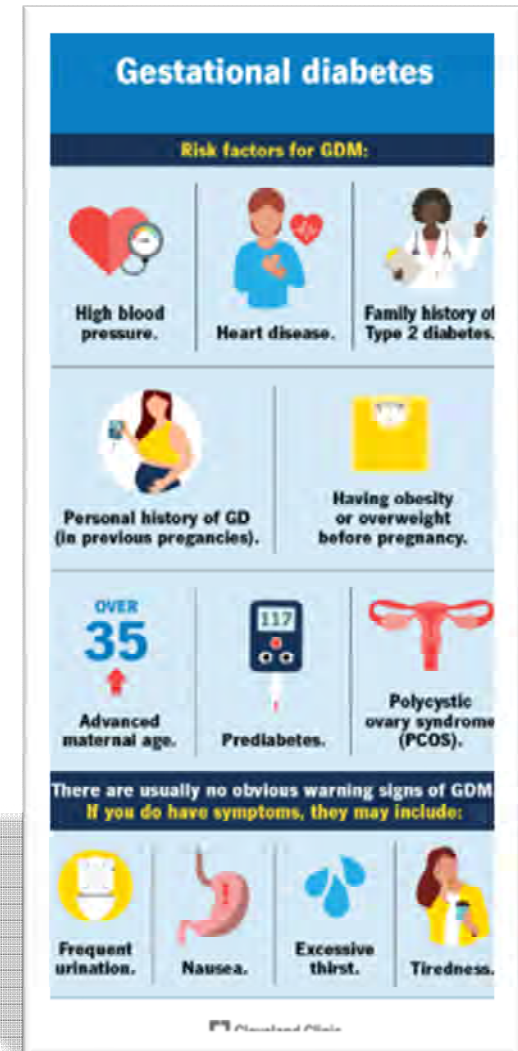
[2]ICD-10-CM and ICD-10-PCS Handbook, Chapter 14
[10]Gestational Diabetes: Causes, Symptoms & Treatment – Including image

Diabetes and Pregnancy Codes

Code Category Ranges	Descriptions
O24.4-	Gestational Diabetes
Further subdivisions for trimester and 'diet controlled', 'insulin controlled', 'controlled by oral hypoglycemic drugs', 'unspecified'	
O24.8-	Pre-existing Diabetes in Pregnancy
Further subdivisions for trimester	
O24.9-	Unspecified Diabetes in Pregnancy
Further subdivisions for trimester	

All codes have further subdivisions for 'in pregnancy', 'in childbirth' and 'in the puerperium'

Diabetes 'with'

Diabetes 'with' – Coding Guideline I.A.15

Excerpt from 2025 ICD-10-CM Manual:

- The ICD-10-CM classification 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

- For example, under the Alphabetic Index main term Diabetes, the subterm "with" indicates a range of conditions in which the classification assumes a linkage between the condition—such as dermatitis, foot ulcer, or gangrene—and the diabetes


```
Diabetes, diabetic (mellitus) (sugar)   E11.9
  with
    amyotrophy   E11.44
    arthropathy NEC   E11.618
    autonomic (poly) neuropathy   E11.43
    cataract   E11.36
    Charcot's joints   E11.610
    chronic kidney disease   E11.22
    circulatory complication NEC   E11.59
    coma due to
      hyperosmolarity   E11.01
      hypoglycemia   E11.641
      ketoacidosis   E11.11
    complication   E11.8
      specified NEC   E11.69
    dermatitis   E11.620
    foot ulcer   E11.621
    gangrene   E11.52
    gastroparalysis   E11.43
    gastroparesis   E11.43
```

Diabetes 'with'

This is the current list of conditions that presume an 'automatic' link with Diabetes per the ICD-10-CM Coding Manual

Conditions that Presume a Link with Diabetes- Type 1 or 2

- amyotrophy
- arthropathy NEC
- autonomic (poly)neuropathy
- cataract
- Charcot's joints
- chronic kidney disease (CKD)
- circulatory complication NEC
- coma due to hyperosmolarity
- coma due to hypoglycemia
- coma due to ketoacidosis
- complication
- complication, specified NEC
- dermatitis
- foot ulcer
- gangrene
- gastroparalysis
- gastroparesis
- glomerulonephrosis, intracapillary
- glomerulonephrosis, intercapillary
- hyperglycemia

- hyperosmolarity
- hyperosmolarity, with coma
- hypoglycemia
- hypoglycemia, with coma
- ketoacidosis
- ketoacidosis with coma
- kidney complications NEC
- Kimmelsteil-Wilson disease
- loss of protective sensation (LOPS) (see DM, by type, with neuropathy)
- mononeuropathy
- myasthenia
- necrobiosis lipoidica
- nephropathy
- neuralgia
- neurologic complication NEC
- neuropathic arthropathy

- neuropathy
- ophthalmic complication NEC
- oral complication NEC
- osteomyelitis
- periodontal disease
- peripheral angiopathy
- peripheral angiopathy, with gangrene
- polyneuropathy
- renal complication NEC
- renal tubular degeneration
- retinopathy (includes ALL retinopathy)
- skin complication NEC
- skin ulcer NEC

"NEC"

Coding Clinic (2Q 2018, pages 6-7) clarifies NEC terms for Diabetes

The 'with' guideline does NOT apply to 'NEC' index entries that cover broad categories of conditions

Diabetes Coding Tip

AHA Coding Clinic, 2Q 2018, pages 6-7:

- The 'with' guideline does not apply to 'not elsewhere classified (NEC)' index entries that cover broad categories of conditions

- Specific conditions must be linked by the terms 'with', 'due to', or 'associated with'

  Example:
  - Documentation states: Patient is a Type 2 diabetic. Assessment and Plan: Glaucoma, stable, follows with Ophthalmology
  - E11.39 DM with ophthalmic complication NEC is INCORRECT!
  - Since glaucoma is **_not specifically stated_** under 'with', it must be linked by provider documentation
  - Code Diabetes and Glaucoma separately

A1c Lab Test

A1c aka Hemoglobin A1c (HbA1c)

Blood test that measures your average blood sugar (glucose) levels over the past 2-3 months

Measures the percentage of hemoglobin that is coated with sugar

Used to help diagnose prediabetes & diabetes and track diabetes management over time

A1C and Estimated Average Glucose Levels

	A1C Percentage	Estimated Average Glucose (EAG)	
In-range	< 5.7%	< 117 mg/dL	6.5 mmol/L
Prediabetes	5.7-6.4%	117-137 mg/dL	6.5-7.6 mmol/L
Diabetes	> 6.4%	> 137 mg/dL	> 7.6 mmol/L
Increased risk of complications	6.5%	140 mg/dL	7.8 mmol/L
	7.0%	154 mg/dL	8.6 mmol/L
	7.5%	169 mg/dL	9.4 mmol/L
	8.0%	183 mg/dL	10.1 mmol/L
	8.5%	197 mg/dL	10.9 mmol/L
	9.0%	212 mg/dL	11.8 mmol/L
	9.5%	226 mg/dL	12.6 mmol/L
	10%	240 mg/dL	13.4 mmol/L

Cleveland Clinic

[11]A1C: What It Is, Test, Levels & Chart

Medications

Insulin

Rapid-Acting

- Humalog (lispro)
- NovoLog (aspart)
- Apidra (glulisine)
- Afrezza
- Fiasp (aspart)
- Lyumjev (lispro-aabc)

Short/Intermediate-Acting

- Humulin R U-100
- Novolin R
- Novolin R ReliOn

Long-Acting

- Basaglar (glargine)
- Lantus (glargine)
- Humulin R U-500
- Lantus (glargine)
- Levemir (detemir)
- Semglee vial (glargine-yfgn)

Ultra-Long-Acting

- Toujeo
- Tresiba (degludec)

[12]https://www.health.com/condition/type-2-diabetes/5-types-of-insulin-and-how-they-work

Diabetic Medications

Metformin (Glucophage)	Alogliptin (Nesina)	Linagliptin (Tradjenta)	Saxagliptin (Onglyza)	Sitagliptin (Januvia)	Dulaglutide (Trulicity)
Exenatide (Byetta)	Exenatide extended-release (Bydureon)	Liraglutide (Victoza)	Lixisenatide (Adlyxin)	Injectable semaglutide (Ozempic)	Glimepiride (Amaryl)
	Glipizide (Glucotrol and Glucotrol XL)	Glyburide (Micronase, Glynase, and Diabeta)	Rosiglitazone (Avandia)	Pioglitazone (Actos)	

Risk Adjustment Documentation

Diabetes – OOC, Poorly Controlled, Uncontrolled

- The terms **'out of control', 'poorly controlled' and 'uncontrolled'** do not all map to the same ICD-10-CM diagnosis code.

- Diabetes, out of control = Code Diabetes (by type) with hyperglycemia

- Diabetes, poorly controlled = Code Diabetes (by type) with hyperglycemia

- If documentation solely states, 'uncontrolled DM', with no further description, assign the code for 'unspecified DM' (by type)
  - Uncontrolled diabetes should be classified by type
  - The involvement hyperglycemia or hypoglycemia must be clearly documented to ensure accurate code assignment

Snippet from 3M encoder:

ICD-10 Principal Diagnosis

Uncontrolled diabetes (mellitus) (sugar) meaning

○ 1. Hyperglycemia
○ 2. Hypoglycemia

Diabetes Coding Tip

AHA Coding Clinic, 1Q 2017, page 42:

Uncontrolled diabetes is classified by type and whether it is hyperglycemia or hypoglycemia

- Diabetes Mellitus– uncontrolled: There is no default code for "uncontrolled diabetes." Effective October 1, 2016, uncontrolled diabetes is classified by type and whether it is hyperglycemia or hypoglycemia. If documentation does not state this level of detail, do not code E11.65.
- When DM uncontrolled is documented and there are no other diabetic manifestations documented, use E11.9 OR send to Consult if uncertain.

- Diabetes, out of control = Code Diabetes (by type) with hyperglycemia
- Diabetes, poorly controlled= Code Diabetes (by type) with hyperglycemia

Diabetes Coding Tip

Question: A patient underwent bariatric surgery due to morbid obesity, hypertension and type 2 diabetes mellitus. Because of the surgery, the patient had lost a significant amount of weight. The provider documented that the patient was no longer diabetic or hypertensive and discontinued medication. There are no documented manifestations of these conditions in the health record.

Would it be appropriate to code these conditions when the provider states "history of" or "resolved"?

Answer:
- Z86.39, Personal history of other endocrine, nutritional and metabolic disease
- Z86.79, Personal history of other diseases of circulatory system

These codes should be used when the provider has documented these conditions are <u>resolved and there are no manifestations of diabetes or hypertension</u>.

"History of" can have two different meanings (e.g., chronic condition or the condition no longer exists)

In this case, history codes are assigned because the provider has documented that diabetes and hypertension **have resolved and are no longer being treated** (medication was discontinued). If the documentation is not clear whether the patient still has the condition, query the provider for clarification.

Diabetes Coding Tip

AHA Coding Clinic, 1Q 2025, page 35:

Question: A patient with type 2 DM, a H/O venous insufficiency and venous stasis dermatitis was admitted with a venous stasis ulcer with cellulitis and edema of the left lower leg. Is it appropriate to assume a relationship between diabetes mellitus and venous insufficiency based on the Coding Clinic, Second Quarter 2018 page 7, that clarifies peripheral vascular disease, and diabetes should be linked and coded as "diabetic peripheral angiopathy?"

What are the appropriate code assignments for venous stasis ulcer due to venous insufficiency in a patient with diabetes mellitus?

Answer:
- I87.2, Venous insufficiency (chronic) (peripheral)
- L97.929, Non-pressure chronic ulcer of unspecified part of left lower leg with unspecified severity
- E11.9, Type 2 diabetes mellitus without complications

Venous insufficiency is generally associated with the deeper veins and is **NOT** considered a diabetic peripheral angiopathy. Peripheral vascular disease (PVD) is an arterial disease, not a venous disease. Therefore, it would not be appropriate to assume a relationship between the patient's venous insufficiency and diabetes mellitus

Medicare Advantage V28

- Drug/chemical induced diabetes with/without manifestations will no longer map to an HCC in the MA model
- Drug-induced diabetes will most commonly be seen in patients who are on long-term steroids
- Major changes for Diabetes in V28 for Diabetes

- 4 levels of hierarchy in V28
  - ✓ HCC 35 – Transplant of pancreas
  - ✓ HCC 36 – DM with severe acute complications
  - ✓ HCC 37 – DM with chronic complications
  - ✓ HCC 38 – DM with glycemic, unspecified or no complications

  *See next slide for weight changes
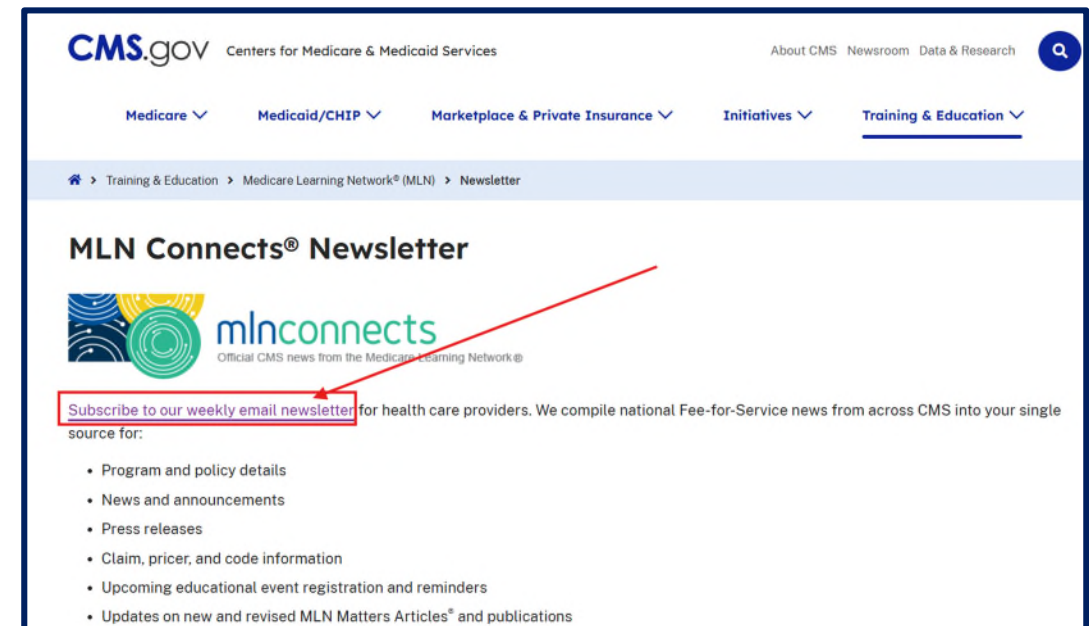
V24 vs V28

2023 (V24)

	HCC Category Description	Community, NonDual, Aged	Community, NonDual, Disabled	Community, FBDual, Aged	Community, FBDual, Disabled	Community, PBDual, Aged	Community, PBDual, Disabled	Institutional
17	Diabetes with Acute Complications	0.302	0.351	0.340	0.423	0.326	0.373	0.440
18	Diabetes with Chronic Complications	0.302	0.351	0.340	0.423	0.326	0.373	0.440
19	Diabetes without Complication	0.105	0.124	0.107	0.145	0.087	0.122	0.178

2024 (V28)

	HCC Category Description	Community, NonDual, Aged	Community, NonDual, Disabled	Community, FBDual, Aged	Community, FBDual, Disabled	Community, PBDual, Aged	Community, PBDual, Disabled	Institutional
35	Pancreas Transplant Status	0.949	1.393	1.117	0.573	1.117	2.740	1.106
36	Diabetes with Severe Acute Complications	0.166	0.191	0.186	0.235	0.166	0.210	0.280
37	Diabetes with Chronic Complications	0.166	0.191	0.186	0.235	0.166	0.210	0.280
38	Diabetes with Glycemic, Unspecified, or No Complications	0.166	0.191	0.186	0.235	0.166	0.210	0.280

Coding Scenarios

Coding Scenario #1 – Inpatient Admission

A young female patient with type 1 diabetes was brought in a comatose state to the ED by her parents. She was admitted with ketoacidosis and was resuscitated with saline hydration via insulin drip. After regaining consciousness, she reported that the morning of admission she felt nauseous and vomited. She was treated with IV hydration and insulin drip. The following morning her lab work was within normal range, and she was experiencing no symptoms. What is/are the correct diagnosis(es) for this scenario?

Discharge diagnosis: Diabetic ketoacidosis

Correct code for this scenario:
E10.11 – Type 1 DM with hypoglycemia with coma

Coding Path History

Enter Keyword: -- DM
DM -- DM (diabetes mellitus)
Diabetes, diabetic (mellitus) (sugar) -- Type 1
Type 1 diabetes mellitus specified as -- Other/unspecified
Type 1 diabetes with complication specified as -- SPELL other diabetic complication
Enter Keyword: -- KE
K -- Ketoacidosis (e.g., signifies uncontrolled diabetes)
Type 1 diabetes with ketoacidosis -- With coma
More diabetic complications to code? -- No
Diabetes (mellitus) (sugar) controlled using (screen will repeat) -- Do not wish to code or already coded
ICD-10-CM Diagnosis Codes
E1011   Type 1 diabetes mellitus with ketoacidosis with coma

Coding Scenario #2 – Outpatient Office Visit

A 54-year-old male patient sees his PCP for treatment and management of his diabetes. The patient also has glaucoma and was seen by his ophthalmologist last month.

A&P states:

Type 2 diabetes – stable; complicated by neuropathy. Continue Metformin 500 mg BID, Gabapentin 300 mg BID; prescriptions refilled

Glaucoma – most recent visual field test shows no significant progression; continue to follow with ophthalmologist

Correct codes for this scenario:
- E11.40 – Type 2 DM w/ neuropathy
- H40.9 -- Glaucoma

Conditions that Presume a Link with Diabetes- Type 1 or 2

amyotrophy	hyperosmolarity	neuropathy
arthropathy NEC	hyperosmolarity, with coma	ophthalmic complication NEC
autonomic (poly)neuropathy	hypoglycemia	oral complication NEC
cataract	hypoglycemia, with coma	osteomyelitis
Charcot's joints	ketoacidosis	periodontal disease
chronic kidney disease (CKD)	ketoacidosis with coma	peripheral angiopathy
circulatory complication NEC	kidney complications NEC	peripheral angiopathy, with gangrene
coma due to hyperosmolarity	Kimmelsteil-Wilson disease	polyneuropathy
coma due to hypoglycemia	loss of protective sensation (LOPS) (see DM, by type, with neuropathy)	renal complication NEC
coma due to ketoacidosis	mononeuropathy	renal tubular degeneration
complication	myasthenia	retinopathy (includes ALL retinopathy)
complication, specified NEC	necrobiosis lipoidica	skin complication NEC
dermatitis	nephropathy	skin ulcer NEC
foot ulcer	neuralgia	
gangrene	neurologic complication NEC	
gastroparalysis	neuropathic arthropathy	
gastroparesis		
glomerulonephrosis, intracapillary		
glomerulonephrosis, intercapillary		
hyperglycemia		

"NEC"

The 'with' guideline does _NOT_ apply to 'NEC' index entries that cover broad categories of conditions

Coding Clinic (2Q 2018, pages 6-7) clarifies _NEC_ terms for Diabetes

Coding Scenario #3 – Outpatient Office Visit

Patient is a 78-year-old female who is presenting to the office today for treatment and management of her type 2 DM. She also has ESRD and is on dialysis 3x/week and longstanding HTN.

AP also states:

Hyperlipidemia due to DM – refill Lipitor – lipid panel ordered

Current Medication List:

Amlodipine, 5 mg, oral, daily
Insulin regular, 0-12 units, sub-Q, with meals and nightly
Lipitor, 20 mg, daily

Correct codes for this scenario:

- E11.22 – Type 2 DM with diabetic chronic kidney disease
- E11.69 – Type 2 DM with other specified complication
- I12.0 –   Hypertensive chronic kidney disease with stage 5 CKD or ESRD
- N18.6 – End stage renal disease
- E78.5 –   Hyperlipidemia
- Z99.2 –   Dependence on renal dialysis

Many of these diagnoses are HCC's!!

Summary and Tips

Summary and Tips

- Diabetes coding is challenging due to its many possible manifestations and presumed links
- Attention to detail is critical
- Use the list of 'presumed links' provided in this presentation as a reference (Slide 35)
- Remember that NEC (not elsewhere classified) diabetic complications do not presume an auto-link
- Our coding must reflect the documentation
- When in doubt, query your providers for clarification

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Source of Truth

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Veradigm Collaborate Portal

Collaborate has resources available to you and your support personnel 24/7

Provider Feedback Application

Provider Alerts

Provider Alerts

Veradigm Payer Insights Overview

- Point-of-care module to review care gaps from Veradigm's Payer partners
- Engages clinical staff within the EHR in real time
- Facilitates pre-visit planning
- Captures suspecting and persisting diagnoses
- Collects supporting "MEAT" documentation

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January: 2025 Coding Updates: New Year, New Codes!

February: The A, B, C's of Coding for Common Pediatric Conditions

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May: Inhale the Facts of Coding and Documentation for Common Pulmonary Conditions

June: Pulse Check: Accurate Coding and Documentation for Cardiovascular Conditions

July: The Sweet Spot: Coding for Diabetes and Complications

August: Don't Let Coding Get Under Your Skin….Coding and Documentation for Dermatology Disorders

September: Making Connections: Proper Coding and Documentation for Neurological Conditions

October: Arm Yourself: Battling Through Coding and Documentation for Cancer

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Avoid the blockage of improper coding and documentation for Vascular Disorders including DVT's- Acute and Chronic, etc.

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Open your mind to specific documentation and coding of Major Depressive Disorders, Schizophrenia, and Bipolar Disorders.

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Calm your Nerves: Coding and Documentation for Neurological Conditions

Join us to review accurate documentation and coding for diseases of the central and peripheral nervous systems such as Epilepsy, Generalized Seizure Disorders, Chronic and Acute pain, Migraines, Alzheimer's disease, and pain management in your patient population.

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Get with the Flow: Coding and Documentation for Genitourinary Conditions

Learn about specific documentation and coding related to Genitourinary Conditions such as Nephritis, Nephropathy, and infections of the kidneys. Gain insight into proper coding for Chronic Kidney Disease and all the associated stages and complications.

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