Understanding Diabetes
for ICD-9 and ICD-10

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Disclaimer

The slides for *Understanding Diabetes for ICD-9 and ICD-10* are not stand-alone curriculum, but intended for viewing with the like-named live or recorded presentation from AAPC 2012 National Conference.

Coding Clinic references within this presentation are specific to ICD-9-CM, and all Guidelines are specific to ICD-10-CM. Both *Coding Clinic* references and Guidelines are system-specific and not interchangeable.

The 2012 editions of ICD-10-CM and ICD-9-CM were used to create this presentation. The ICD-10-CM code set will be updated again before implementation occurs.

Today's Goals

- Clear up your confusion
  - Understand the physiology and etiology of diabetes – it's more than one disease!
  - Differentiate among the different forms of diabetes
  - Review documentation requirements for **ICD-10**
  - Understand what will be different with **ICD-10**
  - Look at some scenarios from an **ICD-9** and **ICD-10** perspective

Statistics

- **What's the deal with diabetes?**
- 8.3% of U.S. population
  - 25,800,000 people
  - 7 million undiagnosed
  - 18% of pregnant women in U.S. have gestational diabetes, using new diagnostic criteria
  - 79 million Americans have pre-diabetes
- Costs: $116 billion/year direct; $58 billion indirect

- *Source: NIH Publication No. 11–3892*

True or False?

- Diabetes is caused by people overeating, especially foods with simple sugars.

- Some forms of diabetes are infectious.

- There is a cure for diabetes.

- Diabetes is your birthright.

Classifying Diabetes

Diabetes is classified to:
- **ICD-9-CM** and **ICD-10-CM** Chapter
  - Endocrine, Nutritional, Metabolic, and Immunity Disorders

Which Is It?

- Diabetes is a disorder of:
    - A. Endocrine system
    - B. Nutrition
    - C. Metabolism
    - D. Immunity

Which Is It?

- According to ICD-10-CM

    Diabetes is its own section, E08-E13

- According to ICD-9-CM, **A**

    Diabetes is classified to section:

    Diseases of other endocrine glands (249-259)

- However:

    Nutrition is correct.

    Metabolism is correct.

    Immunity is correct.

Endocrine Nutritional Metabolic Immunity

- Diabetes is a disorder associated with insulin production. Insulin is produced in the pancreas, which is an **endocrine gland**
- Diabetes creates **metabolic** disturbances of not only sugar, but also fat and protein
- Weight loss in uncontrolled diabetes is due to inability to assimilate **nutrition,** and too much nutrition (overeating) can lead to Type 2 diabetes
- Lowered **immunity** is seen in poorly controlled diabetes and Type 1 diabetes is caused by an **autoimmune** disorder

A Brief History of Diabetes Care

Evolution of Diabetes Treatment

- In the 1st Century, diabetes was described as *the melting down of flesh and limbs into urine* and was considered a digestive/urinary disease.
- **Diabetes** – frequent urination
  - Greek: that which passes through or siphons
    - Polyuria is body's attempt to filter sugar from the blood
- **Mellitus** — sweet urine
  - Latin: honey
- **Diabetes mellitus**: frequent passing of sweet urine
- **Diabetes insipidus**: frequent urination (insipidus: lacks content)

Evolution of Diabetes Treatment

- Insulin
  - Latin: insula: island
  - Naturally produced by the islet of Langerhans cells
    - Paul Langerhans documented "pancreatic juice" in 1869
- Elliot Joslin, *The Treatment of Diabetes Mellitus*, 1916
  - Diet and exercise extends life
- Insulin injected in patients in 1922; received Nobel Prize.
  - Insulin heralded as a "cure" for diabetes
  - Beef and pork insulin replaced with bio-engineered human insulin in the 1990s
  - Type 1 and Type 2 identified as distinctive forms of diabetes in 1936

Evolution of Diabetes Treatment

Pancreas has two functions:
- **Exocrine**
  - Creating enzymes to help the body digest food
- **Endocrine**
  - Creating hormones that regulate blood sugar levels
    - **Glucagon**: opens stored sugars for immediate use
    - **Insulin**: Facilitates storage of sugar in tissue for later use
  - Normal function
    - The pancreas adjusts the release of glucagon and insulin, based upon glucose levels in the blood
      - High glucose: release **insulin**
      - Low glucose: release **glucagon**
- We need insulin to survive.

Evolution of Diabetes Treatment

Universal clinical manifestations of diabetes mellitus
- Hyperglycemia
- Polyuria
- Glycosuria
- Weight loss if untreated
- Potential or existing complications resulting from hyperglycemia
  - Short-term complications
  - Long-term complications
- Diet, exercise, control of blood glucose can affect quality of life and outcomes
- Family history can affect incidence and outcomes
  - **V18.0 Family history of diabetes mellitus**
  - **Z83.3 Family history of diabetes mellitus**

Evolution of Diabetes Treatment

- Severity, treatment and outcomes in diabetes are as varied as they are in fracture care
  - Type 2
  - Type 1
  - Gestational diabetes
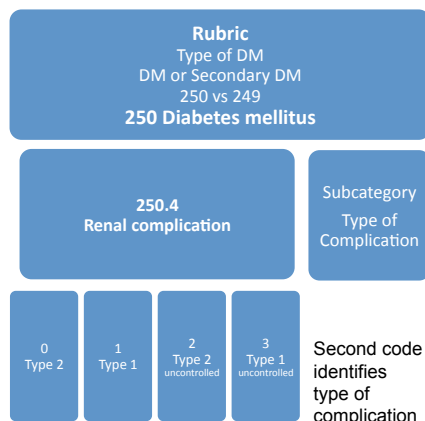 - Secondary diabetes
  - Other forms

Types of Diabetes
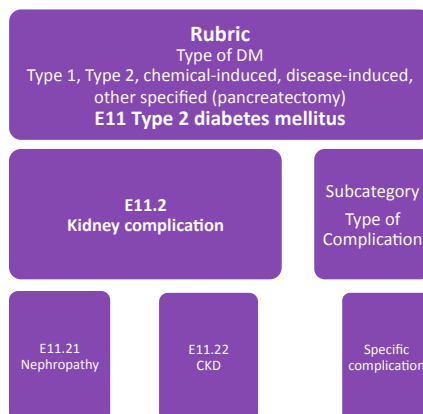
Type 2 Diabetes

- Think of Type 2 diabetes as a matter of capacity
  - The insulin-producing cells are overworked, or the body's insulin receptors are malfunctioning
    - Age
    - Obesity
    - Genetic predisposition
  - <u>Pancreas still produces insulin</u>, but cannot keep up with demands

- 90 to 95 percent of diabetes in the United States is Type 2

  The default for documented diabetes would be:

  250.00 Type 2 diabetes mellitus, not stated as uncontrolled, without complications

  E11.9 Type 2 diabetes mellitus without complications

Comparison of Systems

ICD-9-CM

Rubric
Type of DM
DM or Secondary DM
250 vs 249
250 Diabetes mellitus

250.4 **Renal complication**	Subcategory Type of Complication

0 Type 2	1 Type 1	2 Type 2 uncontrolled	3 Type 1 uncontrolled	Second code identifies type of complication

ICD-10-CM

Rubric
Type of DM
Type 1, Type 2, chemical-induced, disease-induced, other specified (pancreatectomy)
E11 Type 2 diabetes mellitus

E11.2 **Kidney complication**	Subcategory Type of Complication

E11.21 Nephropathy	E11.22 CKD	Specific complication

Type 2 Diabetes

- Type 2 is sometimes documented as **NIDDM**
  - Noninsulin Dependent Diabetes Mellitus
  - Nomenclature established as U.S. standard in 1979
  - Some Type 2 diabetics require insulin to control blood sugars.
    - While NIDDM is generally Type 2, it is not true that a patient documented with IDDM (insulin dependent diabetes mellitus) would always be Type 1. Some Type 2 require insulin for good control
- Type I2 is sometimes called adult-onset diabetes
  - Type 2 usually occurs in overweight or elderly adults
  - However, Type 2 is occurring in young people with more frequency. Type 1 (juvenile onset) occurs most frequently in children but can also occur in adults.
- Demand clarity in the nomenclature clinicians are using in their documentation

Type 2 Diabetes

- Major health issues with Type 2
  - Duration of disease before diagnosis
  - Compliance
  - Long-term complications
  - Underlying health issues
    - Age and obesity

- Treatment options
  - Education
  - Diet and exercise as a "cure"
  - Oral medications to stimulate islet cell production of insulin or to assist in insulin uptake by cells
  - Insulin
    V58.67 Long-term (current) use of insulin
       Z79.4 Long term (current) use of insulin

ICD-10 Guidelines: Insulin

C.4.a.3) Diabetes mellitus and the use of insulin
If the documentation in a medical record does not indicate the type of diabetes but does indicate that the patient uses insulin, code E11, Type 2 diabetes mellitus, should be assigned. Code Z79.4, Long-term (current) use of insulin, should also be assigned to indicate that the patient uses insulin. Code Z79.4 should not be assigned if insulin is given temporarily to bring a type 2 patient's blood sugar under control during an encounter.

Type 1 Diabetes

- IDDM Insulin Dependent Diabetes Mellitus
  - All Type 1 is IDDM but not all IDDM is Type 1
- Autoimmune disease in which the insulin-producing cells in the pancreas are destroyed
  - Genetic, environmental factors
- Can occur at any age, but typically in children or young adults
  - 95 percent of cases diagnosed before age 25
- Ultimately, no insulin is produced by the patient
  - Dependence on insulin
  - Diagnosis is usually under acute circumstances
- Often occurs with other autoimmune disorders
  - Hypothyroidism in 50 percent of cases

Coding Clinic: Insulin

Coding Clinic Q4 2004
Q: Is it necessary to use code V58.67, Long-term [current] use of insulin, with type 1 diabetes? The use additional code note is only at the fifth digits for Type 2 diabetes.
A: Assign code V58.67 for type 1 diabetics, if desired. Type 1 diabetics must use insulin because their pancreas does not produce insulin naturally. Therefore, it is not necessary to assign code V58.67.

Z79.4/**V58.67** are not necessary when reporting Type 1 diabetes.

Type 1 Diabetes

- Major health issues with Type 1
  - Acute requirements with insulin regulation
  - Short-term complications
  - Long-term complications

- Treatment options
  - Education
  - Insulin therapy: injection, pump
  - Pancreas transplant

Gestational Diabetes

- Diabetes <u>commencing</u> during pregnancy
  - Related to increased demands on pancreas
  - The patient is still producing insulin

- Major health issues
  - Increases risks to mother and to fetus
  - Increases likelihood that mother will develop diabetes later

- Treatment options
  - Greater monitoring of pregnancy and fetus
  - Diet restrictions, oral meds, insulin therapy
  - More aggressive view on inductions and sections
  - Periodic monitoring of mother after delivery

Comparison of Systems

A patient's first pre-natal visit occurs at 30 weeks. The patient has not seen a physician in 10 years. Her blood sugar is 400 and her A1C is 11.2. The physician cannot determine whether the patient has gestational or Type 2 diabetes.

ICD-9-CM

ICD-10-CM

648.0 DM in pregnancy

O24.912 Unspecified DM in

OR

pregnancy, 2nd trimester

648.8 Gestational diabetes

Comparison of Systems

ICD-9-CM

Diabetes in Pregnancy

648.0x Diabetes mellitus in pregnancy (code DM secondarily)
648.8x Gestationa diabetes (code any insulin use secondarily)

Perinatal Codes	Fifth digits
775.0 Syndrome, infant of diabetic mother	0 unspecified episode
	1 delivered
775.1 Neonatal diabetes mellitus	2 delivered, with postpartum complication
	3 antepartum condition
	4 postpartum condition

ICD-10-CM

Diabetes in Pregnancy
O24.0 Type 1 pre-existing
O24.1 Type 2 pre-existing
O24.3 Unspecified pre-existing
O24.4 Gestational
O24.8 Other pre-existing
O24.9 Unspecified

Perinatal	Fifth characters	Sixth
P70.0 Syndrome, infant of mother w/ gestational diabetes	1 pregnancy	1 1st trimester
	2 childbirth	2 2nd trimester
	3 puerperium	3 3rd trimester
P70.1 Syndrome, infant of diabetic mother		Gestational diabetes
		0 diet control
P70.2 Neonatal diabetes mellitus		4 insulin cont
		9 unspec. cont

ICD-10 Guidelines: Pregnancy

C.15.i. Gestational (pregnancy-induced) diabetes
Codes for gestational diabetes are in subcategory O24.4, Gestational diabetes mellitus. No other code from category O24, Diabetes mellitus in pregnancy, child-birth, and the puerperium, should be used with a code from O24.4. The codes under O24.4 include diet controlled and insulin controlled.
If a patient with gestational diabetes is treated with both diet and insulin, only the code for insulin-con-trolled is required. Code Z79.4, Long-term (current) use of insulin, should not be assigned with codes from subcategory O24.4

ICD-10 Guidelines: Pregnancy

C.15. g. Diabetes mellitus in pregnancy
Diabetes mellitus is a significant complicating factor in pregnancy. Pregnant women who are diabetic should be assigned a code from category O24, Diabetes mellitus in pregnancy, childbirth, and the puerperium, first, followed by the appropriate diabetes code(s) (E08-E13) from Chapter 4.
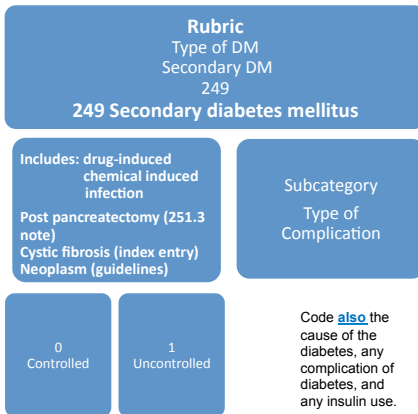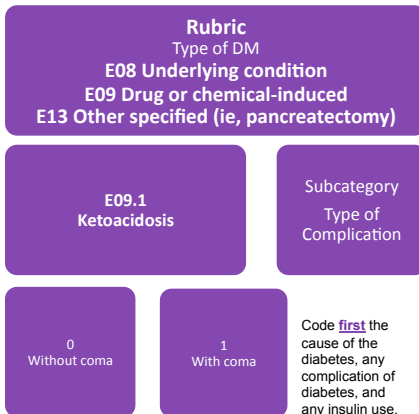
Secondary diabetes

- Still producing insulin
  - Drug or chemical induced diabetes
  - Disease-induced diabetes
  - Partial pancreatectomy or pancreatitis
  - Diabetes due to genetic defect

- No longer producing insulin
  - Postsurgical total pancreatectomy
  - Drug or chemical induced diabetes
  - Disease-induced diabetes

- Greater specificity in **ICD-10-CM**

Comparison of Systems

ICD-9-CM

Rubric
Type of DM
Secondary DM
249
249 Secondary diabetes mellitus

Includes: drug-induced chemical induced infection

Post pancreatectomy (251.3 note)
Cystic fibrosis (index entry)
Neoplasm (guidelines)

Subcategory
Type of Complication

0 Controlled	1 Uncontrolled

Code **also** the cause of the diabetes, any complication of diabetes, and any insulin use.

ICD-10-CM

Rubric
Type of DM
E08 Underlying condition
E09 Drug or chemical-induced
E13 Other specified (ie, pancreatectomy)

E09.1 Ketoacidosis

Subcategory
Type of Complication

0 Without coma	1 With coma

Code **first** the cause of the diabetes, any complication of diabetes, and any insulin use.

ICD-10-CM Guidelines: Secondary Diabetes

C.4.a.6) Secondary *diabetes mellitus*
Codes under categories E08, Diabetes mellitus due to underlying condition, and E09, Drug or chemical induced diabetes mellitus, identify complications/ manifestations associated with secondary DM. Secondary diabetes is always caused by another condition or event (e.g., cystic fibrosis, malignant neoplasm of pancreas, pancreatectomy, adverse effect of drug, or poisoning).

.

NOTE: ICD-10-CM Alphabetic Index classifies Diabetes/post pancreatectomy to specified type NEC E13 not E08.

ICD-10-CM Guidelines: Secondary Diabetes

C.4.a.6)(b)(1) Secondary diabetes mellitus due to pancreatectomy
For postpancreatectomy diabetes mellitus (lack of insulin due to the surgical removal of all or part of the pancreas),assign code E89.1, Postprocedural hypoinsulinemia. Assign a code from category E13 and a code from subcategory Z90.41-, Acquired absence of pancreas, as additional codes.

Complications of Diabetes

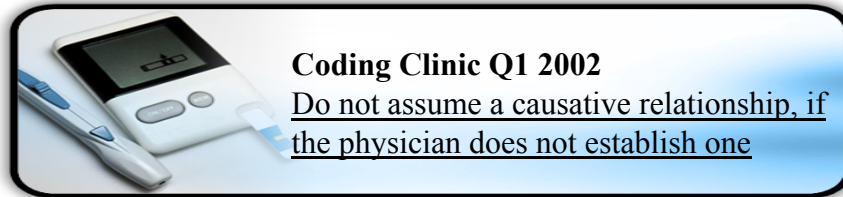# Root Cause: Diabetic Metabolism

- Carbohydrate, fat, and protein metabolism
  - Carbohydrate
    - High sugar
    - Weight loss
    - Weight gain
    - Stress on filtering kidneys as renal threshold is exceeded

  - Fat
    - High cholesterol
    - Cardiovascular disease associated with atherosclerosis

  - Protein
    - Increased catabolism of protein in absence of insulin
    - Contributes to hypoglycemia and stress on kidneys

Complications

Complications will generally fall into one of two categories:

- **Acute** metabolic complications
  - **ICD-9-CM: 250.1X-250.3X**
  - **ICD-10-CM: EXX.0X, EXX.1X, EXX.64**
- **Chronic** complications

Complications

Coding Clinic Q1 2002
<u>Do not assume a causative relationship, if the physician does not establish one</u>

Causal	**Not causal**
"due to," "caused by"	"contributing to"
"Diabetic"	"with diabetes"
"of diabetes"	"diabetes and"
"associated with"	

Complications

- Exceptions to documentation of causal relationship rule:
  - Osteomyelitis
  - Gangrene

Complications

2012 ICD-9-CM Index

Diabetes, diabetic (brittle) (congenital) (familial) (mellitus) (severe) (slight) (without complication) 250.0
-with
- -coma (with ketoacidosis) 250.3
- - -due to secondary diabetes 249.3
- - -hyperosmolar (nonketotic) 250.2
- - - -due to secondary diabetes 249.2
- -complication NEC 250.9
- - -due to secondary diabetes 249.9
- - -specified NEC 250.8
- - - -due to secondary diabetes 249.8
-gangrene 250.7 [785.4]
- -due to secondary diabetes 249.7 [785.4]
-hyperglycemia - code to Diabetes, by type, with 5th digit for not stated as uncontrolled

2012 ICD-10-CM Index

Diabetes, diabetic (mellitus) (sugar) E11.9
- type 2 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
- - - complication E11.8
- - - - specified NEC E11.69
- - - dermatitis E11.620
- - - foot ulcer E11.621
- - - gangrene E11.52

Complications

2012 ICD-10-CM Index

Diabetes, diabetic (mellitus) (sugar) E11.9
- type 2 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
- - - complication E11.8
- - - - specified NEC E11.69
- - - dermatitis E11.620
- - - foot ulcer E11.621
- - - gangrene E11.52

2012 ICD-10-CM Guidelines

I.A.15 "With"

The word "with" should be interpreted to mean "associated with" or "due to" when it appears in a code title, the Alphabetic Index, or an instructional note in the Tabular List.

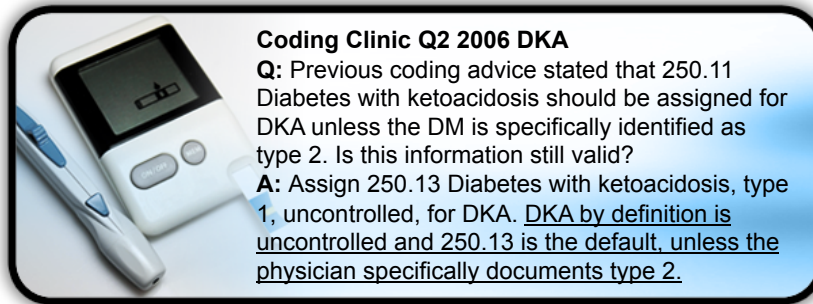Don't mistake the rules for the Index with the rules for documentation.

Acute Complications

- Brought on by body's immediate response to abnormal blood glucose
  - **Polyuria, thirst, weight loss**
    - Generally not coded in a diagnosed diabetic

Acute Complications

- Brought on by body's immediate response to abnormal blood glucose
  - **Ketoacidosis**

    ICD-9-CM: 250.13 Diabetes mellitus with DKA
    (also 249)   250.33 Diabetes mellitus with DKA and coma
    ICD-10-CM: EXX.10 Diabetes mellitus with DKA
    **   EXX.11 Diabetes mellitus with DKA and coma**

    - 25 percent of newly diagnosed Type 1 diabetics present with DKA
    - Fluid imbalance, cerebral edema, coma. Mortality rate 5 percent
    - Infection, pump failure, puberty, poor control

Acute Complications

Coding Clinic Q2 2006 DKA
Q: Previous coding advice stated that 250.11 Diabetes with ketoacidosis should be assigned for DKA unless the DM is specifically identified as type 2. Is this information still valid?
A: Assign 250.13 Diabetes with ketoacidosis, type 1, uncontrolled, for DKA. DKA by definition is uncontrolled and 250.13 is the default, unless the physician specifically documents type 2.

There is no current mechanism in ICD-10-CM to report DKA in a patient with Type 2 diabetes

Acute Complications

- Brought on by body's immediate response to abnormal blood glucose
    - **Hyperosmolarity**

        Hyperglycemia seen in Type 2 diabetics, usually triggered by illness and dehydration. Mortality rate 15 percent.

        There is no current mechanism in ICD-10-CM to report hyperosmolarity in a patient with Type 1 diabetes

Acute Complications

- Brought on by body's immediate response to abnormal blood glucose
    - **Insulin shock, hypoglycemia**
        - **ICD-9-CM: 250.8x Diabetes mellitus with other specified manifestations**
        - **250.3x Diabetes mellitus with (hypoglycemic) coma (same code is reported for DKA coma)**
        - **ICD-10-CM: E08, E09, E10, E11, E13 with the following 4th, 5th and 6th characters:**
            - **.641 diabetes mellitus with hypoglycemia with coma**
            - **.642 diabetes mellitus with hypoglycemia without coma**

Chronic Complications

- Brought on by chronic hyperglycemia or the body chemistry associated with diabetes over time
    - Heart disease and stroke rate 2 to 4 times higher than nondiabetic population
        - Cause of death for 65% of diabetics
        - Almost 75% of diabetics have high blood pressure
    - Leading cause of ESRD
        - Accounts for 45% of new cases each year
    - Leading cause of blindness
    - Leading cause of non-traumatic amputation

Chronic Complications

- Diabetic Control and Complications Trial (1993):
  - Tighter control of diabetes reduces likelihood of long-term complications associated with diabetes
- Genetics also play a role in complications

Chronic Complications

Cardiovascular complications
  - Angiopathy
    - **ICD-9-CM**: **250.7x** peripheral circulatory disorders
      - Code diabetes first; next angiopathy, any gangrene
    - **ICD-10-CM**: **EXX.5x** circulatory complications
      - DM, angiopathy, and gangrene with just one code (.51; or .52 with gangrene)
  - ICD does not provide for causal relationship between diabetes and heart disease or cerebrovascular conditions
    - OK to sequence heart/cerebrovascular problem first, diabetes secondarily, based on focus of encounter

Chronic Complications

Renal disease

– **ICD-9-CM**: **250.4x** Diabetes with renal manifestations

  • Kidney disease, nephropathy, nephrosis, glomerulosclerosis reported secondarily

– **ICD-10-CM**: **EXX.2x**

  .21 diabetic nephropathy

  .22 diabetic CKD (code CKD stage secondarily)

  .29 other diabetic kidney complication (renal tubular degeneration)

Chronic Complications

Ophthalmic disease

ICD-9-CM: 250.5x ophthalmic manifestations

  • Retinopathy, macular degeneration, cataracts, glaucoma, blindness reported secondarily

ICD-10-CM: EXX.3xx ophthalmic complications

  • All captured with a single code

  E10.341 Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema

Chronic Complications

Neuropathic disease

ICD-9-CM: **250.6x** Diabetes with neurological manifestations
    » Various neurological disorders reported secondarily

ICD-10-CM: **EXX.40** Unspecified

    EXX.41 Mononeuropathy -- affecting single nerve

    EXX.42 Polyneuropathy -- neuralgia, neuropathies

    EXX.43 Autonomic neuropathy -- gastroparesis

    EXX.44 Amyotrophy -- lumbosacral radiculoplexus
            neuropathy

    EXX.49 Other -- no specific neuropathies indexed

Practical Diabetes

Coding Scenarios

SceNARio 1

A diabetic patient receives a successful pancreas transplant and no longer requires insulin injections.

- **Under what circumstances is the patient coded as a diabetic?**

SceNARio 1

Coding Clinic Q2 2001

Q: This patient with type 1 DM with diabetic manifestations had a pancreas transplant. The patient no longer requires insulin, the physician specifies that the patient no longer has DM secondary to the transplant. Since manifestations still exist how is this coded?

A: The patient still has complications associated with the DM, because the transplant did not resolve the manifestations of the DM. DM manifestations cannot be coded without 250.xx. Assign code V42.83, Organ or tissue replaced by transplant, Pancreas, for the transplant status.

A patient who had a pancreatic transplant may still suffer from the complications of DM (e.g., diabetic retinopathy or peripheral neuropathy due to DM.) These conditions should be coded using both the DM code and the specific code for the appropriate condition if the physician documents these conditions in the medical record. Even in the absence of a DM complication, DM may still be present following pancreatic transplant. Diabetes should be coded when the physician documents this condition in the medical record.

SceNARio 1

A diabetic patient receives a successful pancreas transplant and no longer requires insulin injections.

- **Under what circumstances is the patient coded as a diabetic?**
  - **Anytime diabetes is documented in the medical record.**
  - **Anytime diabetes is responsible for a complication being treated**
    - Long-standing or newly diagnosed diabetic retinopathy
    - Diabetic neuropathy
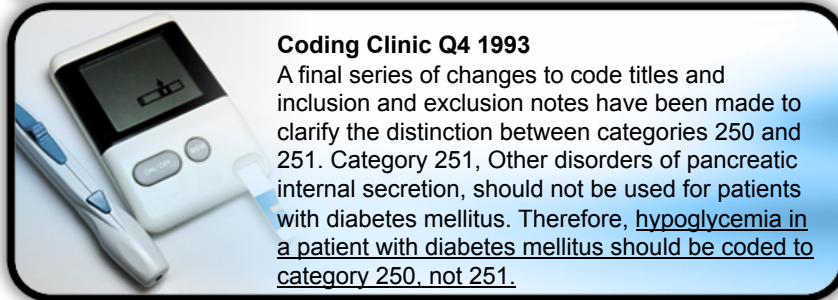 - **Report V42.83/Z94.83 for pancreas transplant status**

SceNARio 2

A patient with Type 1 diabetes mellitus participates in strenuous activity and is admitted to the emergency room with a blood sugar of 26. He is still conscious. The discharge diagnosis is hypoglycemia.

What are the correct ICD-9-CM and ICD-10-CM codes?

SceNARio 2

Coding Clinic Q4 1993
A final series of changes to code titles and inclusion and exclusion notes have been made to clarify the distinction between categories 250 and 251. Category 251, Other disorders of pancreatic internal secretion, should not be used for patients with diabetes mellitus. Therefore, hypoglycemia in a patient with diabetes mellitus should be coded to category 250, not 251.

SceNARio 2
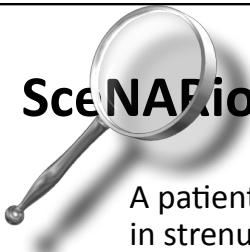
A patient with Type 1 diabetes mellitus participates in strenuous activity and is admitted to the emergency room with a blood sugar of 26. He is still conscious. The discharge diagnosis is hypoglycemia.

What are the correct codes?

ICDD-9-CM
250.81 Diabetes with other specified manifestation, type I, not stated as uncontrolled

ICD-10-CM
E10.649 Type 1 diabetes with hypoglycemia, without coma

SceNARio 3

A patient is hospitalized with a diagnosis of diabetic ketoacidosis.

What are the correct ICD-9-CM and ICD-10-CM codes?

SceNARio 3

A patient is hospitalized with a diagnosis of diabetic ketoacidosis.

Coding Clinic Q2 2006 DKA
Q: Previous coding advice stated that 250.11 Diabetes with ketoacidosis should be assigned for DKA unless the DM is specifically identified as type 2. Is this information still valid?
A: Assign 250.13 Diabetes with ketoacidosis, type 1, uncontrolled, for DKA. DKA by definition is uncontrolled and 250.13 is the default, unless the physician specifically documents type 2.

DKA default is Type 1 and uncontrolled.

SceNARio 3

ICD-9-CM

250.13 Type 1 diabetes with ketoacidosis, uncontrolled

Index

Diabetes/with/ketosis, ketoacidosis 250.1

ICD-10-CM

E10.10 Type 1 diabetes mellitus with ketoacidosis without coma

Index

Diabetes/type 1 /with/ ketoacidosis E10.10

SceNARio 4

The patient with multiple endocrine neoplasia Type 1 developed insulin dependent diabetes secondary to malignant gastrinoma of the pancreas. Today's visit is focused on adjusting his sliding scale for insulin use for better control of blood sugars.

What are the correct ICD-9-CM and ICD-10-CM codes?

SceNARio 4

The patient with multiple endocrine neoplasia Type 1 developed insulin dependent diabetes secondary to malignant gastrinoma of the pancreas. Today's visit is focused on adjusting his sliding scale for insulin use for better control of blood sugars.

Coding Clinic Q4 2007
Q: A 58-year-old man with known multiple endocrine neoplasia type 1 and malignant gastrinoma of the pancreas is admitted for treatment. How should this be coded?
A: Assign code 258.01, Multiple endocrine neoplasia [MEN] type I, as the principal diagnosis. In addition assign code 157.4, Malignant neoplasm, Islets of Langerhans

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SceNARio 4

The patient with multiple endocrine neoplasia Type 1 developed insulin dependent diabetes secondary to malignant gastrinoma of the pancreas. Today's visit is focused on adjusting his sliding scale for insulin use for better control of blood sugars.

What are the correct codes?

ICD-9-CM
249.00 Secondary DM
258.01 MEN type 1
157.4 Malignant neoplasm
V58.67 Use of insulin

ICD-10-CM
E08.9 Secondary DM
E31.21 MEN type 1
C25.4 Malignant neoplasm
Z79.4 Use of insulin

SceNARio 5

A Type 2 diabetic is diagnosed with bilateral retinal edema and bilateral microaneurysms of the retina. The patient's diabetes is out of control.

What are the correct ICD-9-CM and ICD-10-CM codes?

SceNARio 5

A Type 2 diabetic is diagnosed with bilateral macular edema and bilateral microaneurysms of the retina. The patient's diabetes is out of control.

What are the correct codes?

ICD-9-CM	ICD-10-CM
250.52 DM2, ophthalmic, uncontrolled	**E11.311** DM2, macular edema
362.01 background retinopathy	**H35.043** bilateral microaneurysm
362.07 macular edema	**E11.65** hyperglycemia

SceNARio 6

A Type 1 diabetic undergoes a pregnancy test. The results are positive.

What are the correct ICD-9-CM and ICD-10-CM codes?

SceNARio 6

Coding Clinic Q4 2005
A new code has been added to subcategory V72.4, Pregnancy examination or test. Code V72.42, Pregnancy examination or test, positive result, should now be used when a woman tests positive on a pregnancy test during an encounter for which she is given a pregnancy test. Because a pregnancy test is not a standard component of a routine gynecological examination, code V72.42 may be used as an additional code with code V72.31, Routine gynecological examination, or other codes for encounters for other healthcare examination. It may also be used as a first listed code if the reason for the encounter is specifically for the pregnancy test.

SceNARio 6

A Type 1 diabetic undergoes a pregnancy test. The results are positive.

What are the correct codes?

ICD-9-CM	ICD-10-CM
V72.42 Pregnancy test, positive	Z32.01 Pregnancy test, positive
250.01 DM1 w/o complication	E10.9 DM1 w/o complication

The test was the reason for the visit, and no obstetrical care, per se, was given. Reporting the DM is optional in this case.

SceNARio 6

ICD-9-CM	ICD-10-CM
Insulin dependent type 2 diabetic, 35 weeks gestation	Insulin dependent type 2 diabetic, 35 weeks gestation
648.03 DM in pregnancy, antepartum condition	O24.113 DM2 (pre-existing), 3rd trimester
250.00 DM2 without complication	E11.9 DM2 without complication
V58.67 Insulin use	Z79.4 Insulin use

SceNARio 7

The patient is admitted today with diabetic hyperosmolarity and coma. X-ray reveals a decubitus ulcer of the sacral area has eroded into the sacral vertebra and developed into acute osteomyelitis. Sugars are uncontrolled.

What are the correct ICD-9-CM and ICD-10-CM codes?

SceNARio 7

Coding Clinic Q1 2004
If the physician indicates diabetic osteomyelitis, or the patient has both DM and acute osteomyelitis and no other cause of the osteomyelitis is documented, it would be appropriate to assign codes 250.80, DM with other specified manifestations, Type 2, 731.8, Other bone involvement in diseases classified elsewhere, and 730.0X, Acute osteomyelitis. ICD-9 assumes a relationship between DM and osteomyelitis when both conditions are present, unless the physician has indicated in the medical record that the acute osteomyelitis is totally unrelated to the DM. In this case, the physician has indicated that the osteomyelitis is due to the decubitus ulcer, so the osteomyelitis would not be coded as a DM complication.

SceNARio 7

ICD-9-CM

250.22 DM2 hyperosmolarity w or w/o coma

707.03 Pressure ulcer, sacrum

707.24 Stage 4 ulcer

730.08 Osteomyelitis, acute, other specified sites

ICD-10-CM

E11.01 DM2 hyperosmolarity w/coma

L89.154 Sacral pressure ulcer, stage 4

M46.28 Osteomyelitis of veterbra, sacral and sacrococcygeal region

SceNARio 8

Patient with Type 1 DM presents today with hyperglycemia. The patient's insulin pump is discovered to have a plugged infusion tube.

What are the correct ICD-9-CM and ICD-10-CM codes?

SceNARio 8

C.4.a.5)(a) Underdose of insulin due to insulin pump failure
An underdose of insulin due to an insulin pump failure should be assigned to a code from subcategory T85.6, Mechanical | complication of other specified internal and external prosthetic devices, implants and grafts, that specifies the type of pump malfunction, as the principal or first-listed code, followed by code T38.3x6-, Underdosing of insulin and oral hypoglycemic [antidiabetic] drugs. Additional codes for the type of diabetes mellitus and any associated complications due to the underdosing should also be assigned.
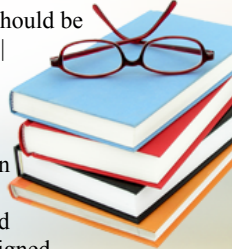
SceNARio 8

Patient with Type 1 DM presents today with hyperglycemia. The patient's insulin pump is discovered to have a plugged infusion tube

What are the correct codes?

ICD-9-CM

996.57 Mech complication

250.01 DM1 w/o complication, not stated as uncontrolled

ICD-10-CM

T85.6 Mech complication

T38.3X6 Underdose insulin

E10.65 DM1, hyperglycemia

Thank you!

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