ICD-10-CM
Coding Guidelines

Chapter 4
Endocrine, Nutritional, and Metabolic Diseases
(E00-E89)
Overview

Note:
All neoplasms, whether functionally active or not, are classified in Chapter 2. Appropriate codes in this chapter (i.e. E05.8, E07.0, E16-E31, E34.-) may be used as additional codes to indicate either functional activity by neoplasms and ectopic endocrine tissue or hyperfunction and hypofunction of endocrine glands associated with neoplasms and other conditions classified elsewhere.

Excludes 1:
transitory endocrine and metabolic disorders specific to newborn (P70-P74)
Chapter 4 contains the following blocks:

- E00-E07 Disorders of thyroid gland
- E08-E13 Diabetes mellitus
- E15-E16 Other disorders of glucose regulation and pancreatic internal secretion
- E20-E35 Disorders of other endocrine glands
- E36 Intraoperative complications of endocrine system
- E40-E46 Malnutrition
- E50-E64 Other nutritional deficiencies
- E65-E68 Overweight, obesity and other hyperalimentation
- E70-E88 Metabolic disorders
- E89 Postprocedural endocrine and metabolic complications and disorders, NEC
Chapter 4 Guidelines

CG.I.C.4.a.1) Type of diabetes
CG.1.C.4.a.2) Type of diabetes mellitus not documented
CG.I.C.4.a.3) Diabetes mellitus and the use of insulin and oral hypoglycemics
CG.I.C.4.a.4) Diabetes mellitus in pregnancy and gestational diabetes
See Section I.C.15. Gestational (pregnancy induced) diabetes
CG.I.C.4.a.5) Complications due to insulin pump malfunction
   CG.I.C.4.a.5)(a) Underdose of insulin due to insulin pump failure
   CG.I.C.4.a.5)(b) Overdose of insulin due to insulin pump failure
CG.I.C.4.a.6) Secondary diabetes mellitus
   CG.I.C.4.a.6)(a) Secondary diabetes mellitus and the use of insulin or oral hypoglycemic drugs
   CG.I.C.4.a.6)(b) Assigning and sequencing secondary diabetes codes and its causes
      CG.I.C.4.a.6)(b)(i) Secondary diabetes mellitus due to pancreatectomy
      CG.I.C.4.a.6)(b)(ii) Secondary diabetes mellitus due to drugs
See section I.C.19.e for coding of adverse effects and poisoning, and section I.C.20 for external cause code reporting.
Diabetes mellitus

The diabetes mellitus codes are combination codes that include the type of diabetes mellitus, the body system affected, and the complications affecting that body system. As many codes within a particular category as are necessary to describe all of the complications of the disease may be used. They should be sequenced based on the reason for a particular encounter. Assign as many codes from categories E08 – E13 as needed to identify all of the associated conditions that the patient has.
### CG I.C.4.a. Diabetes mellitus

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Code</th>
<th>Index Pathway/Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>The patient is admitted for treatment of Type 1 diabetes with ketoacidosis. He also has diabetic nephrosis and a diabetic cataract in the left eye.</td>
<td>E10.10</td>
<td>Diabetes, Type 1, with, ketoacidosis E10.10</td>
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<tr>
<td></td>
<td>E10.21</td>
<td>Diabetes, Type 1, with, nephropathy E10.21</td>
</tr>
<tr>
<td></td>
<td>E10.36</td>
<td>Diabetes, Type 1, with, cataract E10.36</td>
</tr>
</tbody>
</table>

**ICD-10-CM Coding Guideline:** The diabetes mellitus codes are combination codes that include the type of diabetes mellitus, the body system affected, and the complications affecting that body system. As many codes within a particular category as are necessary to describe all of the complications of the disease may be used. They should be sequenced based on the reason for a particular encounter. Assign as many codes from categories E08 – E13 as needed to identify all of the associated conditions that the patient has.

CG I.C.4.a.
Type of diabetes

The age of a patient is not the sole determining factor, though most type 1 diabetics develop the condition before reaching puberty. For this reason type 1 diabetes mellitus is also referred to as juvenile diabetes.
### CG I.C.4.a.1) Type of diabetes

<table>
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<tr>
<th>Scenario</th>
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<tbody>
<tr>
<td>The 10-year-old female patient has been experiencing excessive thirst,</td>
<td>E10.9</td>
<td><strong>Diabetes, juvenile-onset</strong> – See Diabetes, type 1</td>
</tr>
<tr>
<td>fatigue and weight loss. The physician determines that her symptoms can</td>
<td></td>
<td><strong>Diabetes</strong>, Type 1 E10.9</td>
</tr>
<tr>
<td>be attributed to juvenile diabetes.</td>
<td></td>
<td><strong>ICD-10-CM Coding Guideline:</strong> The age of a patient is not the sole determining</td>
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<tr>
<td></td>
<td></td>
<td>factor, though most type 1 diabetics develop the condition before reaching puberty.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For this reason type 1 diabetes mellitus is also referred to as juvenile diabetes.</td>
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<td></td>
<td><strong>CG I.C.4.a.1)</strong></td>
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<td></td>
<td><strong>Note:</strong> Signs or symptoms that are associated routinely with a disease process</td>
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<td></td>
<td></td>
<td>should not be assigned as additional codes, unless otherwise instructed by the</td>
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<tr>
<td></td>
<td></td>
<td>classification. <strong>CG I.C.18.b.</strong></td>
</tr>
</tbody>
</table>

**Scenario:** The 10-year-old female patient has been experiencing excessive thirst, fatigue and weight loss. The physician determines that her symptoms can be attributed to juvenile diabetes.
Type of diabetes mellitus not documented

If the type of diabetes mellitus is not documented in the medical record the default is E11.-, Type 2 diabetes mellitus.
Type of diabetes mellitus not documented

<table>
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<tr>
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</table>
| 69-year-old patient is admitted because her diabetes is out of control. She also has diabetic neuralgia. | E11.65 E11.42 | **Diabetes**, out of control – code to Diabetes, by type, with hyperglycemia  
**Diabetes**, Type 2, with, hyperglycemia E11.65  
**Diabetes**, with neuralgia E11.42  
*Or* **Diabetes**, Type 2, with, neuralgia E11.42  

**ICD-10-CM Coding Guideline:** If the type of diabetes mellitus is not documented in the medical record the default is E11.-, Type 2 diabetes mellitus.

CG I.C.4.a.2)
Diabetes mellitus and the use of insulin and oral hypoglycemics

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. An additional code should be assigned from category Z79 to identify the long-term (current) use of insulin or oral hypoglycemic drugs. If the patient is treated with both oral medications and insulin, only the code for long-term (current) use of insulin should be assigned. 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.
CG I.C.4.a.3)
Diabetes mellitus and the use of insulin and oral hypoglycemics

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</table>
| 19-year-old patient is admitted because her diabetes is out of control. She has been taking daily insulin injections and Metformin for two years. | E11.65 Z79.4 | **Diabetes, Type 2, with, hyperglycemia E11.65**  
**Long-term (current) drug therapy, insulin Z79.4**  

**ICD-10-CM Coding Guideline:** 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. An additional code should be assigned from category Z79 to identify the long-term (current) use of insulin or oral hypoglycemic drugs. If the patient is treated with both oral medications and insulin, only the code for long-term (current) use of insulin should be assigned. 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.  

CG I.C.4.a.3)
Diabetes mellitus in pregnancy and gestational diabetes

See Section I.C.15. Gestational (pregnancy induced) diabetes
(a) **Underdose of insulin due to insulin pump**

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.

(b) **Overdose of insulin due to insulin pump failure**

The principal or first-listed code for an encounter due to an insulin pump malfunction resulting in an overdose of insulin, should also be T85.6-, Mechanical complication of other specified internal and external prosthetic devices, implants and grafts, followed by code T38.3X1-, Poisoning by insulin and oral hypoglycemic [antidiabetic] drugs, accidental (unintentional).
### CG I.C.4.a.5)(a)

**Underdose of insulin due to insulin pump failure**

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<tbody>
<tr>
<td>28-year-old male with Type I diabetes is treated for hyperglycemia.</td>
<td>T85.614A</td>
<td>Complication, insulin pump, mechanical, breakdown T85.614 (Table of Drugs and Chemicals; Underdosage column) <strong>Insulin</strong> T38.3x6</td>
</tr>
<tr>
<td>His insulin pump was found to be malfunctioning and underdosing.</td>
<td>T38.3x6A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E10.65</td>
<td>Diabetes, Type 1, with, hyperglycemia E10.65</td>
</tr>
</tbody>
</table>

**ICD-10-CM Coding Guideline:** 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.

**CG I.C.4.a.5)(a)**
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</thead>
<tbody>
<tr>
<td>28-year-old male with Type I diabetes is treated for hypoglycemia.</td>
<td>T85.614A</td>
<td>Complication, insulin pump, mechanical, breakdown T85.614 (Table of Drugs and Chemicals; Poisoning accidental column)</td>
</tr>
<tr>
<td></td>
<td>T38.3x1A</td>
<td>Insulin T38.3x1</td>
</tr>
<tr>
<td></td>
<td>E10.649</td>
<td>Diabetes, Type 1, with, hyperglycemia E10.65</td>
</tr>
</tbody>
</table>

ICD-10-CM Coding Guideline: The principal or first-listed code for an encounter due to an insulin pump malfunction resulting in an overdose of insulin, should also be T85.6-, Mechanical complication of other specified internal and external prosthetic devices, implants and grafts, followed by code T38.3X1-, Poisoning by insulin and oral hypoglycemic [antidiabetic] drugs, accidental (unintentional).

CG I.C.4.a.5)(b)
Secondary diabetes mellitus

Codes under categories E08, Diabetes mellitus due to underlying condition, E09, Drug or chemical induced diabetes mellitus, and E13, Other specified diabetes mellitus, identify complications/manifestations associated with secondary diabetes mellitus. 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).

(a) Secondary diabetes mellitus and the use of insulin or oral hypoglycemic drugs
(b) Assigning and sequencing secondary diabetes codes and its causes
Secondary diabetes mellitus and the use of insulin or oral hypoglycemic drugs

For patients with secondary diabetes mellitus who routinely use insulin or oral hypoglycemic drugs, an additional code from category Z79 should be assigned to identify the long-term (current) use of insulin or oral hypoglycemic drugs. If the patient is treated with both oral medications and insulin, only the code for long-term (current) use of insulin should be assigned. Code Z79.4 should not be assigned if insulin is given temporarily to bring a secondary diabetic patient’s blood sugar under control during an encounter.
### Secondary diabetes mellitus and the use of insulin or oral hypoglycemic drugs

**Scenario**

24-year-old female evaluated for her diabetes mellitus due to cystic fibrosis. Her blood glucose is currently under control with daily insulin and oral hypoglycemics.

**Code**

- E84.8
- E08.9
- Z79.4

**Index Pathway/Guideline**

- Fibrosis, cystic, with, specified manifestations NEC E84.8
- Diabetes, due to underlying condition E08.9
- Long-term, insulin Z79.4

**ICD-10-CM Coding Guideline:** For patients with secondary diabetes mellitus who routinely use insulin or oral hypoglycemic drugs, an additional code from category Z79 should be assigned to identify the long-term (current) use of insulin or oral hypoglycemic drugs. If the patient is treated with both oral medications and insulin, only the code for long-term (current) use of insulin should be assigned. Code Z79.4 should not be assigned if insulin is given temporarily to bring a secondary diabetic patient’s blood sugar under control during an encounter.

**CG I.C.4.a.6)(a)**
Assigning and sequencing secondary diabetes codes and its causes

The sequencing of the secondary diabetes codes in relationship to codes for the cause of the diabetes is based on the Tabular List instructions for categories E08, E09 and E13.

(i) Secondary diabetes mellitus due to pancreatectomy

(ii) Secondary diabetes due to drugs
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.
<table>
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<tr>
<th>Scenario</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Patient is two months post-op partial pancreatectomy with resulting</td>
<td>E89.1</td>
<td><strong>Hypoinsulinemia, postprocedural</strong> E89.1</td>
</tr>
<tr>
<td>diabetes which is well-controlled on 2.5 mg of glyburide p.o. daily.</td>
<td>E13.9</td>
<td><strong>Diabetes, postpancreatectomy</strong> – see Diabetes, specified type, NEC</td>
</tr>
<tr>
<td></td>
<td>Z90.411</td>
<td><strong>Absence, pancreas, acquired, partial</strong> Z90.411</td>
</tr>
<tr>
<td></td>
<td>Z79.84</td>
<td><strong>Long-term, oral, antidiabetic</strong> Z79.84</td>
</tr>
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</table>

**ICD-10-CM Coding Guideline:** 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.

**CG I.C.4.a.6)(b)(i)**
Secondary diabetes due to drugs

Secondary diabetes may be caused by an adverse effect of correctly administered medications, poisoning or sequela of poisoning.

See section I.C.19.e for coding of adverse effects and poisoning, and section I.C.20 for external cause code reporting.
**Secondary diabetes mellitus due to drugs**

<table>
<thead>
<tr>
<th>Scenarios</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1) This is the initial encounter for a 79-year-old female seen for corticosteroid-induced diabetes. She has been taking the correct dose of corticosteroids as prescribed for her moderate persistent asthma.</td>
<td>E09.9 T38.0x5A</td>
<td><strong>Diabetes, due to drug or chemical E09.9</strong> (Table of Drugs and Chemicals; Adverse effect column) <strong>Corticosteroid T38.0x5</strong> <strong>Asthma, persistent, moderate J45.40</strong></td>
</tr>
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<td></td>
<td>J45.40</td>
<td></td>
</tr>
<tr>
<td>2) This is the initial encounter for a 79-year-old female seen in the ED diabetes secondary to an accidental overdose of the oral corticosteroids prescribed for her moderate persistent asthma.</td>
<td>T38.0x1A E09.9</td>
<td>(Table of Drugs and Chemicals; Poisoning Accidental column) <strong>Corticosteroid T38.0x1</strong> <strong>Diabetes, due to drug or chemical E09.9</strong> <strong>Asthma, persistent, moderate J45.40</strong></td>
</tr>
<tr>
<td></td>
<td>J45.40</td>
<td></td>
</tr>
</tbody>
</table>

**ICD-10-CM Coding Guideline:** Secondary diabetes may be caused by an adverse effect of correctly administered medications, poisoning or sequela of poisoning.

**CG I.C.4.a.6)(b)(ii)**