

Chapter 4

Endocrine, Nutritional and Metabolic Diseases (E00-E89)

Introduction

Chapter 4 addresses a variety of conditions, including endocrine, nutritional and metabolic diseases. Home care clinicians will find themselves flipping to these pages often, as this chapter contains the codes for diabetes – a common home care diagnosis. Also, codes in Chapter 4 may be used to identify functional activity associated with any neoplasm code from Chapter 2, or by ectopic endocrine tissue. Note: This chapter excludes transitory endocrine and metabolic disorders specific to newborns (Codes P70-P74).

Chapter 4 includes codes for a number of different conditions, including:

- Disorders of the thyroid gland (E00-E07), other disorders of glucose regulation and pancreatic internal secretion (E15-E16), disorders of parathyroid, pituitary, hypothalamus, adrenal glands, ovaries, testes, polyglandular disorders, and other endocrine disorders (E20-E35).
- The largest code group for home health is combination codes related to five categories of diabetes codes. These codes include the type of diabetes mellitus, the body system affected, and the complications affecting that body system. These categories include:
 - E08, Diabetes mellitus due to underlying conditions
 - E09, Drug or chemically induced diabetes mellitus
 - E10, Type 1 diabetes mellitus
 - E11, Type 2 diabetes mellitus
 - E13, Other specified diabetes mellitus
- Intraoperative complications of endocrine system (E36)
- Conditions related to nutrition, such as malnutrition (E40-E46), other nutritional deficiencies (E50-E64), and overweight, obesity, and other hyperalimentation (E65-E68).
- Metabolic disorders (E70-E88) Conditions related to metabolism as well as cystic fibrosis, volume depletion, dehydration and fluid overload, and hyperkalemia & hypokalemia.
- Postprocedural endocrine and metabolic complications and disorders, not elsewhere classified (E89).
- If a patient has a **personal or family history** of a condition reported in this chapter, it may be appropriate to select a code from the Z code section, such as Z86.3- (personal history of endocrine, nutritional and metabolic diseases) or Z83.3 (family history of diabetes mellitus). Remember that personal history is far more important than family history in home health coding. History Z codes should be listed as a secondary diagnosis and should not be listed primary.



Tip! Diabetes that is reported by the patient's provider to be in remission should be coded by assigning E11.A, Type 2 diabetes mellitus without complications in remission. However, if the patient has unresolved comorbid diagnoses that are a result of having diabetes, even if the diabetes is now in remission, the appropriate combination code for diabetes with the manifestation diagnosis should be assigned.

Note, when reporting **endocrine, nutritional, and metabolic diseases in a pregnant patient**, and the condition is complicating the pregnancy, report first a code from Chapter 15 such as O24.419 (diabetes mellitus in pregnancy) or O24.81- (Other pre-existing diabetes mellitus in pregnancy). Pay close attention to instructional notes in the tabular that may give instructions like use additional code. Some of the combination codes require an additional code. The instructional notes will help guide sequencing. In addition, the guidance tells us to use additional codes to capture when a patient is on oral hypoglycemics, insulin and non-insulin antidiabetic injectable drugs. Codes should be applied for each of these medications if they are on them, and all three if they are on all three. It is important as a coder to become familiar with drug names and classifications to be able to properly use the codes from Z79.

The Endocrine System

The endocrine system consists of glands that are located throughout the body. Endocrine glands make chemicals called hormones that pass straight into the bloodstream. These glands include the thalamus, hypothalamus, pituitary, adrenal glands, thyroid, pineal body, parathyroid, and reproductive organs (ovaries and testes). The pancreas is also a part of the endocrine system and plays an important role in both digestion and hormone production in regulation, as it regulates insulin production and secretion.

Hormones can be thought of as chemical messages that communicate with the body and bring about changes. Usually, hormones take effect quite slowly. The endocrine system works with the nervous system and the immune system to help the body cope with different events and stresses. For home health clinicians, the best known of the endocrine disorders is diabetes mellitus.

Range of Functions

Some of the roles of the endocrine system include:

- Growth
- Repair
- Control metabolism
- Sexual reproduction
- Digestion
- Homeostasis (constant internal balance)

How Hormones Work

A hormone will only act on a part of the body if it ‘fits.’ A hormone can be thought of as a ‘key’ and its target site (such as an organ) has specially shaped ‘locks’ on the cell walls. If the key (hormone) fits the lock (on the cell wall), then the hormone will work. The endocrine glands get feedback from the body so they can adjust the hormones and keep them at the right levels. The feedback system is regulated by homeostasis and a need to regulate balance within the body by maintaining stable hormone blood concentrations. Dysfunction occurs when the body does not properly regulate feedback and release mechanisms to maintain homeostasis. One of the more common endocrine dysfunctions encountered in home health is diabetes mellitus.

The Glands

The glands of the endocrine system include:

- **Pituitary gland** is located in the brain. It oversees the other glands and keeps hormone levels in check. It can bring about a change in hormone production somewhere else in the system by releasing its own ‘stimulating’ hormones. The pituitary gland also is connected to the nervous system via part of the brain called the hypothalamus.

- **Thyroid gland** is located in the neck. It controls the rate of metabolism.
- **Parathyroid glands** are located in the neck on either side of the thyroid gland. They control the level of calcium in the bloodstream.
- **Adrenal glands** are on top of each kidney. They make a number of different hormones, including sex hormones, as well as adrenaline and cortisol in times of stress.
- **Pancreas** is located inside the abdominal cavity. An organ of digestion, it makes insulin, which controls the amount of sugar in the bloodstream.
- **Ovaries** are located inside the female pelvis. They make female sex hormones like estrogen.
- **Testes** are located in the male scrotal sack. They make male sex hormones, such as testosterone.
- **Thymus gland** is located beneath the sternum (breast bone). The gland secretes hormones that play a role in the development of the body's immune system. The gland begins to shrink in puberty to be replaced by connective tissue and fat in the adult.

Glands that secrete straight to a target site via ducts or tubes are called exocrine glands. Some examples include:

- Salivary glands
- Sweat glands
- Sebaceous glands

Abbreviations

ACTH	Adrenocorticotrophic hormone
ADH	Antidiuretic hormone = vasopressin
CRH	Corticotropin releasing hormone
FSH	Follicle stimulating hormone
GnRH	Gonadotropin releasing hormone
ICSH	Interstitial-cell stimulating hormone
LH	Luteinizing hormone
LTH	Luteotropic hormone
MSH	Melanocyte stimulating hormone
PTH	Parathyroid hormone
STH	Somatotropic hormone
TRH	Thyrotropin releasing hormone
TSH	Thyroid-stimulating hormone

Major Categories

- Disorders of the thyroid gland (E00-E07)
- Diabetes Mellitus (E08-E13)
- Other disorders of glucose regulation and pancreatic internal secretion (E15-E16)

- Disorders of other endocrine glands (E20-E35)
- Intraoperative complications of endocrine system (E36-E36)
- Malnutrition (E40-E46)
- Other nutritional deficiencies (E50-E64)
- Overweight, obesity, and other hyperalimentation (E65-E68)
- Metabolic disorders (E70-E88)
- Postprocedural endocrine and metabolic complications and disorders, not elsewhere classified (E89)

Descriptions of Major Conditions and Categories Common to Home Health

Diabetes categories are:

E08- Diabetes due to underlying conditions

E09- Drug or chemical induced diabetes

E10- Type 1 diabetes mellitus

E11- Type 2 diabetes mellitus

E13- Other Specified diabetes mellitus

Diabetes subcategory 4th character classifications are:

4th character “0”- diabetes with hyperosmolality

4th character “1”- diabetes with ketoacidosis

4th character “2”- diabetes with kidney complications

4th character “3”- diabetes with ophthalmic complications

4th character “4”- diabetes with neurologic complications

4th character “5”- diabetes with circulatory complications

4th character “6”- diabetes with other specified complications*

4th character “A” - diabetes without complications in remission

*Includes diabetic skin complications, diabetic arthropathy, diabetic oral complications, diabetic hyperglycemia, and diabetic hypoglycemia

Important note: Fourth character subclassification coding is the same for categories E08-E13. Additional 5th, 6th, and/or 7th characters may be additionally required based on specific subclassification code requirements to indicate further specificity. For example, E11.3-, Type 2 Diabetes with ophthalmic complications, indicates a need for a 5th character to further specify the complication type (unspecified retinopathy, mild proliferative retinopathy, moderate nonproliferative retinopathy, proliferative retinopathy, severe nonproliferative retinopathy, diabetic cataract). A 6th character may be required if diabetic retinopathy is coded to indicate the presence or absence of macular edema. And a 7th character is required to indicate laterality (which eye - left, right, both or unspecified).