

Is Coding Hard?

“Is coding hard?” is a common question often asked by prospective or wait list students. In general, the answer to new students is “yes.” But once you learn how to code and gain some experience, it’s only hard sometimes!



Use of Critical Thinking

Coding requires use of critical thinking. According to the National Council for Excellence in Critical Thinking, critical thinking is a process of actively and skillfully conceptualizing, applying, analyzing, synthesizing and evaluating information to reach an answer or conclusion. It requires recognizing problems, prioritizing in problem solving, gathering pertinent information, recognizing assumptions, comprehending and using language with accuracy and clarity.



Here’s what several coding students said about critical thinking and its application to coding:

“Critical thinking - there is no better way to describe the process of assigning a code. Even when exercising one’s best efforts, many challenges and “traps” present themselves in the process of assigning a correct medical code, such as coding before discharge summaries are available or deciphering terminology that the physician uses (e.g. “history of”, even if the condition is under treatment). It is essential for the coder

to apply critical thinking principles while sifting through the medical documentation, querying the physician if necessary, reviewing and applying the coding guidelines when determining the principal diagnosis as well secondary diagnoses, and checking the entire list of possible code choices.”

“Coding is exactly that, critical thinking! You have to read, then reread, and then reread the medical documentation again to make sure you are most certain that you have selected the correct principal diagnosis. Then go back and read through it again to determine the secondary diagnoses which need to be coded. Plus applying all the coding guidelines! I’m sure the more you code and being familiar with the process, it isn’t as hard and doesn’t take as long.”

“Only now have I realized that coding is not easy. It requires in depth knowledge of body structure, medical terminology and disease process, plus critical thinking skills, to be able to decipher the medical documentation and assign the correct codes. Numerous coding guidelines and the instructional notes in the code book need to be considered. Coding requires focus and a lot of deep thinking in order to arrive at the correct code. Sometimes I find myself frustrated when I do not even know where to begin in the coding process because I don’t understand the disease being treated or the procedure being performed. I learned that one wrong character/digit in a code can made the code invalid or incorrect. Overall, coding definitely requires critical thinking skills.”

“Critical thinking skills are very important in coding. I feel coding is similar to detective work – you have to dig for details. I always consider learning something new to be fun and exciting. Coding is always changing, so there will always be new things to learn.”

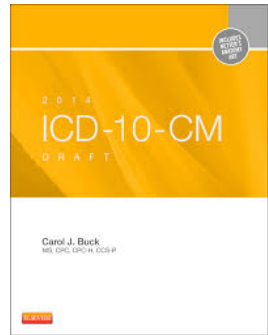
Process of Assigning an ICD-10-CM Code

Step 1: Read and analyze the documentation in the medical record. Here's an excerpt from a Renal Clinic note:

Patient encounters today for his regular hemodialysis session. Patient has end-stage renal disease secondary to Type 1 diabetic nephropathy. Dialysis was performed without complication.

Step 2: Apply the definition of principal diagnosis (the reason established, after study, to be responsible for the admission/encounter). In this case, the patient came to the clinic for a dialysis treatment for end-stage renal disease. (Dialysis is a procedure; ESRD is the diagnosis.)

Step 3: Assign a code. First look in the disease index in the ICD-10-CM code book under Disease > renal > end-stage = N18.6



Disease, diseased

- Reclus' (cystic) - see [Mastopathy, cystic](#)
- rectum [K62.9](#)
- specified NEC [K62.89](#)
- Refsum's (heredopathia atactica polyneuritiformis) [G60.1](#)
- renal (functional) (pelvis) - see also [Disease, kidney N28.9](#)
 - with
 - edema - see [Nephrosis](#)
 - glomerular lesion - see [Glomerulonephritis](#)
 - with edema - see [Nephrosis](#)
 - interstitial nephritis [N12](#)
 - acute [N28.9](#)
 - chronic - see also [Disease, kidney, chronic N18.9](#)
 - cystic, congenital [Q61.9](#)
 - diabetic - see [E08-E13 with .22](#)
 - end-stage (failure) [N18.6](#)
 - due to hypertension [I12.0](#)
 - fibrocystic (congenital) [Q61.8](#)
 - hypertensive - see [Hypertension, kidney](#)
 - lupus [M32.14](#)
 - phosphate-losing (tubular) [N25.0](#)

Step 4: Verify code N18.6 in the tabular list of the ICD-10-CM code book. Pay attention to the instructional notes in the tabular list (see yellow highlighted areas). Notice the instructional notes tell the coder to assign a code for diabetes first (code first any associated diabetic chronic kidney disease). The notes also remind the code to use an additional (secondary) code to show the dialysis status (Z99.2).

N18 Chronic kidney disease (CKD)

Code first any associated:

diabetic chronic kidney disease (E08.22, E09.22, E10.22, E11.22, E13.22)

hypertensive chronic kidney disease (I12.-, I13.-)

Use additional code to identify kidney transplant status, if applicable, (Z94.0)

N18.1 Chronic kidney disease, stage 1

N18.2 Chronic kidney disease, stage 2 (mild)

N18.3 Chronic kidney disease, stage 3 (moderate)

N18.4 Chronic kidney disease, stage 4 (severe)

N18.5 Chronic kidney disease, stage 5

Excludes1: chronic kidney disease, stage 5 requiring chronic dialysis (N18.6)

N18.6 End stage renal disease

Chronic kidney disease requiring chronic dialysis

Use additional code to identify dialysis status (Z99.2)

N18.9 Chronic kidney disease, unspecified

Chronic renal disease

Chronic renal failure NOS

Chronic renal insufficiency

Chronic uremia

Step 5: Assign a code for the Type 1 diabetes. Apply the knowledge that end-stage renal disease is also known as Stage 6 chronic kidney disease. Look in the disease index under Diabetes > Type 1 > with > chronic kidney disease = E10.22

Diabetes, diabetic

type 1 E10.9

- with
 - amyotrophy E10.44
 - arthropathy NEC E10.618
 - autonomic (poly) E10.43
 - cataract E10.36
 - Charcot's joints E10.610
 - chronic kidney disease E10.22
 - circulatory complication NEC E10.59
 - complication E10.8
 - specified NEC E10.69
 - dermatitis E10.620
 - foot ulcer E10.621
 - gangrene E10.52
 - gastroparesis E10.43
 - glomerulonephrosis, intracapillary E10.21

Step 6: Verify code E10.22 in the tabular list. Notice the instructional note reminds one to assign code N18.6 for ESRD (CKD stage 6) as an additional (secondary) code.

E10.2 Type 1 diabetes mellitus with kidney complications

E10.21 Type 1 diabetes mellitus with diabetic nephropathy

Type 1 diabetes mellitus with intercapillary glomerulosclerosis
Type 1 diabetes mellitus with intracapillary glomerulonephrosis
Type 1 diabetes mellitus with Kimmelstiel-Wilson disease

E10.22 Type 1 diabetes mellitus with diabetic chronic kidney disease

Use additional code to identify stage of chronic kidney disease (N18.1-N18.6)

E10.29 Type 1 diabetes mellitus with other diabetic kidney complication

Type 1 diabetes mellitus with renal tubular degeneration

Step 7: Apply the coding guideline which states if a patient has end-stage renal disease (chronic kidney disease, stage 6), the intermediate condition of nephropathy or nephrotic syndrome does not need to be coded. Therefore, a code for diabetic nephropathy is not assigned.

Step 8: Submit final codes for this encounter as:

Principal diagnosis code: **E10.22**

Secondary diagnoses codes: **N18.6** and **Z99.2**

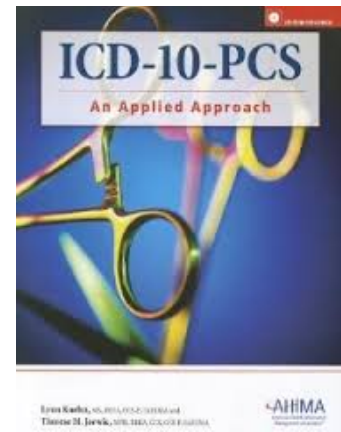
Process of Assigning an ICD-10-PCS Code

Step 1: Read and analyze the documentation in the medical record. Here's an excerpt from an operative report:

Procedures: Excisional breast biopsy, right, followed by total mastectomy

The **right breast** was prepped and draped in the usual sterile fashion. A curvilinear incision was made in the upper outer quadrant to include the localization wire. The skin was incised. Hemostasis was achieved with cautery device where the **breast tissue was excised** around the wire. The 2.1 cm specimen was sent for frozen section. Pathological results from the frozen section indicated adenocarcinoma so the procedure continued with a total mastectomy.

A transverse elliptical incision was made in the breast of the skin to include nipple areolar complex as well as the recent biopsy site. The flaps were raised superiorly and just below the clavicle medially to the sternum, laterally towards the latissimus dorsi, rectus abdominus fascia. The dissection was started medially and extended laterally towards the right axilla. **The entire right breast was removed.** Hemostasis was achieved.



Step 2: Review the ICD-10-PCS coding guidelines and definitions to determine those applicable to this case.

Guideline B3.4b: Biopsy followed by more definitive treatment

If a diagnostic Excision, Extraction, or Drainage procedure (biopsy) is followed by a more definitive procedure, such as Destruction, Excision or Resection at the same procedure site, both the biopsy and the more definitive treatment are coded. Example: Biopsy of breast followed by partial mastectomy at the same procedure site, both the biopsy and the partial mastectomy procedure are coded.

Definition of Excision: Cutting out or off, without replacement, a portion of a body part. The qualifier “diagnostic” is used to identify excision procedures that are biopsies.

Definition of Resection: Cutting out or off, without replacement, all of a body part.

Step 3: Assign a code for the breast biopsy. Look in the ICD-10-PCS index under the main term “biopsy.”

Biopsy

see Drainage with qualifier Diagnostic
see Excision with qualifier Diagnostic
Bone Marrow see Extraction with qualifier Diagnostic

The definition above instructs one to use “Excision” if only a portion of the body part was cut out such as with this breast biopsy. Look in the index under the main term “excision.”

Excision continued
Breast continued
Right **OHBT**
Supernumerary **OHBY**

Step 4: Based on the index entry, go to the PCS table “OHB” to build the PCS code. (See yellow highlighted areas.) The biopsy was done through an open incision in the breast. The definition of excision instructs one to use the qualifier “diagnostic” for biopsies. The ICD-10-PCS code for this breast biopsy is 0HBT0ZX.

OHB

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<i>Section</i>	O	Medical and Surgical		
<i>Body System</i>	H	Skin and Breast		
<i>Operation</i>	B	Excision: Cutting out or off, without replacement, a portion of a body part		
	<i>Body Part</i>	<i>Approach</i>	<i>Device</i>	<i>Qualifier</i>
	0 Skin, Scalp 1 Skin, Face 2 Skin, Right Ear 3 Skin, Left Ear 4 Skin, Neck 5 Skin, Chest 6 Skin, Back 7 Skin, Abdomen 8 Skin, Buttock 9 Skin, Perineum A Skin, Genitalia B Skin, Right Upper Arm C Skin, Left Upper Arm D Skin, Right Lower Arm E Skin, Left Lower Arm F Skin, Right Hand G Skin, Left Hand H Skin, Right Upper Leg J Skin, Left Upper Leg K Skin, Right Lower Leg L Skin, Left Lower Leg M Skin, Right Foot N Skin, Left Foot Q Finger Nail R Toe Nail	X External	Z No Device	X Diagnostic Z No Qualifier
	T Breast, Right U Breast, Left V Breast, Bilateral W Nipple, Right X Nipple, Left Y Supernumerary Breast	0 Open 3 Percutaneous 7 Via Natural or Artificial Opening 8 Via Natural or Artificial Opening Endoscopic X External	Z No Device	X Diagnostic Z No Qualifier

Step 5: Assign a PCS code for the total mastectomy. Look in the index under the main term “mastectomy.”

Mastectomy

see Excision, Skin and Breast [OHB](#)

see Resection, Skin and Breast [OHT](#)

The definition above instructs one to use “Resection” if all of the body part was cut out or off such as with this total mastectomy.

Step 6: Based on the index entry, go to the PCS table “OHT” to build the PCS code. (See yellow highlighted areas.) The ICD-10-PCS code for the total mastectomy is 0HTT0ZZ.

OHT

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<i>Section</i>	O	Medical and Surgical			
<i>Body System</i>	H	Skin and Breast			
<i>Operation</i>	T	Resection: Cutting out or off, without replacement, all of a body part			
		<i>Body Part</i>	<i>Approach</i>	<i>Device</i>	
		Q Finger Nail R Toe Nail W Nipple, Right X Nipple, Left	X External	Z No Device	Z No Qualifier
		T Breast, Right U Breast, Left V Breast, Bilateral Y Supernumerary Breast	O Open	Z No Device	Z No Qualifier

Step 7: Submit the final codes for this operative encounter as: **0HBT0ZX** and **0HTT0ZZ**.

Conclusion

As you can see, coding includes applying knowledge of medical terminology, body structure, and disease process to analyze medical record documentation. Next coding guidelines must be reviewed and applied. Finally codes are located in the code book index and verified with special attention given to any instructional notes. Coding requires focused attention to detail and use of critical thinking skills. Is coding easy? Maybe not easy, but challenging and interesting!