Abstracting for Medical and Surgical Procedures (Section 0)

Chapter 47

Learning Objectives

After completing this chapter, you should have the skills to:

47.1 Spell and define the key words, medical terms, and abbreviations related to medical and surgical procedures. (Remember)

47.2 Adhere to PCS guidelines for Medical and Surgical procedures. (Apply)

47.3 Examine and abstract information from the medical record for each character of Medical and Surgical procedures. (Analyze)

Chapter Outline

Key Terms and Abbreviations

diagnostic procedure
divided
External
Open
operative report
Percutaneous
Percutaneous Endoscopic procedure report
therapeutic procedure
Via Natural or Artificial Opening
Via Natural or Artificial Opening Endoscopic
Via Natural or Artificial Opening Endoscopic with Percutaneous Endoscopic Assistance

In addition to the key terms listed here, students should know the terms defined within tables in this chapter.

INTRODUCTION

When you visit a new city, you might first go to the visitor's information center to gather some general information about the area before exploring individual attractions. Your introduction to the PCS Medical and Surgical Section is presented in two chapters. In this chapter, you become familiar with how the largest section in the PCS manual is structured and how to abstract information for each character of the code. Most importantly, you learn many of the definitions that are the cornerstone of ICD-10-PCS and are essential to accurate code assignment. Chapter 48 walks you through how to assign and arrange Medical and Surgical codes. Then, Chapters 49–53 discuss details about each root operation in this section of the coding manual.

MEDICAL AND SURGICAL PROCEDURE BASICS

Physicians perform a wide range of procedures on any body part. No coder can be familiar with every possible procedure, so it is important to apply medical terminology skills to combine familiar word roots, prefixes, and suffixes to define new procedural terms. Procedural terms combine the word root(s) for one or more body parts, such as *gastr/o*, with a suffix that describes the type of procedure, such as *-ectomy*. Refer to Table 25-1 in Chapter 25 to review procedural suffixes.

Although PCS establishes its own terminology and definitions of root operations, physicians will continue to use traditional Latin-based medical terms, such as *gastrectomy*, and eponyms, such as the Whipple procedure, which is one type of gastrectomy. Latin-based medical terms appear in the PCS Index and redirect coders to the most likely root operations. There is no direct correlation between medical terms and root operation definitions. Coders must read the operative report to determine exactly what was done and interpret this information in light of the root operations.

The surgical approach describes how the surgeon accessed the operative site. A variety of methods may be used for most procedures. The surgeon's decision is based on the reason the procedure is being done, the circumstances of the patient, the proven effectiveness of one approach over others, and other factors. In some cases, the surgeon may plan to use one approach then need to change to another approach due to complicating factors. For example, the surgeon may plan to perform an endoscopic cholecystectomy, but due to adhesions must change to an open approach. PCS definitions of the approach character are discussed in detail later in this chapter.

Procedure Reports

After completing a procedure, physicians prepare a **procedure report** or **operative report** that describes the details of what was done. The format varies with each physician or hospital but must include the following information:

- Date of procedure
- Name of procedure performed
- Names of the surgeon and all assistants
- Preprocedure or provisional diagnosis
- A detailed description of the procedure, including:
  - Patient preparation
  - Anesthesia
  - Instruments and supplies used
  - Incisions made
  - Visualized structures
  - Findings
  - Alterations performed
  - Tissue removed
  - Estimated blood loss
  - Closing process
  - Patient status
- Postprocedure diagnosis

The procedure report may be entered directly into an electronic health record (EHR) by the surgeon or be dictated, then transcribed. The procedure report is maintained in a designated section of the patient's overall medical record.

CODING PRACTICE

Exercise 47.1 Medical and Surgical Basics

Instructions: Use your medical terminology skills and resources to define the following terms, then look them up in the ICD-10-PCS Index.

Follow these steps:

- Use slash marks "/" to break down each term into its root(s) and suffix.
- Define the meaning of the word based on the meaning of each word part.
- Look up the term in the ICD-10-PCS Index, and write down the name(s) of root operation(s) the Index cross-references you to and the Table(s), if provided.
- Do not assign any codes.

CODING PRACTICE *(continued)*

Example: gastrectomy gastr/ectomy	Meaning *excision of the stomach*	Root Operation(s) *Excision, Resection*
1. angioplasty	Meaning _____	Root Operation(s) _____
2. hysterectomy	Meaning _____	Root Operation(s) _____
3. ovariocentesis	Meaning _____	Root Operation(s) _____
4. arthrodesis	Meaning _____	Root Operation(s) _____
5. herniorrhaphy	Meaning _____	Root Operation(s) _____
6. adhesiolysis	Meaning _____	Root Operation(s) _____
7. colostomy	Meaning _____	Root Operation(s) _____
8. tracheotomy	Meaning _____	Root Operation(s) _____
9. esophagoplication	Meaning _____	Root Operation(s) _____
10. cholecystopexy	Meaning _____	Root Operation(s) _____

CODING GUIDELINES FOR MEDICAL AND SURGICAL PROCEDURES

The Medical and Surgical Section is the largest Section of ICD-10-PCS, containing 31 body systems and 31 root operations, and comprising approximately 85% of PCS. ICD-10-PCS provides guidelines for Medical and Surgical codes in section B of the PCS OGCR. Five subdivisions of the guidelines, B2 through B6, correspond to each character within a Medical and Surgical code.

Characters of Medical and Surgical Procedures

The seven characters of Medical and Surgical PCS codes are summarized below. Information later in this chapter discusses in detail how to abstract needed information from the medical records.

- *Character 1: Section*—The Section value for Medical and Surgical is **0**. The characters of Medical and Surgical procedure codes are shown in ■ TABLE 47-1.
- *Character 2: Body System*—The second character in the Medical and Surgical Section defines the body system, general physiological system, or anatomic region. PCS divides most organ systems into multiple body system values in order to achieve a high level of granularity (*detail*). The Index is organized with the root operation as the Main Term with the first-level subterm often being the body system. Coders must select the most specific body system value available, which is often more specific than an anatomic system. Search for a subterm that identifies the specific body system—such as **Joint, Knee**—before selecting a subterm for the broader anatomic region, such as **Knee Region**.
- *Character 3: Root Operation*—The Medical and Surgical Section has 31 root operations, the most of any Section. Root operations are the core of PCS coding because they serve as Main Terms in the Index. Coders cannot assign a root operation based on the common meaning of a word such as "removal" or "excision;" they must apply the full definition that PCS provides in the Tables (PCS OGCR B3.1a). The PCS definition of all root operations appears in the appendix of most ICD-10-PCS coding manuals.
- *Character 4: Body Part*—The body part character identifies the specific anatomic site where the physician performed the procedure. In most cases, the Index directs coders not only to the correct Table, but also to the correct Character 4 value.
- *Character 5: Approach*—The approach character identifies how the surgeon accessed the operative site. Every code must be assigned an approach value from the PCS table. The Table lists only the approach values applicable to the root operation and body part. The seven values for approach in PCS are:
  - Open (0)
  - Percutaneous (3)
  - Percutaneous Endoscopic (4)
  - Via Natural or Artificial Opening (7)
  - Via Natural or Artificial Opening Endoscopic (8)
  - Via Natural or Artificial Opening Endoscopic with Percutaneous Endoscopic Assistance (F)
  - External (X)
- *Character 6: Device*—The device character identifies the type of material intentionally left in a patient for a

Table 47-1 ■ **SEVEN CHARACTERS OF MEDICAL AND SURGICAL PROCEDURES**

1	2	3	4	5	6	7
Section 0	Body System	Root Operation	Body Part	Approach	Device	Qualifier

therapeutic reason at the conclusion of a procedure. Medical equipment and supplies used to perform a procedure, as well as sutures, radiological markers, and temporary postoperative wound drains, *are not coded as devices* in PCS. Every code must be assigned a device value from the PCS table. The Table lists only the device values applicable to the root operation and body part. If a device is not left in the patient, select the value **Z No device** from the PCS table.

- *Character 7: Qualifier*—The qualifier character describes a wide range of additional attributes that may be applicable to a procedure. Every code must be assigned a qualifier value from the PCS table that corresponds to the root operation and body part. The Table lists only the qualifiers applicable to the root operation and body part. If there is no information to be reported for the qualifier, select the value **Z No qualifier** from the PCS table.

Official Guidelines for Coding and Reporting

PCS OGCR for Medical and Surgical procedures comprises section B of the guidelines, which is organized by character:

- B2 Body System
- B3 Root Operation
- B4 Body Part
- B5 Approach
- B6 Device
- No guidelines are provided for Character 7 Qualifier

PCS OGCR appears in most publishers' editions of the ICD-10-PCS coding manual and can be downloaded from the CMS website at **www.cms.gov**. Guidelines are updated annually on October 1.

Guidelines explain general coding rules and how to handle unusual exceptions. The following information highlights general guidelines for each section and summarizes additional detailed guidelines. PCS OGCR lists examples for each guideline that are not repeated here. Coders should become intimately familiar with the guidelines and example and review them frequently. If you are already familiar with CPT coding for physicians, be careful not to confuse CPT guidelines with PCS guidelines. The two are not comparable and are sometimes contradictory.

B2 Body System Guidelines

General guidelines for B2 Body System state that procedure codes in the general **Anatomical Regions** body systems can be used when the procedure is performed on an anatomic region rather than a specific body part. Body systems specified as *upper* (as in **Upper Arteries**) identify areas located above the diaphragm. Body systems specified as *lower* (as in **Lower Arteries**) identify areas located below the diaphragm.

B3 Root Operation Guidelines

General guidelines for B3 Root Operation emphasize that the full definition of a PCS root operation must be applied to determine the appropriate code. Components of a procedure specified in the root operation definition and explanation are not coded separately. Procedural steps necessary to reach the operative site and close the operative site, including anastomosis of a tubular body part, are not coded separately (PCS OGCR B3.1).

Multiple procedures are coded when (PCS OGCR B3.2):

- The same root operation is performed on different PCS body parts. Assign separate codes for the root operation on each body part.
- The same root operation is repeated in multiple anatomic sites that are classified into one PCS body part. Assign duplicate codes for the same root operation and same body part.
- Multiple root operations with distinct objectives are performed on the same PCS body part. Assign separate codes for the each root operation on the same body parts.
- The intended root operation is attempted using one approach, but is converted to a different approach. Assign separate codes for each approach on the same root operation and body part.

When a procedure is discontinued or incomplete (PCS OGCR B3.2), code the procedure to the root operation performed. If a procedure is discontinued before any other root operation is performed, code the root operation **Inspection** of the body part or anatomic region inspected.

Biopsy procedures (PCS OGCR B3.4) are coded using the root operations Excision, Extraction, or Drainage and the Character 7 Qualifier **Diagnostic**. If a diagnostic Excision, Extraction, or Drainage procedure (biopsy) is followed by a more definitive procedure at the same procedure site, such as Destruction, Excision, or Resection, code both the biopsy and the more definitive treatment. Code the biopsy using **Diagnostic** in Character 7. Code the definitive procedure using **No qualifier** or other appropriate value listed in the PCS Table for Character 7.

Code the body part that specifies the deepest layer reached when if the root operations Excision, Repair, or Inspection are performed on overlapping layers of the musculoskeletal system (PCS OGCR 3.5).

PCS OGCR B3 also provides guidelines on coding as many specific root operations. These guidelines are discussed in later chapters of this text where individual root operations are covered.

B4 Body Part Guidelines

General guidelines for B4 Body Part provide instructions on how to code the body part in situations where there might be confusion:

- If a procedure is performed on a portion of a body part that does not have a separate PCS body part value, code the next largest body part value.
- If the prefix *peri-* is combined with a body part name to identify the documented site of the procedure, and the site

of the procedure is not further specified, then code to the most specific named PCS body part.

- If a procedure is performed on a continuous section of a tubular body part, code the body part value corresponding to the furthest anatomical site from the point of entry.

Guidelines B4.2 through B4.8 discuss branches of body parts; bilateral body part values, coronary arteries; tendons, ligaments, bursae, and fascia near a joint; skin, subcutaneous tissue and fascia overlying a joint; fingers and toes; and the upper and lower intestinal tract.

B5 Approach Guidelines

Guidelines for B4 Approach discuss details on how to assign certain approach values for unusual situations:

- Code the Open approach if open procedures use endoscopic assistance through the same access site.
- Code the External approach if procedures are performed within an orifice on structures that are visible without the aid of instrumentation such as an endoscope to visualize the site. This includes the mouth, tonsils, and visible portions of the ear, nose, anus, and vagina.
- Code the Percutaneous approach if procedures are performed percutaneously via a device placed for the procedure.

B6 Device Guidelines

A device is coded in Character 6 only if a device remains after the procedure is completed. In limited root operations, PCS provides Character 7 Qualifier values **Temporary** and **Intraoperative** for specific procedures where the purpose of the device is to be utilized for a brief duration during the procedure or current inpatient stay. Materials such as sutures, ligatures, radiological markers, and temporary post-operative wound drains are considered integral to performing a procedure and are not coded as PCS devices. Procedures performed on a device only and not on a body part are specified in the root operations Change, Irrigation, Removal, and Revision. A separate procedure to put in a drainage device is coded to the root operation Drainage.

SUCCESS STEP

PCS is unique among medical coding systems because it provides standard, official definitions for each character of the code. Although it may feel intimidating to memorize definitions, this feature makes the system user-friendly and logical.

ABSTRACTING MEDICAL AND SURGICAL PROCEDURES

Abstracting Medical and Surgical procedures requires abstracting unique information for each character. These criteria are discussed next. Separate Key Criteria for Abstracting tables are provided for each character of the PCS code.

Abstracting the Body System (Character 2)

Coders should be familiar with the PCS body systems and verify that the code they ultimately select is consistent with the correct body system value. PCS divides all anatomic systems except the endocrine system into multiple values (■ TABLE 47-2) for greater specificity. You must be able to identify the body system to locate the correct subterms when using the Index.

Table 47-2 ■ **MEDICAL AND SURGICAL CHARACTER 2: BODY SYSTEM VALUES WITH ORGAN SYSTEM**

Value	PCS Body System Description	Organ System
0	Central Nervous System	Nervous system
1	Peripheral Nervous System	
2	Heart and Great Vessels	Cardiovascular system
3	Upper Arteries	
4	Lower Arteries	
5	Upper Veins	
6	Lower Veins	
7	Lymphatic and Hemic System	Blood and immune system
8	Eye	Special senses
9	Ear, Nose, Sinus	Special senses (Ear) and Respiratory system
B	Respiratory System	
C	Mouth and Throat	Digestive system
D	Gastrointestinal System	
F	Hepatobiliary System and Pancreas	
G	Endocrine System	Endocrine system
H	Skin and Breast	Integumentary system
J	Subcutaneous Tissue and Fascia	
K	Muscles	Muscular system
L	Tendons	
M	Bursae and Ligaments	
N	Head and Facial Bones	Skeletal system
P	Upper Bones	
Q	Lower Bones	
R	Upper Joints	
S	Lower Joints	
T	Urinary System	Genitourinary system
U	Female Reproductive System	
V	Male Reproductive System	
W	Anatomical Regions, General	Body areas
X	Anatomical Regions, Upper Extremities	
Y	Anatomical Regions, Lower Extremities	

Source: Adapted from Department of Health and Human Services, Centers for Medicare and Medicaid Services, ICD-10-PCS Coding Manual.

For example, you should know that the median nerve is part of the nervous system, but you also need to identify whether it is part of the central or peripheral nervous systems because these are subdivided in PCS. Knowing the options PCS presents for a traditional anatomic system makes it easier to navigate the Index when you move on to the next step, assigning codes.

Body system values **W**, **X**, and **Y** describe Anatomic Regions, which are used when a procedure is performed on an area that is larger than a specific body part (PCS OGCR B2.1a). Do not use these body system values when a more specific value is available.

For example, for a procedure on the elbow, look up the Main Term for the root operation, then the subterm **Joint**, then the second-level subterm **Elbow**. Use the subterm **Elbow Region** only when an area larger than the joint is affected. Examples of situations in which an *Anatomic Region* should be used include the following types of procedures:

- Control of postprocedural bleeding in an extremity
- Amputation of all or part of an extremity
- Drainage of a body cavity

CODING PRACTICE

Exercise 47.2 Abstracting the Body System

Instructions: Refer to Table 47-2, Medical and Surgical Character 2: Body System Values with Organ System. Using your knowledge of anatomy, identify the PCS body system each anatomic site belongs to. Refer to anatomic illustrations elsewhere in this text or in your own resources when needed. Write the character and name of the PCS body system on the lines provided.

1. Extraocular muscle. Character ____ Name _____
2. Left carotid artery. Character ____ Name _____
3. Thyroid gland. Character ____ Name _____
4. Right hip tendon. Character ____ Name _____
5. Cervical vertebral joint. Character ____ Name _____

Abstracting the Root Operation (Character 3)

Identifying the correct root operation is the basis of ICD-10-PCS coding, so coders must learn the differences between similar root operations. This enables them to abstract appropriately. Physicians are not expected to use PCS terminology when documenting. Coders must read what physicians document and equate it to the definitions provided by PCS (PCS OGCR A11). To assign a root operation, its full definition in the PCS manual must be applied (PCS OGCR B3.1a). If the full definition is not applicable, continue searching for another root operation.

Refer to PCS OGCR B3, which provides further details on root operations. Then, follow key criteria for abstracting Medical and Surgical procedures to identify the correct root operation.

To abstract for Medical and Surgical procedures, coders must read the procedure report, then use the resources in this chapter and the PCS coding manual to follow these steps:

1. Answer the questions in the general abstracting table (■ TABLE 47-3) to get a basic understanding of the procedure.
2. Refer to(■ TABLE 47-4) Key Criteria for Abstracting Root Operations. Answer the questions in the first column. One question should be answered *Yes*, the rest should be answered *No*.
3. For the Root Operation Question that was answered *Yes*, refer to the middle column to identify the root operations that could apply.
4. Identify the one root operation that matches the procedure documented using one of the following sources:
   - Refer to the right column of this table to locate the specific Key Criteria for Abstracting table from later chapters of this text. These abstracting tables guide you through the listed root operations in detail.
   - ■ Table 47-5 (page 978), Comparison of Medical and Surgical Root Operations, divides root operations into groups of procedures with similar objectives. Use this table as a resource to help quickly distinguish between similar root operations.
   - Look up the definition of each of the applicable root operations in the ICD-10-PCS coding manual appendix, "Root Operation Definitions" (■ TABLE 47-6, page 979).
5. Write down the root operation name because it will be the Main Term when you use the Index to assign the code, which is discussed in Chapter 48 of this text.
6. Repeat the abstracting process for each procedure that was performed.

PCS OGCR B3 provides several guidelines on how to code the root operation and how to code multiple procedures in situations where the choice might be unclear. These were summarized earlier in this chapter.

Abstracting criteria for Medical and Surgical-Related procedures and Ancillary procedures are presented in Chapters 54 and 55 of this text.

Table 47-3 ■ KEY CRITERIA FOR ABSTRACTING MEDICAL AND SURGICAL PROCEDURES (GENERAL)

- ❑ What is the stated procedure?
- ❑ What organ or body part is involved?
- ❑ How many sites are treated?
- ❑ What is the laterality (if applicable)?
- ❑ Is the procedure description what you would expect based on the name of the procedure?
- ❑ What surgical approach is used? (*Refer to Table 47-9, Key Criteria for Abstracting the Approach.*)
- ❑ Is a therapeutic device left in the patient after the procedure? (*Refer to Table 47-11, Key Criteria for Abstracting the Device.*)
- ❑ Was more than one procedure, or a combined procedure, performed?

Source: ©PB Resources, Inc. Used with permission.

Table 47-4 ■ KEY CRITERIA FOR ABSTRACTING ROOT OPERATIONS

Root Operation Questions	Root Operation (Value)	Key Criteria for Abstracting (in this text)
❑ Did the procedure take out some or all of a body part without replacement?	Destruction (5) Detachment (6) Excision (B) Extraction (D) Resection (T)	See Table 49-9
❑ Did the procedure take out solids, fluids, or gases from a body part?	Drainage (9) Extirpation (C) Fragmentation (F)	See Table 52-8
❑ Did the procedure involve cutting or separation only, within or around a body part?	Division (8) Release (N)	See Table 52-11
❑ Did the procedure put in, put back, or move some or all of a body part?	Reattachment (M) Reposition (S) Transfer (X) Transplantation (Y)	See Table 50-7
❑ Did the procedure alter the diameter or route of a tubular body part?	Bypass (1) Dilation (7) Occlusion (L) Restriction (V)	See Table 51-7
❑ Did the procedure involve an external device left in place in, on, or in replacement of a body part?	Change (2) Insertion (H) Removal (P) Replacement (R) Revision (W) Supplement (U)	See Table 53-11
❑ Did the procedure involve examination only?	Inspection (J) Map (K)	See Table 52-14
Operations Involving Other Repairs ❑ Did the procedure stop or attempt to stop postprocedural or other acute bleeding? ❑ Did the procedure restore a body part to its normal structure?	 Control (3) Repair (Q)	See Table 53-14
Operations Involving Other Objectives ❑ Did the procedure render a joint or articular body part immobile? ❑ Was the procedure for cosmetic purposes only, without affecting the function of the body part? ❑ Did the procedure use biological or synthetic material to form a new body part to replicate a missing body part?	 Fusion (G) Alteration (0) Creation (4)	See Table 53-18

Source: ©PB Resources, Inc. Used with permission.

Table 47-5 ■ **COMPARISON OF ROOT OPERATIONS**

***Group*: Root Operations That Take Out Some or All of a Body Part**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Destruction	5	Eradicating without replacement	Some/all of a body part	Fulguration of endometrium
Detachment	6	Cutting out/off without replacement	Extremity only, any level	Amputation above elbow
Excision	B	Cutting out/off without replacement	Some of a body part	Breast lumpectomy
Extraction	D	Pulling out/off without replacement	Some/all of a body part	Suction D&C
Resection	T	Cutting out/off without replacement	All of a body part	Total mastectomy
***Group*: Root Operations That Take Out Solids/Fluids/Gases from a Body Part**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Drainage	9	Taking/letting out	Fluids and/or gases from a body part	Incision and drainage
Extirpation	C	Taking/cutting out	Solid matter in a body part	Thrombectomy
Fragmentation	F	Breaking into pieces	Solid matter within a body part	Lithotripsy
***Group*: Root Operations Involving Cutting or Separation Only**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Division	8	Cutting into/separating	Within a body part	Neurotomy
Release	N	Freeing a body part from constraint	Around a body part	Adhesiolysis
***Group*: Root Operations That Put In/Put Back or Move Some/All of a Body Part**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Reattachment	M	Putting back a detached body part	Some/all of a body part	Reattach finger
Reposition	S	Moving a body part to normal or other suitable location	Some/all of a body part	Move undescended testicle
Transfer	X	Moving a body part to function for a similar body part	Some/all of a body part	Skin transfer flap
Transplantation	Y	Putting in a living body part from a person/animal	Some/all of a body part	Kidney transplant
***Group*: Root Operations That Alter the Diameter or Route of a Tubular Body Part**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Bypass	1	Altering route of passage of contents	Tubular body part	Coronary artery bypass graft (CABG)
Dilation	7	Expanding naturally or artificially created orifice/lumen	Tubular body part	Percutaneous transluminal coronary angioplasty (PTCA)
Occlusion	L	Completely closing naturally or artificially created orifice/lumen	Tubular body part	Fallopian tube ligation
Restriction	V	Partially closing naturally or artificially created orifice/lumen	Tubular body part	Gastroesophageal fundoplication
***Group*: Root Operations That Always Involve Devices**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Change	2	Exchanging device without cutting/puncturing	In/on a body part	Drainage tube change
Insertion	H	Putting in nonbiological device	In/on a body part	Central line insertion
Removal	P	Taking out device	In/on a body part	Central line removal
Replacement	R	Putting in device that replaces a body part	Some/all of a body part	Total hip replacement
Revision	W	Correcting a malfunctioning/displaced device	In/on a body part	Revision of pacemaker
Supplement	U	Putting in device that reinforces or augments a body part	In/on a body part	Abdominal wall herniorrhaphy using mesh

Table 47-5 ■ (*continued*)

***Group*: Root Operations Involving Examination Only**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Inspection	J	Visual/manual exploration	Some/all of a body part	Diagnostic cystoscopy
Map	K	Locating electrical impulses/functional areas	Brain/cardiac conduction mechanism	Cardiac electro-physiological study
***Group*: Root Operations That Define Other Repairs**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Control	3	Stopping/attempting to stop postprocedural or other acute bleeding	Anatomic region	Post-prostatectomy bleeding control, bleeding ulcer
Repair	Q	Restoring body part to its normal structure	Some/all of a body part	Suture laceration
***Group*: Root Operations That Define Other Objectives**				
Root Operation	**Value**	**Objective of Procedure**	**Procedure Site**	**Example**
Alteration	0	Modifying body part for cosmetic purposes without affecting function	Some/all of a body part	Face lift
Creation	4	Using biological or synthetic material to form a new body part that replicates the anatomic structure or function of a missing body part	Perineum, valve	Sex change/artificial vagina/penis, atrioventricular valve creation
Fusion	G	Unification or immobilization	Joint or articular body part	Spinal fusion

Source: Department of Health and Human Services, Centers for Medicare and Medicaid Services, ICD-10-PCS Coding Manual.

Table 47-6 ■ **ROOT OPERATION DEFINITIONS IN ALPHABETICAL ORDER, WITH EXPLANATIONS AND EXAMPLES**

Value	Root Operation	Description
0	Alteration	**Definition:** Modifying the anatomic structure of a body part without affecting the function of the body part. **Explanation:** Principal purpose is to improve appearance. **Includes/Examples:** Face lift, breast augmentation
1	Bypass	**Definition:** Altering the route of passage of the contents of a tubular body part. **Explanation:** Rerouting contents of a body part to a downstream area of the normal route, to a similar route and body part, or to an abnormal route and dissimilar body part. Includes one or more anastomoses, with or without the use of a device. **Includes/Examples:** Coronary artery bypass, colostomy formation
2	Change	**Definition:** Taking out or off a device from a body part and putting back an identical or similar device in or on the same body part without cutting or puncturing the skin or a mucous membrane. **Explanation:** All Change procedures are coded using the approach External. **Includes/Examples:** Urinary catheter change, gastrostomy tube change
3	Control	**Definition:** Stopping, or attempting to stop, postprocedural or other acute bleeding. **Explanation:** The site of the bleeding is coded as an anatomic region and not to a specific body part. **Includes/Examples:** Control of post-prostatectomy hemorrhage, control of intracranial subdural hemorrhage, control of bleeding duodenal ulcer, control of retroperitoneal hemorrhage
4	Creation	**Definition:** Putting in or on biological or synthetic material to form a new body part that to the extent possible replicates the anatomic structure or function of an absent body part. **Explanation:** Used for gender reassignment surgery and corrective procedures in individuals with congenital anomalies. **Includes/Examples:** Creation of vagina in a male, creation of right and left atrioventricular valve from common atrioventricular valve
5	Destruction	**Definition:** Physical eradication of all or a portion of a body part by the direct use of energy, force, or a destructive agent. **Explanation:** None of the body part is physically taken out. **Includes/Examples:** Fulguration of rectal polyp, cautery of skin lesion

(*continued*)

Table 47-6 ■ (*continued*)

Value	Root Operation	Description
6	Detachment	**Definition:** Cutting off all or a portion of the upper or lower extremities. **Explanation:** The body part value is the site of the detachment, with a qualifier if applicable to further specify the level where the extremity was detached. **Includes/Examples:** Below-knee amputation, disarticulation of shoulder
7	Dilation	**Definition:** Expanding an orifice or the lumen of a tubular body part. **Explanation:** The orifice can be a natural orifice or an artificially created orifice. Accomplished by stretching a tubular body part using intraluminal pressure or by cutting part of the orifice or wall of the tubular body part. **Includes/Examples:** Percutaneous transluminal angioplasty, pyloromyotomy
8	Division	**Definition:** Cutting into a body part without draining fluids and/or gases from the body part in order to separate or transect a body part. **Explanation:** All or a portion of the body part is separated into two or more portions. **Includes/Examples:** Spinal cordotomy, osteotomy
9	Drainage	**Definition:** Taking or letting out fluids and/or gases from a body part. **Explanation:** The Diagnostic qualifier is used to identify drainage procedures that are biopsies. **Includes/Examples:** Thoracentesis, incision and drainage
B	Excision	**Definition:** Cutting out or off, without replacement, a portion of a body part. **Explanation:** The Diagnostic qualifier is used to identify excision procedures that are biopsies. **Includes/Examples:** Partial nephrectomy, liver biopsy
C	Extirpation	**Definition:** Taking or cutting out solid matter from a body part. **Explanation:** The solid matter may be an abnormal by-product of a biological function or a foreign body; it may be imbedded in a body part or in the lumen of a tubular body part. The solid matter may or may not have been previously broken into pieces. **Includes/Examples:** Thrombectomy, choledocholithotomy
D	Extraction	**Definition:** Pulling or stripping out or off all or a portion of a body part by the use of force. **Explanation:** The Diagnostic qualifier is used to identify extraction procedures that are biopsies. **Includes/Examples:** Dilation and curettage, vein stripping
F	Fragmentation	**Definition:** Breaking solid matter in a body part into pieces. **Explanation:** Physical force (e.g., manual, ultrasonic) applied directly or indirectly is used to break the solid matter into pieces. The solid matter may be an abnormal by-product of a biological function or a foreign body. The pieces of solid matter are not taken out. **Includes/Examples:** Extracorporeal shockwave lithotripsy, transurethral lithotripsy
G	Fusion	**Definition:** Joining together portions of an articular body part, rendering the articular body part immobile. **Explanation:** The body part is joined together by fixation device, bone graft, or other means. **Includes/Examples:** Spinal fusion, ankle arthrodesis
H	Insertion	**Definition:** Putting in a nonbiological appliance that monitors, assists, performs, or prevents a physiological function but does not physically take the place of a body part. **Includes/Examples:** Insertion of radioactive implant, insertion of central venous catheter
J	Inspection	**Definition:** Visually and/or manually exploring a body part. **Explanation:** Visual exploration may be performed with or without optical instrumentation. Manual exploration may be performed directly or through intervening body layers. **Includes/Examples:** Diagnostic arthroscopy, exploratory laparotomy
K	Map	**Definition:** Locating the route of passage of electrical impulses and/or locating functional areas in a body part. **Explanation:** Applicable only to the cardiac conduction mechanism and the central nervous system. **Includes/Examples:** Cardiac mapping, cortical mapping
L	Occlusion	**Definition:** Completely closing an orifice or the lumen of a tubular body part. **Explanation:** The orifice can be a natural orifice or an artificially created orifice. **Includes/Examples:** Fallopian tube ligation, ligation of inferior vena cava

Table 47-6 ■ (*continued*)

Value	Root Operation	Description
M	Reattachment	**Definition:** Putting back in or on all or a portion of a separated body part to its normal location or other suitable location. **Explanation:** Vascular circulation and nervous pathways may or may not be reestablished. **Includes/Examples:** Reattachment of hand, reattachment of avulsed kidney
N	Release	**Definition:** Freeing a body part from an abnormal physical constraint by cutting or by the use of force. **Explanation:** Some of the restraining tissue may be taken out, but none of the body part is taken out. **Includes/Examples:** Adhesiolysis, carpal tunnel release
P	Removal	**Definition:** Taking out or off a device from a body part. **Explanation:** If a device is taken out and a similar device put in without cutting or puncturing the skin or mucous membrane, the procedure is coded to the root operation Change. Otherwise, the procedure for taking out a device is coded to the root operation Removal. **Includes/Examples:** Drainage tube removal, cardiac pacemaker removal
Q	Repair	**Definition:** Restoring, to the extent possible, a body part to its normal anatomic structure and function. **Explanation:** Used only when the method to accomplish the repair is not one of the other root operations. **Includes/Examples:** Colostomy takedown, suture of laceration
R	Replacement	**Definition:** Putting in or on biological or synthetic material that physically takes the place and/or function of all or a portion of a body part. **Explanation:** The body part may have been taken out or replaced, or may be taken out, physically eradicated, or rendered nonfunctional during the Replacement procedure. A Removal procedure is coded for taking out the device used in a previous replacement procedure. **Includes/Examples:** Total hip replacement, bone graft, free skin graft
S	Reposition	**Definition:** Moving to its normal location, or other suitable location, all or a portion of a body part. **Explanation:** The body part is moved to a new location from an abnormal location or from a normal location where it is not functioning correctly. The body part may or may not be cut out or off to be moved to the new location. **Includes/Examples:** Reposition of undescended testicle, fracture reduction
T	Resection	**Definition:** Cutting out or off, without replacement, all of a body part. **Includes/Examples:** Total nephrectomy, total lobectomy of lung
V	Restriction	**Definition:** Partially closing an orifice or the lumen of a tubular body part. **Explanation:** The orifice can be a natural orifice or an artificially created orifice. **Includes/Examples:** Esophagogastric fundoplication, cervical cerclage
W	Revision	**Definition:** Correcting, to the extent possible, a portion of a malfunctioning device or the position of a displaced device. **Explanation:** Revision can include correcting a malfunctioning or displaced device by taking out or putting in components of the device, such as a screw or pin. **Includes/Examples:** Adjustment of position of pacemaker lead, recementing of hip prosthesis
U	Supplement	**Definition:** Putting in or on biological or synthetic material that physically reinforces and/or augments the function of a portion of a body part. **Explanation:** The biological material is nonliving or is living and from the same individual. The body part may have been previously replaced, and the Supplement procedure is performed to physically reinforce and/or augment the function of the replaced body part. **Includes/Examples:** Herniorrhaphy using mesh, free nerve graft, mitral valve ring annuloplasty, put a new acetabular liner in a previous hip replacement
X	Transfer	**Definition:** Moving, without taking out, all or a portion of a body part to another location to take over the function of all or a portion of a body part. **Explanation:** The body part transferred remains connected to its vascular and nervous supply. **Includes/Examples:** Tendon transfer, skin pedicle flap transfer
Y	Transplantation	**Definition:** Putting in or on all or a portion of a living body part taken from another individual or animal to physically take the place and/or function of all or a portion of a similar body part. **Explanation:** The native body part may or may not be taken out, and the transplanted body part may take over all or a portion of its function. **Includes/Examples:** Kidney transplant, heart transplant

Source: Department of Health and Human Services, Centers for Medicare and Medicaid Services, ICD-10-PCS Coding Manual.

CODING PRACTICE

Exercise 47.3 Abstracting the Root Operation

Instructions: Refer to Table 47-5, Comparison of Root Operations. Locate the name of the root operation in the first column of the table, then the value, objective, site, or example requested in the appropriate column. Write your answer to the question in the space provided.

1. What procedure is an example of the root operation Extirpation? _____
2. What is the objective of the procedure for the root operation Fragmentation? _____
3. What is the objective of the procedure for the root operation Restriction? _____
4. What is the objective of the procedure for the root operation Removal? _____
5. What is the procedure site for the root operation Fusion? _____
6. What is the value for the root operation Transplantation? _____
7. What procedure is an example of the root operation Map? _____
8. What procedure is an example of the root operation Occlusion? _____
9. What is the procedure site for the root operation Detachment? _____
10. What is the value of the root operation Repair? _____

Abstracting the Body Part (Character 4)

The PCS Body Part character identifies the anatomic site where the procedure is performed. The definition of each body part value in the Medical and Surgical Section is unique to each body system. For example, in body system **8 Eye**, the body part value **1** is **Left Eye**. In body system **L Tendons**, the body part value **1** is **Right Shoulder Tendon**. Body parts appear as first- or second-level subterms in the Index. Refer to ■ TABLE 47-7, Key Criteria for Abstracting the Body Part.

PCS subdivides some organs and other anatomic sites into multiple body part values to achieve greater specificity. For example, for some root operations the large intestine has multiple values. Coders must review the available body part values in a specific root operation table and choose the one applicable to the current procedure. The breakdown of body parts for the large intestine is as follows:

- Large Intestine—Use this value when the procedure is performed on the entire large intestine.
- Large Intestine, Right—Use this value when the procedure is performed on the right half of the intestine.
- Large Intestine, Left—Use this value when the procedure is performed on the left half of the intestine.
- Transverse Colon—Use this value when the procedure is performed only on the transverse segment of the large intestine.
- Descending Colon—Use this value when the procedure is performed only on the descending segment of the large intestine.
- Sigmoid Colon—Use this value when the procedure is performed only on the sigmoid segment of the large intestine.

The PCS Appendix, "Body Part Key," identifies the correct PCS body part value for many anatomic sites. For example, *acetabulofemoral joint* is classified to the PCS value **Hip Joint, Right** or **Hip Joint, Left**. Use of the "Body Part Key" is discussed in detail in Chapter 48, "Assigning Codes for Medical and Surgical Procedures."

PCS OGCR B4 provides several guidelines on how to code the body part in situations where the choice might be unclear. These were summarized earlier in this chapter.

Table 47-7 ■ KEY CRITERIA FOR ABSTRACTING THE BODY PART

- ❑ What organ or body part is involved?
- ❑ What body system is the site part of?
- ❑ How many sites are treated?
- ❑ What is the laterality (if applicable)?
- ❑ Does PCS subdivide the anatomic site into multiple segments or lobes for detailed body system or body part values?
  - If so, which segment applies to this procedure? (Refer to PCS coding manual Index, Tables, and Body Part Key.)

CODING PRACTICE

Exercise 47.4 Abstracting the Body Part

Instructions: Answer the abstracting questions about the following procedural statements. Do not assign any codes.

1. Closed reduction of nasal bone fracture
   a. What organ or body part is involved? _____
   b. What body system is the site part of? _____
   c. How many sites are treated? _____
   d. What is the laterality (if applicable)? _____
   e. Does PCS subdivide the anatomic site into multiple segments or lobes for detailed body system or body part values? If so, which segment applies to this procedure? _____
2. Banding of esophageal vein
   a. What organ or body part is involved? _____
   b. What body system is the site part of? _____
   c. How many sites are treated? _____
   d. What is the laterality (if applicable)? _____
   e. Does PCS subdivide the anatomic site into multiple segments or lobes for detailed body system or body part values? If so, which segment applies to this procedure? _____
3. Fine-needle aspiration of the upper lobe of the right lung
   a. What organ or body part is involved? _____
   b. What body system is the site part of? _____
   c. How many sites are treated? _____
   d. What is the laterality (if applicable)? _____
   e. Does PCS subdivide the anatomic site into multiple segments or lobes for detailed body system or body part values? If so, which segment applies to this procedure? _____
4. Exchange of a drainage tube from the right acetabulofemoral joint following a total hip replacement
   a. What organ or body part is involved? _____
   b. What body system is the site part of? _____
   c. How many sites are treated? _____
   d. What is the laterality (if applicable)? _____
   e. Does PCS subdivide the anatomic site into multiple segments or lobes for detailed body system or body part values? If so, which segment applies to this procedure? _____
5. Placement of a pacemaker lead in the left atrium
   a. What organ or body part is involved? _____
   b. What body system is the site part of? _____
   c. How many sites are treated? _____
   d. What is the laterality (if applicable)? _____
   e. Does PCS subdivide the anatomic site into multiple segments or lobes for detailed body system or body part values? If so, which segment applies to this procedure? _____

Abstracting the Approach (Character 5)

The approach character identifies the surgical technique used to reach the site of the procedure. The Medical and Surgical section uses seven different values to define the approach (■ TABLE 47-8). An appendix in most ICD-10-PCS manuals defines each approach. PCS OGCR B5 discusses specific coding situations related to an open approach with percutaneous endoscopic assistance, the external approach, and percutaneous procedures performed with a device, such as fragmentation of kidney stones performed via percutaneous nephrostomy.

Every PCS code must contain a valid value for Character 5, Approach. *None* is never an option. The approach comprises three components: the access location, method, and type of instrumentation. Refer to ■ TABLE 47-9 for abstracting questions to ask about the surgical approach. These are discussed next.

The *access location*, also called the anatomic approach, refers to the anatomic site through which the target site for the procedure is reached. The two general types of access locations are the skin/mucous membranes and an external orifice. The skin or mucous membranes can be punctured or incised to reach the procedure site and is the access location for all percutaneous and open procedures. An external orifice may be natural—such as the nose, ears, mouth, urethra, anus, or vagina—or artificial, such as a colostomy stoma. An endoscopic procedure can be performed percutaneously or through an external orifice. The External approach identifies procedures performed directly on the skin or mucous membranes, such as the excision of a skin lesion, and those performed indirectly through the application of force, such as closed reduction of a fracture. Procedures performed in the mouth always use the External approach.

Table 47-8 ■ **MEDICAL AND SURGICAL APPROACH DEFINITIONS**

Value	Approach	Definition
0	Open	Cutting through the skin or mucous membrane and any other body layers necessary to visually expose the site of the procedure
3	Percutaneous	Entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to reach the site of the procedure without visualization
4	Percutaneous Endoscopic	Entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to reach and visualize the site of the procedure
7	Via Natural or Artificial Opening	Entry of instrumentation through a natural or artificial external opening to reach the site of the procedure
8	Via Natural or Artificial Opening Endoscopic	Entry of instrumentation through a natural or artificial external opening to reach and visualize the site of the procedure
F	Via Natural or Artificial Opening with Percutaneous Endoscopic Assistance	Entry of instrumentation through a natural or artificial external opening and entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to aid in the performance of the procedure
X	External	Procedures performed directly on the skin or mucous membrane and procedures performed indirectly by the application of external force through the skin or mucous membrane

Source: Department of Health and Human Services, Centers for Medicare and Medicaid Services, ICD-10-PCS Coding Manual.

Table 47-9 ■ **KEY CRITERIA FOR ABSTRACTING THE APPROACH**

Key Criteria Questions	Method	PCS Approach
❑ Is a full incision made?	Skin and deeper layers are cut open to reach internal organs/sites.	Open (0)
❑ Is a needle or other puncture device used?	Skin is not cut open to expose deeper layers.	Percutaneous (3)
❑ Is an endoscope used?	Access is made through small incisions in the skin.	Percutaneous endoscopic (4)
	Access is made thorough a natural or pre-existing artificial opening.	Via natural or artificial opening endoscopic (8)
❑ Is a natural opening used for access to internal sites?	Direct entry access is made without endoscope.	Via natural or artificial opening (7)
	Access is made using an endoscope.	Via natural or artificial opening endoscopic (8)
❑ Is access made through a pre-existing artificial opening?	Direct entry access is made without endoscope.	Via natural or artificial opening (7)
	Access is made using an endoscope.	Via natural or artificial opening endoscopic (8)
❑ Is the procedure performed on the surface of the skin?	Skin is not cut open to reach deeper layers.	External (X)
❑ Is the procedure performed in the mouth or mucous membrane?	Site can be seen without use of an endoscope.	External (X)
❑ Is pressure applied to the skin?	Skin is not cut open. Direct or indirect force is applied, to move an internal structure.	External (X)
❑ Are there two access sites: one through a natural or artificial opening and a second through the skin with an endoscope?	Laparoscopically assisted vaginal hysterectomy Laparoscopically assisted anorectal pull-through procedure	Via natural or artificial opening with endoscopic assistance (F)

Source: © PB Resources, Inc. Used with permission.

Method identifies how the access location is entered to reach an internal body part. An open procedure involves cutting through the skin or mucous membrane and subcutaneous layers to reach the procedure site. The root operation Detachment always uses the open approach. When instrumentation, such as an endoscope, is used, the method identifies whether the instrumentation is introduced percutaneously or through an external orifice. The incisions during a percutaneous procedure are part of that method and are not identified or coded separately.

Instrumentation is specialized equipment used to reach an internal body part, such as an endoscope or needle. Use of a needle is classified as the Percutaneous approach in PCS. Endoscopy is a generic name for any procedure using a fiber-optic viewing scope. The procedure may also carry the name of the site accessed, such as colonoscopy, laparoscopy, or gastroscopy. Use of an endoscope can be classified as Percutaneous Endoscopic *or* Endoscopic Via Natural or Artificial Opening in PCS, depending whether the procedure site is accessed through the skin or through an opening. ■ TABLE 47-10 (page 988) lists common types of endoscopy procedures and the approach used.

The seven PCS approach values are discussed next. These terms and definitions may differ slightly from those used in CPT. PCS OGCR B5 provides several guidelines on how to code the approach in situations where the choice might be unclear. These were summarized earlier in this chapter.

Open (0)

In a procedure using the **Open** approach, an incision is made through the skin and subcutaneous tissue to open the operative site to view (■ FIGURE 47-1A). Fascia and muscles are **divided** (*separated*) and the organ, body cavity, or region is directly visualized with the naked eye by the surgeon. All steps to access the procedure site, including the initial incision on the skin, subsequent divisions to reach the surgical site, and layered closure, are part of the procedure. An open approach is the most invasive and carries the highest risk to the patient. Surgeons will generally opt for a less invasive approach whenever possible. Code the Open approach when an open procedure is performed *with* percutaneous endoscopic assistance because PCS does not provide a unique value for these approaches used simultaneously. Examples of the open approach are an open appendectomy, abdominal hysterectomy, and open coronary artery bypass graft (CABG).

Percutaneous (3)

In the approach **Percutaneous**, the skin is punctured or a very small incision is made to access the site, but a full-length incision is not made (FIGURE 47-1B). An example is a needle biopsy of any joint or organ.

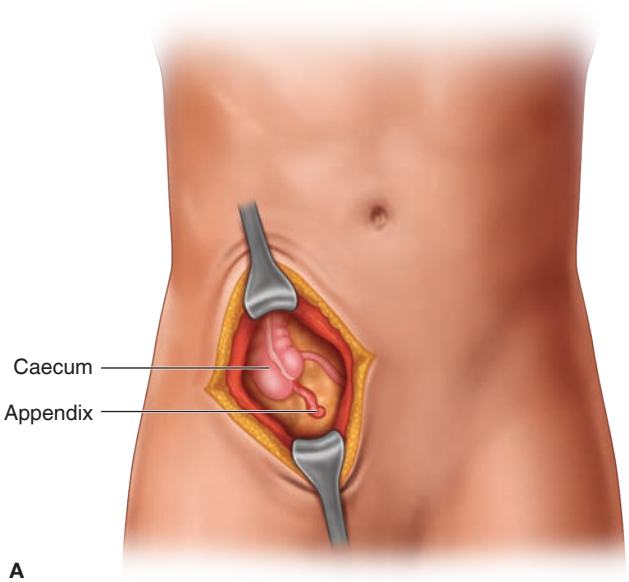
Percutaneous Endoscopic (4)

In the approach **Percutaneous Endoscopic**, the surgeon makes several—usually two to four—small incisions, approximately one-half to one inch in length. A fiber-optic camera

Table 47-10 ■ **TYPES OF ENDOSCOPY PROCEDURES**

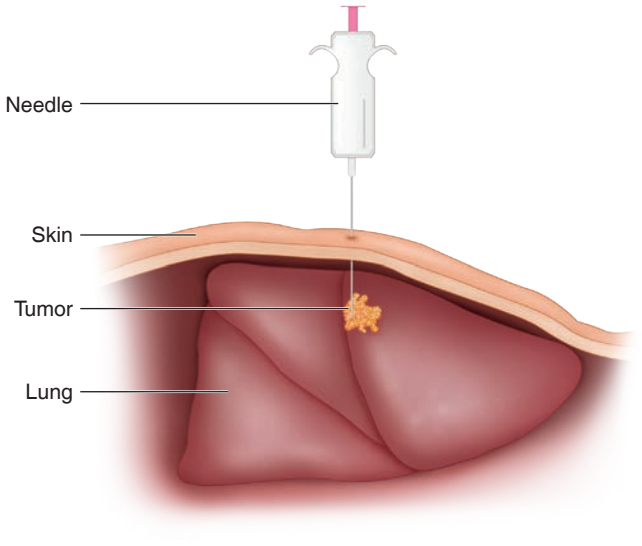
Endoscopy Name	Procedure Site	Insertion Point	Type of Access
Anoscopy	Anus	Anus	Natural opening
Arthroscopy	Joint	Through a small incision in the skin	Percutaneous
Bronchoscopy	Lungs	Nose or mouth	Natural opening
Colonoscopy	Colon/large intestine	Anus Colostomy site	Natural opening Artificial opening
Cystoscopy	Bladder	Urethra Cystostomy site	Natural opening Artificial opening
Enteroscopy	Small intestine	Mouth or anus Ileostomy or jejunostomy site	Natural opening Artificial opening
Esophagogastroduodenoscopy	Esophagus, stomach, and duodenum	Nose or mouth	Natural opening
Esophagoscopy	Esophagus	Nose or mouth	Natural opening
Gastroscopy	Stomach	Nose or mouth	Natural opening
Hysteroscopy	Uterus	Vagina	Natural opening
Laparoscopey	Abdominal or pelvic cavity	Through a small incision in the skin	Percutaneous
Laryngoscopy	Larynx (voice box)	Nose or mouth Tracheostomy site	Natural opening Artificial opening
Proctoscopy	Anal cavity, rectum, or sigmoid colon	Anus	Natural opening
Rhinoscopy	Nose	Nose	Natural opening
Sigmoidoscopy	Sigmoid colon	Anus	Natural opening
Ureteroscopy	Ureter	Urethra	Natural opening

Source: © PB Resources, Inc. Used with permission.



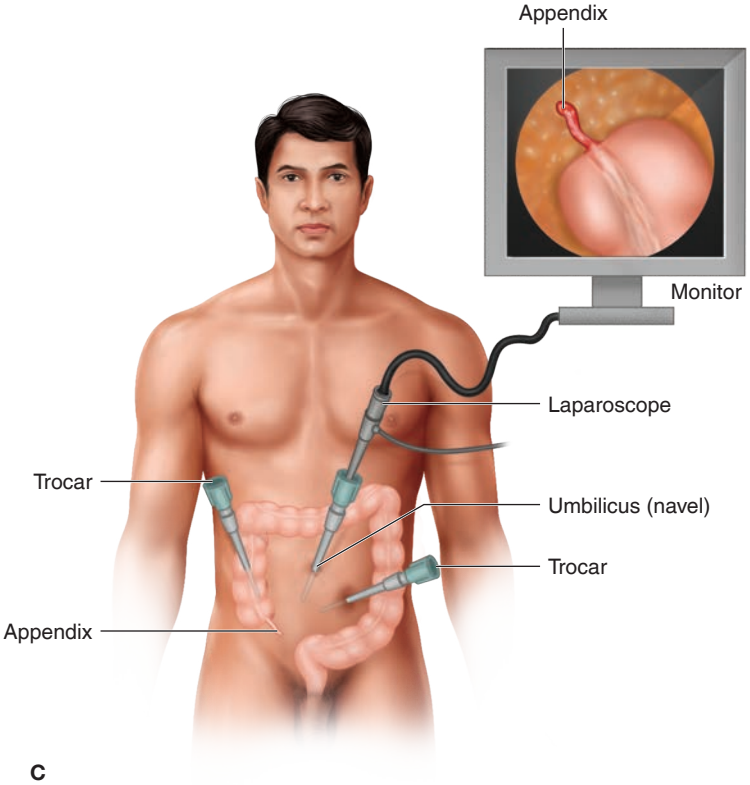
A

Approach: Open (0)
Example: Access through a major incision in the skin to perform an open appendectomy.



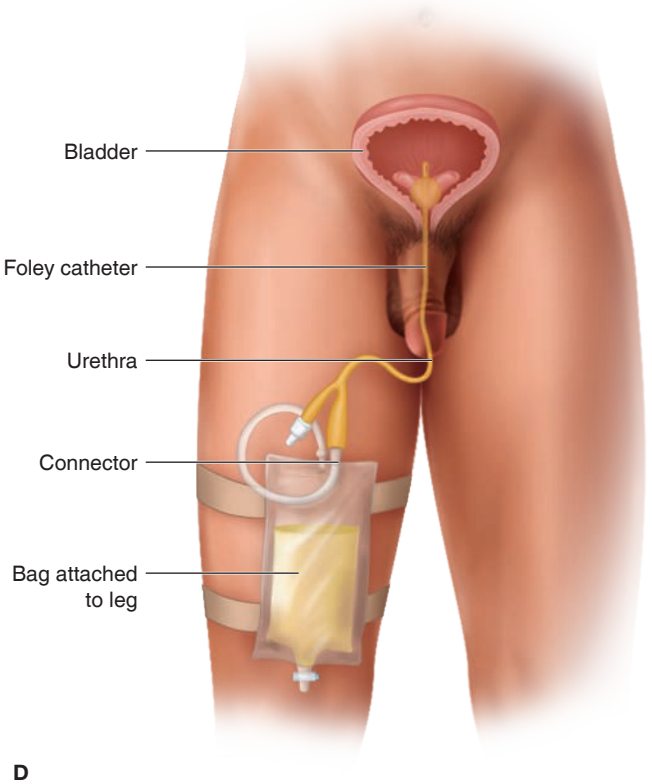
B

Approach: Percutaneous (3)
Example: Access through a puncture in skin during a needle biopsy of the lung.



C

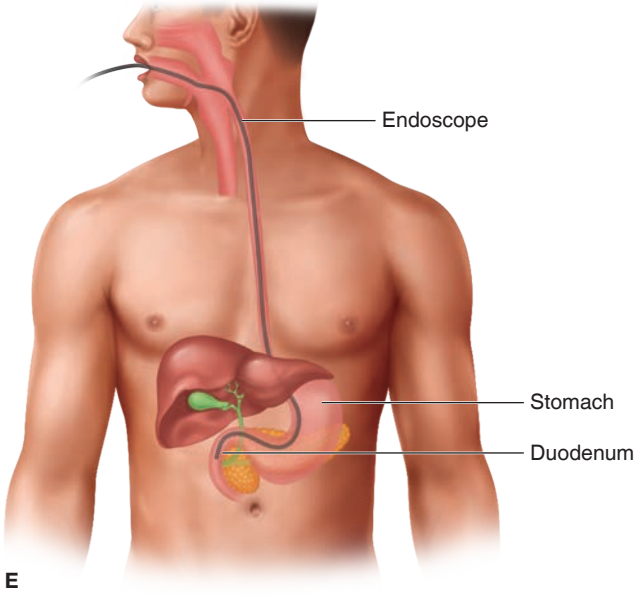
Approach: Percutaneous Endoscopic (4)
Example: Access through the skin with an endoscope during a laparoscopic appendectomy.



D

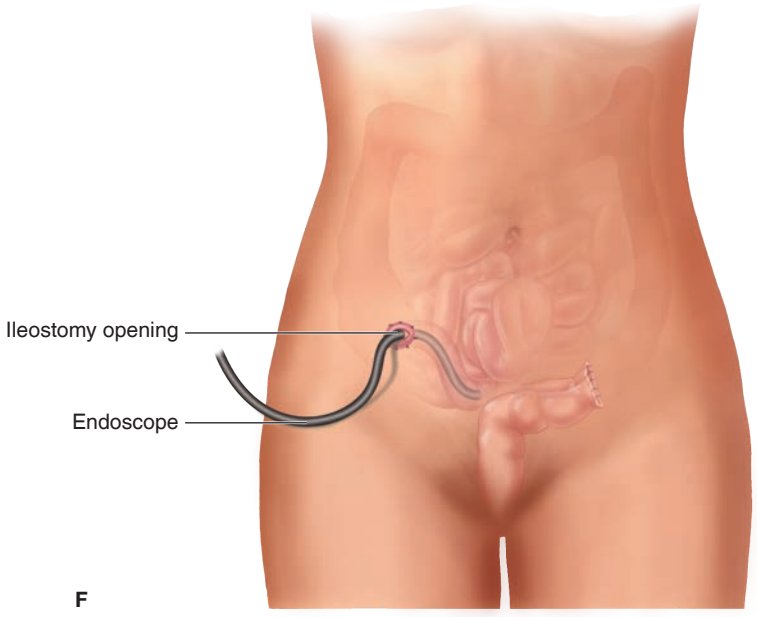
Approach: Via Natural or Artificial Opening (7)
Example: Access through a natural opening (urethra) for insertion of a Foley catheter.

Figure 47-1 ■ Examples of PCS approaches. *Source: ©PB Resources, Inc. Used with permission.*



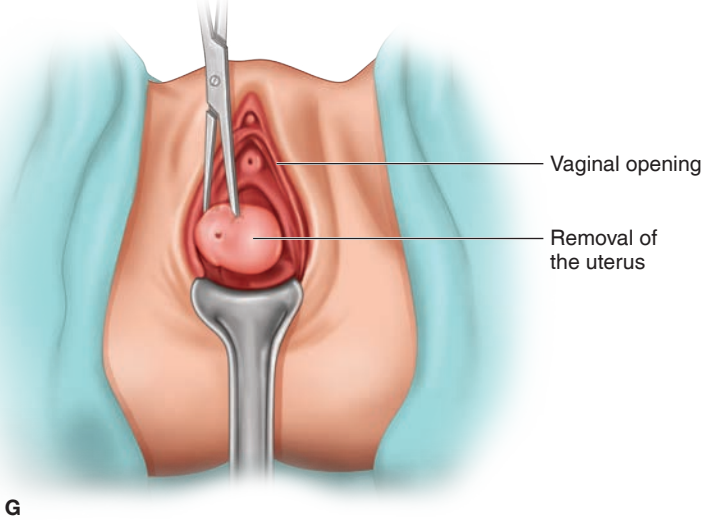
E

Approach: Via Natural or Artificial Opening Endoscopic (8)
Example: Access through a natural opening (oral cavity) during an esophagogastroduodenoscopy.



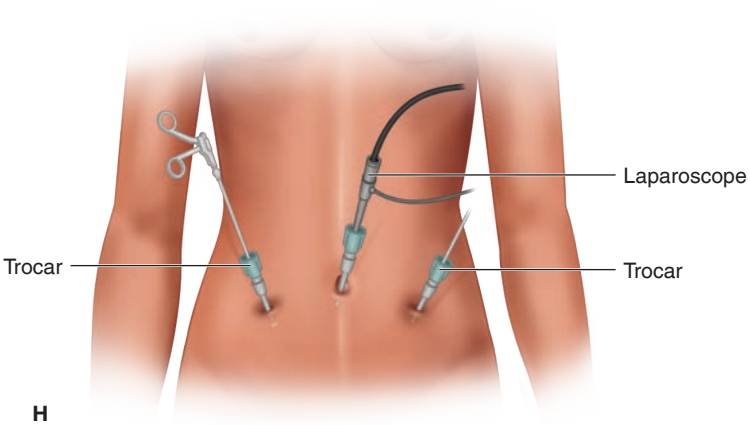
F

Approach: Via Natural or Artificial Opening Endoscopic (8)
Example: Access through an artifical opening (ileostomy opening) to examine the inside of the bowel.



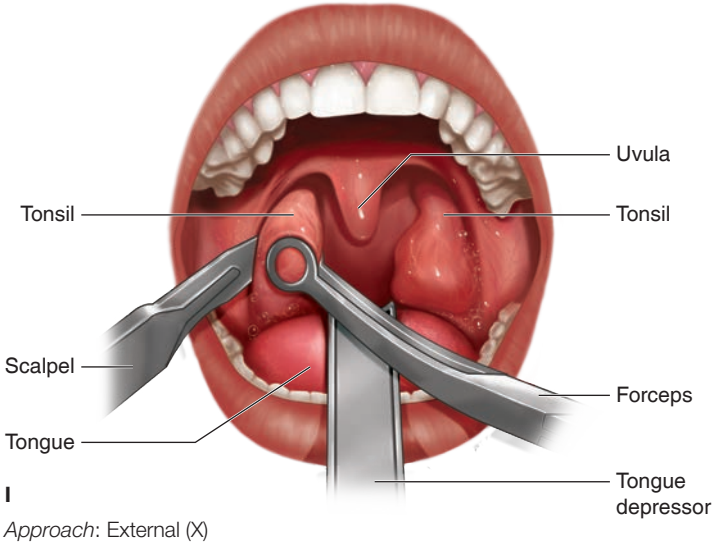
G

Approach: Via Natural or Artificial Opening with Percutaneous Endoscopic Assistance (F)
Example: Natural opening component of removing the uterus through the vagina during a laparoscopically assisted vaginal hysterectomy (LAVH).



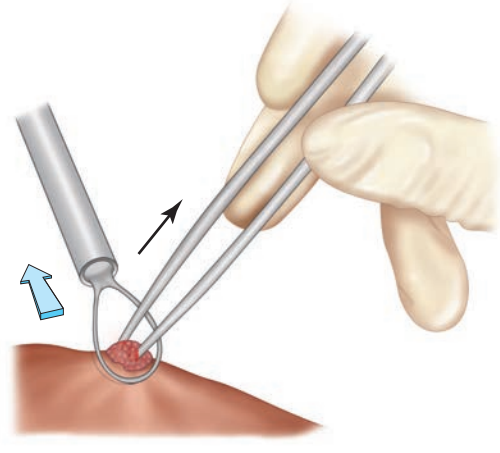
H

Approach: Via Natural or Artificial Opening with Percutaneous Endoscopic Assistance (F)
Example: Percutaneous endoscopic component with access through the abdomen during a laparoscopically assisted vaginal hysterectomy (LAVH).



I

Approach: External (X)
Example: Tonsillectomy performed on the mucous membranes.



J

Approach: External (X)
Example: Removal of a skin lesion.

is inserted through one incision and surgical instruments are inserted through the other openings. The camera transmits an image of the operative site to a television monitor (FIGURE 47-1C). Examples of the percutaneous endoscopic approach are a laparoscopic appendectomy and arthroscopic repair of a joint.

Via Natural or Artificial Opening (7)

In the approach **Via Natural or Artificial Opening**, the surgeon accesses the surgical site through a body opening that already exists, such as the mouth, nose, ear, anus, vagina, or urethra (FIGURE 47-1D). Artificially made openings—such as a tracheostomy or colostomy mouth—may also be used. A new incision is not required. Examples of using a natural opening are insertion of an endotracheal tube through the oral cavity or placement of a Foley catheter through the urinary tract. An example of using an artificial opening is fragmentation of kidney stones through an existing nephrostomy tube.

Via Natural or Artificial Opening Endoscopic (8)

In the approach **Via Natural or Artificial Opening Endoscopic**, the surgeon inserts an endoscope through an existing natural (FIGURE 47-1E) or artificial (FIGURE 47-1F) opening. Examples are a colonoscopy, in which the endoscope is inserted through the anus; an endoscopic examination of the esophagus, in which the endoscope is inserted through the mouth; or an endoscopic examination of the small or large intestine via an existing colostomy or ileostomy opening.

Via Natural or Artificial Opening Endoscopic with Percutaneous Endoscopic Assistance (F)

In the approach **Via Natural or Artificial Opening Endoscopic with Percutaneous Endoscopic Assistance**, the operative site is accessed two ways simultaneously: through a natural or artificial opening (FIGURE 47-1G) and with a percutaneous endoscope (FIGURE 47-1H). Surgeons choose this approach when they cannot perform the entire procedure through the natural or artificial opening. This approach is used on only two procedures: a laparoscopically assisted vaginal hysterectomy (LAVH) and a laparoscopically assisted anorectal pull-through procedure (LAAPP).

External (X)

In the **External** approach, the entire treatment is performed on the skin or mucous membranes. The operative site can be seen directly without the use of instrumentation (e.g., an endoscope) or an incision (FIGURE 47-1I and J). Procedures in the mouth and nose use the External approach. Examples of the external approach are a tonsillectomy and removal of a skin lesion. Another method used for an used external approach is applying direct or indirect pressure. An example is a closed fracture reduction.

CODING PRACTICE

Exercise 47.5 Abstracting the Approach

Instructions: Refer to Table 47-7, Medical and Surgical Approach Definitions, and Figure 47-1, Examples of PCS Approaches, and other information in this section. Read the procedural statements below and identify the PCS approach. Write the character and name of the approach on the lines provided.

1. The surgeon made a low transverse abdominal incision in preparation for a hysterectomy. Character _____ Name _____
2. Colonoscopy. Character ____ Name _____
3. Diagnostic laparoscopy with palpation of the liver. Character _____ Name _____
4. Needle biopsy of the lower lobe of the left lung. Character _____ Name _____
5. Tonsillectomy. Character ____ Name _____
6. Vaginal hysterectomy. Character ____ Name _____
7. Arthroscopic meniscectomy. Character _____ Name _____
8. Shaving of a skin lesion on the left arm. Character _____ Name _____
9. Open carpal tunnel release. Character _____ Name _____
10. Percutaneous transluminal angioplasty of the right renal artery. Character ____ Name _____

Abstracting the Device (Character 6)

The Device character identifies material that is intentionally left in a patient for a therapeutic reason at the conclusion of a procedure. Material considered integral to the procedure—such as sutures, radiological markers, and temporary postoperative wound drains—are not coded as devices (PCS OGCR B6.1b). Drains placed for therapeutic purposes are coded as a device. Equipment used before or during the procedure—such as an endoscope, robotic arm, or sterilizer—is not coded as a device because it is not left in the patient.

Table 47-11 ■ KEY CRITERIA FOR ABSTRACTING THE DEVICE

- ❑ Was anything left in the patient to continue treating the condition?
- ❑ Was a therapeutic drain placed?
- ❑ Were clips placed around a vessel?
- ❑ Was a stent placed inside a vessel?
- ❑ Was an internal or external fixation device used to repair a fracture?
- ❑ Was a mechanical device, such as an infusion pump, placed in the patient?
- ❑ Was an electronic device, such as a pacemaker, placed in the patient?
- ❑ Was an artificial body part, such as a joint or limb, used to replace the natural part?
- ❑ Was a fusion device used?
- ❑ Was natural or artificial tissue used?
- ❑ Was an implant left in the patient?
- ❑ Was a shunt placed to move fluid from one area of the body to another?
- ❑ What material was used for the graft in a coronary artery bypass graft procedure?

Source: ©PB Resources, Inc. Used with permission.

The coder's main task during abstracting is to identify potential devices listed in the medical record (■ TABLE 47-11). General types of devices include clips, bands, grafts, stents, shunts, prostheses, fixation devices, and electronic devices. Coders need to determine where the device is placed. They must identify whether the material for grafts and prostheses is obtained from the patient, from another human, from an animal, or synthetic. The type of synthetic material—such as metal, ceramic, and so on—needs to be identified for prostheses.

PCS classifies devices into more than 100 general categories rather than listing hundreds of individual devices. You can abstract the device based on the procedure description in the medical record. You will not always know how PCS classifies the device until you assign the code in the PCS table. Category choices are listed on the PCS table and are discussed under the section "Assigning Codes" for root operations in the chapters that follow. You need to cross-reference between the coding manual and the medical record to ensure that all devices are correctly identified and classified. Examples of devices, their description, and how PCS classifies them appear in ■ TABLE 47-12.

The majority of procedures do not require additional information in the device character, in which case the value **Z No device** is assigned to Character 6. PCS OGCR B6 provides several guidelines on how to code the device in situations where the choice might be unclear. These were summarized earlier in this chapter.

Table 47-12 ■ DEVICE EXAMPLES, DESCRIPTIONS, AND PCS CLASSIFICATION

Device	Description	PCS Classification
Blood glucose monitoring system **Cardiac event recorder**	An electronic device worn by the patient to monitor a physiological function	Monitoring device
Bone bank graft **Cadaver tissue**	Human tissue from a cadaver or live individual	Nonautologous tissue substitute
Metal occlusive clip **Gastric band**	A fixed ring or flexible strap placed around the outside of a vessel to narrow it or close it off	Extraluminal device
Cystostomy tube **Foley catheter**	A tube that continuously drains fluid to the outside of the body	Drainage device
Fixation device	Rods, pins, or screws applied to stabilize a bone	Internal or external fixation device
Gore-Tex graft	Artificial skin or tissue replacement	Synthetic substitute
Mesh	Material used for reinforcement of tissue or muscle	Synthetic substitute
Neuromuscular stimulator lead **Carotid artery stimulator**	A wire connected to an electronic device that emits impulses to encourage a physiological reaction	Stimulator lead
Pig heart valve **Animal graft**	Tissue taken from an animal	Zooplastic tissue substitute
Shunt	A tube or vein placed to move fluid to another site in the body where it can be reabsorbed	Autologous, nonautologous, or zooplastic substitute
Skin autograft **Autologous vein graft**	Tissue from another area of the patient's body	Autologous tissue substitute
Stent	A tube placed inside of a vessel for reinforcement; may or may not deliver medication	Intraluminal device Drug-eluting intraluminal device

Source: ©PB Resources, Inc. Used with permission.

CODING PRACTICE

Exercise 47.6 Abstracting the Device

Instructions: Refer to Table 47-11, Key Criteria for Abstracting the Device, and Table 47-12, Device Examples, Descriptions, and PCS Classification. Identify the name of the device in the following procedural statements. Write the type of device on the line after the statement. If no device is mentioned, write *No Device*. Do not assign any codes.

1. Fallopian tube ligation using extraluminal clips. _____
2. Internal fixation of the tibia using screws and a rod. _____
3. Open drainage of a neck abscess. _____
4. Adjustment of a pacemaker lead in the left atrium. _____
5. Open right femoral-popliteal bypass using Gore-Tex graft. _____
6. Esophageal dilation using an endoscope. _____
7. Insertion of a drug-eluting stent in the carotid artery. _____
8. Total hip replacement with ceramic-on-ceramic prosthesis. _____
9. Endoscopic balloon dilation of the common bile duct _____
10. Insertion of a Foley catheter. _____

Abstracting the Qualifier (Character 7)

The qualifier character contains unique values for individual procedures. ■ TABLE 47-13 lists some of the most commonly used qualifiers and the key criteria for abstracting them. The coder must refer to the PCS table and cross-reference the choices in the table with the medical record to select the correct qualifier value. Qualifier choices for specific root operations are discussed in the "Assigning Codes" section of the chapters that follow. PCS uses hundreds of qualifier values, but many are used with only one body system and one root operation. Coders do not need to memorize qualifier values; they refer to the PCS table for the root operation and body system to identify the values for a particular clinical situation.

The most common qualifier identifies diagnostic procedures. Physicians may order procedures for either therapeutic or diagnostic purposes. A **diagnostic procedure** is performed to obtain information needed to make a diagnosis and treatment plan. Examples are performing a biopsy of a tumor in order to determine whether it is malignant or performing amniocentesis to determine whether a fetus has chromosomal abnormalities. Diagnostic procedures require the value **X Diagnostic** for the qualifier. A **therapeutic procedure** is performed in order to treat a disease or condition. Examples are a cholecystectomy due to gallbladder disease, a coronary artery bypass to treat atherosclerosis, or removal of a skin lesion that is cancerous. Procedures are assumed to be therapeutic unless stated to be diagnostic, so a specific qualifier is not required to identify the therapeutic nature of the procedure.

The majority of procedures do not require additional information in the qualifier character, in which case the value **Z No qualifier** is assigned to Character 7.

Table 47-13 ■ **KEY CRITERIA FOR ABSTRACTING THE QUALIFIER**

- ❑ Is the procedure a biopsy or otherwise diagnostic?

Bypass (Non-Coronary) Procedures

- ❑ What is the ending site of the bypass?

Coronary Bypass Procedures

- ❑ What vessel is bypassed from?

Amputation

- ❑ What is the exact anatomic site of the amputation?

Skin and Muscle Grafts

- ❑ To what depth is the procedure performed? Skin, subcutaneous tissue, fascia, partial thickness, full thickness
- ❑ What type of flap is created? Latissimus dorsi myocutaneous flap, transverse rectus abdominis myocutaneous flap, deep inferior epigastric artery perforator flap, superficial inferior epigastric artery flap, gluteal artery perforator flap

Spine Procedures

- ❑ What direction is the anatomic approach? Anterior (*incision/access from the front*) or posterior (*incision/access from the back*)?
- ❑ What part of the spinal column is treated? Anterior (*front side*) or posterior (*back side*)

Transplant and Replacement Procedures

- ❑ What type of tissue is used? Autologous, nonautologous, zooplastic, or synthetic

Source: ©PB Resources, Inc. Used with permission.

CODING PRACTICE

Exercise 47.7 Abstracting the Qualifier

Instructions: Read the following procedural statements and determine if each one is a diagnostic or therapeutic procedure. Circle the correct description following the statement.

1. Needle biopsy of the liver. Diagnostic Therapeutic
2. Laparoscopic cholecystectomy for gallstones. Diagnostic Therapeutic
3. Screening colonoscopy. Diagnostic Therapeutic
4. Exploratory laparotomy of the peritoneum. Diagnostic Therapeutic
5. Excision of malignant skin lesion. Diagnostic Therapeutic

Abstracting for Multiple Procedures

General guidelines related to coding multiple procedures include the following. These guidelines apply to all root operations. Refer to the PCS OGCR for clinical examples of each. ■ TABLE 47-14 summarizes the criteria for identifying when multiple codes might be needed.

- Procedural components—The root operation definition includes all components of the procedure, which should not be coded separately. Procedural steps necessary to reach the operative site and close the operative site, including anastomosis of a tubular body part, are not coded separately (PCS OGCR B3.1b).
- Multiple body parts—When the same root operation is performed on different body part values defined in Character 4, assign separate codes for each body part value (PCS OGCR B3.2.a).
- Multiple anatomic sites—When the same root operation is repeated at different anatomic sites that are included in the same body part value, assign separate codes for each site using the same body part value (PCS OGCR B3.2.b).
- Multiple root operations—When multiple root operations with distinct objectives are performed on the same body part, assign separate codes for each root operation (PCS OGCR B3.2.c).
- Multiple approaches—When the intended root operation is attempted using one Approach (Character 5) but is converted to a different approach, assign separate codes for each approach value (PCS OGCR B3.2.d).
- Discontinued procedures—When the intended procedure is discontinued or otherwise not completed, assign one code for the root operation that is completed. If a procedure is discontinued and no other root operation is performed, code the root operation Inspection of the body part or Anatomical Region inspected (PCS OGCR B3.3). (*Note:* The root operation Inspection is discussed in Chapter 55 of this text.)

Table 47-14 ■ KEY CRITERIA FOR ABSTRACTING MULTIPLE PROCEDURES

- ❑ Which components are included in the root operation (Character 3) or procedural steps?
- ❑ Is the same root operation (Character 3) performed on multiple body parts (Character 4)?
- ❑ Is the same root operation (Character 3) performed on multiple anatomic sites with the same body part (Character 4) value?
- ❑ Are multiple root operations (Character 3) with distinct objectives performed on the same body part (Character 4)?
- ❑ Is a root operation (Character 3) attempted with one approach (Character 5) then converted to a different approach?
- ❑ Is the initial root operation (Character 3) discontinued or otherwise not completed and a different root operation completed?
- ❑ Are a biopsy and a definitive procedure performed at the same operative session?
- ❑ Is an autograft harvested from a distinct anatomic site?

Source: ©PB Resources, Inc. Used with permission.

SUCCESS STEP

The PCS OGCR is not as extensive as the guidelines for ICD-10-CM or CPT, so you should try to memorize as many guidelines as possible. It is especially helpful to memorize the guidelines regarding multiple coding. Doing so will make the coding process faster and more accurate.

Guided Example of Abstracting PCS Procedures

The mini-medical-record used for procedure cases in this text provides a limited snapshot of the most pertinent information. Refer to ■ FIGURE 47-2 (page 992) to learn how to interpret the mini-medical-record used for procedure reports.

To practice skills for abstracting procedures, refer to the following example of Michael Longo, who had an ileostomy at Branton Medical Center, which is used throughout this chapter. Marcy Elwood, CCS, is the fictitious coder at the hospital who guides you through the coding process.

Follow along as Marcy Elwood, CCS, abstracts the root operation from the medical record. Check off each step after you complete it.

▶ Marcy reads through the procedure report, with special attention to the preprocedure diagnosis, the procedure name and description, and the postprocedure diagnosis.

▶ Marcy refers to Key Criteria for Abstracting Medical and Surgical Procedures (General) (Table 47-3).

- ❑ *What is the procedure?* Temporary loop ileostomy (■ FIGURE 47-3)

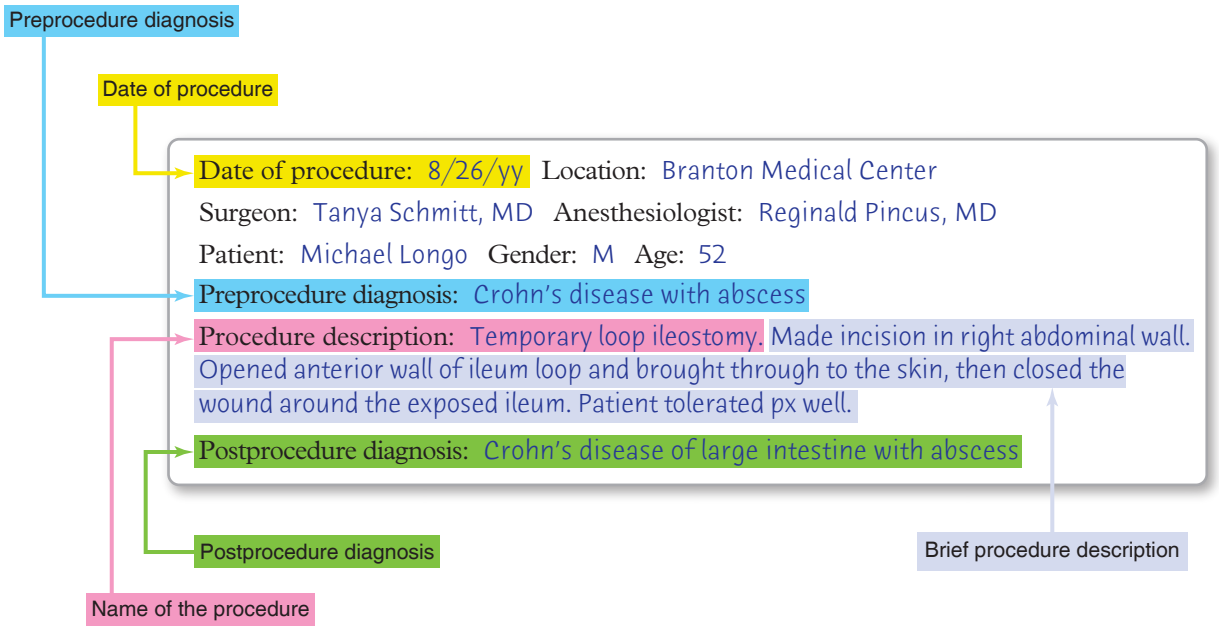


Figure 47-2 ■ Key to interpreting the procedure report mini-medical-record.

Date of procedure: 8/26/yy Location: Branton Medical Center Surgeon: Tanya Schmitt, MD

Anesthesiologist: Reginald Pincus, MD

Patient: Michael Longo Gender: M Age: 52

Preprocedure diagnosis: Crohn's disease with abscess

Procedure description: Temporary loop ileostomy. Made incision in right abdominal wall. Opened anterior wall of ileum loop and brought through to the skin, then closed the wound around the exposed ileum. Patient tolerated px (*procedure*) well.

Postprocedure diagnosis: Crohn's disease of large intestine with abscess

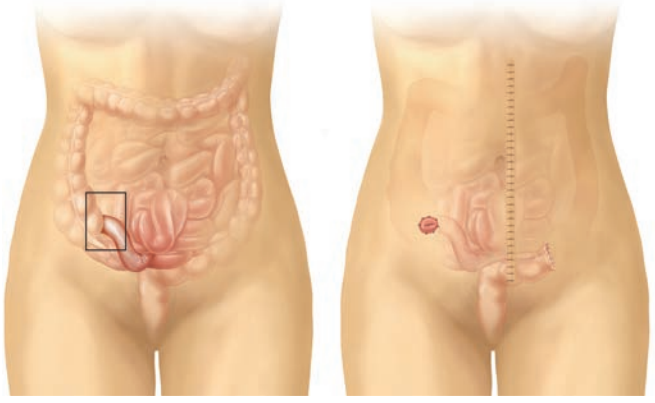


Figure 47-3 ■ A loop ileostomy reroutes the contents of the small intestine to bypass the large intestine.

- ❑ *What organ or body part is involved?* The ileum, which is the third section of the small intestine
- ❑ *Is the procedure description what you would expect based on the name of the procedure?* Yes, the ileum was divided and the free end was brought through the right abdominal wall to the skin. This created a new route to evacuate the contents of the small intestine so they would not pass through to the infected large intestine.
- ❑ *Was more than one procedure, or a combined procedure, performed?* No
- ❑ She refers to the table Key Criteria for Abstracting Root Operations and reads the abstracting questions that identify root operation groups. She answers "Yes" to the question, *Did the procedure alter the diameter or route of a tubular body part?*

▶ The Key Criteria for Abstracting Root Operations directs Marcy to review the definitions of four root operations.

▶ She turns to the appendix "Comparison of Medical and Surgical Root Operations" in the ICD-10-PCS coding manual. (This PCS appendix also appears in Table 47-5.)

- ❑ She locates the group titled Procedures That Alter the Diameter or Route of a Tubular Body Part and reads the definition of each root operation.
- ❑ After reading the definitions, she believes that **Bypass (1)** best describes the ileostomy.

▶ Next, Marcy turns to the appendix, "Root Operation Definitions," in the ICD-10-PCS manual. (This table also appears in Table 47-6.)

- ❑ She locates the entry for **1 Bypass**.
- ❑ She reads the Definition, Explanation, and Examples listed and concludes that **Bypass** is the correct root operation because this operation altered the route of a tubular body part, the ileum.

❑ *What surgical approach is used?* The approach is Open because an abdominal incision was made.

❑ The procedure is a bypass so Marcy must also identify the ending site of the bypass. The ending site is documented as *cutaneous*, which is the skin. This information is needed to assign the value for Character 7 Qualifier.

▶ At this time, Marcy has abstracted the procedure and determined that the root operation is **Bypass**. She also identified the approach and qualifier. Next, she will assign the PCS code, which is discussed in Chapter 48.

CHAPTER SUMMARY

In this chapter you learned that:

- Coders need to understand the difference between treatments and diagnostic procedures as well as the description of various surgical approaches.
- The Medical and Surgical Section is the largest Section of ICD-10-PCS, containing 31 body systems and 31 root operations.
- The seven characters of a Medical and Surgical procedure are (1) Section, (2) Body System, (3) Root Operation, (4) Body Part, (5) Approach, (6) Device, and (7) Qualifier.
- ICD-10-PCS provides guidelines for Medical and Surgical codes in section B of the PCS OGCR, which contains five subdivisions, corresponding to characters within a Medical and Surgical code. Coders should review the guidelines and examples frequently.
- Abstracting Medical and Surgical procedures requires abstracting unique information for each Character.
- Coders should be familiar with the PCS body systems and verify that the code they ultimately select is consistent with the correct body system value.
- Identifying the correct root operation is the basis of ICD-10-PCS coding, so coders must learn the differences between similar root operations.
- PCS subdivides some organs and other anatomic sites into multiple body part values to achieve greater specificity.
- PCS uses seven values to identify the approach, which is the surgical technique used to reach the procedure site.
- A device is material that is intentionally left in a patient for a therapeutic reason at the conclusion of a procedure.
- The qualifier character contains unique values for individual procedures. The coder must refer to the PCS table and cross-reference the choices in the table with the medical record to select the correct qualifier value.

CONCEPT QUIZ

Take a moment to look back at the abstracting for medical and surgical procedures and solidify your skills. Try to answer the questions from memory first, then refer to the discussion in this chapter if you need a little extra help.

Completion—Device

Instructions: Refer to Table 47-12, Device Examples, Descriptions, and PCS Classification. Identify the type of device described in each statement. Choose from the list below. Some choices may be used more than once and some choices may not be used at all. Write the answer on the line provided.

autologous tissue substitute	intraluminal device
drainage device	monitoring device
drug-eluting intraluminal device	nonautologous tissue substitute
external fixation device	stimulator lead
extraluminal device	synthetic substitute
internal fixation device	zooplastic tissue substitute

1. Gastric band. _____
2. Skin autograft. _____
3. Pig heart valve. _____
4. Foley catheter. _____
5. Stent that releases medication. _____
6. Rods inserted inside a bone to stabilize it. _____
7. Gore-Tex graft. _____
8. Bone bank graft. _____
9. Carotid artery stimulator. _____
10. Blood glucose monitoring system. _____

Multiple Choice

Instructions: Circle the letter of the best answer to each question based on the information you learned in this chapter. Refer to tables in the chapter for assistance.

1. What approach is used for a procedure in which an incision is made through the skin and subcutaneous tissue?
   A. Open
   B. Percutaneous
   C. Percutaneous Endoscopic
   D. External
2. What approach is used for a procedure in which the endoscope is inserted through the anus?
   A. Percutaneous Endoscopic
   B. Via Natural or Artificial Opening
   C. External
   D. Via Natural or Artificial Opening Endoscopic

(*continued*)

(continued from page 993)

3. Which of the following is a body system in ICD-10-PCS?
   A. Digestive System
   B. Skeletal System
   C. Upper Bones
   D. Cardiovascular System
4. Which root operation is lithotripsy an example of?
   A. Excision
   B. Destruction
   C. Fragmentation
   D. Removal
5. Which root operation is fallopian tube ligation an example of?
   A. Resection
   B. Occlusion
   C. Destruction
   D. Restriction
6. What root operation is used when the procedure involves cutting out the left upper lobe of the lung?
   A. Repair
   B. Resection
   C. Removal
   D. Excision
7. Which of the following is a valid qualifier value?
   A. T Therapeutic
   B. X Diagnostic
   C. 0 Open
   D. R Bilateral
8. What type of procedure is done when the surgeon leaves a drainage device in the patient?
   A. Therapeutic
   B. Diagnostic
   C. Exploratory
   D. Supplemental
9. How many PCS body systems are used for the muscular system?
   A. 1
   B. 2
   C. 3
   D. 5
10. Which of the following root operations always involves a device?
    A. Change
    B. Drainage
    C. Occlusion
    D. Reposition

KEEP ON CODING

Part A—Root Operation Examples

Instructions: Refer to Table 47-6, Root Operation Definitions in Alphabetical Order, with Explanations and Examples. Provide an example of each root operation.

Example: Change *Drainage tube change*

1. Supplement _____
2. Excision _____
3. Extraction _____
4. Restriction _____
5. Revision _____
6. Resection _____
7. Reposition _____
8. Release _____
9. Reattachment _____
10. Dilation _____

Part B—Root Operation Groups

Instructions: Refer to Table 47-5, Comparison of Root Operations. For each root operation group listed below, write down the names and character values of all root operations in the group.

Example: Root operations that define other objectives *Fusion G, Alteration 0, Creation 4*

11. Root operations involving examination only _____
    _____
    _____

12. Root operations that always involve a device _____

13. Root operations involving cutting or separation only _____

14. Root operations that put in/put back or move some/all of a body part _____

15. Root operations that take out solids/fluids/gases from a body part _____

Part C—Approach

Instructions: Refer to Table 47-8, Medical and Surgical Approach Definitions; Table 47-9, Key Criteria for Abstracting the Approach; and (Figure 47-1), "Examples of PCS approaches." Read the procedural statements below and identify the PCS approach. Write the character and name of the approach on the lines provided. Do not assign any full codes.

16. Reduction of a fracture of the right ulna by applying pressure to the skin and bone. Approach value ____ Approach name _____
17. Transurethral (*through the urethra*) cystoscopy. Approach value ____ Approach name _____
18. Percutaneous insertion of neurostimulator lead in cervical spinal cord. Approach value ____ Approach name _____
19. Incision with removal of internal fixation device, left tibia. Approach value ____ Approach name _____
20. Percutaneous chest tube placement. Approach value ____ Approach name _____
21. Open retropubic prostatectomy. Approach value ____ Approach name _____
22. Cryotherapy (*freezing*) of a wart on the back. Approach value ____ Approach name _____
23. Cervical cerclage (*stitch*) with access through the vagina. Approach value ____ Approach name _____
24. Laparoscopy with lysis of abdominal adhesions. Approach value ____ Approach name _____
25. Tooth extraction with forceps. Approach value ____ Approach name _____

CODING CHALLENGE

Instructions: Refer to the abstracting tables in this chapter for each Character of the code. Read the mini-medical-record of each patient's encounter and answer the abstracting questions listed. Write the answer on the line provided. Do not assign any codes.

1. INPATIENT HOSPITAL Gender: F Age: 83

Preprocedure diagnosis: Pressure ulcer, left hip

Procedure description: Open excisional debridement of left hip. Used scissors to cut out necrosis and devitalized tissue, through full epidermis and subcutaneous tissue, 1 cm beyond the wound margin.

Postprocedure diagnosis: Healing stage III pressure ulcer, left hip

a. What is the stated procedure? _____

b. What organ or body part is involved? _____

(*continued*)

1. (continued)

c. Is the procedure description what you would expect based on the name of the procedure?

_____

d. Was more than one procedure, or a combined procedure, performed? _____

e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure?

_____

g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used?

_____

(*continued*)

(continued from page 995)

2. INPATIENT HOSPITAL Gender: F Age: 48

Preprocedure diagnosis: Mass in left breast

Procedure description: Needle biopsy. Using a needle, took out a tissue sample from the left breast that was previously marked with a wire.

Postprocedure diagnosis: Benign neoplasm, breast per pathology report

a. What is the stated procedure? _____

b. What organ or body part is involved? _____

c. Is the procedure description what you would expect based on the name of the procedure? _____

d. Was more than one procedure, or a combined procedure, performed? _____

e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____

g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____

h. Review the Key Criteria for Abstracting the Qualifier. Was the procedure diagnostic or therapeutic?

_____

3. INPATIENT HOSPITAL Gender: M Age: 15

Preprocedure assessment: Presented to ED with vomiting, acute abdominal pain, RLQ tenderness, T 101 degrees

Procedure description: Appendectomy. Made three small umbilical incisions and placed laparoscope. Expanded abdominal cavity with carbon dioxide to aid visualization. Grasped appendix and divided with stapler. Cauterized appendiceal stump. Removed appendix, irrigated and suctioned abdominal cavity. Removed instruments and closed incision. Patient tolerated procedure well, no complications.

Postprocedure diagnosis: Acute appendicitis with rupture

a. What is the stated procedure? _____

b. What organ or body part is involved? _____

(*continued*)

3. (continued)

c. Is the procedure description what you would expect based on the name of the procedure? _____

d. Was more than one procedure, or a combined procedure, performed? _____

e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____

g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____

4. INPATIENT HOSPITAL Gender: F Age: 61

Preprocedure diagnosis: Gangrene in left great toe due to nonhealing plantar (*sole of foot*) ulcer

Procedure description: Midlevel amputation of L great toe at interphalangeal joint

Postprocedure diagnosis: Diabetes with gangrene

a. What is the stated procedure? _____

b. What organ or body part is involved? _____

c. Is the procedure description what you would expect based on the name of the procedure? _____

d. Was more than one procedure, or a combined procedure, performed? _____

e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____

g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____

h. At what joint was the amputation performed?

_____

Is this site a low-, mid-, or high-level amputation? _____

5. INPATIENT HOSPITAL Gender: F Age: 23

Preprocedure: Hypermenorrhea

Procedure description: Transvaginal dilation and curettage. Inserted speculum to hold the vagina open. Progressively dilated cervix and uterus with os dilator. Inserted curette and scraped endometrial wall. Tissue sent to lab for analysis.

Postprocedure diagnosis: Hypermenorrhea

***Tip*:** Curettage (*scraping*) is classified as removal by force.

a. What is the stated procedure? _____

b. What organ or body part is involved? _____

c. Is the procedure description what you would expect based on the name of the procedure? _____

d. Was more than one procedure, or a combined procedure, performed? _____

e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____

g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____

h. Review the Key Criteria for Abstracting the Qualifier. Was the procedure diagnostic or therapeutic?

_____

6. INPATIENT HOSPITAL Gender: F Age: 52

Preprocedure diagnosis: Endometriosis

Procedure description: Ablation of ovaries and endometrium. Inserted the endoscope through the vagina into the uterus to cauterize the endometrium (*lining of uterus*). When that was successfully completed, withdrew the scope, applied a new tip. Made three incisions on the lower abdomen and inserted endoscope to treat each ovary.

Postprocedure diagnosis: Endometriosis

***Tip*:** Code multiple procedures when the same root operation is performed on different body parts as defined by distinct values of the body part character (PCS OGCR B3.2a).

a. What is the stated procedure? _____

b. What organ or body part is involved? _____

c. Is the procedure description what you would expect based on the name of the procedure? _____

(*continued*)

6. (continued)

d. Was more than one procedure, or a combined procedure, performed? _____

e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____

g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____

h. Repeat the abstracting process for each procedure that was performed. _____

7. INPATIENT HOSPITAL Gender: F Age: 52

Preprocedure diagnosis: Pain RUQ, T 102 degrees, vomiting, acute cholecystitis with calculi in the common bile duct, causing obstruction. Extensive known abdominal adhesions prevent a laparoscopic approach.

Procedure description: Cholecystectomy. Made subcostal incision and isolated gallbladder from surrounding structures with laparotomy packs. Excised entire gallbladder and common bile duct. Hemostasis was achieved. Closed operative wound. Patient tolerated procedure well.

Postprocedure diagnosis: Acute cholecystitis with calculi in the common bile duct, causing obstruction

***Tip*:** Code multiple procedures when the same root operation is performed on different body parts as defined by distinct values of the body part character (PCS OGCR B3.2a).

a. What is the stated procedure? _____

b. What organ or body part is involved? _____

c. Is the procedure description what you would expect based on the name of the procedure? _____

d. Was more than one procedure, or a combined procedure, performed? _____

e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____

g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____

h. Repeat the abstracting process for each procedure that was performed. _____

(*continued*)

(continued from page 997)

8. INPATIENT HOSPITAL Gender: M Age: 43

Preprocedure diagnosis: Detached R retina

Procedure description: Trans pars plana vitrectomy (TPPV) with synthetic scleral buckle. Punctured the pars plana and used vitreous cutter to suction out all vitreous. Injected balanced saline solution (BSS) to replace vitreous. Sutured scleral buckle, which effectively closed the break. Pt tolerated px well.

Postprocedure diagnosis: Detached R retina

a. What is the stated procedure? _____
b. What organ or body part is involved? _____
c. Is the procedure description what you would expect based on the name of the procedure? _____
d. Was more than one procedure, or a combined procedure, performed? _____
e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____
g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____
h. Review the Key Criteria for Abstracting the Device. What device is used? _____
i. Repeat the abstracting process for each procedure that was performed. _____

9. INPATIENT HOSPITAL Gender: M Age: 75

Preprocedure diagnosis: Blepharoptosis obscuring vision

Procedure description: Bilateral upper blepharoplasty. Cut out a crescent of skin and subcutaneous tissue from fold of R eyelid, sutured to restore normal position of eyelid. Repeated on left side.

Postprocedure diagnosis: Blepharoptosis obscuring vision

a. What is the stated procedure? _____
b. What organ or body part is involved? _____
c. Is the procedure description what you would expect based on the name of the procedure? _____

(*continued*)

9. (continued)

d. Was more than one procedure, or a combined procedure, performed? _____
e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____
g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____
h. Repeat the abstracting process for each procedure that was performed. _____

10. INPATIENT HOSPITAL Gender: F Age: 23

Preprocedure diagnosis: Fractured R tibia and R humerus

Procedure description: Open reduction, R tibia with internal fixation device. Closed reduction, R humerus with percutaneous internal fixation. Applied cast to right humerus.

Postprocedure diagnosis: Fractured R tibia, fractured R humerus shaft

a. What is the stated procedure? _____
b. What organ or body part is involved? _____
c. Is the procedure description what you would expect based on the name of the procedure? _____
d. Was more than one procedure, or a combined procedure, performed? _____
e. Review the Key Criteria for Abstracting Root Operations. To which question did you answer yes?

_____

f. Review the definitions of the root operations that answer this question. Which root operation correctly describes this procedure? _____
g. Review the Key Criteria for Abstracting the Approach. What surgical approach is used? _____
h. Review the Key Criteria for Abstracting the Device. What device is used? _____
i. Repeat the abstracting process for each procedure that was performed. _____