

# Coding Root Operations with ICD-10-PCS: Understanding Drainage, Extirpation, and Fragmentation

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*Editor's note: This is the third in a series of 10 articles discussing the 31 root operations of ICD-10-PCS.*

The implementation of ICD-10-PCS will challenge the skills of coders—it contains many unique features and provides an opportunity to truly reflect the complexity of the procedures being performed today. Coding professionals must understand the many new definitions and descriptions used in ICD-10-PCS that translate directly to the different components of procedures.

This article will focus on the definitions of three root operations in the Medical and Surgical section of ICD-10-PCS:

- Drainage
- Extirpation
- Fragmentation

These three root operations define procedures that take out solids/fluids/gases from a body part. Their corresponding character in ICD-10-CM is:

- Drainage: Character 9
- Extirpation: Character C
- Fragmentation: Character F

## Root Operation 9: Drainage

The definition for the Drainage root operation provided in the 2013 ICD-10-PCS Reference Manual is “Taking or letting out fluids and/or gases from a body part.” Drainage is coded for both diagnostic and therapeutic drainage procedures. When drainage is accomplished by putting in a catheter, the device value drainage device is coded in the sixth character.

Examples of drainage include:

- Thoracentesis
- Incision and drainage
- Aspiration
- Lumbar puncture

The seventh character qualifier, X-Diagnostic, is included in the drainage root operation when needed to identify procedures that are biopsies.

For example, a diagnostic percutaneous paracentesis for ascites is coded to 0W9G3ZX. The characters are defined as follows:

- Section: 0 Medical and Surgical
- Body System: W Anatomical Regions, General
- Operation: 9 Drainage
- Body Part: G Peritoneal Cavity
- Approach: 3 Percutaneous
- Device: Z No Device
- Qualifier: X Diagnostic

## Comparing ICD-9-CM and ICD-10-PCS: Drainage

The following is an example of how ICD-9-CM and ICD-10-PCS compare when determining a code assignment for Detachment procedures.

### Lumbar puncture, diagnostic

In ICD-9-CM, the Alphabetic Index entry main term, puncture, subterm lumbar (diagnostic) (removal of dye) identifies code 03.31, Spinal tap.

In ICD-10-PCS, the coding professional must understand the intent of the lumbar puncture in order to identify the correct root operation. Lumbar puncture is performed to drain spinal fluid from the spinal canal and is done for both therapeutic and diagnostic purposes.

Careful review of the documentation is necessary to determine if the procedure is being done to biopsy the spinal fluid. The key to correct coding of this procedure is the identification of the correct body part.

In the Alphabetic Index, the choices for body part under Drainage include Spinal Canal, Spinal Cord, and Spinal Meninges. Lumbar puncture is accomplished by removing fluid from the spinal canal for, in many cases, diagnostic evaluation. The correct code for a diagnostic lumbar puncture in ICD-10-PCS is 009U3ZX.

## Root Operation C: Extirpation

The definition for the root operation Extirpation provided in the 2013 ICD-10-PCS Reference Manual is “Taking or cutting out solid matter from a body part.” The solid matter contained in the definition may be an abnormal byproduct 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.

Extirpation represents a range of procedures where the body part itself is not the focus of the procedure. Instead, the objective is to remove solid material such as a foreign body, thrombus, or calculus from the body part. Examples of an extirpation procedure include thrombectomy, endarterectomy, choledocholithotomy, and excision of a foreign body.

It is not necessary, for example, that a physician document the term “extirpation” to describe a thrombectomy. Rather, the coder would use the definition of the root operation and the procedure performed to determine that a thrombectomy is a type of Extirpation.

Consider the example of a percutaneous thrombectomy of the left radial artery, which is coded to 03CC3ZZ:

- Section: 0 Medical and Surgical
- Body system: 3 Upper Arteries
- Root operation: C Extirpation
- Body part: C Radial Artery, Left
- Approach: 3 Percutaneous
- Device: Z No Device
- Qualifier: Z No Qualifier

## Comparing ICD-9-CM and ICD-10-PCS: Extirpation

The following is an example of how ICD-9-CM and ICD-10-PCS compare when determining a code assignment for Extirpation procedures.

Staghorn calculus of the left renal pelvis removed via a percutaneous nephrostomy tube

In ICD-9-CM, the main term in the Alphabetic Index, nephrostomy, followed by the subterm percutaneous, leads the coder to 55.03, percutaneous nephrostomy without fragmentation. This code includes percutaneous removal of a kidney stone.

In ICD-10-PCS, review of the term “nephrostomy” in the Alphabetic Index identifies two possible root operations, bypass and drainage. However, after review of the documentation neither of these root operations matches the procedure performed. Following this review, the coding professional determines that extirpation is the correct root operation for this procedure. Review of the Alphabetic Index under extirpation reveals no body part for “renal pelvis.”

There is a body part for “kidney pelvis” which is further defined by left and right. The correct code for this procedure is 0TC43ZZ, percutaneous removal of a staghorn calculus from the left renal pelvis.

## ICD-10-PCS Official Guidelines

The ICD-10-PCS Official Guidelines include a specific coding guideline that applies to the drainage root operation, as well as a guideline for using documentation to determine PCS definitions.

### Biopsy followed by more definitive treatment: B3.4

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

While extirpation is not a common term among coding professionals nor is it regularly documented in the health record, it is important to keep in mind the coding guideline that addresses provider documentation, Guideline A11.

### Guideline A11

Many of the terms used to construct PCS codes are defined within the system. It is the coder’s responsibility to determine what the documentation in the medical record equates to in the PCS definitions. The physician is not expected to use the terms used in PCS code descriptions, nor is the coder required to query the physician when the correlation between the documentation and the defined PCS terms is clear.

Source: Centers for Medicare and Medicaid Services. “ICD-10-PCS Draft Coding Guidelines.” 2012.

[http://www.cms.hhs.gov/Medicare/Coding/ICD10/Downloads/pcs\\_2013\\_guidelines.pdf](http://www.cms.hhs.gov/Medicare/Coding/ICD10/Downloads/pcs_2013_guidelines.pdf)

## Root Operation F: Fragmentation

The definition for the root operation Fragmentation provided in the 2013 ICD-10-PCS Reference Manual is “Breaking solid matter in a body part into pieces.”

The explanation provided is that the physical force applied directly or indirectly is used to break the solid matter into pieces. The solid matter may be an abnormal byproduct of a biological function or a foreign body. The pieces of solid matter are not taken out.

Examples of fragmentation include extracorporeal shockwave lithotripsy (ESWL) and transurethral lithotripsy. Fragmentation is coded for procedures to break up, but not remove, solid material such as a calculus or foreign body. This root operation includes both direct and extracorporeal fragmentation procedures. It is important to note that fragmentation cannot be coded with extirpation.

For additional information, review the procedure coding for an ESWL of the bilateral ureters. This procedure requires two codes, 0TF7XZZ and 0TF6XZZ, as there is not a bilateral body part value for the ureter.

The first code, 0TF7XZZ, can be broken down as:

- Section: 0 Medical and Surgical
- Body System: T Urinary System

- Root Operation: F Fragmentation
- Body Part: 7 Ureter, Left
- Approach: X External
- Device: Z No Device
- Qualifier: Z No Qualifier

The second code, 0TF6XZZ, can be broken down as:

- Section: 0 Medical and Surgical
- Body System: T Urinary System
- Root Operation: F Fragmentation
- Body Part: 6 Ureter, Right
- Approach: X External
- Device: Z No Device
- Qualifier: Z No Qualifier

## Comparing ICD-9-CM to ICD-10-PCS: Fragmentation

The following is an example of how ICD-9-CM and ICD-10-PCS compare when determining a code assignment for Fragmentation procedures.

### ERCP with lithotripsy of common bile duct stone

In ICD-9-CM, indexing lithotripsy directs the coder to 51.49, Incision of other bile ducts for relief of obstruction. This code does not identify the use of the scope to accomplish the procedure. Indexing ERCP directs the coder to 51.10, Endoscopic retrograde cholangiopancreatography (ERCP).

There is an *excludes* note for this range of codes excluding endoscopic procedures classified to other code ranges. Another indexing option is removal, subterm calculus, subterm bile duct, and subterm endoscopic—code 51.88, which is the correct code for this procedure.

In ICD-10-PCS, the indexing can also be challenging for this procedure. Indexing ERCP directs the coder to the root operation Fluoroscopy, which is the radiologic portion of the ERCP procedure. Indexing of lithotripsy directs the coder to the root operation Fragmentation and the body part duct, common bile can be found in the index. The coder is directed to table 0FF. After identification of the correct body part, the approach character is critical for accurate code assignment.

ERCP is performed with a scope entering through the mouth to the biliary system via the duodenum, so the approach value is Via Natural or Artificial Opening Endoscopic. The correct procedure code is 0FF98ZZ, endoscopic fragmentation of common bile duct stone.

## Specific Documentation Needed for Accurate Coding

In ICD-10-PCS, documentation is a decisive part of accurate procedure code assignment. The coding professional must be able to identify all procedural elements to correctly assign all seven characters of the ICD-10-PCS code. During this period of transition to ICD-10, documentation analysis and improvement is as essential as coder training. Organizations that approach documentation improvement as a critical portion of ICD-10 implementation will be well prepared for the transition to ICD-10-PCS.

## References

Barta, Ann et al. *ICD-10-PCS Coder Training Manual 2013 Instructor's Edition*. Chicago, IL: AHIMA Press, 2013.

Kuehn, Lynn, and Therese M. Jorwic. *ICD-10-PCS An Applied Approach*. Chicago, IL: AHIMA Press, 2012.

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**Correction**

The Coding Notes article “Coding Root Operations with ICD-10-PCS: Understanding Excision and Resection” that appeared in the April *Journal of AHIMA* incorrectly identified the ICD-10-PCS code for Total thyroid excision, open. The procedure should be coded as Total thyroidectomy, open 0GTK0ZZ. The *Journal* regrets the error.

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