# Coding Root Operations with ICD-10-PCS: Understanding Insertion, Supplement, and Removal

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

In this article, the *Journal of AHIMA* continues the 10-part Coding Notes series focusing on the 31 root operations of ICD-10-PCS. This article will describe three of the root operations in the Medical and Surgical Section that always involve a device:

- Insertion
- Supplement
- Removal

# **Insertion: Root Operation H**

The definition for the Insertion root operation provided in the 2014 ICD-10-PCS Reference Manual is "Putting in a non-biological device that monitors, assists, performs, or prevents a physiological function but does not physically take the place of a body part." The body part value represents the site that the device was placed. The device value represents the type of device that was inserted, such as cardiac lead, intraluminal device, or hearing device.

It is important for coders to remember that if a device is inserted to meet an objective other than Insertion, then the root operation of the underlying objective of the procedure should be used. For example, if a procedure to insert a coronary stent during percutaneous coronary angioplasty is performed, the root operation is Dilation and the intraluminal device is captured in the sixth character. The root operation Dilation is assigned as the objective if the procedure is to expand the lumen of the coronary artery and maintain it with the stent placement.

Some examples of Insertion procedures include placement of a pin in a nondisplaced fracture, placement of a Port-A-Cath, open insertion of a multiple channel cochlear implant of the right ear, and cystoscopy with placement of brachytherapy seeds in the prostate gland.

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

The following is an example of how ICD-9-CM and ICD-10-PCS compare when assigning codes for Insertion procedures.

#### **Endobronchial Valve Placement**

A patient with a long history of emphysema presents for endobronchial valve placement. The flexible fiberoptic bronchoscope is introduced via the nose and is advanced into the bronchus of the right lower lobe. The valve is released and placement is confirmed.

In ICD-9-CM, the Alphabetic Index main term entry is Insertion; subterms Valve(s), Bronchus, Single Lobe which identifies code 33.71, Endoscopic insertion or replacement of bronchial valve(s), single lobe. This code may be used for either the initial insertion or the replacement of an endobronchial valve. Code 33.71 does not distinguish the specific lobe of the lung that is involved in the procedure.

In ICD-10-PCS, the root operation for this procedure is Insertion as the sole objective of the procedure is to put in a device. The index main term entry is Insertion of device in; subterms include Bronchus, Lower Lobe, Right which directs the user to

The ICD-10-PCS procedure code for this procedure is 0BH68GZ. The fourth character (6) identifies the body part as the right lower lobe bronchus and the fifth character (8) identifies the approach or technique used to reach the operative site as via natural or artificial opening, endoscopic. The sixth character (G) identifies the device as an endobronchial valve.

## **Supplement: Root Operation U**

The definition for the root operation Supplement provided in the 2014 ICD-10-PCS Reference Manual is "Putting in or on biologic or synthetic material that physically reinforces and/or augments the function of a portion of a body part." The biologic or synthetic material that is used is captured in the device character as autologous tissue substitute, synthetic substance, nonautologous tissue substitute, and in some cases zooplastic tissue. In Supplement procedures, the body part is not removed—although it may have been previously removed in another procedure.

Examples of Supplement procedures include aortic valve ring annuloplasty, open anterior colporrhaphy with polypropylene mesh reinforcement, and an open resurfacing procedure of the left femoral head.

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

The following is an example of how ICD-9-CM and ICD-10-PCS compare in code assignment for Supplement procedures.

## Left Inguinal Herniorrhaphy

The patient presents with a left inguinal hernia in need of herniorrhaphy. A groin incision is made and the indirect hernia sac is identified and dissected free. The hernia sac was then ligated. The posterior wall was repaired with Marlex mesh.

In ICD-9-CM, the Alphabetic Index main term entry is Repair, subterms Hernia NEC, Inguinal (unilateral), Indirect, Other and Open, with Prosthesis or Graft. This directs users to code 53.04, Other and open repair of indirect inguinal hernia with graft or prosthesis. This code indicates the procedure was unilateral but does not specify the laterality further.

The index entry main term is Herniorrhaphy, subterm With Synthetic Substitute, which provides two directional notes—see Supplement, Anatomical Regions, General (0WU) and see Supplement Anatomical Regions, Lower Extremities (0YU). The inguinal region body part is classified in Table 0YU for Anatomical Regions, Lower Extremities. Refer to Coding Guideline B2.1a for further detail, included in the sidebar on page 70.

The ICD-10-PCS procedure code for this scenario is 0YU60JZ. The fourth character (6) identifies the body part as left inguinal region. The sixth character (J) specifies the device as a synthetic substance.

ICD-10-PCS codes do not express diagnostic information in the code descriptor. Notice that the procedure code for the hernia repair in ICD-9-CM specifies the indirect inguinal hernia in the code description.

## **Removal: Root Operation P**

The definition for the root operation Removal provided in the 2014 ICD-10-PCS Reference Manual is "Taking out or off a device from a body part." Procedures that are classified as Removal encompass a wide array of procedures outside of those for removing devices contained in the root operation Insertion. The root operation Removal is used when the procedure to remove a device is not a component of another root operation. The root operation Removal may be used regardless of the approach or the original root operation by which the device was placed. The sixth character specifies the type of device that is being removed.

Example procedures include non-incisional removal of Swan-Ganz catheter from right pulmonary artery, extubation, endotracheal tube, and removal of external fixator device from left ulnar fracture.

ICD-10-PCS Coding Guidelines: Device General Guidelines

#### Coding Guideline B6.1a

A device is coded only if a device remains after the procedure is completed. If no device remains, the device value No Device is coded.

#### Coding Guideline B6.1b

Materials such as sutures, ligatures, radiological markers and temporary post-operative wound drains are considered integral to the performance of a procedure and are not coded as devices.

#### **Coding Guideline B6.1c**

Procedures performed on a device only and not on a body part are specified in the root operations Change, Irrigation, Removal and Revision, and are coded to the procedure performed.

Source: Centers for Medicare and Medicaid Services. "ICD-10-PCS Draft Coding Guidelines 2014." 2013. http://www.cms.gov/Medicare/Coding/ICD10/Downloads/PCS-2014-guidelines.pdf.

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

The following is an example of how ICD-9-CM and ICD-10-PCS compare in code assignment in a Removal procedure.

#### Removal of Painful Hardware

The patient previously underwent a left ankle fusion five years ago and now presents with painful hardware. An incision was made into the subcutaneous tissue at the lateral malleolus. Screws were identified, removed one after the other in their entirety, and the incision was closed with 0-Vicryl.

In ICD-9-CM, the Alphabetic Index main term entry is Removal; subterms, Fixation Device, Internal, Fibula which direct the coder to 78.67, Removal of implanted devices from bones, tibia and fibula.

The objective of this procedure is to take out the device from the lateral malleolus which equates to the root operation Removal. The Body Part Key may be accessed to identify that the

anatomical term, Lateral malleolus, uses the PCS description Fibula, Right or Left. Another way to identify the anatomical term is through the Alphabetic Index, where there is a main term for Lateral malleolus which states to use Fibula, Right or Left.

The index main term entry is Removal of device from, subterm, Fibula, Left which directs the user to Table 0QP. The complete code for this scenario is 0QPK04Z. The fourth character (K) identifies the body part as the left fibula, the fifth character (0) identifies this as an open procedure, and the sixth character (4) denotes the device that was removed as an internal fixation device. Unlike ICD-9-CM, the ICD-10-PCS procedure code specifies the type of implanted device and specific site.

## ICD-10-PCS Coding Guidelines: Body System General Guideline

#### Coding Guideline B2.1a

The procedure codes in the general anatomical regions body systems should only be used when the procedure is performed on an anatomical region rather than a specific body part (i.e., root operations Control and Detachment, Drainage of a body cavity) or on the rare occasion when no information is available to support assignment of a code to a specific body part.

Source: Centers for Medicare and Medicaid Services. "ICD-10-PCS Draft Coding Guidelines 2014." 2013. http://www.cms.gov/Medicare/Coding/ICD10/Downloads/PCS-2014-guidelines.pdf.

## References

Centers for Medicare and Medicaid Services. "2014 Code Tables and Index." 2013. <a href="http://www.cms.gov/Medicare/Coding/ICD10/2014-ICD-10-PCS.html">http://www.cms.gov/Medicare/Coding/ICD10/2014-ICD-10-PCS.html</a>.

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