Coding Root Operations with ICD-10-PCS- Understanding Restriction Occlusion and Dilation

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

With the upcoming implementation of ICD-10-PCS, there are new definitions and descriptions used to describe the procedures performed. Coding professionals should start acquainting themselves with the 31 different root operations in the medical and surgical section. An in-depth understanding of the definitions and applications of the various root operations and knowledge of the integral components of procedures will be important in making a smooth transition.

This article focuses on the root operations Restriction, Occlusion, and Dilation. These are three of the four root operations that make up the group defined as procedures that alter the diameter/route of a tubular body part. Their corresponding characters in ICD-10-PCS are:

- Restriction: Character V
- Occlusion: Character L
- Dilation: Character 7

An article discussing the remaining root operation of this group, Bypass, will appear in the November/December issue of the *Journal of AHIMA*.

ICD-10-PCS Coding Guidelines

B3.12. Occlusion vs. Restriction for vessel embolization procedures
If the objective of an embolization procedure is to completely close a vessel, the root operation Occlusion is coded. If the objective of an embolization procedure is to narrow the lumen of a vessel, the root operation Restriction is coded.

Examples: Tumor embolization is coded to the root operation Occlusion, because the objective of the procedure is to cut off the blood supply to the vessel.

Embolization of a cerebral aneurysm is coded to the root operation Restriction, because the objective of the procedure is not to close off the vessel entirely, but to narrow the lumen of the vessel at the site of the aneurysm where it is abnormally wide.

B4.4 Coronary arteries
The coronary arteries are classified as a single body part that is specified by number of sites treated and not by name or number of arteries. Separate body part values are used to specify the number of sites treated when the same procedure is performed on multiple sites in the coronary arteries.

Examples: Angioplasty of two distinct sites in the left anterior descending coronary artery with placement of two stents is coded as Dilation of Coronary Arteries, Two Sites, with Intraluminal Device.

Angioplasty of two distinct sites in the left anterior descending coronary artery, one with stent placed and one without, is coded separately as Dilation of Coronary Artery, One Site with Intraluminal Device, and Dilation of Coronary Artery, One Site with no device.

B6.1a Device
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.

Source: Centers for Medicare and Medicaid Services. "ICD-10-PCS Coding Guidelines." 2013. http://www.cms.gov/Medicare/Coding/ICD10/downloads/PCS_2012_guidelines.pdf.

Root Operation V: Restriction

The ICD-10-PCS definition for the root operation Restriction is "Partially closing an orifice or the lumen of a tubular body part." For Restriction, the orifice can be a natural orifice or an artificially created orifice. Restriction includes either intraluminal or extraluminal methods for narrowing the diameter (for example, stents or bands).

Examples of Restriction include:

- Esophagogastric fundoplication
- Thoracotomy with banding of left pulmonary artery with extraluminal device
- Restriction of thoracic duct with intraluminal stent

Comparing ICD-9-CM and ICD-10-PCS: Restriction

Transvaginal cervical cerclage

A cervical cerclage procedure is done for an incompetent cervix. The cerclage is used to prevent early changes in a woman's cervix, thus preventing premature labor. During this procedure, a strong suture is inserted at the upper part of the cervix early in the pregnancy, usually between the 12th and 16th week of the pregnancy, and is then removed toward the end of the pregnancy, usually during the 37th week.

In ICD-9-CM, the Alphabetical Index main term entry is Cerclage with the subterm of cervical followed by transvaginal. The code is 67.59, Other repair of internal cervical OS. For code 67.59, there is no specification to show if the procedure was performed via the vagina with endoscopy or without.

Restriction is the correct ICD-10-PCS root operation for cervical cerclage. This root operation is coded when the objective of the procedure is to narrow the diameter of a tubular body part or orifice. The Alphabetic Index entry main term Cerclage leads the coder to see Restriction. Under the main term Restriction, the body part "cervix" provides the first four characters of our code—0UVC. The coding professional must go to the code table for 0UVC and build the correct code. The appropriate code for this procedure is 0UVC7ZZ. The fourth character (C) identifies the body part as the cervix while the fifth character identifies the technique to reach the operative site or approach. The procedural approach was via natural or artificial opening (7) as the procedure was completed through the vagina without an incision or puncture. The sixth and seventh characters (Z) are assigned to indicate there was no device used and no qualifier.

Root Operation L: Occlusion

Occlusion is defined in the ICD-10-PCS Reference Manual as "Completely closing an orifice or the lumen of a tubular body part." Just like in Restriction, the orifice can be a natural orifice or an artificially created orifice for Occlusion procedures.

Occlusion procedure examples include:

- Ligation of inferior vena cava
- Fallopian tube ligation with bands or tied and cut
- Complete embolization of internal carotid-cavernous fistula
- Percutaneous suture exclusion of left atrial appendage, via femoral artery access

Comparing ICD-9-CM and ICD-10-PCS: Occlusion

Laparoscopy with bilateral occlusion of fallopian tubes using extraluminal clips

A fallopian tube ligation involves severing and sealing the tubes to prevent pregnancy. There are several different ways to accomplish this result, such as with sutures, clips, or rings. If the procedure is performed with electrocoagulation or cauterization, it is coded to Destruction, not Occlusion. Researching the way the rings and clips are applied will assist with information about the types of devices. In this example, the occlusion of the fallopian tubes was achieved by extraluminal clips.

In ICD-9-CM, the Alphabetic Index entry main term is Ligation, followed by subterms fallopian tube, by endoscopy. The code is 66.29, Other bilateral endoscopic destruction or occlusion of fallopian tubes. The root operation Occlusion is coded when the objective of the procedure is to close off a tubular body part or orifice. The ICD-10-PCS Alphabetic Index entry main term Ligation provides a note to "see Occlusion." A review of the subterms located under the main term Occlusion shows fallopian tubes, bilateral and indicates that the correct table for this procedure is Table 0UL7. The appropriate ICD-10-PCS code for this procedure is 0UL74CZ. The fourth character (7) identifies that the procedure was performed on the fallopian tubes, bilaterally. The fifth character (4) provides the approach, percutaneous endoscopic. The sixth character (C) specifies the device used was an "extraluminal device." And the seventh character (Z) indicates there was no qualifier.

Root Operation 7: Dilation

The definition for the root operation Dilation in the ICD-10-PCS Reference Manual is "Expanding an orifice or the lumen of a tubular body part." Dilation includes both intraluminal and extraluminal methods of enlarging the diameter. The explanation of Dilation states the orifice can be a natural orifice or an artificially created orifice. This can be accomplished by stretching a tubular body part using intraluminal pressure or by cutting part of the orifice or wall of the tubular body part.

A device placed to maintain the new diameter is an integral part of the Dilation procedure, and is coded to a sixth-character device value in the Dilation procedure code.

Examples of Dilation procedures include:

- Percutaneous transluminal angioplasty
- Dilation of the common bile duct
- Cystoscopy with dilation of ureteral stricture, with stent placement

In determining the body part for Dilation, it would be the body part where the stent is placed. The device values for Dilation procedures performed on the arteries are:

- Intraluminal device, drug-eluting – 4
- Intraluminal device – D
- Radioactive intraluminal device - T

Comparing ICD-9-CM and ICD-10-PCS: Dilation

Laryngoscopy with intraluminal dilation of laryngeal stenosis

The root operation Dilation is coded when the objective of the procedure is to enlarge the diameter of a tubular body part or orifice. During this procedure a mechanical device was inserted into the mouth and larynx in order to dilate the stenosis.

In ICD-9-CM, the Alphabetical Index main term entry is Dilation with the subterm of larynx. The code is 31.98, Other operations on larynx. This code does not provide any specification to show if the procedure was performed with or without a laryngoscope. The root operation in ICD-10-PCS is the same main entry term used to look up the ICD-9-CM procedure code, Dilation. Review the Alphabetical Index for term Dilation and subterm, Larynx. This provides the code table to reference for the complete code, which is 0C7S. The appropriate ICD-10-PCS code for this procedure is 0C7S8ZZ. The fourth character (S) identifies that the procedure was performed on the larynx. The fifth character (8) provides the approach, which is via natural or artificial opening, endoscopic. Since no device was left in place, the sixth character (Z) indicates no device and no qualifier (Z) was assigned for the seventh character.

References

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

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

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

Centers for Medicare and Medicaid Services. "2014 ICD-10-PCS Reference Manual." http://www.cms.gov/Medicare/Coding/ICD10/2014-ICD-10-PCS.html.

Ingenix. *ICD-9-CM Expert for Hospitals and Payers, Volumes 1, 2, & 3 – 2013, First Edition.* Salt Lake City, UT: OptumInsight, 2012.

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