Coding Root Operations with ICD-10-PCS: Understanding Fusion, Alteration, and Creation

By Theresa Rihanek, MHA, RHIA, CCS

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

With this article the *Journal of AHIMA* concludes its 10-part Coding Notes series focusing on the 31 root operations of ICD-10-PCS. This installment focuses on three root operations in the Medical and Surgical Section that define other objectives:

- Fusion
- Alteration
- Creation

Fusion: Root Operation G

The definition for the Fusion root operation provided in the 2014 ICD-10-PCS Reference Manual is "Joining together portions of an articular body part rendering the articular body part immobile." Fusion procedures are only performed on the joints, not the bones or vertebra. The only tables for fusion are found in the Upper Joints (0RG) and Lower Joints (0SG) body systems.

The body part value assigned is the specific joint being fused. When coding a spinal fusion at L1-L2, the body part value used is "0-Lumbar vertebral joint," meaning one joint. If the fusion was performed at L1-L3, then the body part value that is assigned is "1-Lumbar vertebral joint, 2 or more," meaning two joints.

Spinal fusions may use a variety of different devices such as autologous tissue substitute, interbody fusion device, internal fixation device, non-autologous tissue substitute, and external fixation device. Guideline B3.10c (see side bar on page 65) delineates how to apply the device value for fusion procedures when a combination of devices is used. An interbody fusion device is selected if the interbody fusion device is used with other material such as a bone graft—the bone graft would not be coded separately. When bone grafts are used as the only method for fusing a vertebral joint, either Autologous or Non-autologous tissue substitute is selected for the device value. If a mixture of autologous and non-autologous bone tissue is used at the same level, then the device value assigned is Autologous tissue substitute.

For vertebral joint fusion, qualifier values are used to specify the approach. These values delineate:[1]

- Anterior approach, anterior column—entry through the front of the body to perform a procedure on the body of the vertebra or disc
- Posterior approach, posterior column—entry through the back of the body to perform a procedure on the vertebral foramen, spinous process, facets and/or lamina
- Posterior approach, anterior column—entry through the back of the body to perform a procedure on the body of the vertebra or the disc

Some fusion procedures involve the insertion of a spinal stabilization device that is performed in conjunction with the placement of an interbody fusion device. Spinal stabilization devices, pedicle based, include segmental and non-segmental spinal instrumentation which provide stabilization to the posterior spine via the pedicles.[2] Other terms that may be used to describe spinal stabilization devices include interspinsous spacer, or interspinous distraction device. An additional code for the insertion of the spinal stabilization device is assigned using the root operation Insertion. Some examples of Fusion procedures include open ankle arthrodesis and open radiocarpal fusion of left hand with internal fixation.

ICD-10-PCS Coding Guidelines: Fusion Procedures of the Spine

Coding Guideline B3.10a

The body part coded for a spinal vertebral joint(s) rendered immobile by a spinal fusion procedure is classified by the level of the spine (i.e., thoracic). There are distinct body part values for a single vertebral joint and for multiple vertebral joints at each spinal level.

Example: Body part values specify Lumbar Vertebral Joint, Lumbar Vertebral Joints, 2 or More, and Lumbosacral Vertebral Joint.

Coding Guideline B3.10b

If multiple vertebral joints are fused, a separate procedure is coded for each vertebral joint that uses a different device and/or qualifier.

Example: Fusion of lumbar vertebral joint, posterior approach, anterior column and fusion of lumbar vertebral joint, posterior approach, posterior column are coded separately.

Coding Guideline B3.10c

Combinations of devices and materials are often used on a vertebral joint to render the joint immobile. When combinations of devices are used on the same vertebral joint, the device value coded for the procedure is as follows:

- If an interbody fusion device is used to render the joint immobile (alone or containing other material like bone graft), the procedure is coded with the device value Interbody Fusion Device
- If bone graft is the only device used to render the joint immobile, the procedure is coded with the device value Nonautologous Tissue Substitute or Autologous Tissue Substitute
- If a mixture of autologous and nonautologous bone graft (with or without biological or synthetic extenders or binders) is used to render the joint immobile, code the procedure with the device value Autologous Tissue Substitute

Examples: Fusion of a vertebral joint using a cage style interbody fusion device containing morsellized bone graft is coded to the device Interbody Fusion Device.

Fusion of a vertebral joint using a bone dowel interbody fusion device made of cadaver bone and packed with a mixture of local morsellized bone and demineralized bone matrix is coded to the device Interbody Fusion Device.

Fusion of a vertebral joint using both autologous bone graft and bone bank bone graft is coded to the device Autologous Tissue Substitute.

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

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

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

Spinal Fusion

A patient presented for spinal surgery. An anterior incision was made to access the L3/L4 interspace. An interbody fusion device (carbon fiber cage) was placed on the anterior column after being packed with bone morphogenetic protein and some allograft bone. This resulted in satisfactory positioning.

In ICD-9-CM, this procedure documentation requires multiple codes to completely capture the procedure:

- 81.06 - Lumbar fusion of the anterior column/anterior technique
- 81.62 - Fusion or refusion of 2-3 vertebrae
- 84.51 - Insertion of interbody spinal fusion device
- 84.52 - Insertion of recombinant bone morphogenetic protein

In ICD-10-PCS, this procedure is coded using 0SG00Z0. To assign the fusion code, the Index main term entry is Fusion, subterm Lumbar Vertebral, which directs the user to table 0SG. The fourth character (0) identified the body part as a single lumbar vertebral joint and the fifth character (0) identifies the open approach. The device value used is (A) for interbody fusion device, which includes the placement of the cage, the bone morphogenetic protein and allograft. The seventh character qualifier (0) specifies the anterior approach, anterior column.

Alteration: Root Operation 0

The definition for the root operation Alteration in the 2014 ICD-10-PCS Reference Manual is “Modifying the natural anatomic structure of a body part without affecting the function of the body part.” Alteration is only to be used for all procedures—including all methods, approaches, and devices used—performed only to change appearance. Coding professionals must carefully review documentation to clearly identify that the root operation, Alteration, should be used since some procedures may be done for medical purposes rather than cosmetic purposes. Examples of Alteration procedures include a cosmetic face lift.

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

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

Cosmetic Breast Augmentation

An open bilateral breast augmentation was performed for cosmetic reasons. An umbilical incision was made and a tunneling device was employed to tunnel up to the left breast. Sizers were placed and filled to approximately 400 ml to create a subpectoral pocket. An identical procedure was performed on the right breast. 350 ml silicone implants were then placed into each pocket and inflated. Symmetry was achieved and the wound was closed.

In ICD-9-CM, the Alphabetic Index main term entry is Augmentation, breast which provides a cross reference note to see Mammoplasty, augmentation. At this index entry additional subterms—with, breast implant—are identified. This entry directs users to code 85.54, Bilateral breast implant.

There is not an index entry for Augmentation in ICD-10-PCS. The coding professional must understand that the root operation for this procedure is Alteration because it was done for cosmetic reasons. The Index entry is Alteration, subterms, Breast, bilateral which direct to table 0H0. The complete code for this scenario is 0H0V0JZ. The body part value is bilateral breast (V), approach value open (0), and the device value is synthetic substitute (J) for the silicone implants.

Creation: Root Operation 4

The definition for the root operation Creation in the 2014 ICD-10-PCS Reference Manual is, “Making a new genital structure that does not physically take the place of a body part.” Creation is used for procedures representing sex change operations. Creation procedures are captured in the general anatomical regions body system, Table 0W4. The body part values are M-Perineum, Male and N-Perineum, Female. These body part values pertain to the current gender of the patient. The qualifier

identifies the body part that is created, either vagina or penis. Procedures include the creation of a penis in a female patient using tissue allograft or creation of a vagina in a male patient using autograft.

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

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

Creation of a Vagina in a Male Patient Using Synthetic Material

In ICD-9-CM, the Alphabetic Index main term entry is Operation; subterms, Sex Transformation, NEC which direct the coder to 64.5 – Operations for sex transformation, not elsewhere ified.

In ICD-10-PCS, the Index main term entry is Creation, subterm Male which directs to Table 0W4M0. The complete code is 0W4M0J0. The body part value is M-Perineum, male because the body part represents the current gender of the patient. The approach value is open (0), device value is synthetic substitute (J), and qualifier is vagina (0).

Notes

1. Kuehn, Lynn and Therese Jorwic. *ICD-10-PCS: An Applied Approach*. Chicago, IL: AHIMA Press, 2013, p. 360-366.
2. Ibid.

References

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.” 2013. http://www.cms.gov/Medicare/Coding/ICD10/Downloads/PCS-2014-guidelines.pdf.

Centers for Medicare and Medicaid Services. “2014 ICD-10-PCS Reference Manual.” 2013. http://www.cms.gov/Medicare/Coding/ICD10/2014-ICD-10-PCS.html.

Theresa Rihanek (theresa.rihanek@ahima.org) is a director of HIM practice excellence at AHIMA

Article citation:
Rihanek, Theresa. "Coding Root Operations with ICD-10-PCS: Understanding Fusion, Alteration, and Creation" *Journal of AHIMA* 85, no.3 (March 2014): 64-66.