

# Coding Root Operations with ICD-10-PCS: Understanding Bypass, Inspection, and Map

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*Editor's note: This is the seventh 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 take a more in depth look at the definitions and applications of three root operations:

- Bypass
- Inspection
- Map

## Root Operation 1: Bypass

The definition for the Bypass root operation provided in the 2014 ICD-10-PCS Reference Manual is "Altering the route of passage of the contents of a tubular body part." Bypass involves rerouting the 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. The bypass root operation includes one or more anastomosis, with or without the use of a device. The range of bypass procedures includes normal routes such as those made in coronary artery bypass procedures, and abnormal routes such as those made in colostomy formation procedures.

For coding guidelines related to the Bypass root operation, see the sidebar on page 75. All coding guideline information is referenced from the 2014 ICD-10-PCS Official Guidelines for Coding and Reporting, available online from the Centers for Medicare and Medicaid Services.

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

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

### Four Vessel Coronary Artery Bypass Graft

For the purposes of this example, this open four vessel coronary artery bypass was completed by grafting three coronary arteries using the left autologous greater saphenous vein, harvested endoscopically, and the fourth coronary artery was bypassed using the loosened end of the left internal mammary artery. This was an off pump procedure.

In ICD-9-CM, the Alphabetic Index main term entry is Bypass; subterm aortocoronary, which is further subdivided by the number of vessels leading to codes 36.11–36.14. Another subterm entry identifies internal mammary-coronary which identifies code 36.15. The harvest of the greater saphenous vein is not coded separately in ICD-9-CM.

In ICD-10-PCS, there are two root operations for this procedure, Bypass and Excision. Two codes are assigned for the four vessel coronary artery bypass and an additional code is assigned for excision of the greater saphenous vein. Starting with Bypass, the index main term is Bypass; subterm artery and further subdivided by coronary. The number of sites treated—one, two, three, or four or more—directs the user to Table 021.

Applying coding guideline B3.6c (see sidebar on page 75 for full text of the guideline and an additional example), two codes are needed to correctly code the four vessel bypass. These codes are 021209W and 02100Z9. The first code identifies the use

of the saphenous vein as the autologous graft. The second code does not include a device as the left internal mammary artery is the vessel "bypassed from." A third code is necessary to identify the excision of the greater saphenous vein for the graft. For this procedure, the index main term is Excision; subterm Vein, which is further subdivided by Greater Saphenous, and directs the user to Table 06B. The code assigned for this graft excision is 06BQ4ZZ.

## Root Operation J: Inspection

The definition for the root operation Inspection provided in the 2014 ICD-10-PCS Reference Manual is, "Visually and/or manually exploring a body part." Inspection represents procedures where the sole object is to examine a body part. The visual inspection may be performed with or without optical instrumentation and manual exploration may be performed directly or through intervening body layers. Procedures that are discontinued without any other root operation being performed are also coded to Inspection.

There are several coding guidelines that apply to the root operation Inspection, available in the 2014 ICD-10-PCS Official Guidelines for Coding and Reporting:

- Coding Guideline B3.11a: Inspection of a body part(s) performed in order to achieve the objective of a procedure is not coded separately.
- Coding Guideline B3.11b: If multiple non-tubular body parts in a region are inspected, the body part that specifies the entire area inspected is coded.
- Coding Guideline B3.11c: When both an Inspection procedure and another procedure are performed on the same body part during the same episode, if the Inspection procedure is performed using a different approach than the other procedure, the Inspection procedure is coded separately.

## ICD-10-PCS Coding Guidelines: Bypass Procedures

### Coding Guideline B3.6a

Bypass procedures are coded by identifying the body part bypassed "from" and the body part bypassed "to." The fourth character body part specifies the body part bypassed from, and the qualifier specifies the body part bypassed to.

#### *Example:*

Bypass from stomach to jejunum, Stomach is the body part and Jejunum is the qualifier.

### Coding Guideline B3.6b

Coronary arteries are classified by number of distinct sites treated, rather than number of coronary arteries or anatomic name of a coronary artery (i.e., left anterior descending). Coronary artery bypass procedures are coded differently than the other bypass procedures as described in the previous guideline. Rather than identifying the body part bypassed from, the body part identifies the number of coronary artery sites bypassed to, and the qualifier specifies the vessel bypassed from.

#### *Example:*

Aortocoronary artery bypass of one site on the left anterior descending coronary artery and one site on the obtuse marginal coronary artery is classified in the body part axis of the classification as Two Coronary Artery Sites and the qualifier specifies the Aorta as the body part bypassed from.

### Coding Guideline B3.6c

If multiple coronary artery sites are bypassed, a separate procedure is coded for each coronary artery site that uses a different device and/or qualifier.

#### *Example:*

Aortocoronary artery bypass and internal mammary coronary artery bypass are coded separately.

**Coding Guideline B3.9: Excision for Graft**

If an autograft is obtained from a different body part in order to complete the objective of the procedure, a separate procedure is coded.

*Example:*

Coronary bypass with excision of saphenous vein graft, excision of saphenous vein is coded separately.

Source: 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>.

**Comparing ICD-9-CM and ICD-10-PCS: Inspection**

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

**Ureteroscopy with Unsuccessful Removal of a Left Ureteral Stone**

In ICD-9-CM the Alphabetic Index main term, Ureteroscopy, directs the coder to 56.31, ureteroscopy. Because the removal of the stone was unsuccessful no additional codes are necessary for complete coding.

In the ICD-10-PCS Alphabetic Index, main term Ureteroscopy provides a complete code for this inspection procedure, 0TJ98ZZ. After review of table 0TJ and finding no distinction between the right or left ureter for body part, code 0TJ98ZZ is the correct code for this procedure.

**Root Operation K: Map**

The definition for the root operation Map provided in the 2014 ICD-10-PCS Reference Manual is "Locating the route of passage of electrical impulses and/or locating functional areas in a body part." The Map root operation represents a very narrow range of procedures as it is applicable only to the cardiac conduction mechanism and the central nervous system. Procedures include cardiac mapping and cortical mapping. There are only two body system choices for Map: Central Nervous System (00K) and Heart and Great Vessels (02K). Review of both tables reveals very few choices when coding map procedures.

**ICD-10-PCS Code Structure**

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

**Comparing ICD-9-CM and ICD-10-PCS: Map**

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

**Left Heart Catheterization with Cardiac Mapping**

In ICD-9-CM, the Alphabetic Index main term, Catheterization; subterm cardiac directs the coder to combined, left or right. This was a left heart catheterization which is coded to 37.22, left heart cardiac catheterization. The cardiac mapping must also

be coded and review of the Alphabetic Index main term, Mapping; subterm cardiac directs the coder to 37.27, cardiac mapping.

ICD-10-PCS requires two codes for this procedure. Beginning with Catheterization in the Alphabetic Index; subterm Heart, the instructions are to see Measurement, Cardiac 4A02. With the table provided the coder goes directly to table 4A0. The code is completed using body part cardiac (2), approach percutaneous (3), function sampling and pressure (N), and qualifier left heart (7) for a complete code of 4A023N7. The cardiac mapping is coded using the Alphabetic Index main entry for Map, subentry conduction mechanism directing the coder to table 02K, body part conduction mechanism (8), approach percutaneous (3), no device (Z), and no qualifier (Z) for a complete code of 02K83ZZ. Conduction mechanism is the only choice in this table for body part.

## 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>.

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