

ICD-10-PCS Official Guidelines for Coding and Reporting

2019

The Centers for Medicare and Medicaid Services (CMS) and the National Center for Health Statistics (NCHS), two departments within the U.S. Federal Government’s Department of Health and Human Services (DHHS) provide the following guidelines for coding and reporting using the International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS). These guidelines should be used as a companion document to the official version of the ICD-10-PCS as published on the CMS website. The ICD-10-PCS is a procedure classification published by the United States for classifying procedures performed in hospital inpatient health care settings.

These guidelines have been approved by the four organizations that make up the Cooperating Parties for the ICD-10-PCS: the American Hospital Association (AHA), the American Health Information Management Association (AHIMA), CMS, and NCHS.

These guidelines are a set of rules that have been developed to accompany and complement the official conventions and instructions provided within the ICD-10-PCS itself. The instructions and conventions of the classification take precedence over guidelines. These guidelines are based on the coding and sequencing instructions in the Tables, Index and Definitions of ICD-10-PCS, but provide additional instruction. Adherence to these guidelines when assigning ICD-10-PCS procedure codes is required under the Health Insurance Portability and Accountability Act (HIPAA). The procedure codes have been adopted under HIPAA for hospital inpatient healthcare settings. A joint effort between the healthcare provider and the coder is essential to achieve complete and accurate documentation, code assignment, and reporting of diagnoses and procedures. These guidelines have been developed to assist both the healthcare provider and the coder in identifying those procedures that are to be reported. The importance of consistent, complete documentation in the medical record cannot be overemphasized. Without such documentation accurate coding cannot be achieved.

Table of Contents

A. Conventions	2
B. Medical and Surgical Section Guidelines	4
2. Body System	4
3. Root Operation.....	4
4. Body Part	9
5. Approach	12
6. Device	12
C. Obstetrics Section Guidelines.....	13
D. New Technology Section Guidelines.....	14
Selection of Principal Procedure.....	14

Conventions

A1

ICD-10-PCS codes are composed of seven characters. Each character is an axis of classification that specifies information about the procedure performed. Within a defined code range, a character specifies the same type of information in that axis of classification.

Example: The fifth axis of classification specifies the approach in sections 0 through 4 and 7 through 9 of the system.

A2

One of 34 possible values can be assigned to each axis of classification in the seven-character code: they are the numbers 0 through 9 and the alphabet (except I and O because they are easily confused with the numbers 1 and 0). The number of unique values used in an axis of classification differs as needed.

Example: Where the fifth axis of classification specifies the approach, seven different approach values are currently used to specify the approach.

A3

The valid values for an axis of classification can be added to as needed.

Example: If a significantly distinct type of device is used in a new procedure, a new device value can be added to the system.

A4

As with words in their context, the meaning of any single value is a combination of its axis of classification and any preceding values on which it may be dependent.

Example: The meaning of a body part value in the Medical and Surgical section is always dependent on the body system value. The body part value 0 in the Central Nervous body system specifies Brain and the body part value 0 in the Peripheral Nervous body system specifies Cervical Plexus.

A5

As the system is expanded to become increasingly detailed, over time more values will depend on preceding values for their meaning.

Example: In the Lower Joints body system, the device value 3 in the root operation Insertion specifies Infusion Device and the device value 3 in the root operation Replacement specifies Ceramic Synthetic Substitute.

A6

The purpose of the alphabetic index is to locate the appropriate table that contains all information necessary to construct a procedure code. The PCS Tables should always be consulted to find the most appropriate valid code.

A7

It is not required to consult the index first before proceeding to the tables to complete the code. A valid code may be chosen directly from the tables.

A8

All seven characters must be specified to be a valid code. If the documentation is incomplete for coding purposes, the physician should be queried for the necessary information.

A9

Within a PCS table, valid codes include all combinations of choices in characters 4 through 7 contained in the same row of the table. In the example below, 0JHT3VZ is a valid code, and 0JHW3VZ is *not* a valid code.

Section: 0 Medical and Surgical

Body System: J Subcutaneous Tissue and Fascia

Operation: H Insertion: Putting in a nonbiological appliance that monitors, assists, performs, or prevents a physiological function but does not physically take the place of a body part

Body Part	Approach	Device	Qualifier
S Subcutaneous Tissue and Fascia, Head and Neck V Subcutaneous Tissue and Fascia, Upper Extremity W Subcutaneous Tissue and Fascia, Lower Extremity	0 Open 3 Percutaneous	1 Radioactive Element 3 Infusion Device	Z No Qualifier
T Subcutaneous Tissue and Fascia, Trunk	0 Open 3 Percutaneous	1 Radioactive Element 3 Infusion Device V Infusion Pump	Z No Qualifier

A10

“And,” when used in a code description, means “and/or,” except when used to describe a combination of multiple body parts for which separate values exist for each body part (e.g., Skin and Subcutaneous Tissue used as a qualifier, where there are separate body part values for “Skin” and “Subcutaneous Tissue”).

Example: Lower Arm and Wrist Muscle means lower arm and/or wrist muscle.

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.

Example: When the physician documents “partial resection” the coder can independently correlate “partial resection” to the root operation Excision without querying the physician for clarification.

Medical and Surgical Section Guidelines (section 0)

B2. Body System

General guidelines

B2.1a

The procedure codes in the general anatomical regions body systems can be used when the procedure is performed on an anatomical region rather than a specific body part (e.g., 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.

Examples: Control of postoperative hemorrhage is coded to the root operation Control found in the general anatomical regions body systems.

Chest tube drainage of the pleural cavity is coded to the root operation Drainage found in the general anatomical regions body systems. Suture repair of the abdominal wall is coded to the root operation Repair in the general anatomical regions body system.

B2.1b

Where the general body part values “upper” and “lower” are provided as an option in the Upper Arteries, Lower Arteries, Upper Veins, Lower Veins, Muscles and Tendons body systems, “upper” or “lower” specifies body parts located above or below the diaphragm respectively.

Example: Vein body parts above the diaphragm are found in the Upper Veins body system; vein body parts below the diaphragm are found in the Lower Veins body system.

B3. Root Operation

General guidelines

B3.1a

In order to determine the appropriate root operation, the full definition of the root operation as contained in the PCS Tables must be applied.

B3.1b

Components of a procedure specified in the root operation definition and explanation are not coded separately. Procedural steps necessary to reach the operative site and close the operative site, including anastomosis of a tubular body part, are also not coded separately.

Examples: Resection of a joint as part of a joint replacement procedure is included in the root operation definition of Replacement and is not coded separately.

Laparotomy performed to reach the site of an open liver biopsy is not coded separately.

In a resection of sigmoid colon with anastomosis of descending colon to rectum, the anastomosis is not coded separately.

Multiple procedures

B3.2

During the same operative episode, multiple procedures are coded if:

- a. The same root operation is performed on different body parts as defined by distinct values of the body part character.
Examples: Diagnostic excision of liver and pancreas are coded separately. Excision of lesion in the ascending colon and excision of lesion in the transverse colon are coded separately.
- b. The same root operation is repeated in multiple body parts, and those body parts are separate and distinct body parts classified to a single ICD-10-PCS body part value.
Examples: Excision of the sartorius muscle and excision of the gracilis muscle are both included in the upper leg muscle body part value, and multiple procedures are coded.
Extraction of multiple toenails are coded separately.
- c. Multiple root operations with distinct objectives are performed on the same body part.
Example: Destruction of sigmoid lesion and bypass of sigmoid colon are coded separately.
- d. The intended root operation is attempted using one approach, but is converted to a different approach.
Example: Laparoscopic cholecystectomy converted to an open cholecystectomy is coded as percutaneous endoscopic Inspection and open Resection.

Discontinued or incomplete procedures

B3.3

If the intended procedure is discontinued or otherwise not completed, code the procedure to the root operation performed. If a procedure is discontinued before any other root operation is performed, code the root operation Inspection of the body part or anatomical region inspected.

Example: A planned aortic valve replacement procedure is discontinued after the initial thoracotomy and before any incision is made in the heart muscle, when the patient becomes hemodynamically unstable. This procedure is coded as an open Inspection of the mediastinum.

Biopsy procedures

B3.4a

Biopsy procedures are coded using the root operations Excision, Extraction, or Drainage and the qualifier Diagnostic.

Examples: Fine needle aspiration biopsy of fluid in the lung is coded to the root operation Drainage with the qualifier Diagnostic.

Biopsy of bone marrow is coded to the root operation Extraction with the qualifier Diagnostic.

Lymph node sampling for biopsy is coded to the root operation Excision with the qualifier Diagnostic.

Biopsy followed by more definitive treatment

B3.4b

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.

Example: Biopsy of breast followed by partial mastectomy at the same procedure site, both the biopsy and the partial mastectomy procedure are coded.

Overlapping body layers

B3.5

If the root operations Excision, Repair or Inspection are performed on overlapping layers of the musculoskeletal system, the body part specifying the deepest layer is coded.

Example: Excisional debridement that includes skin and subcutaneous tissue and muscle is coded to the muscle body part.

Bypass procedures

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.

B3.6b

Coronary artery bypass procedures are coded differently than 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 arteries bypassed to, and the qualifier specifies the vessel bypassed from.

Example: Aortocoronary artery bypass of the left anterior descending coronary artery and the obtuse marginal coronary artery is classified in the body part axis of classification as two coronary arteries, and the qualifier specifies the aorta as the body part bypassed from.

B3.6c

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

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

Control vs. more definitive root operations

B3.7

The root operation Control is defined as, “Stopping, or attempting to stop, postprocedural or other acute bleeding.” If an attempt to stop postprocedural or other acute bleeding is unsuccessful, and to stop the bleeding requires performing a more definitive root operation, such as Bypass, Detachment, Excision, Extraction, Reposition, Replacement, or Resection, then the more definitive root operation is coded instead of Control.

Example: Resection of spleen to stop bleeding is coded to Resection instead of Control.

Excision vs. Resection

B3.8

PCS contains specific body parts for anatomical subdivisions of a body part, such as lobes of the lungs or liver and regions of the intestine. Resection of the specific body part is coded whenever all of the body part is cut out or off, rather than coding Excision of a less specific body part.

Example: Left upper lung lobectomy is coded to Resection of Upper Lung Lobe, Left rather than Excision of Lung, Left.

Excision for graft

B3.9

If an autograft is obtained from a different procedure site 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.

Fusion procedures of the spine

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 (e.g. 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.

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.

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.

Inspection procedures

B3.11a

Inspection of a body part(s) performed in order to achieve the objective of a procedure is not coded separately.

Example: Fiberoptic bronchoscopy performed for irrigation of bronchus, only the irrigation procedure is coded.

B3.11b

If multiple tubular body parts are inspected, the most distal body part (the body part furthest from the starting point of the inspection) is coded. If multiple non-tubular body parts in a region are inspected, the body part that specifies the entire area inspected is coded.

Examples: Cystoureteroscopy with inspection of bladder and ureters is coded to the ureter body part value.

Exploratory laparotomy with general inspection of abdominal contents is coded to the peritoneal cavity body part value.

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.

Example: Endoscopic Inspection of the duodenum is coded separately when open Excision of the duodenum is performed during the same procedural episode.

Occlusion vs. Restriction for vessel embolization procedures

B3.12

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.

Release procedures

B3.13

In the root operation Release, the body part value coded is the body part being freed and not the tissue being manipulated or cut to free the body part.

Example: Lysis of intestinal adhesions is coded to the specific intestine body part value.

Release vs. Division

B3.14

If the sole objective of the procedure is freeing a body part without cutting the body part, the root operation is Release. If the sole objective of the procedure is separating or transecting a body part, the root operation is Division.

Examples: Freeing a nerve root from surrounding scar tissue to relieve pain is coded to the root operation Release.

Severing a nerve root to relieve pain is coded to the root operation Division.

Reposition for fracture treatment

B3.15

Reduction of a displaced fracture is coded to the root operation Reposition and the application of a cast or splint in conjunction with the Reposition procedure is not coded separately. Treatment of a nondisplaced fracture is coded to the procedure performed.

Examples: Casting of a nondisplaced fracture is coded to the root operation Immobilization in the Placement section.

Putting a pin in a nondisplaced fracture is coded to the root operation Insertion.

Transplantation vs. Administration

B3.16

Putting in a mature and functioning living body part taken from another individual or animal is coded to the root operation Transplantation. Putting in autologous or nonautologous cells is coded to the Administration section.

Example: Putting in autologous or nonautologous bone marrow, pancreatic islet cells or stem cells is coded to the Administration section.

Transfer procedures using multiple tissue layers

B3.17

The root operation Transfer contains qualifiers that can be used to specify when a transfer flap is composed of more than one tissue layer, such as a musculocutaneous flap. For procedures involving transfer of multiple tissue layers including skin, subcutaneous tissue, fascia or muscle, the procedure is coded to the body part value that describes the deepest tissue layer in the flap, and the qualifier can be used to describe the other tissue layer(s) in the transfer flap.

Example: A musculocutaneous flap transfer is coded to the appropriate body part value in the body system Muscles, and the qualifier is used to describe the additional tissue layer(s) in the transfer flap.

B4. Body Part

General guidelines

B4.1a

If a procedure is performed on a portion of a body part that does not have a separate body part value, code the body part value corresponding to the whole body part.

Example: A procedure performed on the alveolar process of the mandible is coded to the mandible body part.

B4.1b

If the prefix “peri” is combined with a body part to identify the site of the procedure, and the site of the procedure is not further specified, then the procedure is coded to the body part named. This guideline applies only when a more specific body part value is not available.

Examples: A procedure site identified as perirenal is coded to the kidney body part when the site of the procedure is not further specified.

A procedure site described in the documentation as peri-urethral, and the documentation also indicates that it is the vulvar tissue and not the urethral tissue that is the site of the procedure, then the procedure is coded to the vulva body part.

B4.1c

If a procedure is performed on a continuous section of a tubular body part, code the body part value corresponding to the furthest anatomical site from the point of entry.

Example: A procedure performed on a continuous section of artery from the femoral artery to the external iliac artery with the point of entry at the femoral artery is coded to the external iliac body part.

Branches of body parts

B4.2

Where a specific branch of a body part does not have its own body part value in PCS, the body part is typically coded to the closest proximal branch that has a specific body part value. In the cardiovascular body systems, if a general body part is available in the correct root operation table, and coding to a proximal branch would require assigning a code in a different body system, the procedure is coded using the general body part value.

Examples: A procedure performed on the mandibular branch of the trigeminal nerve is coded to the trigeminal nerve body part value.

Occlusion of the bronchial artery is coded to the body part value Upper Artery in the body system Upper Arteries, and not to the body part value Thoracic Aorta, Descending in the body system Heart and Great Vessels.

Bilateral body part values

B4.3

Bilateral body part values are available for a limited number of body parts. If the identical procedure is performed on contralateral body parts, and a bilateral body part value exists for that body part, a single procedure is coded using the bilateral body part value. If no bilateral body part value exists, each procedure is coded separately using the appropriate body part value.

Examples: The identical procedure performed on both fallopian tubes is coded once using the body part value Fallopian Tube, Bilateral.

The identical procedure performed on both knee joints is coded twice using the body part values Knee Joint, Right and Knee Joint, Left.

Coronary arteries

B4.4

The coronary arteries are classified as a single body part that is further specified by number of arteries treated. One procedure code specifying multiple arteries is used when the same procedure is performed, including the same device and qualifier values.

Examples: Angioplasty of two distinct coronary arteries with placement of two stents is coded as Dilation of Coronary Artery, Two Arteries with Two Intraluminal Devices.

Angioplasty of two distinct coronary arteries, one with stent placed and one without, is coded separately as Dilation of Coronary Artery, One Artery with Intraluminal Device, and Dilation of Coronary Artery, One Artery with no device.

Tendons, ligaments, bursae and fascia near a joint

B4.5

Procedures performed on tendons, ligaments, bursae and fascia supporting a joint are coded to the body part in the respective body system that is the focus of the procedure.

Procedures performed on joint structures themselves are coded to the body part in the joint body systems.

Examples: Repair of the anterior cruciate ligament of the knee is coded to the knee bursa and ligament body part in the bursae and ligaments body system.

Knee arthroscopy with shaving of articular cartilage is coded to the knee joint body part in the Lower Joints body system.

Skin, subcutaneous tissue and fascia overlying a joint

B4.6

If a procedure is performed on the skin, subcutaneous tissue or fascia overlying a joint, the procedure is coded to the following body part:

- Shoulder is coded to Upper Arm
- Elbow is coded to Lower Arm
- Wrist is coded to Lower Arm
- Hip is coded to Upper Leg
- Knee is coded to Lower Leg
- Ankle is coded to Foot

Fingers and toes

B4.7

If a body system does not contain a separate body part value for fingers, procedures performed on the fingers are coded to the body part value for the hand. If a body system does not contain a separate body part value for toes, procedures performed on the toes are coded to the body part value for the foot.

Example: Excision of finger muscle is coded to one of the hand muscle body part values in the Muscles body system.

Upper and lower intestinal tract

B4.8

In the Gastrointestinal body system, the general body part values Upper Intestinal Tract and Lower Intestinal Tract are provided as an option for the root operations Change, Inspection, Removal and Revision. Upper Intestinal Tract includes the portion of the gastrointestinal tract from the esophagus down to and including the duodenum, and Lower Intestinal Tract includes the portion of the gastrointestinal tract from the jejunum down to and including the rectum and anus.

Example: In the root operation Change table, change of a device in the jejunum is coded using the body part Lower Intestinal Tract.

B5. Approach

Open approach with percutaneous endoscopic assistance

B5.2

Procedures performed using the open approach with percutaneous endoscopic assistance are coded to the approach Open.

Example: Laparoscopic-assisted sigmoidectomy is coded to the approach Open.

External approach

B5.3a

Procedures performed within an orifice on structures that are visible without the aid of any instrumentation are coded to the approach External.

Example: Resection of tonsils is coded to the approach External.

B5.3b

Procedures performed indirectly by the application of external force through the intervening body layers are coded to the approach External.

Example: Closed reduction of fracture is coded to the approach External.

Percutaneous procedure via device

B5.4

Procedures performed percutaneously via a device placed for the procedure are coded to the approach Percutaneous.

Example: Fragmentation of kidney stone performed via percutaneous nephrostomy is coded to the approach Percutaneous.

B6. Device

General guidelines

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. In limited root operations, the classification provides the qualifier values Temporary and Intraoperative, for specific procedures involving clinically significant devices, where the purpose of the device is to

be utilized for a brief duration during the procedure or current inpatient stay. If a device that is intended to remain after the procedure is completed requires removal before the end of the operative episode in which it was inserted (for example, the device size is inadequate or a complication occurs), both the insertion and removal of the device should be coded.

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.

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.

Example: Irrigation of percutaneous nephrostomy tube is coded to the root operation Irrigation of indwelling device in the Administration section.

Drainage device

B6.2

A separate procedure to put in a drainage device is coded to the root operation Drainage with the device value Drainage Device.

Obstetric Section Guidelines (section 1)

C. Obstetrics Section

Products of conception

C1

Procedures performed on the products of conception are coded to the Obstetrics section. Procedures performed on the pregnant female other than the products of conception are coded to the appropriate root operation in the Medical and Surgical section.

Example: Amniocentesis is coded to the products of conception body part in the Obstetrics section. Repair of obstetric urethral laceration is coded to the urethra body part in the Medical and Surgical section.

Procedures following delivery or abortion

C2

Procedures performed following a delivery or abortion for curettage of the endometrium or evacuation of retained products of conception are all coded in the Obstetrics section, to the root operation Extraction and the body part Products of Conception, Retained.

Diagnostic or therapeutic dilation and curettage performed during times other than the postpartum or post-abortion period are all coded in the Medical and Surgical section, to the root operation Extraction and the body part Endometrium.

New Technology Section Guidelines (section X)

D. New Technology Section

General guidelines

D1

Section X codes are standalone codes. They are not supplemental codes. Section X codes fully represent the specific procedure described in the code title, and do not require any additional codes from other sections of ICD-10-PCS. When section X contains a code title which describes a specific new technology procedure, only that X code is reported for the procedure. There is no need to report a broader, non-specific code in another section of ICD-10-PCS.

Example: XW04321 Introduction of Ceftazidime-Avibactam Anti-infective into Central Vein, Percutaneous Approach, New Technology Group 1, can be coded to indicate that Ceftazidime-Avibactam Anti-infective was administered via a central vein. A separate code from table 3E0 in the Administration section of ICD-10-PCS is not coded in addition to this code.

Selection of Principal Procedure

The following instructions should be applied in the selection of principal procedure and clarification on the importance of the relation to the principal diagnosis when more than one procedure is performed:

1. Procedure performed for definitive treatment of both principal diagnosis and secondary diagnosis
 - a. Sequence procedure performed for definitive treatment most related to principal diagnosis as principal procedure.
2. Procedure performed for definitive treatment and diagnostic procedures performed for both principal diagnosis and secondary diagnosis.
 - a. Sequence procedure performed for definitive treatment most related to principal diagnosis as principal procedure
3. A diagnostic procedure was performed for the principal diagnosis and a procedure is performed for definitive treatment of a secondary diagnosis.
 - a. Sequence diagnostic procedure as principal procedure, since the procedure most related to the principal diagnosis takes precedence.
4. No procedures performed that are related to principal diagnosis; procedures performed for definitive treatment and diagnostic procedures were performed for secondary diagnosis
 - a. Sequence procedure performed for definitive treatment of secondary diagnosis as principal procedure, since there are no procedures (definitive or nondefinitive treatment) related to principal diagnosis.