循環系統編碼原則
與注意事項

鍾麗君
20160919
Heart Failure

- I50.1 Left ventricular failure
- I50.20 Unspecified systolic (congestive) heart failure
- I50.21 Acute systolic (congestive) heart failure
- I50.22 Chronic systolic (congestive) heart failure
- I50.23 Acute on chronic systolic (congestive) heart failure
- I50.30 Unspecified diastolic (congestive) heart failure
- I50.31 Acute diastolic (congestive) heart failure
- I50.32 Chronic diastolic (congestive) heart failure
- I50.33 Acute on chronic diastolic (congestive) heart failure
- I50.40 Unspecified combined systolic (congestive) and diastolic (congestive) heart failure
- I50.41 Acute combined systolic (congestive) and diastolic (congestive) heart failure
- I50.42 Chronic combined systolic (congestive) and diastolic (congestive) heart failure
- I50.43 Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure
- I50.9 Heart failure, unspecified

Edema of lung with heart failure

Congestive heart failure
Right ventricular failure
Biventricular heart failure
Heart Failure

- HFpEF (Heart failure with preserved ejection fraction), HFpEF may also be referred to as heart failure with preserved systolic function, 即是 diastolic heart failure.

- HFrEF (Heart failure with reduced ejection fraction), HFrEF may also be called heart failure with low ejection fraction or systolic function, 即是 systolic heart failure.
How is pleural effusion in CHF coded?

- Pleural effusion is commonly seen with CHF with or without pulmonary edema. Ordinarily the pleural effusion is minimal and is not specifically addressed other than by more aggressive treatment of the underlying CHF. In this situation it should not be coded. However, it is acceptable to report pleural effusion as an additional diagnosis if the condition requires either therapeutic intervention or diagnostic testing.

- J91.8 pleural effusion in other conditions classified elsewhere, is assigned as a secondary code only if the condition is specifically evaluated or treated.

Coding Clinic, Second Quarter 2015, P15
Post-infarctional angina

Q: What is the correct code assignment for a patient who presents with an acute non-ST elevation MI, and develops post-infarctional angina when the patient has atherosclerotic CAD?

A:
- I21.4 Non-ST elevation (NSTEMI) myocardial infarction
- I23.7 Post-infarction angina
- I25.118 Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris

Coding Clinic, Second Quarter 2015, P16-17
Pulmonary hypertension complicating pregnancy

Q:
- What is the appropriate diagnosis code for preexisting pulmonary hypertension complicating pregnancy?

A:
- O99.41- Disease of the circulatory system complicating pregnancy
- I27.2 Other secondary pulmonary hypertension

Pulmonary hypertension defaults to secondary pulmonary hypertension

Coding Clinic, Second Quarter 2016, P8
Central Artery/Vein

- Coronary artery
- Coronary vein
- Pulmonary trunk
- Pulmonary artery
- Pulmonary vein
- Inferior vena cava
- Superior vena cava
- Thoracic aorta
- All other vessels are code to the peripheral artery/vein body part value.
Bypass Procedures

2014~2016 ICD-10-PCS Official Guidelines

B3. Root Operation
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 (e.g., LAD). 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 artery sites bypassed to, and the qualifier specifies the vessel bypassed from.

Example:
- Aortocoronary artery bypass of one site on the LAD and one site on the obtuse marginal coronary artery is classified in the body part axis of classification as two coronary artery sites and the qualifier specifies the aorta as the body part bypassed from.
Bypass Procedures

2014~2016 ICD-10-PCS Official Guidelines

B3. Root Operation
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 are coded separately.
The coronary arteries are classified as a single body part that is further 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 LAD, 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.
Q:
The patient had multiple drug-eluting stents placed percutaneously in three distinct lesions occurring in three separate coronary arteries: the first diagonal (D1), the left circumflex (LCX), and the right coronary artery (RCA). What is the appropriate body part value for coronary artery sites(s)?

A:
- 027234Z Dilation of Coronary Artery, Three Sites with Drug-eluting Intraluminal Device, Percutaneous Approach

Coding Clinic, Second Quarter 2015, P3
PTCA

Q:
- A patient had one long mid-to-distal lesion in LAD, which was treated percutaneously with two drug-eluting stents.

A:
- 027034Z  Dilation of coronary artery, one site with drug-eluting intraluminal device, percutaneous approach.

- This is considered one coronary artery site (LAD). Multiple stents used to treat a single coronary artery lesion are identified with the device value intraluminal device or drug-eluting intraluminal device, when multiple stents classified to the same device value are used to treat a single coronary artery lesion, that information is not currently captured in the icd-10-pcs code.

Coding Clinic, Second Quarter 2015, P3-4
PTCA

Q:

- The patient had a lesion in the proximal LAD artery that was treated percutaneously with one drug-eluting stent and a lesion in the distal LAD artery that was treated with one non-drug-eluting stent.

A:

- Two distinct lesions in the same coronary artery (LAD) were treated. These lesions are considered two coronary sites. In this case, since different types of stents were inserted, two codes with the body part value of one coronary artery site are assigned, to show the type of stent used.
  
  - 027034Z
  - 02703DZ
**PTCA**

**Q:**
- This patient had a lesion within the LAD that extended into a branch artery of the LAD at the bifurcation and two drug-eluting stents were placed percutaneously, one in the LAD and one in the branch.

**A:**
- In this case, the branch is not coded as a separate coronary artery site. According to the procedure report, the lesion extended from the LAD to the branch. If the lesion in the branch had been a separate lesion than the one in the LAD, then the body part value would be coded as two coronary sites.

- 0270346 Dilation of Coronary Artery, One Site, Bifurcation, with Drug-eluting Intraluminal Device, Percutaneous Approach

Coding Clinic, Second Quarter 2015, P4-5
PTCA

Q:
- The patient had percutaneous transluminal coronary angioplasty of the RCA with placement of two drug-eluting stents. He also had PTCA of the proximal and mid-portion of the LAD coronary artery. Three drug-eluting stents overlapping from the proximal to the mid-LAD were inserted.

A:
- 027134Z Dilation of coronary artery, two sites with drug eluting intraluminal device, percutaneous approach

- Two distinct sites were dilated, the RCA and the LAD. Since all of the stents placed were drug-eluting, they can be captured with a single code.
Q: Whether the LIMA is considered a free graft or a pedicle graft, if the LIMA graft remains attached, would only the bypass be coded with 6th character Z for no device?

A:
- The LIMA was used as pedicle graft and was not excised from the patient. A separate code should not be reported for harvesting/excision of the LIMA.
- 02100Z9 Bypass coronary artery, one site, from LIMA, open approach.
CABG
CABG

Q:

• A patient, status post CABG, is admitted due to significant in-stent restenosis in a previously placed stent in the saphenous vein graft within the distal anastomosis. A percutaneous transluminal coronary angioplasty was performed on the right coronary artery with deployment of a single drug-eluting stent. How is an angioplasty of a vessel that has been previously bypassed using a saphenous vein graft coded?

A:

• The saphenous vein is now functioning as a coronary artery. The current surgery was performed on what is now serving as a coronary artery; therefore the coronary artery is the site of the procedure and the procedure is coded to the appropriate coronary artery body part value.
Branches of body part

2017 ICD-10-PCS Official Guidelines

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 part system, the procedure is coded using the general 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.
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<td>Upper Arteries</td>
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<td>Operation</td>
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<th>Device</th>
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Fontan surgery

- The Fontan is a two staged repair
  - The first stage, also called a Bidirectional Glenn procedure or Hemi-Fontan
  - The second stage, also called Fontan completion, involves redirecting the blood from the IVC to the lungs

- There are three variations of the Fontan procedure
  - Atriopulmonary connection (the original technique)
  - Intracardiac total cavopulmonary connection (lateral tunnel)
  - Extracardiac total cavopulmonary connection
Fontan surgery

Q:

- A patient diagnosed with hypoplastic left heart syndrome, status post Norwood procedure and bidirectional Glenn procedure, presents for Fontan completion stage II. The intent of the procedure is to connect the inferior vena cava with the right pulmonary artery via a prosthetic conduit.

A:

- There are various methods to complete the Fontan procedure, ultimately the procedure is performed for blood flow to bypass the right ventricle and the blood to pass from the right atrium to the pulmonary artery.
- 02160JQ bypass right atrium to right pulmonary artery with synthetic substitute, open approach.

Coding Clinic, Third Quarter 2014, P29
Fontan surgery

- 02160JQ

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<td>Heart and Great Vessels</td>
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<td>Operation</td>
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<td>Bypass: Altering the route of passage of the contents of a tubular body part</td>
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<td>K Nonautologous Tissue Substitute</td>
<td>R Pulmonary Artery, Left</td>
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Removal of previous conduit

Q:
- The patient’s existing right ventricle to pulmonary artery conduit, along with the previously placed graft material, is resected and replaced with new graft material. Would this be considered removal and replacement of a device? Or should we just report a code for the new bypass procedure?

A:
- Assign only a code for the new bypass. The removal of a previous conduit is not considered removal of device.
- 021K0JQ bypass right ventricle to right pulmonary artery with synthetic substitute, open approach

Coding Clinic, Third Quarter 2014, P30
Switch operation

Q:
- The pulmonary artery was divided and brought anterior to the aorta. At this point, left and right coronary artery ostia were excised and reimplanted in the posterior great vessel and anastomosed to the distal aorta. What are the correct codes for arterial switch procedure with the repositioning of the coronary arteries?

A:
- During surgery, the aortic root and pulmonary trunk are switched and connected to the correct ventricles. The coronary arteries are also removed from the original aortic root and reconnected to the switched pulmonary trunk-the new neo-aorta.

- 02SP0ZZ Reposition Pulmonary Trunk, Open Approach
- 02SW0ZZ Reposition Thoracic Aorta, Open Approach
Vascular Ring

- 雙主動脈弓 (Double aortic arch)
- 異位左鎖骨下動脈 (Right aortic arch with aberrant left subclavian and a left ligamentum arteriosum)
- 左肺動脈吊帶 (left pulmonary artery sling)
Vascular Ring

Q:

- A two month old with stridor as a result of a vascular ring presents for division of the vascular ring. During surgery, a left posterolateral thoracotomy was done, the ligamentum was isolated, and then divided between two silk ties. The ends appeared to spring apart with no other fibrous structures constricting the esophagus, the descending aorta was then approximated to the prevertebral fascia using a single prolene suture, thereby lifting it off the underlying esophagus and trachea.

A:

- 0DN50ZZ Release Esophagus, Open Approach
- 0BN10ZZ Release Trachea, Open Approach

- The intent of the procedure is to free up the esophagus and trachea.
- Do not assign a separate code for the repositioning of the aorta since this was inherent to lifting off the underlying esophagus and trachea.
Vascular Ring

Q:

- A nine y/o girl with double aortic arch presents for division of the ring. At surgery, a left thoracotomy was carried out, a small ligamentum arteriosus was divided. The left aortic arch was circumferentially dissected, ligated and divided. After division, there was no apparent compression to the esophagus.

A:

- 0DN50ZZ release esophagus, open approach, for the release the esophagus
- 02QW0ZZ repair thoracic aorta, open approach, for the division of left aortic arch

- The icd-10-pcs does not provide a specific root operation or body part value for division of an aortic arch. Repair of the thoracic aorta is the closest available equivalent.

Coding Clinic, Third Quarter 2015, P16
A patient with TOF presents for repair. During the procedure, the anterior portion of the pericardium was resected and treated in glutaraldehyde. Following the repair, the pulmonary arteriotomy site was closed with the autologous pericardial patch to enlarge the main pulmonary artery and left pulmonary artery. The infundibulotomy was closed with an autologous pericardial patch to enlarge the area with running prolene® suture. Should the pericardial excision be coded separately?

When autologous graft is obtained from the site of the procedure, (for example, bone graft obtained from the operative site during a fusion procedure) the tissue harvest is typically not coded separately. Therefore, do not assign a separate code for the pericardial excision.

- 02UR07Z Supplement Left Pulmonary Artery with Autologous Tissue Substitute, Open Approach
- 02UP07Z Supplement Pulmonary Trunk with Autologous Tissue Substitute, Open Approach
RVOT divided

Q:

- A 4 month old boy with TOF, right ventricular outflow tract muscle bundles was divided and widened, the ligamentum was ligated, thymus was resected, and closure of VSD with a Gore-tex patch.

A:

- 02NK0ZZ Release of right ventricle, open approach for the widening of the right ventricular outflow tract.
- 02UM0JZZ Supplement Ventricular Septum with Synthetic Substitute, Open Approach
- 07TM0ZZZ Resection of Thymus, Open Approach

Coding Clinic, Third Quarter 2014, P16-17
Q:
- A 3 weeks old male, who was diagnosed with transposition of the great arteries with pulmonary stenosis, presents for right modified Blalock-Taussig shunt procedure to augment pulmonary artery flow. At surgery, the aorta and pulmonary artery were separated with electrocautery and the branch pulmonary arteries were mobilized. The innominate artery was mobilized, an arteriotomy was made and the proximal anastomosis was created with a Gore-Tex graft. A longitudinal arteriotomy was performed and the distal anastomosis of the shunt created to the right pulmonary artery using Prolene suture. What is modified B-T shunt procedure code?

A:
- 021W0JQ Bypass Thoracic Aorta to Right Pulmonary Artery with Synthetic Substitute, Open Approach

Coding Clinic, Third Quarter 2014, P3
## BT Shunt

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<tr>
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<td>5 Axillary Artery, Right</td>
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<td>6 Axillary Artery, Left</td>
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Rastelli operation

Q:
- An infant who had TGA and LVOT obstruction, presents for complete repair. The surgeon performed VSD closure using Gore-Tex baffle and right ventricle to pulmonary artery bypass with a Contegra valved conduit, is it appropriate to assign an additional code for valve replacement?

A:
- During surgery, the pulmonary valve is over sewn and sutured along with the stump of the pulmonary artery. The Contegra valved conduit (composed of bovine jugular vein) is implanted in the right ventricular outflow tract to restore pulmonary valve function.

- 021K0KP Bypass right ventricle to pulmonary trunk with nonautologous tissue substitute, open approach
- 02UM0JZ Supplement Ventricular Septum with Synthetic Substitute, Open Approach
Annuloplasty

Q:

The patient had severe mitral valve disease and underwent open mitral valve repair involving a wedge resection of P2(mid portion) of the posterior leaflet with a 32 mm Colvin-Galloway(CG) future band ring annuloplasty. Is this coded as a supplement or repair?

A:

The objective of the annuloplasty ring procedure is to supplement the annulus to restore its proper dimensions. Because a device is used to accomplish this objective, supplement is the correct root operation.

- 02UG0JZ Supplement Mitral Valve with Synthetic Substitute, Open Approach
- 02BG0ZZ Excision of Mitral Valve, Open Approach

Coding Clinic, Second Quarter 2015, P23-24
Q:
- A 19 month-old child was admitted for repair of severe subvalvar and valvar pulmonary stenosis. A pulmonary valvotomy was performed with pulmonary valve debridement. An incision was performed on the main pulmonary artery. The valvotomy was performed by doing several commisurotomies, dilation of annulus, and debridement of the tips of the leaflets. What is the code assignment for the valvotomy procedure? Are the commisurotomies inherent to dilation of the valve?

A:
- The commisurotomies are considered inherent to the dilation for this case. Additionally, the debridement of the valve tips is not separately coded in this case.

- 027H0ZZ Dilation of pulmonary valve, open approach

Coding Clinic, First Quarter 2016, P16
A patient with aortic stenosis underwent AVR with a root enlargement using a bioprosthetic valve and hemashield graft. During surgery, aortotomy was done, calcified leaflets were excised, and the annulus was debrided. A patch graft was needed as well as root enlargement. Therefore, a hemashield patch graft was sewn in place. Subannular sutures were placed and a pericardial valve was seated in place. The aortotomy was closed using the hemashield patch. Is a separate code assigned for aortic root enlargement with patch graft when performed during an AVR?

A:

- Code separately the aortic root enlargement performed prior to valve replacement. This is not a typical part of a valve replacement.
- 02UW0JZ Supplement Thoracic Aorta with Synthetic Substitute, Open Approach

Coding Clinic, Second Quarter 2016, P26
A patient with a pulmonary arteriovenous fistula presented for embolization of the right middle lobe lesions. Tornado® coils were deployed into the right pulmonary artery that fed into a branch of the arteriovenous fistula. Post embolization imaging showed complete occlusion of the AV fistula within the right middle lobe region. What is the appropriate body system and body part value for occlusion of a right pulmonary artery?

A:

- The procedure occludes both the pulmonary artery and vein, but the ICD-10-PCS table does not currently provide the body part value right pulmonary artery under the root operation occlusion. Since there is no body part value for right pulmonary artery, occlusion of the right pulmonary vein should be coded.
- 02LS3DZ Occlusion of Right Pulmonary Vein with Intraluminal Device, Percutaneous Approach
Pulmonary arteriovenous fistula

- 02LS3DZ

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<td>S Pulmonary Vein, Right</td>
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<td>T Pulmonary Vein, Left</td>
<td>3 Percutaneous</td>
<td>D Intraluminal Device</td>
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</tr>
<tr>
<td>V Superior Vena Cava</td>
<td>4 Percutaneous Endoscopic</td>
<td>Z No Device</td>
<td></td>
</tr>
</tbody>
</table>
VT Ablation

Q:
- The patient, who has ventricular tachycardia, was admitted for VT ablation. The ablation was performed percutaneously and Impella® 2.5 support was used.

A:
- The cardiac conduction system includes the sinoatrial node, the AV node, the bundle of HIS and all other specialized pathways in the atria and ventricles that govern the stimulation of the heart’s pumping action. The cardiac conduction system is the site of any arrhythmogenic focus treated by an ablation procedure, and such procedures are coded to the conduction mechanism body part value.

- 02583ZZ Destruction of Conduction Mechanism, Percutaneous Approach
- 5A0221D Assistance with Cardiac Output using Impeller Pump, Continuous

Coding Clinic, Third Quarter 2014, P19
### Impella support

**5A0**

<table>
<thead>
<tr>
<th>Body System</th>
<th>Duration</th>
<th>Function</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac</td>
<td></td>
<td></td>
<td>0 Balloon Pump</td>
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<tr>
<td>Circulatory</td>
<td></td>
<td></td>
<td>5 Pulsatile Compression</td>
</tr>
<tr>
<td>Respiratory</td>
<td></td>
<td></td>
<td>6 Other Pump</td>
</tr>
</tbody>
</table>

- Cardiac: 
  - Intermittent
  - Continuous
- Circulatory: 
  - Intermittent
  - Continuous
- Respiratory: 
  - Less than 24 Consecutive Hours
  - 24-96 Consecutive Hours
  - Greater than 96 Consecutive Hours

- Function: 
  - Output
  - Oxygenation
  - Ventilation

- Qualifier: 
  - 0 Impeller Pump
  - 1 Hyperbaric
  - C Supersaturated
  - 7 Continuous Positive Airway Pressure
  - 8 Intermittent Positive Airway Pressure
  - 9 Continuous Negative Airway Pressure
  - B Intermittent Negative Airway Pressure
  - Z No Qualifier
Peripulmonary vein Ablation

Q:
- Peripulmonary vein catheter ablation to treat atrial fibrillation

A:
- The actual target of the ablation procedure was the arrhythmogenic focus in the conduction pathway of the left atrium.
- 02583ZZ Destruction of Conduction Mechanism, Percutaneous Approach

Coding Clinic, Fourth Quarter 2014, P47
Renal Artery Bypass

Q:
- A patient with history of infrarenal abdominal aortic aneurysm repair has developed an extension in the perivisceral aorta. Bilateral renal artery bypass was performed due to the nature of the disease and location of the renal arteries. An end-to-end anastomosis was performed between the right renal artery and the gastroduodenal artery (a branch of the hepatic artery) and between the left renal artery and the splenic artery.

A:
- The body part key of icd-10-pcs indicates hepatic artery should be used for gastroduodenal artery, but icd-10-pcs does not provide a specific body part valve for hepatic artery in table 041, bypass lower arteries. The abdominal aorta body part valve is the closest available (upstream) equivalent.

  - 04100Z3 Bypass Abdominal Aorta to Right Renal Artery, Open Approach
  - 04140Z4 Bypass splenic artery to Left Renal Artery, Open Approach
## Renal Artery Bypass

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Abdominal Aorta</td>
<td>0 Open</td>
<td>9 Autologous Venous Tissue</td>
<td>0 Abdominal Aorta</td>
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<tr>
<td>C Common Iliac Artery, Right</td>
<td>4 Percutaneous Endoscopic</td>
<td>A Autologous Arterial Tissue</td>
<td>1 Celiac Artery</td>
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<tr>
<td>D Common Iliac Artery, Left</td>
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<td>J Synthetic Substitute</td>
<td>2 Mesenteric Artery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>K Nonautologous Tissue Substrate</td>
<td>3 Renal Artery, Right</td>
</tr>
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<td></td>
<td></td>
<td>Z No Device</td>
<td>4 Renal Artery, Left</td>
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<td>5 Renal Artery, Bilateral</td>
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<td>6 Common Iliac Artery, Right</td>
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<td></td>
<td>7 Common Iliac Artery, Left</td>
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<td>8 Common Iliac Arteries, Bilateral</td>
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<td>9 Internal Iliac Artery, Right</td>
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<td>B Internal Iliac Artery, Left</td>
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<td>C Internal Iliac Arteries, Bilateral</td>
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<td></td>
<td></td>
<td>Q Lower Extremity Artery</td>
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<td></td>
<td>R Lower Artery</td>
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<tr>
<td>4 Splenic Artery</td>
<td>0 Open</td>
<td>9 Autologous Venous Tissue</td>
<td>3 Renal Artery, Right</td>
</tr>
<tr>
<td></td>
<td>4 Percutaneous Endoscopic</td>
<td>A Autologous Arterial Tissue</td>
<td>4 Renal Artery, Left</td>
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<tr>
<td></td>
<td></td>
<td>J Synthetic Substitute</td>
<td>5 Renal Artery, Bilateral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>K Nonautologous Tissue Substrate</td>
<td>Z No Device</td>
</tr>
</tbody>
</table>
Hypophyseal aneurysm

Q:

A 58y/o female presented with right superior hypophyseal (脳下垂体) aneurysm and was taken to interventional radiology for stent assisted coil embolization of the aneurysm. Provider documentation states that a catheter was used to deploy a stent in the supraclinoid internal carotid artery across the neck of the aneurysm, and then coils were introduced through the catheter into the aneurysm. What is the correct code for the embolization? Is a separate code assigned for the stent?

A:

Both the stent and coils are being used at the same site for the same objective, to restrict the lumen of the intracranial artery, and only one code is necessary. Intracranial artery more accurately captures the fact that the procedure was done on the supraclinoid portion of the internal carotid artery.

03VG3DZ Restriction of intracranial artery with intraluminal device, percutaneous approach

Coding Clinic, First Quarter 2016, P19
Endarterectomy

Q:
- The patient presents with significant carotid artery stenosis. An open right carotid endarterectomy with patch angioplasty is performed. There is disagreement among coders whether the patch graft should be coded. What are the appropriate code assignments for a carotid endarterectomy with Dacron patch graft?

A:
- 03CK0ZZ Extirpation of Matter from Right Internal Carotid Artery, Open Approach
- 03UK0JZ Supplement Right Internal Carotid Artery with Synthetic Substitute, Open Approach

Coding Clinic, Second Quarter 2016, P11-12
Thrombectomy

Q:
- The patient presents with a clotted left femoral popliteal bypass graft of the left leg, and percutaneous mechanical thrombectomy is performed to reestablish flow. How should a thrombectomy of the fem-pop bypass graft be coded?

A:
- Extirpation is the correct root operation for the thrombectomy of the fem-pop bypass graft.
- 04CL3ZZ Extirpation of matter from left femoral artery, percutaneous approach

Coding Clinic, First Quarter 2015, P36
The patient is a 74 y/o female with severe peripheral arterial occlusion disease. She is s/p femoropopliteal bypass. The provider documented femoropopliteal bypass graft occlusion. An open thrombectomy was carried out, and the existing fem-pop autologous bypass was trimmed and re-anastomosed.

A procedure for correcting a previously placed graft/synthetic substitute that is malfunctioning or displaced should be coded to the root operation revision.
Bovine patch arterioplasty

Q:

- A patient with right femoral occlusion and ischemic rest pain underwent bovine patch arterioplasty. Although bovine patch appears to be graft tissue derived from animal, there is no device character for zooplastic(動物組織移植) at table 04U.

A:

- When graft material is derived from a living or biological basis it is appropriate to use nonautologous tissue substitute as the device value.

- 04UK0KZ Supplement Right Femoral Artery with Nonautologous Tissue Substitute, Open Approach
## Bovine patch arterioplasty

<table>
<thead>
<tr>
<th>Section</th>
<th>0</th>
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<tr>
<td>Body System</td>
<td>4</td>
<td>Lower Arteries</td>
</tr>
<tr>
<td>Operation</td>
<td>U</td>
<td>Supplement: Putting in or on biological or synthetic material that physically reinforces and/or augments the function of a portion of a body part</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Abdominal Aorta</td>
<td>0 Open</td>
<td>7 Autologous Tissue Substitute</td>
<td>Z No Qualifier</td>
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<tr>
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<td>3 Percutaneous</td>
<td>J Synthetic Substitute</td>
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<td>5 Superior Mesenteric Artery</td>
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<td>E Internal Iliac Artery, Right</td>
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<tr>
<td>Y Lower Artery</td>
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</tbody>
</table>
Discontinued procedures

2017 ICD-10-PCS Official Guidelines

B3.3
• If the intended procedure is discontinued, 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.
Discontinued procedures

Q:

- The patient presents to the hospital for a planned carotid artery endarterectomy. Diagnostic imaging had previously demonstrated carotid stenosis and atherosclerotic disease. Upon surgical exploration, there was no evidence of carotid artery stenosis or atherosclerotic disease. How should the procedure be coded since the planned endarterectomy was not done?

A:

- The planned surgery was discontinued, so inspection of the carotid artery is the only procedure performed. Assign the following code for the exploration of the carotid artery.

- 03JY0ZZ Inspection of upper artery, open approach

Coding Clinic, First Quarter 2015, P29
Discontinued procedures

Q:

- A patient with critical limb ischemia was seen for catheter based treatment of a lesion in the superficial femoral artery. During the procedure, an angled guidewire encountered significant difficulty, when attempting to enter the lumen of the distal SFA. At that point different crossing catheters and guidewires were utilized without success. Retrograde pedal access using angiogram guided road map was also unsuccessful in crossing the lesion. The procedure was aborted.

A:

- Based on the documentation, only femoral angiography was performed. The inspection would be intrinsic to the angiogram. Therefore, assign the appropriate code for the angiogram.

Coding Clinic, Third Quarter 2015, P9
Central Venous Catheter

Q:
- What is the correct icd-10-pcs code assignment for percutaneous insertion of a central venous line ending in the cavoatrial junction?

A:
- 02HV33Z
- The correct coding of venous catheters depends on the end placement of the catheter, meaning the site where the device ends up. The cavoatrial junction is where the superior vena cava joins the wall of the right atrium; therefore, it would be appropriate to assign body part character V, SVC for cavoatrial junction.

Coding Clinic, Fourth Quarter 2015, P28-29
PICC line

Q:

- When coding the placement of an infusion device such as a peripherally inserted central catheter PICC line, the code assignment for the body part is based on the site in which the device ended up (end placement). For coding purposes, can imaging reports be used to determine the end placement of the device?

A:

- When the provider’s documentation does not specify the end placement of the infusion device, the imaging report may be used to identify the body part.

Coding Clinic, Third Quarter 2014, P5-6
Port-A cath

Q:
- Totally implantable central venous access device

A:
- 02HV33Z Insertion of Infusion Device into Superior Vena Cava, Percutaneous Approach
- 0JH60XZ Insertion of Vascular Access Device into Chest Subcutaneous Tissue and Fascia, Open Approach

- A totally implantable central venous access device is a two part device, an injection port and a catheter system, therefore two codes are required to capture insertion of the device. A subcutaneous pocket was created under direct visualization in order to place the vascular access port, and therefore the approach is open for that portion of the procedure.

Coding Clinic, Second Quarter 2015, P33
Q: A patient with ESRD is admitted to undergo placement of a tunneled hemodialysis catheter. The catheter was placed in the right subclavian vein with the tip in the SVC, and then tunneled through the subcutaneous tissue. A small pocket was created in the chest area to hold the port. The catheter was then connected to the port.

A:
02HV33Z Insertion of Infusion Device into Superior Vena Cava, Percutaneous Approach
0JH63XZ Insertion of Vascular Access Device into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

In the Device key, the vascular access device in subcutaneous tissue and fascia for a tunneled central venous catheter.

Coding Clinic, Fourth Quarter 2015, P30-31
Perm cath catheter exchange

Q:
What is the correct code assignment for exchange of a tunneled dialysis catheter? The existing tunneled catheter was removed via an open approach.

A:
0JPT0XZ Removal of Vascular Access Device from Trunk Subcutaneous Tissue and Fascia, Open Approach
02PY33Z Removal of Infusion Device from Great Vessel, Percutaneous Approach
02HV33Z Insertion of Infusion Device into Superior Vena Cava, Percutaneous Approach
0JH63XZ Insertion of Vascular Access Device into Chest Subcutaneous Tissue and Fascia, Percutaneous Approach

Coding Clinic, Fourth Quarter 2015, P31-32
Renal Dialysis

Q:
- A patient with ESRD is admitted, and during the hospitalization he received hemodialysis on three separate days.

A:
- 5A1D60Z Performance of urinary filtration, multiple

- The duration value single is appropriate for any continuous process that is not intentionally interrupted, the duration value is assigned based on documentation of a single(continuous) treatment or multiple(separate) treatment.

Coding Clinic, First Quarter 2016, P29
附錄
Bypass Procedures

- 2017 ICD-10-PCS Official Guidelines

- B3. Root Operation
  - 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 LAD 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.
Bypass Procedures

- 2017 ICD-10-PCS Official Guidelines

- B3. Root Operation
- 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 are coded separately.
Coronary Artery

- 2017 ICD-10-PCS Official Guidelines

- B4. Body Part
- 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.
PTCA (2017年版)

<table>
<thead>
<tr>
<th>Section</th>
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</thead>
<tbody>
<tr>
<td>Body System</td>
<td>2 Heart and Great Vessels</td>
</tr>
<tr>
<td>Operation</td>
<td>7 Dilation: Expanding an orifice or the lumen of a tubular body part</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Approach</th>
<th>Device</th>
<th>Qualifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Coronary Artery, One Artery</td>
<td>0 Open</td>
<td>4 Intraluminal Device, Drug-eluting</td>
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<td>1 Coronary Artery, Two Arteries</td>
<td>3 Percutaneous</td>
<td>5 Intraluminal Device, Drug-eluting, Two</td>
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</tr>
<tr>
<td>2 Coronary Artery, Three Arteries</td>
<td>4 Percutaneous Endoscopic</td>
<td>6 Intraluminal Device, Drug-eluting, Three</td>
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<td>7 Intraluminal Device, Drug-eluting, Four or More</td>
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