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REDICE REISE RECYCLE DEPARTMENT OF HEALTH & HUM. Centers for Medicare & Medicaid Servi 7500 Security Boulevard Baltimore, Maryland 21244-1850



Agenda ICD-10 Coordination and Maintenance Committee Department of Health and Human Services Centers for Medicare & Medicaid Services CMS Auditorium 7500 Security Boulevard Baltimore, MD 21244-1850 ICD-10-PCS Topics September 13, 2016

Pat Brooks, CMS - Co-Chairperson

## Webcast and Dial-In Information

- The meeting will begin promptly at 9am ET and will be webcast.
- Toll-free dial-in access is available for participants who cannot join the webcast: Phone: 1-877-267-1577; Meeting ID: 997 795 269. We encourage you to join early, as the number of phone lines is limited.
- If participating via the webcast or dialing in you do NOT need to register on-line for the meeting.

This meeting is being webcast via CMS at <u>http://www.cms.gov/live/</u>. By your attendance, you are giving consent to the use and distribution of your name, likeness and voice during the meeting. You are also giving consent to the use and distribution of any personally identifiable information that you or others may disclose about you during the meeting. Please do not disclose personal health information.

**NOTE:** In compliance to The Real ID Act, enacted in 2005, the following states/territories: American Samoa, Louisiana, Minnesota, New Hampshire, and New York **will not** gain access into any Federal Agencies using the **above states** driver's license or ID. This means CMS visitors from these states/territories will need to provide alternative proof of identification (**such as a passport**) to gain entrance into the Baltimore-based CMS building.

Proposals for diagnosis code topics are scheduled for September 14, 2016 and will be led by the Centers for Disease Control (CDC). Please visit CDCs website for the Diagnosis agenda located at the following address: <u>http://www.cdc.gov/nchs/icd/icd10cm\_maintenance.htm</u>

#### Introductions and Overview

### Pat Brooks

## **ICD-10-PCS Topics:**

1.	Extracorporeal Carbon Dioxide Removal	Pat Brooks	
	Pages 11-13	Laura Lund, Ph.D.	
		VP Clinical/Scientific	Affairs

- Intramuscular Autologous Bone Marrow Cell Therapy Pages 14-19
   Michelle Joshua Charles B. Ross, MD, FACS
- 3. Administration of Influenza Vaccine Pages 20-21
- 4. Introduction of Peptide Enhanced Bone Graft Substitute Pages 22-24
- Resuscitative Endovascular Balloon Occlusion of Aorta Pages 25-27
- Intraoperative Treatment of Vascular Grafts Pages 28-30
- 7. Addenda and Key Updates Pages 31-90

Pat Brooks

Mady Hue Jeff Marx, President and COO, Cerapedics

Alung Technologies, Inc.

Piedmont Heart Institute

Mady Hue Paul T. Mayer, MD Colonel, USA Retired

Michelle Joshua Tracy Goeken, MD VP, CMO, Somahlution

Rhonda Butler, 3M

## Registering for the meeting:

Registration for the March 7-8, 2017 ICD-10 Coordination and Maintenance Committee meeting opens on February 3, 2017. If participating by Livestream webcast or dialing in you do not need to register online.

Information on registering online to attend the meeting can be found at: <a href="http://www.cms.hhs.gov/apps/events/">http://www.cms.hhs.gov/apps/events/</a>

For questions about the registration process, please contact Mady Hue at 410-786-4510 or marilu.hue@cms.hhs.gov or Noel Manlove at 410-786-5161 or noel.manlove@cms.hhs.gov.

# **Continuing Education Credits**:

Continuing education credits may be awarded by the American Academy of Professional Coders (AAPC) or the American Health Information Management Association (AHIMA) for participation in CMS ICD-10 Coordination and Maintenance (C&M) Committee Meeting Conference Calls, Meetings and Webcasts.

<u>Continuing Education Information for American Academy of Professional Coders (AAPC)</u> If you have attended or are planning to attend a CMS ICD-10 Coordination and Maintenance (C&M) Committee Meeting Conference Call, you should be aware that CMS does not provide certificates of attendance for these calls. Instead, the AAPC will accept your e-mailed confirmation and call description as proof of participation. Please retain a copy of your e-mailed confirmation for these calls as the AAPC will request them for any conference call you entered into your CEU Tracker if you are chosen for CEU verification. Members are awarded one (1) CEU per hour of participation.

# Continuing Education Information for American Health Information Management Association (AHIMA)

AHIMA credential-holders may claim 1 CEU per 60 minutes of attendance at an educational program. Maintain documentation about the program for verification purposes in the event of an audit. A program does not need to be pre-approved by AHIMA, nor does a CEU certificate need to be provided, in order to claim AHIMA CEU credit. For detailed information about AHIMA's CEU requirements, see the Recertification Guide on AHIMA's web site.

Please note: The statements above are standard language provided to CMS by the AAPC and the AHIMA. If you have any questions concerning either statement, please contact the respective organization, <u>not CMS</u>.

# **ICD-10 TIMELINE**

A timeline of important dates in the ICD-10 process is described below:

September 13 –14, 2016	ICD-10 Coordination and Maintenance Committee meeting.
	Those who wish to attend the ICD-10 Coordination and Maintenance Committee meeting <b>must have registered for the</b> <b>meeting online by September 2, 2016.</b> You must bring an official form of picture identification (such as a driver's license) in order to be admitted to the building.
September 2016	Webcast of the September 13–14, 2016 ICD-10 Coordination and Maintenance Committee meeting will be posted on the CMS webpage as follows: https://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticC odes/meetings.html
	Summary report of the Diagnosis part of the September 13–14, 2016 ICD-10 Coordination and Maintenance Committee meeting report will be posted on NCHS homepage as follows: <u>http://www.cdc.gov/nchs/icd/icd10cm_maintenance.htm</u>
October 1, 2016	New and revised ICD-10-CM and ICD-10-PCS codes go into effect along with DRG changes. Final addendum available on web pages as follows: Diagnosis addendum - <u>http://www.cdc.gov/nchs/icd/icd10cm.htm</u> Procedure addendum - <u>http://www.cms.gov/Medicare/Coding/ICD10/</u>
October 16, 2016	Deadline for receipt of public comments on proposed new codes discussed at the September 13-14, 2016 ICD-10 Coordination and Maintenance Committee meetings for implementation on April 1, 2017.
November 2016	Any new ICD-10 codes required to capture new technology that will be implemented on the following April 1 will be announced. Information on any new codes to be implemented April 1, 2017 will be posted on the following websites: http://www.cdc.gov/nchs/icd/icd10cm.htm http://www.cms.gov/Medicare/Coding/ICD10/
November 13, 2016	Deadline for receipt of public comments on proposed new codes and revisions discussed at the September 13-14, 2016

	ICD-10 Coordination and Maintenance Committee meetings for implementation on October 1, 2017.
January 6, 2017	Deadline for requestors: Those members of the public requesting that topics be discussed at the March 7–8, 2017 ICD-10 Coordination and Maintenance Committee meeting must have their requests submitted to CMS for procedures and NCHS for diagnoses by this date.
February 2017	Tentative agenda for the Procedure part of the March 7, 2017 ICD- 10 Coordination and Maintenance Committee meeting posted on CMS webpage as follows: <u>https://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticC</u> <u>odes/ICD-9-CM-C-and-M-Meeting-Materials.html</u>
	Tentative agenda for the Diagnosis part of the March 8, 2017 ICD- 10 Coordination and Maintenance Committee meeting posted on NCHS homepage as follows: <u>http://www.cdc.gov/nchs/icd/icd10cm_maintenance.htm</u>
	Federal Register notice of March 7–8, 2017 ICD-10 Coordination and Maintenance Committee Meeting will be published.
February 3, 2017	On-line registration opens for the March 7–8, 2017 ICD-10 Coordination and Maintenance Committee meeting at: <u>https://www.cms.gov/apps/events/default.asp</u>
March 2017	Because of increased security requirements, <b>those wishing to</b> <b>attend the March 7–8, 2017</b> ICD-10 Coordination and Maintenance Committee meeting must register for the meeting online at: <u>https://www.cms.gov/apps/events/default.asp</u>
	Attendees must register online by February 3, 2017; failure to do so may result in lack of access to the meeting.
March 7 – 8, 2017	ICD-10 Coordination and Maintenance Committee meeting.
March 2017	Webcast of the March 7-8, 2017 ICD-10 Coordination and Maintenance Committee meeting will be posted on the CMS webpage as follows: https://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticC odes/ICD-9-CM-C-and-M-Meeting-Materials.html
	Summary report of the Diagnosis part of the March 8, 2017 ICD- 10 Coordination and Maintenance Committee meeting report will be posted on the NCHS webpage as follows:

	http://www.cdc.gov/nchs/icd/icd10cm_maintenance.htm	
April 1, 2017	Any new ICD-10 codes to capture new diseases or technology on April 1, 2017, will be implemented.	
April 7, 2017	Deadline for receipt of public comments on proposed new codes and revisions discussed at the March 7–8, 2017 ICD-10 Coordination and Maintenance Committee meetings for implementation on October 1, 2017.	
April 2017	Notice of Proposed Rulemaking to be published in the <u>Federal</u> <u>Register</u> as mandated by Public Law 99-509. This notice will include references to the finalized FY 2018 ICD-10-CM diagnosis and ICD-10-PCS procedure codes to date. It will also include proposed revisions to the MS-DRG system based on ICD-10- CM/PCS codes on which the public may comment. The proposed rule can be accessed at: <u>http://www.cms.gov/Medicare/Medicare-Fee-for-Service- Payment/AcuteInpatientPPS/index.html?redirect=/AcuteInpatientP PS/IPPS/list.asp</u>	
June 2017	Final addendum posted on web pages as follows: Diagnosis addendum – <u>http://www.cdc.gov/nchs/icd/icd10cm.htm</u>	
	Procedure addendum - <u>http://cms.hhs.gov/Medicare/Coding/ICD10/index.html</u>	
July 14, 2017	Deadline for requestors: Those members of the public requesting that topics be discussed at the September 12–13, 2017 ICD-10 Coordination and Maintenance Committee meeting must have their requests submitted to CMS for procedures and NCHS for diagnoses.	
August 1, 2017	Hospital Inpatient Prospective Payment System final rule to be published in the Federal Register as mandated by Public Law 99- 509. This rule will also include links to all the final codes to be implemented on October 1, 2017. This rule can be accessed at: <u>http://www.cms.gov/Medicare/Medicare-Fee-for-Service- Payment/AcuteInpatientPPS/index.html?redirect=/AcuteInpatientP PS/IPPS/list.asp</u>	
August 2017	Tentative agenda for the Procedure part of the September 12–13, 2017 ICD-10 Coordination and Maintenance Committee meeting will be posted on the CMS webpage at – <u>https://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticC</u> odes/ICD-9-CM-C-and-M-Meeting-Materials.html	

	Tentative agenda for the Diagnosis part of the September 12-13, 2017 ICD-10 Coordination and Maintenance Committee meeting will be posted on the NCHS webpage at - <u>http://www.cdc.gov/nchs/icd/icd10cm_maintenance.htm</u>
	Federal Register notice for the September 12-13, 2017 ICD-10 Coordination and Maintenance Committee meeting will be published. This will include the tentative agenda.
August 4, 2017	On-line registration opens for the September 12-13, 2017 ICD- 10 Coordination and Maintenance Committee meeting at: <u>https://www.cms.gov/apps/events/default.asp</u>
September 1, 2017	Because of increased security requirements, those wishing to attend the September 12-13, 2017 ICD-10 Coordination and Maintenance Committee meeting must register for the meeting online at: https://www.cms.gov/apps/events/default.asp
	Attendees must register online by September 1, 2017; failure to do so may result in lack of access to the meeting.
September 12-13, 2017	ICD-10 Coordination and Maintenance Committee meeting.
	Those who wish to attend the ICD-10 Coordination and Maintenance Committee meeting <b>must have registered for the</b> <b>meeting online by September 1, 2017.</b> You must bring an official form of picture identification (such as a driver's license) in order to be admitted to the building.
September 2017	Webcast of the September 12-13, 2017 ICD-10 Coordination and Maintenance Committee meeting will be posted on the CMS webpage as follows: <u>https://www.cms.gov/Medicare/Coding/ICD9ProviderDiagnosticCodes/meetings.html</u>
	Summary report of the Diagnosis part of the September 12-13, 2017 ICD-10 Coordination and Maintenance Committee meeting report will be posted on NCHS homepage as follows: <u>http://www.cdc.gov/nchs/icd/icd10cm_maintenance.htm</u>
October 1, 2017	New and revised ICD-10-CM and ICD-10-PCS codes go into effect along with DRG changes. Final addendum available on web pages as follows: Diagnosis addendum - <u>http://www.cdc.gov/nchs/icd/icd10cm.htm</u>

	Procedure addendum – <u>http://www.cms.gov/Medicare/Coding/ICD10/</u>		
October 17, 2017	Deadline for receipt of public comments on proposed new codes discussed at the September 12-13, 2017 ICD-10 Coordination and Maintenance Committee meetings for implementation on April 1, 2018.		
November 2017	Any new ICD-10 codes required to capture new technology that will be implemented on the following April 1 will be announced. Information on any new codes to be implemented April 1, 2018 will be posted on the following websites: http://www.cdc.gov/nchs/icd/icd10cm.htm http://www.cms.gov/Medicare/Coding/ICD10/		
November 13, 2017	Deadline for receipt of public comments on proposed new codes and revisions discussed at the September 12-13, 2017 ICD-10 Coordination and Maintenance Committee meetings for implementation on October 1, 2018.		

# Introductions and Overview

- ICD-10 Coordination & Maintenance (C&M) Committee is a public forum on ICD-10-CM & ICD-10-PCS code updates
- CMS & CDC Co-chair the meetings
  - CMS has lead on procedure issues
  - CDC has lead on diagnosis issues
- Coding proposals presented and public given opportunity to comment

# **Code Proposals**

- No final decisions made at the meeting
- CMS will describe options and recommendations to facilitate discussion
- Public can comment at meeting and send written comments

# **Comments on Code Proposals**

- Submit written comments by
  - October 16, 2016 for new technology code requests for April 1, 2017 implementation (there were no such requests at the September 2016 C&M meeting)
  - November 13, 2016 for codes to be implemented on October 1, 2017
- Procedure comments to CMS (new) <u>ICDProcedureCodeRequest@cms.hhs.gov</u>
- Diagnosis comments to Donna Pickett, CDC <u>nchsicd10@cdc.gov</u>

# Proposed and Final Rules

- April 2016 Notice of Proposed Rulemaking, IPPS
  - Includes ICD-10-CM/PCS diagnosis and procedure updates approved prior to March 2016 C&M meeting
- August 1, 2016 Final rule with links to final codes to be implemented on October 1, 2016
  - Includes any additional codes approved from March 9-10, 2016 C&M meeting

# Addendum

- June 2016 Final code updates and addendum posted
  - FY 2017 ICD-10-CM (Diagnosis) and ICD-10-PCS (procedure) <u>http://www.cms.gov/Medicare/Coding/ICD10/index.html</u>
  - FY 2017 ICD-10-CM (Diagnosis)

http://www.cdc.gov/nchs/icd/icd10cm.htm

• June 2017 – FY 2018 final code updates and addendum to be posted

# **GEM Files**

- FY 2017 ICD-10-CM and ICD-10-PCS GEMs posted at http://www.cms.gov/Medicare/Coding/ICD10/index.html
- Annual GEM updates will be posted in August 2016
- Reimbursement files and ICD-10-PCS Reference manual no longer being produced

# March 7-8, 2017 C&M Code Requests

- January 6, 2017– Deadline for submitting topics for March 7-8, 2017 C&M meeting
  - Procedure requests to CMS (new address)
    - ICDProcedureCodeRequest@cms.hhs.gov
  - Diagnosis requests to Donna Pickett, CDC <u>nchsicd10@cdc.gov</u>

# **Public Participation**

- For this meeting the public may participate in three ways:
  - Attend public C&M meeting
  - Listen to proceedings through free conference lines
  - Participate through a free livestream webcast
- CMS & CDC hope this provides greater opportunity for public participation

# Written Comments

- No matter how you participate please send written comments by
- November 13,2016 for new technology codes requests for October 1, 2017 implementation
- Procedure comments to CMS <u>ICDProcedureCodeRequest@cms.hhs.gov</u>
- Diagnosis comments to Donna Pickett, CDC <u>nchsicd10@cdc.gov</u>

# **ICD-10-PCS** Codes Implementation

• ICD-10-PCS codes discussed today under consideration for October 1, 2017 implementation

# **Extracorporeal Carbon Dioxide Removal**

**Issue:** ICD-10-PCS does not have codes which capture extracorporeal carbon dioxide removal (ECCO<sub>2</sub>R) from patients suffering acute hypercapnic respiratory failure. The technology for providing this therapy is referred to as the Hemolung<sup>®</sup> Respiratory Assist System (RAS).

# New Technology Application? Not for FY 2018. However, will apply in FY 2019.

**Background:** The Hemolung<sup>®</sup> RAS is a bridge-to-recovery ventilatory support device for patients experiencing acute, reversible lung failure for whom ventilation of CO2 is the primary challenge. Primary indications for use of this device include patients experiencing an acute exacerbation of underlying COPD, or patients with moderate to severe acute respiratory distress syndrome (ARDS) requiring mechanical ventilation (MV) at reduced tidal volumes to prevent ventilator induced lung injury. (The forthcoming IDE Clinical Trial focuses on acute exacerbation of COPD, and afterwards, ALung Technologies will seek an expanded indication for ARDS.) The Hemolung<sup>®</sup> RAS received CE Marking in 2013 for these indications.

The Hemolung<sup>®</sup> RAS is a fully-integrated respiratory dialysis system which uses a low flow, minimally invasive extracorporeal CO2 removal (ECCO2R) technique. Removing clinically meaningful levels of CO2 independently of the lungs allows the patient's lungs to rest and heal while avoiding intubation, minimizing time on mechanical ventilation, or facilitating protective ventilation. The Hemolung<sup>®</sup> RAS is not intended to provide therapeutic levels of oxygenation.

In 2015, ALung received FDA approval for Expedited Access Pathway (EAP) designation, and is working with the FDA to finalize a clinical plan for an Investigational Device Exemption (IDE) to conduct a pivotal trial for pre-market approval (PMA) of this Class III device.

The Hemolung<sup>®</sup> RAS is a fully integrated device consisting of three components:

- 1. The Hemolung Cartridge combines a centrifugal blood pump with an advanced gas exchange membrane in one device capable of providing efficient extracorporeal CO2 removal at dialysis-like blood flow rates. The integrated centrifugal blood pump provides circuit flows of 350-500 mL/min when paired with the Hemolung Catheter.
- 2. The Hemolung Catheter is a dual-lumen catheter which is inserted using a standard Seldinger technique, similar to acute continuous dialysis catheter insertions. The Hemolung Catheter is a "unicaval" design, meaning it is placed in either the superior or inferior vena cava, just like a normal central line.
- 3. The Hemolung Controller integrates control and monitoring of all aspects of therapy, including control of the blood pump and sweep gas flow; measuring and monitoring of blood flow, sweep gas flow and rate of CO2 removal; and sensing and displaying alarm conditions. The Hemolung Controller can operate on battery power for up to one hour. The controller offers an advanced degree of safety and ease of use.

The indication for use of the Hemolung<sup>®</sup> RAS that will be supported by the US IDE trial is as follows. For patients experiencing an acute exacerbation of COPD who require ventilatory support for acute hypercapnia and hypercapnic acidosis, the Hemolung RAS is indicated:

• As an alternative to, or to avoid, invasive positive pressure mechanical ventilation (IPPMV) when failing support with noninvasive ventilation (NIV), or

• To facilitate early weaning and extubation from IPPMV when the patient is unable to sustain trials of spontaneous breathing due to increases in PaCO2 and its resulting effects.

**Current Coding:** Facilities can capture the use of extracorporeal carbon dioxide removal with one of the following ICD-10-PCS codes:

5A0935Z Assistance with Respiratory Ventilation, Less than 24 Consecutive Hours

5A0945Z Assistance with Respiratory Ventilation, 24-96 Consecutive Hours

5A0955Z Assistance with Respiratory Ventilation, Greater than 96 Consecutive Hours

# **Coding Options:**

**Option 1**. Do not create new codes for extracorporeal carbon dioxide removal. Continue to use existing codes as shown above.

**Option 2**. Create unique codes in table 5A0, to capture extracorporeal carbon dioxide removal. Create a new table row containing the fourth character body system value Respiratory, and containing the fifth character function value Filtration for the root operation Assistance. Use existing duration values Single and Multiple to distinguish between single and multiple procedures performed during an admission.

Section 5 Extracorporeal Assistance and Performance Body System A Physiological Systems					
	<i>Operation</i> <b>0</b> Assistance: Taking over a portion of a physiological function by extracorporeal				
means	means				
Body System	Duration	Function	Qualifier		
9 Respiratory	ADD 0 Single ADD 6 Multiple	<b>ADD 0</b> Filtration	ADD Z No Qualifier		

**Option 3**. Create unique codes in table 5A1, to capture extracorporeal carbon dioxide removal. Add the fourth character body system value Respiratory to the row containing the fifth character function value Filtration for the root operation Performance. Use existing duration values Single and Multiple to distinguish between single and multiple procedures performed during an admission.

Section 5 Extracorporeal Assistance and Performance Body SystemA Physiological Systems					
<i>Operation</i> <b>1</b> Performance: Completely taking over a physiological function by extracorporeal means					
Body System	Duration	Function	Qualifier		
ADD 9 Respiratory C Biliary D Urinary	0 Single 6 Multiple	0 Filtration	Z No Qualifier		

**Option 4**. Create new codes in section X, New Technology, to identify extracorporeal carbon dioxide removal procedures. Use the root operation Assistance and the same body system value as in section 5, Extracorporeal Assistance and Performance.

Section X New Technology				
Body System B Respiratory Syste	m			
Operation A Assistance : Taki	ng over a portion of a physiological	function by extracorporeal		
means				
Body Part Approach	Device / Substance / Technology	Qualifier		
ADD 0 Despiratory 3 Deroutana	ADD 0 Extracorporeal Carbon	ADD 3 New		
ADD 9 Respiratory 3 Percutane	Dioxide Removal	Technology Group 3		

**Option 5**. Create new codes in section X, New Technology, to identify extracorporeal carbon dioxide removal procedures. Use the root operation Performance and the same body system value as in section 5, Extracorporeal Assistance and Performance.

Section X New	Technology				
Body System B Resp	iratory System				
Operation ADD I	B Performance: C	ompletely taking over a physiologic	al function by		
extracor	extracorporeal means				
Body Part	Approach	Device / Substance / Technology	Qualifier		
ADD 9 Respiratory	3 Dercutaneous	ADD 0 Extracorporeal Carbon	ADD 3 New		
ADD 9 Respiratory	5 I CICULAIICOUS	Dioxide Removal	Technology Group 3		

**CMS recommendation**: Option 5. Create new codes in section X, New Technology, to identify extracorporeal carbon dioxide removal procedures. Use the root operation Performance and the same body system value as in section 5, Extracorporeal Assistance and Performance.

**Interim Coding Advice:** Facilities can capture the use of extracorporeal carbon dioxide removal with one of the following ICD-10-PCS codes: 5A0935Z Assistance with Respiratory Ventilation, Less than 24 Consecutive Hours 5A0945Z Assistance with Respiratory Ventilation, 24-96 Consecutive Hours 5A0955Z Assistance with Respiratory Ventilation, Greater than 96 Consecutive Hours

### Intramuscular Autologous Bone Marrow Cell Therapy

**Issue:** ICD-10-PCS does not have codes to identify intramuscular autologous bone marrow cell therapy, a completely new procedure for patients with peripheral artery disease. It is designed to promote angiogenesis, arteriogenesis, and/or vasculogenesis in the affected limb.

**New Technology application?** Yes. Zimmer Biomet is currently analyzing the clinical results from its pivotal "MOBILE" IDE trial (MarrOwStim<sup>TM</sup> PAD Kit for the Treatment of Critical Lim**B** IschemIa in Subjects with Severe Peripheral ArteriaL DiseasE), with intent to submit a New Technology Add-on Payment application for FY 2018.

**Food & Drug Administration (FDA Clearance):** The MarrowStim<sup>TM</sup> PAD Kit is not yet approved/cleared by the U.S. Food & Drug Administration. An application is pending for the use of the MarrowStim<sup>TM</sup> PAD Kit in peripheral artery disease, with approval expected in calendar year 2017.

**Background:** Peripheral artery disease (PAD), a chronic disorder that affects an estimated 8 million or more Americans, is defined by atherosclerotic narrowing and blocking of arteries in the extremities (typically the legs).<sup>1</sup> Despite current therapies, PAD often leads to disability and in some cases amputation, and it can be life threatening. The burden of this disease, which worsens over time due to the cumulative effects of cardiovascular risk factors that characterize the patient population, is projected to grow along with the aging population.<sup>2</sup>

Clinical decision making in PAD management is guided by published recommendations from both the American College of Cardiology/American Heart Association (ACC/AHA) and the Trans-Atlantic Inter-Society Consensus (TASC II) for the Management of PAD.<sup>3,4</sup> These guidelines describe treatment options that are recommended based on the severity of the disease.

Lifestyle modification (exercise, diet, smoking cessation), as well as use of medications that target the reduction of underlying cardiovascular risk factors and prevent development and progression of atherosclerotic lesions (e.g., antihypertensives, statins, and antiplatelet therapies) used in the initial treatment of PAD, may improve function and slow disease progression.<sup>5,6</sup>

For subjects with lower extremity ischemia due to advanced PAD, surgical bypass or endovascular interventions (collectively, "revascularization") are presently options to restore perfusion and maintain limb viability. It is estimated that 3-12% of subjects with lower extremity ischemia will not be suitable candidates for these procedures because of extensive occlusive disease in the arteries of the leg, failed previous revascularization attempts, or because of insufficient autologous vein to create a bypass graft to an arterial target below the knee.<sup>7-9</sup> The number of subjects with limb threatening ischemia who will not be suitable candidates for revascularization is increasing as our population ages and the incidence of diabetes mellitus and other vascular risk factors increase.<sup>10</sup>

The remaining treatment option for lower extremity ischemia complicated by rest pain, gangrene, or infection is amputation. It is estimated that over 85,000 amputations are performed in the United States each year.<sup>11</sup> For the group of subjects with limb threatening ischemia who are considered unsuitable for revascularization or have a history of failed revascularization, the amputation and mortality rates at 6 months approach 40% and 20%, respectively<sup>8</sup>, and higher in

the case of clinical high risk groups.<sup>12</sup> Furthermore, one fourth of all subjects who undergo below knee amputation will fail rehabilitation and will require chronic institutional care or professional assistance at home.<sup>10</sup> Five-year data for below-knee amputees shows that 30% will have received a major contralateral amputation, 50% will be dead, and only 20% will be alive with one intact leg.<sup>7</sup> Beyond the physical disability, there is a significant emotional cost as well. Psychological testing of subjects with critical leg ischemia shows quality of life indices similar to subjects with terminal malignancy.<sup>13</sup>

Therapeutic angiogenesis is a treatment strategy designed to improve collateral blood flow in the ischemic leg by inducing the formation of new blood vessels. The most studied methods to stimulate angiogenesis have involved the use of vascular growth factors; however, there is growing clinical evidence that the use of autologous stem cells for this purpose may be more effective, with fewer potential side effects. Revascularization of affected limbs with autologous cell therapy—which involves the collection, concentration, and direct application of undifferentiated mononuclear cells originating in the bone marrow, to promote angiogenesis, arteriogenesis, and/or vasculogenesis—is a promising future approach to PAD therapy.

It is known that there are endothelial progenitor cells (EPC) in adult peripheral blood that are derived from mononuclear stem cells in the bone marrow. Studies with cell cultures and in animal models of hind limb ischemia have shown that these EPC's will differentiate both in vitro and *in vivo* into mature endothelial cells.<sup>14-17</sup> The number of EPC's is 500 fold greater in bone marrow mononuclear cells than in peripheral blood mononuclear cells, making it the richest source of these multipotent cells.<sup>18</sup> Shintani and Kamihata have shown in animals that bone marrow mononuclear cell implantation into ischemic limbs or myocardium promotes collateral vessel formation with differentiation of the mononuclear cells into EPC's and incorporation of these EPC's into new capillaries. Furthermore, local concentrations of angiogenic growth factors (basic fibroblast growth factor, VEGF, and angiopoietin-1) were increased in implanted tissues via production from these progenitor cells magnifying the potential for angiogenesis. Neither tissue injury by inflammatory cytokines released from injected cells nor differentiation into other lineage cells such as osteoblasts or fibroblasts was noted in implanted ischemic tissues.<sup>19,20</sup> These findings demonstrate that injection of bone marrow mononuclear cells provides the cellular building blocks as well as the necessary cytokines and growth factors for new vessel development.

The MarrowStim PAD Kit was developed based on proven Zimmer Biomet technology, which is currently utilized in over 6000 bone grafting procedures annually in the United States.<sup>21</sup> Although not yet FDA approved for use in PAD, it is a validated system that provides an efficient and reliable method to collect, separate, and concentrate mononuclear cells from bone marrow for autologous cell therapy. Use of the MarrowStim occurs at the patient's point of care within a single procedure.<sup>22,23</sup> It makes autologous cell therapies practical by eliminating time-consuming and labor-intensive cell separation techniques, such as Ficoll gradient centrifugation, and also provides less potential risk than cell culture techniques.

Clinical use of the MarrowStim device in PAD has been previously described as part of a Phase I safety trial.<sup>24</sup> The trial initially used Ficoll gradient centrifugation to concentrate the bone marrow cells. Approximately halfway through the trial, the Ficoll technique was replaced by the MarrowStim technique, described as follows. Briefly, approximately 300 mL of bone marrow was aspirated from the right and left posterior iliac crests (150 mL per side). Using the

MarrowStim centrifugation system, the bone marrow was loaded into multiple MarrowStim devices and centrifuged for 15 minutes to separate and concentrate the bone marrow cells. The concentrated bone marrow aspirate (cBMA) was then extracted from the MarrowStim devices, yielding approximately 30 mL of cBMA. The cBMA was then delivered in 0.75-mL aliquots via intramuscular injection along the medial and lateral aspect of the lower limb. Delivery occurred at 2-cm intervals, 1.5-cm deep into the gastrocnemius muscle. Overall, 29 patients (30 limbs) were treated in the safety trial (14 w/ Ficoll, 16 w/ MarrowStim). Reported results included a one-year amputation-free survival (AFS) rate of 86.3%; improvement in rest pain, quality of life, and perfusion measures at twelve-weeks post-treatment; overall average MarrowStim procedure time of less than two hours; no procedure-related deaths and two reports of procedure-related serious adverse events (neither related to the MarrowStim device). Additional long-term follow-up data for this Phase I safety trial was recently reported with a 5-year AFS rate of 74%.<sup>25</sup>

Following completion of the Phase I safety trial, its data was provided to the FDA as part of an IDE submission to support the next-phase pivotal "MOBILE" trial (MarrOwStim<sup>TM</sup> PAD Kit for the Treatment of Critical Lim**B** IschemIa in Subjects with Severe Peripheral ArteriaL DiseasE). This trial enrolled 152 critical limb ischemia patients randomized to placebo or treatment with cBMA obtained using the MarrowStim PAD Kit. Enrollment was completed in June 2015 with a 12 month primary endpoint of amputation-free survival. Primary follow up was recently completed and the data are being analyzed.

**Current Coding:** Code bone marrow harvest procedures using the appropriate body part and approach values in root operation table 07D, and using the qualifier value Z.

Section 0 Medical and Surgical Body System7 Lymphatic and Hemic Systems					
Operation <b>D</b> Extraction: Pulling on use of force	Operation <b>D</b> Extraction: Pulling or stripping out or off all or a portion of a body part by the				
Body Part Approach Device Qua			Qualifier		
	0 Open 3 Percutaneous		X Diagnostic Z No Qualifier		

If desired, facilities can capture intramuscular injection of concentrated bone marrow aspirate with one of the following ICD-10-PCS code:

3E023GC Introduction of Other Therapeutic Substance into Muscle, Percutaneous Approach

## **Coding Options:**

**Option 1**. Do not create new codes for the intramuscular injection of concentrated bone marrow aspirate. Continue to use existing codes as shown above.

**Option 2**. To capture the intramuscular injection of concentrated bone marrow aspirate, create new qualifier value Concentrated Bone Marrow Aspirate for the body system value Muscle and the approach Percutaneous, in table 3E0 of the Administration section.

Section 3 Administration Body System E Physiological Systems and Anatomical Regions					
<i>Operation</i> <b>0</b> Introduction: Putting in or on a therapeutic, diagnostic, nutritional, physiological, or prophylactic substance except blood or blood products					
Body System / RegionApproachSubstanceQualifier			Qualifier		
2 Muscle	3 Percutaneous	G Other Therapeutic Substance	<b>ADD 9</b> Concentrated Bone Marrow Aspirate		

3E023G9 Introduction of Concentrated Bone Marrow Aspirate into Muscle, Percutaneous Approach

**Option 3**. Create a new code in section X, New Technology, to identify intramuscular injection of concentrated bone marrow aspirate.

Section X N	ection X New Technology				
Body System <b>K</b> I	Body System K Muscles, Tendons, Bursae and Ligaments				
Operation 0 In	<i>Operation</i> <b>0</b> Introduction: Putting in or on a therapeutic, diagnostic, nutritional,				
phys	physiological, or prophylactic substance except blood or blood products				
Body Part	Body Part Approach Device / Substance / Technology Qualifier				
ADD 2 Muscle 3 Percutaneous ADD 0 Concentrated Bone Marro Aspirate			3 New Technology		
ADD 2 Muscle	Aspirate		Group 3		

XK02303 Introduction of Concentrated Bone Marrow Aspirate into Muscle, Percutaneous Approach, New Technology Group 3

**CMS Recommendation:** Option 3. Create a new code in section X, New Technology, for intramuscular injection of concentrated bone marrow aspirate.

**Interim Coding Advice:** Continue to code bone marrow harvest procedures and intramuscular injection of concentrated bone marrow aspirate as shown in current coding above.

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# Administration of Influenza Vaccine

**Issue:** ICD-10-PCS does not have codes which capture the administration of the influenza vaccine as did ICD-9-CM. ICD-10-PCS does not allow the tracking of the type of vaccine provided.

# New Technology Application? No

**Background:** All subcutaneous vaccine injection procedures are reported using ICD-10-PCS code 3E0134Z Introduction of Serum, Toxoid and Vaccine into Subcutaneous Tissue, Percutaneous Approach. This code does not provide the ability to track the type of vaccine provided.

Unlike other vaccines, influenza vaccination confers immunity for only a single year due to the rapid mutation of the influenza viral strains. Consequently, the vaccinated population is a dynamic cohort from year to year. It is important to be able to detect changes in the incidence and prevalence among groups regarding vaccination status that may have policy implications. Secondly, immunity may be only partially effective due the rapid mutation of the virus. The ability to identify patients with vaccination that subsequently develop influenza infection and to analyze the timing of vaccination in regard to disease development would also be important public health information.

**Current Coding:** If desired, facilities can capture the use of influenza vaccine with the following ICD-10-PCS code:

3E0134Z Introduction of Serum, Toxoid and Vaccine into Subcutaneous Tissue, Percutaneous Approach

# **Coding Options:**

**Option 1**. Do not create new codes for administration of the influenza vaccine. Continue to use the existing ICD-10-PCS code 3E0134Z Introduction of Serum, Toxoid and Vaccine into Subcutaneous Tissue, Percutaneous Approach.

**Option 2**. Create unique codes to capture subcutaneous injection of influenza vaccine as described by the requestor. Create new qualifier value 0 Influenza Vaccine in table 3E0 of the Administration section. Use existing fourth character body system value Subcutaneous Tissue with the approach Percutaneous.

Section 3 Administration	3 Administration				
Body SystemE Physiological Systems and Anatomical Regions					
<i>Operation</i> <b>0</b> Introduction: Putting in or on a therapeutic, diagnostic, nutritional, physiological, or prophylactic substance except blood or blood products					
Body System / Region Approach Substance Qualifier					
Body System / Region	Approach	Substance	Qualifier		

**CMS recommendation:** Option 2. This new code may be useful to hospitals who want to track this information.

**Interim Coding Advice:** If desired, facilities can code subcutaneous injection of influenza vaccine with ICD-10-PCS code 3E0134Z Introduction of Serum, Toxoid and Vaccine into Subcutaneous Tissue, Percutaneous Approach.

# Introduction of Peptide Enhanced Bone Graft Substitute

**Issue:** Currently there is not an ICD-10-PCS procedure code to describe the introduction of the peptide enhanced bone graft substitute, i-FACTOR<sup>TM</sup>, when used in cervical spinal fusion. Should a new code be created?

# New Technology Application? No.

**FDA Approval:** Premarket Approval (PMA) for i-FACTOR<sup>™</sup> Peptide Enhanced Bone Graft for use in anterior cervical discectomy and fusion procedures in patients with degenerative cervical disc disease was received on November 3, 2015.

**Background:** Degenerative disc disease (DDD) of the cervical spine can result in significant pain, instability, and radiculopathy and/or myelopathy. These symptoms are due to neural compression resulting from a loss of disc space height, loss of foraminal area, disc bulging or protruding osteophytes. Cervical DDD is treated conservatively; when conservative treatment fails, surgical treatment is an option. The goals of surgical treatment are decompression of spine/nerve root, restoration of cervical alignment, and stability. Decompression involves discectomy (removal of the soft disc) and/or removal of osteolytic structures. Restoration of alignment involves restoration of the disc space height and neural foraminal height. Stability involves elimination of motion in order to induce resorption of posterior osteophytes. Fusion is the current standard of care for surgical treatment of cervical disc disease in the U.S. Support to the treated segment is achieved by using a structural device such as an allograft ring. Anterior cervical plating is commonly used to provide additional stability to the segment of the spine to which it is applied and maintain spinal alignment, prevent graft dislodgement and collapse, enhance fusion rates, and eliminate the need for external immobilization.

The void space in the allograft ring can be filled with autologous bone or various bone replacement materials to improve the fusion process and clinical outcomes. Although autologous bone achieves good results, it may be associated with additional morbidity. The autologous bone can originate from local millings and osteophyte bone or from harvesting iliac crest bone. The most frequently reported problems associated with harvesting iliac crest autologous bone include postoperative pain, wound hematoma, infection, pelvic fracture, nerve palsy, and chronic donor site pain. Bone replacement materials are used as alternatives for use in cervical interbody fusion in an attempt to reduce donor site morbidity.

**Technology:** P-15<sup>TM</sup> bone putty (i-FACTOR<sup>TM</sup>) is a synthetic osteoconductive bone substitute that is approved for use in cervical fusion procedures. The first step in the bone formation process is cell attachment. Osteogenic precursor cells bind to P-15, then a natural signaling cascade occurs that leads to new bone formation.

i-FACTOR<sup>™</sup> is indicated for use in skeletally mature patients for reconstruction of a degenerated cervical disc at one level from C3-C4 to C6-C7 following single-level discectomy for intractable radiculopathy (arm pain and/or neurological deficit), with or without neck pain, or myelopathy due to a single-level abnormality localized to the disc space, and corresponding to at least one of the following conditions confirmed by radiographic imaging (CT, MRI, X-rays): herniated nucleus pulposus, spondylolysis (defined by the presence of osteophytes), and/or

visible loss of disc height as compared to adjacent levels, after failure of at least 6 weeks of conservative treatment. i-FACTOR<sup>TM</sup> Peptide Enhanced Bone Graft must be used inside an allograft bone ring and with supplemental anterior plate fixation.

**Current Coding:** Currently, a procedure code for the cervical fusion would be coded from table 0RG, Fusion of Upper Joints, with the device value Interbody Fusion Device.

<ul> <li>Section 0 Medical and Surgical</li> <li>Body System R Upper Joints</li> <li>Operation G Fusion: Joining together portions of an articular body part rendering the articular body part immobile</li> </ul>			
Body Part	Approach	Device	Qualifier
6 Thoracic Vertebral Joint	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous</li> <li>Endoscopic</li> </ul>	7 Autologous Tissue Substitute A Interbody Fusion Device J Synthetic Substitute K Nonautologous Tissue Substitute Z No Device	0 Anterior Approach, Anterior Column 1 Posterior Approach, Posterior Column J Posterior Approach, Anterior Column

*ICD-10-PCS Guidelines for Fusion procedures of the spine* 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 desired, facilities can capture the use of peptide enhanced bone graft substitute when used in a cervical spinal fusion with the following ICD-10-PCS code: 3E0U3GC Introduction of Other Therapeutic Substance into Joints, Percutaneous Approach

# **Coding options:**

**Option 1.** Do not create new codes for the use of peptide enhanced bone graft substitute. Continue to use the existing ICD-10-PCS code for cervical spinal fusion and if desired, code 3E0U3GC Introduction of Other Therapeutic Substance into Joints, Percutaneous Approach.

**Option 2**. Create unique codes to capture the use of peptide enhanced bone graft substitute. Create new qualifier value D P-15 Peptide Enhanced Bone Graft in table 3E0 of the Administration section. Use existing fourth character body system value Joints. Add the new qualifier for the approach values Open and Percutaneous. Also add the approach value Open for qualifier C Other Substance, for consistency.

<ul> <li>Section 3 Administration</li> <li>Body SystemE Physiological Systems and Anatomical Regions</li> <li>Operation 0 Introduction: Putting in or on a therapeutic, diagnostic, nutritional, physiological, or prophylactic substance except blood or blood products</li> </ul>			
Body System / RegionApproachSubstanceQualifier			Qualifier
U Joints	ADD 0 Open 3 Percutaneous	G Other Therapeutic	<ul> <li>B Recombinant Bone</li> <li>Morphogenetic Protein</li> <li>C Other Substance</li> <li>ADD D P-15 Peptide Enhanced</li> <li>Bone Graft</li> </ul>

**CMS recommendation:** We are recommending option 1, do not create new codes for the use of peptide enhanced bone graft substitute when used in a cervical spinal fusion. The requester noted in its original comments that other autograft alternatives such as rhBMP-2 have the qualifier (B) Recombinant bone morphogenetic protein in table 3E0 and therefore P-15 Peptide enhanced bone graft should have a unique qualifier developed. However, we note that rBMP was an approved new technology under ICD-9-CM and therefore warranted a unique procedure code, which was then automatically replicated for ICD-10-PCS as part of the conversion to ICD-10. In addition, as noted above under current coding, the ICD-10-PCS guidelines for fusion instruct that 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. The purpose of that guideline is to address this exact type of scenario.

**Interim Coding Advice:** Continue to code fusion of the cervical vertebrae with interbody fusion device with the appropriate values from table ORG. If desired, facilities can code the use of peptide enhanced bone graft substitute with ICD-10-PCS code 3E0U3GC Introduction of Other Therapeutic Substance into Joints, Percutaneous Approach.

# **Resuscitative Endovascular Balloon Occlusion of the Aorta**

**Issue:** There is currently not a unique ICD-10-PCS procedure code to identify resuscitative endovascular balloon occlusion of the aorta (REBOA) procedures in the aorta. Should new codes be created?

# New Technology Application? No.

**Food and Drug Administration (FDA) Approval:** Yes. Temporary balloon occlusion of large vessels is approved by the FDA. Approximately eight companies have percutaneous REBOA type balloon catheters commercially available in the United States, although several balloon catheters are indicated for use in conjunction with AAA endovascular procedures. The ER-REBOA<sup>™</sup> Catheter (Prytime Medical Devices, Inc.) was approved October 26, 2015.

**Background**: In general, temporary occlusion of large vessels are performed in two general clinical situations: 1) during a life-saving maneuver whereby a large artery or vein is temporarily blocked, resulting in the transient cessation of blood flow to allow surgeons time to definitively repair hemorrhage and 2) during non-emergent control of anticipated bleeding during surgical procedures, such as in removing highly vascularized tumors. In both of these clinical situations the REBOA catheter would be inserted in either the emergency room as a life-saving maneuver or in the operating room prior to a planned surgical procedure to control the risk of significant and anticipated operative blood loss.

The use of a balloon occlusion catheter in the setting of traumatic hemorrhagic shock was first reported in 1954 during the Korean War. However, technological limitations prevented the technique from being widely adopted. Following the endovascular revolution of the 1980's, clinical use of REBOA became more widespread, with promising results reported in both the military and civilian population.

Temporarily occluding a large vessel can be accomplished by:

1) Resuscitative thoracotomy (RT), an open surgical approach whereby a body cavity or extremity compartment is opened and a vascular clamp is directly applied to the aorta or other major blood vessel, or

2) Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA), a minimally invasive endovascular technique whereby a balloon occlusion catheter is inserted percutaneously. The catheter is then advanced into the aorta or other major blood vessel and inflated, usually under fluoroscopic control.

These techniques are generally used when difficult to control hemorrhage is either ongoing or anticipated.

However, open RT is associated with extremely high rates of morbidity and mortality. Open RT requires a large incision, and is associated with considerable pain as well as the potential for pulmonary and infective complications. Because of this, it is often performed as a last resort resuscitative maneuver in arrested or peri-arrested patients. Modern studies report continued poor open RT survival rates, with recent series showing only a 10% survival in contemporary trauma patients [Moore, 2015]. These concerns, along with improvements in balloon and vascular technology, have prompted renewed interest in less invasive options such as REBOA.

According to the requester, REBOA has the potential to affect a significant paradigm shift in patient management, by providing the clinical effects of temporary large vessel occlusion with significantly less risk of the morbidity incurred with open surgery.

The requester also notes that several published studies have reported reduced overall procedure times, statistically significant reductions in intraoperative blood loss, reduced need for intraoperative blood transfusions, and reductions in morbidity and mortality.

Note: Balloon occlusion has had various names over the years, including Aortic Balloon Occlusion (ABO), Inter Aortic Balloon Occlusion (IABO), Temporary Large Vessel Occlusion (TLVO), and others. In 2011, a seminal publication by Rasmussen et al codified the use of the term REBOA for any temporary occlusion of large vessels.

**Current Coding:** There is no ICD-10-PCS code for resuscitative endovascular balloon occlusion of the abdominal aorta or the descending thoracic aorta (REBOA). Hospitals report a code for the surgical repair procedure and do not report a code for REBOA.

## **Coding Options:**

**Option 1**: Do not create new ICD-10-PCS codes for REBOA.

**Option 2**: Create a unique code in table 02L, Occlusion of Heart and Great Vessels, for REBOA. Add qualifier J Temporary and fourth character body part value W Thoracic Aorta, Descending, with the approach value Percutaneous. In addition, create a unique code in table 04L, Occlusion of Lower Arteries, for REBOA. Add qualifier J Temporary to the fourth character body part value Abdominal Aorta, with the approach value Percutaneous.

Section 0 Medical and Surgical	0 Medical and Surgical				
Body System 2 Heart and Great Vess	Body System 2 Heart and Great Vessels				
Operation L Occlusion: Complete	<i>Operation</i> L Occlusion: Completely closing an orifice or the lumen of a tubular body part				
Body Part Approach Device Qualifier					
ADD W Thoracic Aorta, DescendingBercutaneousD Intraluminal DeviceADD J Tempora					

Section 0 Medical	tion 0 Medical and Surgical					
Body System 4 Lower A	Body System 4 Lower Arteries					
Operation L Occlusio	Operation L Occlusion: Completely closing an orifice or the lumen of a tubular body part					
Body Part	Body Part Approach Device Qualifier					
<b>0</b> Abdominal Aorta <b>3</b> Percutaneous		<b>D</b> Intraluminal Device	ADD J Temporary			
V Abuominar Aorta	5 r el cutalleous	D Intratuminar Device	Z No Qualifier			

**CMS recommendation:** Option 2. Create a unique code in table 02L, Occlusion of Heart and Great Vessels, for REBOA. Add qualifier J Temporary and fourth character body part value W Thoracic Aorta, Descending, with the approach value Percutaneous. In addition, create a unique code in table 04L, Occlusion of Lower Arteries, for REBOA. Add qualifier J Temporary to the fourth character body part value Abdominal Aorta, with the approach value Percutaneous.

**Interim Coding Advice:** Hospitals should continue to code for the definitive, surgical repair procedure only.

## **Intraoperative Treatment of Vascular Grafts**

**Issue:** Currently there is not a unique ICD-10-PCS procedure code to describe the intraoperative treatment of vascular grafts for the prevention of vein graft disease and vein graft failure following coronary artery bypass surgery or peripheral artery bypass surgery.

**New Technology Application?** Yes. A New Technology Add-On Payment application for the DuraGraft<sup>®</sup> Endothelial Damage Inhibitor will be submitted for FY 2018.

**Food and Drug Administration (FDA) Approval:** Pending. The DuraGraft<sup>®</sup> Endothelial Damage Inhibitor is currently the subject of a prospective, randomized controlled study. FDA clearance of the 510(k) is expected in the fourth quarter of 2016.

**Background:** Bypass surgery is a surgical intervention in which vascular conduits are used to reroute blood flow around blockages in arteries. Coronary Artery Bypass Grafting Surgery (CABG) is the recommended revascularization procedure for many patients with coronary artery disease (CAD) while peripheral bypass surgery is the recommended revascularization intervention in many patients with peripheral artery disease (PAD) and critical limb ischemia.

Autologous vascular grafts including saphenous vein and radial artery grafts are used broadly as bypass conduits in CABG and saphenous veins are commonly used in peripheral bypass surgeries. Unfortunately, the durability and patency of these grafts are significantly compromised by vein graft disease (VGD) in a process that begins during the grafting surgery itself. VGD is the principal cause of both early (within 30 days) and intermediate/late vein graft failure (VGF). VGD encompasses the pathophysiological changes that occur in vein grafts following their use in surgical grafting. These changes, apparent within minutes to hours of grafting, are manifested as endothelial dysfunction and include pro-inflammatory, pro-thrombogenic and proliferative changes within the graft. As VGD progresses, vein grafts lose their ability to adapt to the postgrafting environment leading to thrombus formation, intimal hyperplasia and atherosclerosis resulting in graft stenosis, occlusion and loss of graft patency.

There has been relatively little improvement over the past several decades in the occurrence of VGD and VGF and the rates of both VGD and VGF remain unacceptably high despite the introduction of aspirin and statins to treat or mitigate the disease. Approximately 45-50% of patients undergoing CABG and peripheral bypass surgery respectively will have a graft failure within 12 months. The percentage of patients with underlying VGD that will manifest as VGF after one year is even higher.

VGD that progresses to VGF may result in myocardial infarction (MI), the need for repeat revascularization and/or lower limb amputation or even death. The success rate of revascularization or re-intervention of a failed graft is very poor and is technically challenging because of the soft atheromatous and thrombotic debris that develop when these grafts deteriorate. Failed SVG intervention is associated with higher rates of peri-procedural myocardial infarction, in-hospital mortality, restensis and occlusion, and therefore, addressing early vein graft disease in the primary graft is crucial. Disease burden and consequences of VGD can be more severe than the initial disease for which bypass grafting was indicated.

As such, VGD represents a substantial disease burden to the patient and a high cost burden to health care systems. It also represents a disease for which there has been no significant improvement in several decades.

DuraGraft<sup>®</sup> treatment of vascular grafts is formulated into a graft handling and flushing solution. Once the graft is harvested, it is flushed with DuraGraft<sup>®</sup> and then immediately placed in DuraGraft<sup>®</sup> solution until it is anastomosed.

DuraGraft<sup>®</sup> is provided as a simple to use kit containing two solutions that are mixed in the surgical suite prior to use. The kit provides enough solution to treat multiple grafts during multi-vessel bypass surgery.

According to a recent large retrospective US-based study evaluating DuraGraft<sup>®</sup> in 2436 CABG patients, it has demonstrated for the first time since the CABG procedure was developed, a statistically significant reduction in complications associated with VGF; 50% reduction in MI (p= 0.0001) and 38% reduction in repeat revascularization ( p=0.03). Furthermore, this study showed long-term benefits associated with the use of DuraGraft<sup>®</sup> in that statistically significant reductions in both complications were observed for at least 10 years following CABG surgery indicating both near term and long term benefit for patients and near and long-term cost savings as well. A prospective study evaluating graft level effects including wall thickening and graft patency in CABG patients is currently underway. This study utilizes a unique in-patient design in which one graft is treated with DuraGraft<sup>®</sup> and a second graft is managed according to standard of care. The in-patient design reduces patient bias in the study. Upon successful completion of the on-going prospective study in mid-2016, the product is expected to be approved in the United States.

**Current Coding:** Code vascular bypass procedures using vein graft to the appropriate body part value in tables 021 Bypass of Heart and Great Vessels, 031 Bypass of Upper Arteries, and 041 Bypass of Lower Arteries, with the device value that captures the source of vein graft as documented (i.e., autologous or nonautologous). For harvest of autologous saphenous vein, code the appropriate body part value in table 06B Excision of Lower Veins. The intraoperative preparation of vein graft material is not coded separately.

## **Coding Options**

**Option 1**. Do not create new codes for the intraoperative treatment of vascular grafts for the prevention of vein graft disease and vein graft failure following bypass surgery. Continue to use existing codes as above.

**Option 2**. To capture the intraoperative administration of endothelial damage inhibitor to vein graft material, create new qualifier value Vein Graft in table 3E0 of the Administration section.

Section 3 Administr	<i>ection</i> <b>3</b> Administration			
Body System E Physiological Systems and Anatomical Regions				
<i>Operation</i> <b>0</b> Introduction: Putting in or on a therapeutic, diagnostic, nutritional,				
physiological, or prophylactic substance except blood or blood products				
Body System / Region Approach Substance Qualifier				
Z None X External G Other Therapeutic Substance ADD V Vein Graft			ADD V Vein Graft	

3E0ZXGV Extracorporeal Introduction of Other Therapeutic Substance to Vein Graft

**Option 3**. Create new codes in section X, New Technology, to identify the intraoperative administration of endothelial damage inhibitor to vein graft material.

	Section ADD X New Technology Body System ADD Y Extracorporeal			
	Operation ADD 0 Introduction: Putting in or on a therapeutic, diagnostic, nutritional, physiological, or prophylactic substance except blood or blood products			
Body Part Approach Device / Substance / Technology Qualifier				
ADD V Vein Graft	ADD X External	ADD 8 Endothelial Damage Inhibitor	ADD 3 New Technology Group 3	

XY0VX83 Extracorporeal Introduction of Endothelial Damage Inhibitor to Vein Graft, New Technology Group 3

**CMS Recommendation:** Option 3. Create new codes in section X, New Technology, administration of endothelial damage inhibitor to vein graft material.

**Interim Coding Advice:** Continue to code vascular bypass procedures and saphenous vein harvest as described in current coding.

References:

Haime, Miguel (2016, October). DuraGraft, a one-time intraoperative treatment for the prevention of vein graft failure improves clinical outcomes after coronary artery bypass grafting. Long-term analysis of 2,436 consecutive patients. 30<sup>th</sup> Annual European Association of Cardio-Thoracic Surgery in Barcelona, October 2016, Barcelona, Spain.

# **ICD-10-PCS Definitions Addenda**

#### **Medical and Surgical section**

Axis 3OperationTermDilationExplanation DeleteThe orifice can be a natural orifice or an artificially created orifice.Accomplished by stretching a tubular body part using intraluminal pressure or by cutting part of<br/>the orifice or wall of the tubular body partIncludesDeletePercutaneous transluminal angioplasty, pyloromyotomyExplanationAddThe orifice can be a natural orifice or an artificially created orifice.Accomplished by stretching a tubular body part using intraluminal pressureIncludesAddPercutaneous transluminal angioplasty, balloon valvuloplasty

#### ICD-10-PCS Index/Body Part Key Addenda

vice

- Add see Insertion of device in, Lower Bones 0QH
- Add see Repair, Lower Bones 0QQ

Lttr Main Add Add Add	L LAGB (laparoscopic adjustable gastric banding) initial procedure 0DV64CZ revision/adjustment 0DW64CZ
Lttr Main Add	O Odontoid process use Cervical Vertebra
Lttr	R
Main	Restriction
	Artery
	Common Iliac
Delete	Left, Intraluminal Device, Branched or Fenestrated 04VD
Delete	Right, Intraluminal Device, Branched or Fenestrated 04VC
Add Add	Left 04VD Right 04VC
Auu	Right 04VC
Lttr	Т
Main Add	Transverse foramen use Cervical Vertebra
Main Add	Transverse process
Add	use Cervical Vertebra
Add	use Thoracic Vertebra
Add	use Lumbar Vertebra
Lttr	U
Main	Umbilical artery
Add	use Lower Artery
	·
Lttr	V
Main Add	Vertebral body
Add	use Cervical Vertebra
Add	use Thoracic Vertebra
Add	use Lumbar Vertebra

# ICD-10-PCS Table addenda

# Revise title only--Section title

Source	Description	Code specification
public	Change the title of section 5 from Extracorporeal	Revise section title only,
comment	Assistance and Performance to Systemic Assistance and Performance	does not affect code title.
public comment	Change the title of section 6 from Extracorporeal Therapies to Systemic Therapies	Revise section title only, does not affect code title.

# EXAMPLE

	<b>REVISE from 5</b> Extracorporeal Assistance and Performance <b>REVISE to 5</b> Systemic Assistance and Performance			
Body SystemA Phys	iological Systems			
-	<i>Operation</i> <b>0</b> Assistance: Taking over a portion of a physiological function by extracorporeal			
means				
Body System	Duration	Function	Qualifier	
2 Cardiac	1 Intermittent 2 Continuous		<ul> <li>0 Balloon Pump</li> <li>5 Pulsatile Compression</li> <li>6 Other Pump</li> <li>D Impeller Pump</li> </ul>	

Section REVISE from 6 Extracorporeal Therapies					
REVISE	to 6 Systemic The	rapies			
Body SystemA Physiol	ogical Systems				
<i>Operation</i> <b>0</b> Atmospheric Control: Extracorporeal control of atmospheric pressure and composition					
Body System	Body System Duration Qualifier Qualifier				
Z None	0 Single 1 Multiple	Z No Qualifier	Z No Qualifier		

Source	Description	Code specification
2014 Coding Clinic	Change the title of the Central Nervous	Revise body system
Editorial Advisory Board	body system in the Medical and Surgical	title only, does not
(EAB) & CMS internal	section to Central Nervous System and	affect code title.
review	Cranial Nerves.	

# Revise title only—Body system title, Medical and Surgical section

Section 0 Medical and Su Body System <b>REVISE from</b>	6		
<b>REVISE to 0</b> Central Nervous System and Cranial Nerves			
	ng out or off, without replaceme		a body part
Body Part	Approach	Device	Qualifier
1		· ·	• •

# Medical and Surgical section Axis 3 Operation Dilation/Bypass of cerebral ventricle

Source	Description	Code specification
2015,	Add the root operation Dilation to the central nervous	0076^ZZ (3 codes)
Coding Clinic	body system, for the cerebral ventricle body part, to capture dilation of ventricle stricture.	
Editorial Advisory Board & CMS internal review	In addition, add the approach value Percutaneous Endoscopic for all device values, and the device value No Device to the root operation Bypass table 001 for the cerebral ventricle body part, to capture additional detail, including endoscopic third ventriculostomy (ETV) for treatment of hydrocephalus.	00164 <sup>^</sup> (30 codes) 0016 <sup>^</sup> ZB (3 codes)

# EXAMPLE

Section 0 Medical and Surgical			
Body System 0 Central N	Iervous System		
<i>Operation</i> <b>ADD 7</b> D	ilation: Expanding an orifice or the	lumen of a tubula	ar body part
Body Part	Device	Qualifier	
6 Cerebral Ventricle	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> </ul>	<b>Z</b> No Device	Z No Qualifier

<ul> <li>Section 0 Medical and Surgical</li> <li>Body System 0 Central Nervous System</li> <li>Operation 1 Bypass: Altering the route of passage of the contents of a tubular body part</li> </ul>				
Body Part	Approach	Device	Qualifier	
<b>6</b> Cerebral Ventricle	0 Open 3 Percutaneous ADD 4 Percutaneous Endoscopic	7 Autologous Tissue Substitute J Synthetic Substitute K Nonautologous Tissue Substitute	<ul> <li>0 Nasopharynx</li> <li>1 Mastoid Sinus</li> <li>2 Atrium</li> <li>3 Blood Vessel</li> <li>4 Pleural Cavity</li> <li>5 Intestine</li> <li>6 Peritoneal Cavity</li> <li>7 Urinary Tract</li> <li>8 Bone Marrow</li> <li>B Cerebral Cisterns</li> </ul>	

	0 Open		
6 Cerebral	<b>3</b> Percutaneous	ADD Z No Device	ADD B Cerebral
Ventricle	ADD 4 Percutaneous	ADD Z NO DEVICE	Cisterns
	Endoscopic		

# Graft Replacement and Supplement

Source	Description	Code specification
2015,	Add the root operation Replacement to the	00R^[04][7JK]Z (135 codes)
Coding	central nervous, peripheral nervous, respiratory,	01R^[04][7JK]Z (117 codes)
Clinic EAB	muscle and ligament body systems, to capture	0BR^[04][7JK]Z (72 codes)
& CMS	additional detail for reconstruction procedures	0KR^[04][7JK]Z (168 codes)
internal	using graft material.	0MR^[04][7JK]Z (168 codes)
review		

Section 0 Medical and Surgical				
Body System Central Nervous System				
Operation ADD R Replacement: Putting in or on biological or synthetic material that				
physically ta	akes the place and/or func	ction of all or a portion of a body	' part	
Body Part	Approach	Device	Qualifier	
1 Cerebral Meninges				
<b>2</b> Dura Mater				
F Olfactory Nerve				
G Optic Nerve				
H Oculomotor Nerve				
J Trochlear Nerve				
K Trigeminal Nerve	0 Open	7 Autologous Tissue Substitute		
L Abducens Nerve	4 Percutaneous	J Synthetic Substitute	Z No	
M Facial Nerve	Endoscopic	<b>K</b> Nonautologous Tissue Substitute	Qualifier	
N Acoustic Nerve				
P Glossopharyngeal				
Nerve				
<b>Q</b> Vagus Nerve				
<b>R</b> Accessory Nerve				
S Hypoglossal Nerve				
<b>T</b> Spinal Meninges				

Section0 Medical and SurgicalBody SystemB Respiratory SystemOperationADDR Replacement: Putting in or on biological or synthetic material that physically takes the place and/or function of all or a portion of a body part			
Body Part	Approach	Device	Qualifier
<ol> <li>Trachea</li> <li>Carina</li> <li>Main Bronchus, Right</li> <li>Upper Lobe Bronchus, Right</li> <li>Middle Lobe Bronchus, Right</li> <li>Lower Lobe Bronchus, Right</li> <li>Lower Lobe Bronchus, Left</li> <li>Upper Lobe Bronchus, Left</li> <li>Lingula Bronchus</li> <li>B Lower Lobe Bronchus, Left</li> <li>Diaphragm, Right</li> <li>S Diaphragm, Left</li> </ol>	<b>0</b> Open <b>4</b> Percutaneous Endoscopic	7 Autologous Tissue Substitute J Synthetic Substitute K Nonautologous Tissue Substitute	<b>Z</b> No Qualifier

# Extraction procedures

Source	Description	Code specification
2013, Coding	Add the root operation Extraction to the	07D^[34]ZX (42 codes)
Clinic EAB	lymphatic, respiratory and gastrointestinal body	0BD^[48]ZX (38 codes)
& CMS	systems to capture additional detail, including	0DD^[348]ZX (66 codes)
internal	percutaneous aspiration biopsies and brush	0DDQ[348X]ZX (4 codes)
review;	biopsies.	
2015, Coding Clinic 3Q p.7	In addition, add the root operation Extraction for the muscle, tendon, upper bone, and lower bone body systems, to capture additional detail, including non-excisional debridement of muscle, tendon, and bone body parts.	0KD^0ZZ (28 codes) 0LD^0ZZ (28 codes) 0PD^0ZZ (27 codes) 0QD^0ZZ (25 codes)

Section0 Medical andBody SystemB RespiratoryOperationADDD Extraby the use of feed	System ction: Pulling or stripping out or off all o	r a portion o	f a body part
Body Part	Approach	Device	Qualifier
<ol> <li>Trachea</li> <li>Carina</li> <li>Main Bronchus, Right</li> <li>Upper Lobe Bronchus, Right</li> <li>Middle Lobe Bronchus, Right</li> <li>Lower Lobe Bronchus, Right</li> <li>Lower Lobe Bronchus, Left</li> <li>Upper Lobe Bronchus, Left</li> <li>Lingula Bronchus</li> <li>Lower Lobe Bronchus, Left</li> <li>Upper Lung Lobe, Right</li> <li>Middle Lung Lobe, Right</li> <li>F Lower Lung Lobe, Right</li> <li>G Upper Lung Lobe, Left</li> <li>H Lung Lingula</li> <li>J Lower Lung Lobe, Left</li> <li>K Lung, Right</li> <li>L Lung, Left</li> <li>M Lungs, Bilateral</li> </ol>	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>7 Via Natural or Artificial Opening</li> <li>8 Via Natural or Artificial Opening</li> <li>Endoscopic</li> </ul>	<b>Z</b> No Device	X Diagnostic Z No Qualifier

Section0 Medical and SurgicalBody SystemK MusclesOperationADDD Extraction: Pullin by the use of force	ng or stripping out or off all	or a portion of	of a body part
Body Part	Approach	Device	Qualifier
<ul> <li>0 Head Muscle</li> <li>1 Facial Muscle</li> <li>2 Neck Muscle, Right</li> <li>3 Neck Muscle, Left</li> <li>4 Tongue, Palate, Pharynx Muscle</li> <li>5 Shoulder Muscle, Right</li> <li>6 Shoulder Muscle, Left</li> <li>7 Upper Arm Muscle, Right</li> <li>8 Upper Arm Muscle, Left</li> <li>9 Lower Arm and Wrist Muscle, Right</li> <li>B Lower Arm and Wrist Muscle, Left</li> <li>C Hand Muscle, Right</li> <li>D Hand Muscle, Right</li> <li>G Trunk Muscle, Right</li> <li>J Thorax Muscle, Left</li> <li>H Thorax Muscle, Left</li> <li>K Abdomen Muscle, Right</li> <li>J Thorax Muscle, Left</li> <li>M Perineum Muscle, Right</li> <li>I Abdomen Muscle, Right</li> <li>I Abdomen Muscle, Right</li> <li>I Abdomen Muscle, Right</li> <li>K Abdomen Muscle, Right</li> <li>I Abdomen Muscle, Right</li> <li>I Lower Leg Muscle, Right</li> <li>R Upper Leg Muscle, Right</li> <li>T Lower Leg Muscle, Left</li> <li>V Foot Muscle, Right</li> <li>W Foot Muscle, Left</li> </ul>	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	<b>Z</b> No Device	<b>X</b> Diagnostic

### Medical and Surgical section Axis 4 Body Part

# Hepatic artery to renal artery

Source	Description	Code specification
2015, Coding	In the Lower Arteries body system of the Medical	0413[04]^][345] (30
Clinic 3Q	and Surgical section, add the body part value	codes)
p.28	Hepatic Artery to the root operation Bypass table	
	041, for the body part values Renal Artery, Right	
	and Renal Artery, Left. These changes will enable	
	capture of detail for bypass procedures from the	
	hepatic artery or its branches to the renal arteries.	

#### EXAMPLE

Section0 Medical and SurgicalBody System 4 Lower ArteriesOperation1 Bypass: Altering the route of passage of the contents of a tubular body part			
Body Part	Approach	Device	Qualifier
Artery	0 Open 4 Percutaneous Endoscopic	K Nonautologous Tissue Substitute	3 Renal Artery, Right 4 Renal Artery, Left 5 Renal Artery, Bilateral

#### Common hepatic duct

Source	Description	Code specification
2014, public	In the Hepatobiliary and Pancreas body system of	0F^7^^^ (142 codes)
comment	the Medical and Surgical section, create new body	
	part value 7 Common Hepatic Duct and add to all	
	root operation tables containing the body part	
	values Hepatic Duct, Right and Hepatic Duct, Left.	

Section0 Medical andBody SystemF HepatobiliaryOperation1 Bypass: Alter	6	of the contents of a t	tubular body part
Body Part	Approach	Device	Qualifier
<ul> <li>4 Gallbladder</li> <li>5 Hepatic Duct, Right</li> <li>6 Hepatic Duct, Left</li> <li>ADD 7 Hepatic Duct,</li> <li>Common</li> <li>8 Cystic Duct</li> <li>9 Common Bile Duct</li> </ul>	0 Open 4 Percutaneous Endoscopic	<b>D</b> Intraluminal Device <b>Z</b> No Device	<ul> <li>3 Duodenum</li> <li>4 Stomach</li> <li>5 Hepatic Duct,</li> <li>Right</li> <li>6 Hepatic Duct, Left</li> <li>7 Hepatic Duct,</li> <li>Caudate</li> <li>8 Cystic Duct</li> <li>9 Common Bile Duct</li> <li>B Small Intestine</li> </ul>

# Extirpation from spinal canal

Source	Description	Code specification
2014, CMS	In the Central Nervous body system of the Medical	00CU^ZZ (3 codes)
internal	and Surgical section, add the body part value U	
review	Spinal Canal to the root operation Extirpation table	
	00C, to capture detail for extirpation procedures	
	performed on the spinal canal, such as in the	
	epidural space.	

Section0 Medical and SurgicalBody System0 Central Nervous SystemOperationC Extirpation: Taking or cutting out solid matter from a body part			part
Body Part	Approach	Device	Qualifier
<ul> <li>0 Brain</li> <li>1 Cerebral Meninges</li> <li>2 Dura Mater</li> <li>3 Epidural Space</li> <li>4 Subdural Space</li> <li>5 Subarachnoid Space</li> <li>6 Cerebral Ventricle</li> <li>7 Cerebral Hemisphere</li> <li>8 Basal Ganglia</li> <li>9 Thalamus</li> </ul>	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	<b>Z</b> No Device	<b>Z</b> No Qualifier

A TT		
A Hypothalamus		
<b>B</b> Pons		
C Cerebellum		
<b>D</b> Medulla Oblongata		
F Olfactory Nerve		
G Optic Nerve		
H Oculomotor Nerve		
J Trochlear Nerve		
K Trigeminal Nerve		
L Abducens Nerve		
M Facial Nerve		
N Acoustic Nerve		
P Glossopharyngeal Nerve		
<b>Q</b> Vagus Nerve		
<b>R</b> Accessory Nerve		
S Hypoglossal Nerve		
T Spinal Meninges		
ADD U Spinal Canal		
W Cervical Spinal Cord		
<b>X</b> Thoracic Spinal Cord		
Y Lumbar Spinal Cord		

# Occlusion of pulmonary artery

Source	Description	Code specification
2015, Coding	In the Heart and Great Vessels body system of the	02L[QR]^[CDZ]Z (18
Clinic	Medical and Surgical section, add the body part	codes)
Editorial	values Pulmonary Artery, Right, and Pulmonary	
Advisory	Artery, Left to the root operation Occlusion table	
Board &	02L, to capture detail for embolization procedures	
CMS internal	performed on the pulmonary arteries, such as	
review	embolization of pulmonary AV fistula.	

Section0 Medical and SurgicalBody System 2 Heart and Great VesselsOperationL Occlusion: Completely closing an orifice or the lumen of a tubular body part						
Body Part Approach Device Qualifier						
	U Open 3 Percutaneous	Device	<b>K</b> Left Atrial Appendage			

	4 Percutaneous Endoscopic	Device Z No Device	
<ul> <li>ADD Q Pulmonary Artery, Right</li> <li>S Pulmonary Vein, Right</li> <li>T Pulmonary Vein, Left</li> <li>V Superior Vena Cava</li> </ul>	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	C Extraluminal Device D Intraluminal Device Z No Device	<b>Z</b> No Qualifier
<b>R</b> Pulmonary Artery, Left	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	C Extraluminal Device D Intraluminal Device Z No Device	T Ductus Arteriosus ADD Z No Qualifier

# Lower artery bypass

Source	Description	Code specification
2015, public	In the Lower Arteries body system of the Medical	041[TUVW][04]^[PQS]
comment	and Surgical section, add the body part values T	(120 codes)
	Peroneal Artery, Right, U Peroneal Artery, Left, V	
	Foot Artery, Right, and W Foot Artery, Left to the	
	root operation Bypass table 041, to capture detail	
	for bypass procedures performed on the lower leg	
	and foot arteries.	

Section0 Medical and SurgicalBody System 4 Lower ArteriesOperation1 Bypass: Altering the route of passage of the contents of a tubular body part				
Body Part	Approach	Device	Qualifier	
<ul> <li>ADD T Peroneal</li> <li>Artery, Right</li> <li>ADD U Peroneal</li> <li>Artery, Left</li> <li>ADD V Foot Artery,</li> <li>Right</li> <li>ADD W Foot Artery,</li> <li>Left</li> </ul>	0 Open 4 Percutaneous Endoscopic	<ul> <li>9 Autologous Venous Tissue</li> <li>A Autologous Arterial Tissue</li> <li>J Synthetic Substitute</li> <li>K Nonautologous Tissue Substitute</li> <li>Z No Device</li> </ul>	ADD P Foot Artery ADD Q Lower Extremity Artery ADD S Lower Extremity Vein	

# **Reposition of intestine**

Source	Description	Code specification
2016, public	In the Gastrointestinal body system of the Medical	0DS[8E]^ZZ (10 codes)
comment	and Surgical section, add the body part values	
	Small Intestine and Large Intestine to the root	
	operation Reposition table OGS, to capture	
	procedures for repositioning the intestines, such as	
	correction of malrotation of the small intestine	
	and/or the large intestine.	

Section 0 Medical	and Surgical			
Body System D Gastrointestinal System				
Operation S Reposition	on: Moving to its normal location, or other su	itable locatio	n, all or a	
portion of	a body part			
Body Part	Approach	Device	Qualifier	
5 Esophagus				
6 Stomach				
ADD 8 Small				
Intestine				
9 Duodenum				
A Jejunum	0 Open			
<b>B</b> Ileum	4 Percutaneous Endoscopic			
ADD E Large	7 Via Natural or Artificial Opening	Z No	Z No	
Intestine	8 Via Natural or Artificial Opening	Device	Qualifier	
<b>H</b> Cecum	Endoscopic			
K Ascending Colon	X External			
L Transverse Colon				
M Descending Colon				
N Sigmoid Colon				
P Rectum				
<b>Q</b> Anus				

#### Diaphragm

Source	Description	Code
		specification
2014, Coding	In the Respiratory body system of the Medical and	Add 43 codes
Clinic EAB &	Surgical section, add the body part value T Diaphragm to	0B^T^^^
CMS internal	all root operation tables currently using body part values	
review	R Diaphragm, Right and S Diaphragm, Left.	
	In addition, delete the body part values R Diaphragm, Right and S Diaphragm, Left.	Delete 86 codes 0B^[RS]^^^

Section 0 Medical and Su	ırgical		
Body System B Respiratory Sy			
Operation <b>B</b> Excision: Cutting	ng out or off, without replacement, a p	ortion of a	body part
Body Part	Approach	Device	Qualifier
<ol> <li>Trachea</li> <li>Carina</li> <li>Main Bronchus, Right</li> <li>Upper Lobe Bronchus, Right</li> <li>Middle Lobe Bronchus, Right</li> <li>Lower Lobe Bronchus, Right</li> <li>Lower Lobe Bronchus, Left</li> <li>Upper Lobe Bronchus, Left</li> <li>Upper Lobe Bronchus, Left</li> <li>Lingula Bronchus</li> <li>Lower Lobe Bronchus, Left</li> <li>C Upper Lung Lobe, Right</li> <li>D Middle Lung Lobe, Right</li> <li>F Lower Lung Lobe, Right</li> <li>G Upper Lung Lobe, Right</li> <li>G Upper Lung Lobe, Left</li> <li>H Lung Lingula</li> </ol>		<b>Z</b> No Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier
J Lower Lung Lobe, Left K Lung, Right L Lung, Left M Lungs, Bilateral N Pleura, Right			
P Pleura, Left <b>DELETE R</b> Diaphragm, Right <b>DELETE S</b> Diaphragm,	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	<b>Z</b> No Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier

Left		
ADD T Diaphragm		

# Saphenous vein

Source	Description	Code
		specification
2014, Coding	In the Lower Veins body system of the Medical and	Revise 180
Clinic	Surgical section, revise the title of the body part values Q	codes
Editorial	and R from Greater Saphenous Vein, Right and Greater	06^[PQ]^^^
Advisory	Saphenous Vein, Left to Saphenous Vein, Right and	
Board &	Saphenous Vein, Left respectively.	
CMS internal review	In addition, delete the body part values R Lesser Saphenous Vein, Right, and S Lesser Saphenous Vein, Left.	Delete 180 codes 06^[RS]^^^

Section 0 Medical and Surgical					
Body System 6 Lower Veins					
<i>Operation</i> <b>B</b> Excision: Cutting out or off, without replacement, a portion of a body part					
Body Part	Approach	Device	Qualifier		
0 Inferior Vena Cava			~ "		
1 Splenic Vein					
2 Gastric Vein					
<b>3</b> Esophageal Vein					
4 Hepatic Vein					
5 Superior Mesenteric Vein					
6 Inferior Mesenteric Vein					
7 Colic Vein					
8 Portal Vein	0 Open		V Diagnostia		
9 Renal Vein, Right	3 Percutaneous	Z No	X Diagnostic Z No		
<b>B</b> Renal Vein, Left	4 Percutaneous	Device	Qualifier		
C Common Iliac Vein, Right	Endoscopic		Quamier		
<b>D</b> Common Iliac Vein, Left					
F External Iliac Vein, Right					
G External Iliac Vein, Left					
H Hypogastric Vein, Right					
J Hypogastric Vein, Left					
M Femoral Vein, Right					
N Femoral Vein, Left					
<b>REVISE from P</b> Greater Saphenous Vein,	,				

Right		
<b>REVISE to P</b> Saphenous Vein, Right		
<b>REVISE from Q</b> Greater Saphenous		
Vein, Left		
<b>REVISE to Q</b> Saphenous Vein, Left		
<b>DELETE R</b> Lesser Saphenous Vein,		
Right		
<b>DELETE</b> S Lesser Saphenous Vein, Left		
T Foot Vein, Right		
V Foot Vein, Left		

# Frontal and sphenoid sinus

Source	Description	Code
		specification
2014, Coding	In the Ear, Nose, Sinus body system of the Medical and	Revise 64 codes
Clinic Editorial	Surgical section, revise the title of the body part value S	09^[SW]^^^
Advisory	from Frontal Sinus, Right to Frontal Sinus, and body part	
Board & CMS	value W from Sphenoid Sinus, Right to Sphenoid Sinus.	
internal review	In addition, delete the body part values T Frontal Sinus, Left and X Sphenoid Sinus, Left.	Delete 64 codes 09^[TX]^^^

Section 0 Medical and Surgical				
Body System 9 Ear, Nose, Sinus				
<i>Operation</i> <b>B</b> Excision: Cutting out or o	off, without replacement, a	portion of a	body part	
Body Part	Approach	Device	Qualifier	
B Mastoid Sinus, Right				
C Mastoid Sinus, Left				
M Nasal Septum				
P Accessory Sinus				
Q Maxillary Sinus, Right	0 Open			
<b>R</b> Maxillary Sinus, Left	0 Open 3 Percutaneous	Z No	<b>X</b> Diagnostic	
<b>REVISE from S</b> Frontal Sinus, Right		Device	Z No	
<b>REVISE to S</b> Frontal Sinus	4 Percutaneous	Device	Qualifier	
<b>DELETE T</b> Frontal Sinus, Left	Endoscopic			
U Ethmoid Sinus, Right				
V Ethmoid Sinus, Left				
REVISE from W Sphenoid Sinus,				
Right				

<b>REVISE to W</b> Sphenoid Sinus		
<b>DELETE</b> X Sphenoid Sinus, Left		

#### Omentum

Source	Description	Code specification
2012, Coding	In the Gastrointestinal body system of the Medical and	Revise 41 codes
Clinic EAB &	Surgical section, revise the title of the body part value S	0D^S^^^
CMS internal review	from Greater Omentum to Omentum. In addition, delete the body part value T Lesser	Delete 41 codes
	Omentum.	0D-1

### EXAMPLE

Section0 Medical and SurgicalBody SystemD Gastrointestinal SystemOperationB Excision: Cutting out		a portion of a	body part
Body Part	Approach	Device	Qualifier
<b>DELETE</b> T Lesser Omentum	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> </ul>	<b>Z</b> No Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier

#### Front and back skull bones

Source	Description	Code specification
2014, Coding	In the Head and Facial Bones body system of the	Revise 120
Clinic Editorial	Medical and Surgical section, revise the title of body part	codes
Advisory	value 1 from Frontal Bone, Right to Frontal Bone, body	0N^[137C]^^^
Board & CMS	part value 3 from Parietal Bone, Right to Parietal Bone,	
internal review	body part value 7 from Occipital Bone, Right to	
	Occipital Bone, body part value C from Sphenoid Bone,	
	Right to Sphenoid Bone, and body part value R from	
	Maxilla, Right to Maxilla.	
	-	

In addition, delete the body part values 2 Frontal Bone, Left, 4 Parietal Bone, Left, 8 Occipital Bone, Left, D Sphenoid Bone, Left, and S Maxilla, Left.	Delete 120 codes 0N^[248D]^^^
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Section0 Medical and SurgicalBody System N Head and Facial Bones			
<i>Operation</i> <b>B</b> Excision: Cutting out or	off, without replacement, a	portion of a	body part
Body Part	Approach	Device	Qualifier
0 Skull			
<b>REVISE from 1</b> Frontal Bone, Right			
<b>REVISE to 1</b> Frontal Bone			
<b>DELETE</b> 2 Frontal Bone, Left			
<b>REVISE from 3</b> Parietal Bone, Right			
<b>REVISE to 3</b> Parietal Bone			
<b>DELETE</b> 4 Parietal Bone, Left			
5 Temporal Bone, Right			
6 Temporal Bone, Left			
<b>REVISE from</b> 7 Occipital Bone, Right			
<b>REVISE to 7</b> Occipital Bone			
<b>DELETE 8</b> Occipital Bone, Left			
<b>B</b> Nasal Bone			
<b>REVISE from</b> C Sphenoid Bone,			
Right	0 Open		
<b>REVISE to C</b> Sphenoid Bone	3 Percutaneous	Z No	X Diagnostic
<b>DELETE D</b> Sphenoid Bone, Left	4 Percutaneous	Device	Z No
F Ethmoid Bone, Right	Endoscopic	Device	Qualifier
G Ethmoid Bone, Left	Lindoscopie		
H Lacrimal Bone, Right			
J Lacrimal Bone, Left			
K Palatine Bone, Right			
L Palatine Bone, Left			
M Zygomatic Bone, Right			
N Zygomatic Bone, Left			
<b>P</b> Orbit, Right			
Q Orbit, Left			
<b>REVISE from R</b> Maxilla, Right			
<b>REVISE to R</b> Maxilla			
DELETE S Maxilla, Left			
T Mandible, Right			
V Mandible, Left			
X Hyoid Bone			

# Cranial meningeal space

Source	Description	Code specification
2015, CMS	In the Central Nervous body system of the Medical and	Revise 48 codes
internal	Surgical section, revise the title of the body part value 3	00^[345]^^^
review	from Epidural Space to Epidural Space, Intracranial, the	
	body part value 4 from Subdural Space to Subdural Space,	
	Intracranial, and the body part value 5 from Subarachnoid	
	Space to Subarachnoid Space, Intracranial, to clarify the	
	intended use of these body part values.	

Section 0 Medical and Surgical			
Body System 0 Central Nervous System			
<i>Operation</i> 9 Drainage: Taking or lett	, , , , , , , , , , , , , , , , , , ,		
Body Part	Approach	Device	Qualifier
0 Brain			
1 Cerebral Meninges			
2 Dura Mater			
<b>REVISE from 3</b> Epidural Space			
<b>REVISE to 3</b> Epidural Space,			
Intracranial			
<b>REVISE from 4</b> Subdural Space			
<b>REVISE to 4</b> Subdural Space,			
Intracranial			
<b>REVISE from 5</b> Subarachnoid Space			
<b>REVISE to 5</b> Subarachnoid Space,			
Intracranial	0 Open		
6 Cerebral Ventricle	<b>3</b> Percutaneous	<b>0</b> Drainage	Z No
7 Cerebral Hemisphere	4 Percutaneous	Device	Qualifier
8 Basal Ganglia	Endoscopic	Device	Quamier
9 Thalamus	Lindoseopie		
A Hypothalamus			
<b>B</b> Pons			
C Cerebellum			
<b>D</b> Medulla Oblongata			
F Olfactory Nerve			
G Optic Nerve			
H Oculomotor Nerve			
J Trochlear Nerve			
K Trigeminal Nerve			
L Abducens Nerve			
M Facial Nerve			

N Acoustic Nerve		
P Glossopharyngeal Nerve		
<b>Q</b> Vagus Nerve		
R Accessory Nerve		
S Hypoglossal Nerve		
T Spinal Meninges		
U Spinal Canal		
W Cervical Spinal Cord		
X Thoracic Spinal Cord		
Y Lumbar Spinal Cord		

# Internal carotid artery

Source	Description	Code specification
2015, Coding	In the Upper Arteries body system of the Medical and	Revise 184 codes
Clinic Editorial	Surgical section, revise the title of the body part value K	03^[KL]^^^
Advisory	Internal Carotid Artery, Right to K Internal Carotid	
Board & CMS	Artery, Extracranial Segment, Right, and the body part	
internal review	value L from Internal Carotid Artery, Left, to Internal	
	Carotid Artery, Extracranial Segment, Left, to clarify the	
	intended use of these body part values.	

Section 0 Medical and Surgical			
Body System 3 Upper Arteries			
Operation C Extirpation: Taking or cutt	ing out solid matter from	a body part	
Body Part	Approach	Device	Qualifier
0 Internal Mammary Artery, Right			
1 Internal Mammary Artery, Left			
2 Innominate Artery			
3 Subclavian Artery, Right			
4 Subclavian Artery, Left			
5 Axillary Artery, Right			
6 Axillary Artery, Left	0 Open		
7 Brachial Artery, Right	3 Percutaneous	Z No	Z No
8 Brachial Artery, Left	4 Percutaneous	Device	Qualifier
9 Ulnar Artery, Right	Endoscopic		
A Ulnar Artery, Left			
<b>B</b> Radial Artery, Right			
C Radial Artery, Left			
<b>D</b> Hand Artery, Right			
F Hand Artery, Left			
G Intracranial Artery			

H Common Carotid Artery, Right	
J Common Carotid Artery, Left	
<b>REVISE from K</b> Internal Carotid Artery,	
Right	
<b>REVISE to K</b> Internal Carotid Artery,	
Extracranial Segment, Right	
<b>REVISE from</b> L Internal Carotid Artery, Left	
<b>REVISE to L</b> Internal Carotid Artery,	
Extracranial Segment, Left	
M External Carotid Artery, Right	
N External Carotid Artery, Left	
P Vertebral Artery, Right	
Q Vertebral Artery, Left	
<b>R</b> Face Artery	
S Temporal Artery, Right	
T Temporal Artery, Left	
U Thyroid Artery, Right	
V Thyroid Artery, Left	
Y Upper Artery	

#### Nasal mucosa and soft tissue

Source	Description	Code specification
2014, Coding	In the Ear, Nose, Sinus body system of the Medical and	Revise 137 codes
Clinic Editorial	Surgical section, revise body part value K from Nose to	09^K^^^
Advisory	Nasal Mucosa and Soft Tissue to clarify the intended use	
Board & CMS	of this body part value, for procedures on the intranasal	
internal review	mucosa and/or the submucosal soft tissue.	

Section 0 Medical and Surgical			
Body System9 Ear, Nose, Sinus			
Operation <b>R</b> Replacement: Putting in	or on biolo	gical or synthetic material that	physically
takes the place and/or fund	ction of all o	or a portion of a body part	
Body Part	Approach	Device	Qualifier
0 External Ear, Right			
<b>1</b> External Ear, Left		7 Autologous Tissue Substitute	
<b>2</b> External Ear, Bilateral	0 Open	J Synthetic Substitute	Z No
<b>REVISE from K</b> Nose	X External	K Nonautologous Tissue	Qualifier
<b>REVISE to K</b> Nasal Mucosa and		Substitute	
Soft Tissue			

# Inguinal region skin

Description	Code specification
In the Skin body system of the Medical and Surgical	Revise 21 codes
section, revise the title of the body part value A from	0H^A^^^
Skin, Genitalia to Skin, Inguinal to make related body	
part values consistent across body systems.	
	In the Skin body system of the Medical and Surgical section, revise the title of the body part value A from Skin, Genitalia to Skin, Inguinal to make related body

Section 0 Medical and Surgical							
Body System <b>H</b> Skin and Breast							
Operation <b>Q</b> Repair: Restoring, to the exte	Operation Q Repair: Restoring, to the extent possible, a body part to its normal anatomic						
structure and function							
Body Part	Approach	Device	Qualifier				
0 Skin, Scalp							
1 Skin, Face							
2 Skin, Right Ear							
<b>3</b> Skin, Left Ear							
4 Skin, Neck							
5 Skin, Chest							
6 Skin, Back							
7 Skin, Abdomen							
8 Skin, Buttock							
9 Skin, Perineum							
<b>REVISE from A Skin</b> , Genitalia							
<b>REVISE to A</b> Skin, Inguinal							
<b>B</b> Skin, Right Upper Arm	X External	Z No Device	<b>Z</b> No Qualifier				
C Skin, Left Upper Arm	A External	Z NO DEVICE					
<b>D</b> Skin, Right Lower Arm							
E Skin, Left Lower Arm							
F Skin, Right Hand							
G Skin, Left Hand							
H Skin, Right Upper Leg							
J Skin, Left Upper Leg							
K Skin, Right Lower Leg							
L Skin, Left Lower Leg							
M Skin, Right Foot							
N Skin, Left Foot							
Q Finger Nail							
R Toe Nail							

#### Neck subcutaneous tissue

Source	Description	Code specification
2013, Coding	In the Subcutaneous Tissue and Fascia body system of	Revise 90 codes
Clinic Editorial	the Medical and Surgical section, revise the title of the	0J^[45]^^^
Advisory	body part value 4 from Subcutaneous Tissue and Fascia,	
Board & CMS	Anterior Neck to Subcutaneous Tissue and Fascia, Right	
internal review	Neck, and the body part value 5 from Subcutaneous	
	Tissue and Fascia, Posterior Neck to 5 Subcutaneous	
	Tissue and Fascia, Left Neck, to be consistent with	
	common usage.	

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Section 0 Medical and Surgical			
Body System J Subcutaneous Tissue and Fascia	1 .		
<i>Operation</i> <b>B</b> Excision: Cutting out or off, without r			, <u>,</u>
Body Part	Approach	Device	Qualifier
0 Subcutaneous Tissue and Fascia, Scalp			
1 Subcutaneous Tissue and Fascia, Face			
<b>REVISE from 4</b> Subcutaneous Tissue and Fascia,			
Anterior Neck			
<b>REVISE to 4</b> Subcutaneous Tissue and Fascia,			
Right Neck			
<b>REVISE from 5</b> Subcutaneous Tissue and Fascia,			
Posterior Neck			
<b>REVISE to 5</b> Subcutaneous Tissue and Fascia, Left			
Neck			
6 Subcutaneous Tissue and Fascia, Chest			
7 Subcutaneous Tissue and Fascia, Back			<b>X</b> Diagnostic
8 Subcutaneous Tissue and Fascia, Abdomen	0 Open	Z No	Z No
9 Subcutaneous Tissue and Fascia, Buttock	3 Percutaneous	Device	Qualifier
<b>B</b> Subcutaneous Tissue and Fascia, Perineum			Quamer
C Subcutaneous Tissue and Fascia, Pelvic Region			
<b>D</b> Subcutaneous Tissue and Fascia, Right Upper Arm			
<b>F</b> Subcutaneous Tissue and Fascia, Left Upper Arm			
G Subcutaneous Tissue and Fascia, Right Lower Arm			
H Subcutaneous Tissue and Fascia, Left Lower Arm			
J Subcutaneous Tissue and Fascia, Right Hand			
K Subcutaneous Tissue and Fascia, Left Hand			
L Subcutaneous Tissue and Fascia, Right Upper Leg			
M Subcutaneous Tissue and Fascia, Left Upper Leg			
N Subcutaneous Tissue and Fascia, Right Lower Leg			
<b>P</b> Subcutaneous Tissue and Fascia, Left Lower Leg			

Q Subcutaneous Tissue and Fascia, Right Foot		
<b>R</b> Subcutaneous Tissue and Fascia, Left Foot		

# Inguinal subcutaneous tissue

Source	Description	Code specification
2013, Coding	In the Subcutaneous Tissue and Fascia body system of	Revise 43 codes
Clinic Editorial	the Medical and Surgical section, revise the title of the	0J^C^^^
Advisory	body part value C from Pelvic Region to Inguinal	
Board & CMS	Region, to make related body part values consistent	
internal review	across body systems.	

Section 0 Medical and Surgical						
Body System J Subcutaneous Tissue and Fascia						
<i>Operation</i> 9 Drainage: Taking or letting out flui	<i>Operation</i> 9 Drainage: Taking or letting out fluids and/or gases from a body part					
Body Part	Approach	Device	Qualifier			
0 Subcutaneous Tissue and Fascia, Scalp						
<b>1</b> Subcutaneous Tissue and Fascia, Face						
4 Subcutaneous Tissue and Fascia, Anterior Neck						
<b>5</b> Subcutaneous Tissue and Fascia, Posterior Neck						
6 Subcutaneous Tissue and Fascia, Chest						
7 Subcutaneous Tissue and Fascia, Back						
8 Subcutaneous Tissue and Fascia, Abdomen						
9 Subcutaneous Tissue and Fascia, Buttock						
<b>B</b> Subcutaneous Tissue and Fascia, Perineum						
<b>REVISE from</b> C Subcutaneous Tissue and						
Fascia, Pelvic Region						
<b>REVISE to C</b> Subcutaneous Tissue and Fascia,	0 Open	<b>0</b> Drainage	Z No			
Inguinal Region	<b>3</b> Percutaneous	0	Qualifier			
<b>D</b> Subcutaneous Tissue and Fascia, Right Upper	5 I el cutalleous	Device	Quamiei			
Arm						
F Subcutaneous Tissue and Fascia, Left Upper						
Arm						
G Subcutaneous Tissue and Fascia, Right Lower						
Arm						
H Subcutaneous Tissue and Fascia, Left Lower						
Arm						
J Subcutaneous Tissue and Fascia, Right Hand						
K Subcutaneous Tissue and Fascia, Left Hand						
L Subcutaneous Tissue and Fascia, Right Upper						
Leg						

M Subcutaneous Tissue and Fascia, Left Upper	
Leg	
N Subcutaneous Tissue and Fascia, Right Lower	
Leg	
P Subcutaneous Tissue and Fascia, Left Lower Leg	
Q Subcutaneous Tissue and Fascia, Right Foot	
R Subcutaneous Tissue and Fascia, Left Foot	

# Spinal ligament and bursa

Source	Description	Code specification
2014, Coding	In the Ligaments and Bursae body system of the Medical	Revise 192 codes
Clinic Editorial	and Surgical section, revise the title of body part value C	0M^[CDFG]^^^
Advisory	from Trunk Bursa and Ligament, Right to Upper Spine	
Board & CMS	Bursa and Ligament, revise the title of body part value D	
internal review	from Trunk Bursa and Ligament, Left to Lower Spine	
	Bursa and Ligament, revise the title of body part value F	
	from Thorax Bursa and Ligament, Right to Sternum	
	Bursa and Ligament, and revise the title of body part	
	value G from Thorax Bursa and Ligament, Left to Rib(s)	
	Bursa and Ligament.	

Section 0 Medical and Surgical					
Body System M Bursae and Ligaments					
Operation Q Repair: Restoring, to the exter	t possible, a body part to	its normal	anatomic		
structure and function					
Body Part	Approach	Device	Qualifier		
<b>0</b> Head and Neck Bursa and Ligament					
1 Shoulder Bursa and Ligament, Right					
2 Shoulder Bursa and Ligament, Left					
<b>3</b> Elbow Bursa and Ligament, Right					
4 Elbow Bursa and Ligament, Left					
IS Wriet Burea and Lidament Right	0 Open	7 N.	<b>7</b> N-		
<b>Ib</b> Wrist Bursa and Ligament Left	3 Percutaneous	Z No	Z No		
7 Hand Bursa and Ligament, Right	4 Percutaneous	Device	Qualifier		
8 Hand Bursa and Ligament, Left	Endoscopic				
9 Upper Extremity Bursa and Ligament,					
Right					
<b>B</b> Upper Extremity Bursa and Ligament, Left					
<b>REVISE from</b> C Trunk Bursa and					

L' D'I		1
Ligament, Right		
<b>REVISE to C</b> Upper Spine Bursa and		
Ligament		
<b>REVISE from D</b> Trunk Bursa and		
Ligament, Left		
<b>REVISE to D</b> Lower Spine Bursa and		
Ligament		
<b>REVISE from F</b> Thorax Bursa and		
Ligament, Right		
<b>REVISE to F</b> Sternum Bursa and Ligament		
<b>REVISE from</b> G Thorax Bursa and		
Ligament, Left		
<b>REVISE to G</b> Rib(s) Bursa and Ligament		
H Abdomen Bursa and Ligament, Right		
J Abdomen Bursa and Ligament, Left		
K Perineum Bursa and Ligament		
L Hip Bursa and Ligament, Right		
<b>M</b> Hip Bursa and Ligament, Left		
N Knee Bursa and Ligament, Right		
<b>P</b> Knee Bursa and Ligament, Left		
<b>Q</b> Ankle Bursa and Ligament, Right		
<b>R</b> Ankle Bursa and Ligament, Left		
<b>S</b> Foot Bursa and Ligament, Right		
T Foot Bursa and Ligament, Left		
V Lower Extremity Bursa and Ligament,		
Right		
W Lower Extremity Bursa and Ligament,		
Left		

# **Rib body part**

Source	Description	Code specification
2014, Coding	In the Upper Bones body system of the Medical and	Revise 178 codes
Clinic 4Q p.26	Surgical section, revise the title of the body part value 1	0P^[12]^^^
	from Rib, Right to Ribs, 1 to 2, and revise the title of	
	body part value 2 from Rib, Left to Ribs, 3 or More, to	
	differentiate between the same procedure performed on	
	one or two ribs vs. three or more ribs.	

portion of a b		Daviaa	Qualifian
<i>Body Part</i> <b>0</b> Sternum	Approach 0 Open 3 Percutaneous 4 Percutaneous Endoscopic	Device0 Internal Fixation Device,Rigid Plate4 Internal Fixation DeviceZ No Device	<i>Qualifier</i> <b>Z</b> No Qualifier
0 Sternum	<b>X</b> External	Z No Device	<b>Z</b> No Qualifier
Right <b>REVISE to 1</b> Ribs, 1 to 2 <b>REVISE from 2</b> Rib, Left <b>REVISE to 2</b> Ribs, 3 or More <b>3</b> Cervical Vertebra <b>4</b> Thoracic Vertebra <b>5</b> Scapula, Right <b>6</b> Scapula, Left <b>7</b> Glenoid Cavity, Right <b>8</b> Glenoid Cavity, Left <b>9</b> Clavicle, Right <b>B</b> Clavicle, Left	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	<b>4</b> Internal Fixation Device <b>Z</b> No Device	<b>Z</b> No Qualifier
REVISE from 1 Rib, Right REVISE to 1 Ribs, 1 to 2 REVISE from 2 Rib, Left REVISE to 2 Ribs, 3 or More 3 Cervical Vertebra 4 Thoracic Vertebra 5 Scapula, Right 6 Scapula, Left 7 Glenoid Cavity, Right 8 Glenoid Cavity, Left 9 Clavicle, Right B Clavicle, Left	<b>X</b> External	<b>Z</b> No Device	<b>Z</b> No Qualifier

#### Carpometacarpal joint

Source	Description	Code specification
2015, public	In the Upper Joints body system of the Medical and	Revise 296 codes
comment	Surgical section, revise the title of the body part value S	0R^[ST]^^^
	from Metacarpocarpal Joint, Right, to Carpometacarpal	
	Joint, Right, and the body part value T from	
	Metacarpocarpal Joint, Left to Carpometacarpal Joint,	
	Left, to be consistent with common usage.	
	In addition, in the Lower Joints body system of the Medical and Surgical section, revise the title of the body part value K from Metatarsal-Tarsal Joint, Right to Tarsometatarsal Joint, Right, and revise the body part value L from Metatarsal-Tarsal Joint, Left to Tarsometatarsal Joint, Left.	Revise 296 codes 0S^[KL]^^^

Section0 Medical and SurgicalBody SystemR Upper JointsOperationU Supplement: Putting in or on biological or synthetic material that physically reinforces and/or augments the function of a portion of a body part				
Body Part	Approach	Device	Qualifier	
<ul> <li>0 Occipital-cervical Joint</li> <li>1 Cervical Vertebral Joint</li> <li>3 Cervical Vertebral Disc</li> <li>4 Cervicothoracic Vertebral Joint</li> <li>5 Cervicothoracic Vertebral Disc</li> <li>6 Thoracic Vertebral Joint</li> <li>9 Thoracic Vertebral Disc</li> <li>A Thoracolumbar Vertebral Joint</li> <li>B Thoracolumbar Vertebral Disc</li> <li>C Temporomandibular Joint, Right</li> <li>D Temporomandibular Joint, Right</li> <li>F Sternoclavicular Joint, Right</li> <li>F Sternoclavicular Joint, Right</li> <li>H Acromioclavicular Joint, Right</li> <li>H Acromioclavicular Joint, Left</li> <li>J Shoulder Joint, Right</li> <li>K Shoulder Joint, Right</li> <li>M Elbow Joint, Left</li> </ul>	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	7 Autologous Tissue Substitute J Synthetic Substitute K Nonautologous Tissue Substitute	<b>Z</b> No Qualifier	

N Wrist Joint, Right		
<b>P</b> Wrist Joint, Left		
Q Carpal Joint, Right		
<b>R</b> Carpal Joint, Left		
<b>REVISE from S</b> Metacarpocarpal		
Joint, Right		
<b>REVISE to S</b> Carpometacarpal		
Joint, Right		
<b>REVISE from</b> T Metacarpocarpal		
Joint, Left		
<b>REVISE to T</b> Carpometacarpal		
Joint, Left		
U Metacarpophalangeal Joint, Right		
V Metacarpophalangeal Joint, Left		
W Finger Phalangeal Joint, Right		
X Finger Phalangeal Joint, Left		

# Pelvic cavity

Source	Description	Code specification
2015, Coding	In the General Anatomical Regions body system	Revise 85 codes
Clinic Editorial	of the Medical and Surgical section, revise the	0W^J^^^
Advisory	title of the body part value J from Pelvic Cavity	Revise 7 codes
Board & CMS	to Pelvic Region to be consistent with common	0W1^^^J
internal review	usage. Note: The qualifier J Pelvic Cavity in	
	table 0W1 will also be revised to Pelvic Region.	
	In addition, add body part value Pelvic Region to the root operations Excision, Repair, and Supplement, tables 0WB, 0WQ and 0WU to capture these procedures performed in soft tissue of the pelvic region.	Add 0WBJ[034X]ZZ (4 codes) 0WQJ[034X]ZZ (4 codes) 0WUJ[04][7JK]Z (6 codes)

Section	Section 0 Medical and Surgical		
Body System	ystem W Anatomical Regions, General		
<i>Operation</i> 9 Drainage: Taking or letting out fluids and/or gases from a body part			
Body Part Approach Device Qualifier			

<ul> <li>0 Head</li> <li>1 Cranial Cavity</li> <li>2 Face</li> <li>3 Oral Cavity and Throat</li> <li>4 Upper Jaw</li> <li>5 Lower Jaw</li> <li>6 Neck</li> <li>8 Chest Wall</li> <li>9 Pleural Cavity, Right</li> <li>B Pleural Cavity, Left</li> <li>C Mediastinum</li> </ul>		<b>0</b> Drainage Device	<b>Z</b> No Qualifier
D Pericardial Cavity F Abdominal Wall G Peritoneal Cavity H Retroperitoneum REVISE from J Pelvic Cavity REVISE to J Pelvic Region K Upper Back L Lower Back M Perineum, Male N Perineum, Female 0 Head	4 Percutaneous Endoscopic		
<ol> <li>Cranial Cavity</li> <li>Face</li> <li>Oral Cavity and Throat</li> <li>Upper Jaw</li> <li>Lower Jaw</li> <li>Neck</li> <li>Chest Wall</li> <li>Pleural Cavity, Right</li> </ol>	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> </ul>		<b>X</b> Diagnostic <b>Z</b> No Qualifier

Section0 Medical and SurgicalBody SystemW Anatomical Regions, GeneralOperationQ Repair: Restoring, to the extent possible, a body part to its normal anatomicstructure and function				
Body Part	Approach	Device	Qualifier	
0 Head 2 Face 4 Upper Jaw 5 Lower Jaw 8 Chest Wall	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>X External</li> </ul>	<b>Z</b> No Device	Z No Qualifier	

# Medical and Surgical section Axis 5 Approach

# Percutaneous heart valve procedures

Source	Description	Code specification
2014, Coding	In the Heart and Great Vessels body system of the	02RJ3[78JK][HZ]
Clinic	Medical and Surgical section, add the approach	(8 codes)
Editorial	value 3 Percutaneous to the root operation	
Advisory	Replacement table 02R for the tricuspid valve body	02W[FGHJ]3[78JK]Z (16
Board &	part value to capture detail for transcatheter valve	codes)
CMS internal	replacement. Add the approach value 3	
review	Percutaneous to the root operation Revision table	
	02W for the heart valve body parts, to capture	
	detail for percutaneous revision of devices	
	previously placed in the cardiac valves.	
	In addition, add the approach value 3 Percutaneous	02163Z7 (one code)
	to root operation Bypass table 021 for the body part	
	value Atrium, Right, with the qualifier Atrium, Left	
	to capture percutaneous septostomy procedures.	

Section 0 Medical and	Section 0 Medical and Surgical			
Body System2 Heart and G	reat Vessels			
Operation <b>R</b> Replacement	nt: Putting in or	on biological or synthetic material that	at physically	
takes the place	takes the place and/or function of all or a portion of a body part			
Body Part	Approach	Device	Qualifier	
<b>F</b> Aortic Valve		7 Autologous Tissue Substitute		
G Mitral Valve	2 Darautanaous	8 Zooplastic Tissue	<b>H</b> Transapical	
H Pulmonary Valve	5 reiculaneous	8 Zooplastic Tissue J Synthetic Substitute	Z No Qualifier	
ADD J Tricuspid Valve		K Nonautologous Tissue Substitute		

#### EXAMPLE

Section 0 Med	Section 0 Medical and Surgical			
Body System2 Hear	t and Great Vessels			
Operation W Rev	vision: Correcting, to the ext	tent possible, a portion of a malfund	ctioning	
device	or the position of a displace	ed device		
Body Part	Body Part Approach Device Qualifier			
H Pulmonary	F Aortic Valve G Mitral Valve H Pulmonary Valve0 Open ADD 3 Percutaneous 4 Percutaneous Endoscopic7 Autologous Tissue Substitute 8 Zooplastic Tissue J Synthetic Substitute K Nonautologous TissueZ No Qualifier			

Section 0 Medical and Surgical				
Body System 2 Heart and Great Vessels				
Operation	1 Bypass: Altering the rout	te of passage of the contents of	a tubular body part	
Body Part	Approach	Device	Qualifier	
<b>6</b> Atrium, Right	0 Open 4 Percutaneous Endoscopic	A Autologous Venous Lissue A Autologous Arterial Tissue	<b>P</b> Pulmonary Trunk <b>Q</b> Pulmonary Artery, Right <b>R</b> Pulmonary Artery, Left	
<b>6</b> Atrium, Right	0 Open 4 Percutaneous Endoscopic	<b>Z</b> No Device	7 Atrium, Left P Pulmonary Trunk Q Pulmonary Artery, Right R Pulmonary Artery, Left	

<b>6</b> Atrium, Right	ADD 3 Percutaneous	ADD Z No Device	ADD 7 Atrium, Left
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### Section 3 Administration

# Percutaneous endoscopic administration

Source	Description	Code specification
2014, Coding	In section 3, Administration, add approach values 3	3E0[LMP][34]5Z
Clinic	Percutaneous and 4 Percutaneous Endoscopic to the	(6 codes)
Editorial	root operation Introduction table 3E0, for all axis 4	
Advisory	body region values that use substance value 5	
Board &	Adhesion Barrier, to capture percutaneous and	
CMS internal	percutaneous endoscopic procedures where	
review;	adhesion barrier substance is placed.	
2015, Coding		
Clinic 2Q	In addition, add approach value 4 Percutaneous	3E0[EFGHJKNP]4GC (8
p.31	Endoscopic, for all axis 4 body region values that	codes)
	currently use approach value 8 Via Natural or	
	Artificial Opening Endoscopic and substance value	
	G Therapeutic Substance, to capture percutaneous	
	endoscopic administration of a therapeutic	
	substance, such as thoracoscopic talc pleurodesis.	

### EXAMPLE

Section 3 Administration Body SystemE Physiological Systems and Anatomical Regions				
Operation 0 Introduction	<i>Operation</i> <b>0</b> Introduction: Putting in or on a therapeutic, diagnostic, nutritional, physiological, or prophylactic substance except blood or blood products			
Body System / Region	Body System / Region Approach Substance Qualifie			
L Pleural Cavity	L Pleural Cavity 0 Open			
M Peritoneal Cavity ADD 3 Percutaneous		5 Adhesion Barrier	Z No Qualifier	
<b>P</b> Female Reproductive	ADD 4 Percutaneous Endoscopic			

Section	3 Administration			
Body System	Body SystemE Physiological Systems and Anatomical Regions			
Operation	<i>Operation</i> <b>0</b> Introduction: Putting in or on a therapeutic, diagnostic, nutritional, physiological,			
or prophylactic substance except blood or blood products				
Body Syste	m/Region Approach	Substance	Qualifier	

<ul> <li>E Products of Conception</li> <li>F Respiratory Tract</li> <li>G Upper GI</li> <li>H Lower GI</li> <li>J Biliary and Pancreatic Tract</li> <li>K Genitourinary Tract</li> <li>N Male Reproductive</li> <li>P Female Reproductive</li> </ul>	<b>8</b> Via Natural or Artificial Opening	G Other Therapeutic	<b>C</b> Other Substance
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# Open insertion of IUD

Source	Description	Code specification
2016, public	In the Female Reproductive body system of the	0UH90HZ (one code)
comment;	Medical and Surgical section, add the approach	
2013, Coding	value Open to the root operation Insertion table	
Clinic 2Q	OUH, for the body part value Uterus and the device	
p.34	value Contraceptive Device, to capture detail for	
-	open insertion of IUD after cesarean delivery.	

#### EXAMPLE

Section Body Syst	Section 0 Medical and Surgical Body SystemU Female Reproductive System			
<i>Operation</i> <b>H</b> 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	
9 Uterus	<ul> <li>ADD 0 Open</li> <li>7 Via Natural or Artificial Opening</li> <li>8 Via Natural or Artificial Opening</li> <li>Endoscopic</li> </ul>	<b>H</b> Contraceptive Device	<b>Z</b> No Qualifier	

# Transorifice esophageal vein banding

Source	Description	Code specification
2013,	In the Lower Veins body system of the Medical	06L3[78][CDZ]Z (6 codes)
Coding	and Surgical section, add the approach values 7	
Clinic EAB	Via Natural or Artificial Opening and 8 Via	
& CMS	Natural or Artificial Opening Endoscopic to the	

internal	root operation Occlusion table 06L for the body	
review	part value Esophageal Vein, to capture detail for	
	esophageal vein banding procedures that use	
	transorifice approaches.	

Section0 Medical and SurgicalBody System 6 Lower VeinsOperationL Occlusion: Completely closing an orifice or the lumen of a tubular body part					
Body Part	Approach	Device	Qualifier		
<b>3</b> Esophageal Vein	<ul> <li>4 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>ADD 7 Via Natural or Artificial Opening</li> <li>ADD 8 Via Natural or Artificial Opening</li> </ul>	C Extraluminal Device D Intraluminal Device Z No Device	<b>Z</b> No Qualifier		

# Transorifice endoscopic lymphatic procedures

Source	Description	Code specification
2013,	In the Lymphatic and Hemic body system of the	079[0-L]80Z (19 codes)
Coding	Medical and Surgical section, add the approach	079[0-L]8Z[XZ] (38 codes)
Clinic EAB	value 8 Via Natural or Artificial Opening	
& CMS	Endoscopic to root operation tables 079 Drainage,	07D[0-L]8ZX (19 codes)
internal	07D Extraction (see axis 3 proposal re extraction	07JN8ZZ (one code)
review	procedures for details) 07J Inspection and 07Q	()
	Repair for the lymphatic body part values, to	07Q[0-L]8ZZ (19 codes)
	capture detail for procedures that use the	
	transorifice endoscopic approach.	

Section Body System Operation	<ul> <li>0 Medical and Surgical</li> <li>7 Lymphatic and Hemic Systems</li> <li>9 Drainage: Taking or letting out fluids and/or gases from a body part</li> </ul>			
Body Part		Approach	Device	Qualifier
<b>0</b> Lymphatic, Head		0 Open	0 Drainage	Z No
		1 Percuitaneous	Ŭ	Qualifier
2 Lymphatic,	Left Neck	4 Percutaneous Endoscopic	Device	Quaimer

<b>3</b> Lymphatic, Right Upper	ADD 8 Via Natural or Artificial		[]
Extremity	Opening Endoscopic		
4 Lymphatic, Left Upper			
Extremity			
5 Lymphatic, Right			
Axillary			
<b>6</b> Lymphatic, Left Axillary			
7 Lymphatic, Thorax			
8 Lymphatic, Internal			
Mammary, Right			
<b>9</b> Lymphatic, Internal			
Mammary, Left			
<b>B</b> Lymphatic, Mesenteric			
C Lymphatic, Pelvis			
<b>D</b> Lymphatic, Aortic			
<b>F</b> Lymphatic, Right Lower			
Extremity			
G Lymphatic, Left Lower			
Extremity			
H Lymphatic, Right			
Inguinal			
J Lymphatic, Left Inguinal			
K Thoracic Duct			
L Cisterna Chyli			
<b>0</b> Lymphatic, Head			
<b>1</b> Lymphatic, Right Neck			
<b>2</b> Lymphatic, Left Neck			
<b>3</b> Lymphatic, Right Upper			
Extremity			
<b>4</b> Lymphatic, Left Upper			
Extremity			
5 Lymphatic, Right			
Axillary			
6 Lymphatic, Left Axillary	0 Open		
7 Lymphatic, Thorax	3 Percutaneous		X Diagnostic
8 Lymphatic, Internal	4 Percutaneous Endoscopic	<b>Z</b> No Device	Z No
Mammary, Right	ADD 8 Via Natural or Artificial		Qualifier
9 Lymphatic, Internal	Opening Endoscopic		
Mammary, Left			
<b>B</b> Lymphatic, Mesenteric			
C Lymphatic, Pelvis			
<b>D</b> Lymphatic, Aortic			
<b>F</b> Lymphatic, Right Lower			
Extremity			
G Lymphatic, Left Lower			
Extremity			
H Lymphatic, Right			

Inguinal		
J Lymphatic, Left Inguinal		
K Thoracic Duct		
L Cisterna Chyli		

# Transorifice endoscopic ENS procedures

Source	Description	Code specification
2013,	In the Ear, Nose, Sinus body system of the	095^8ZZ (19 codes)
Coding	Medical and Surgical section, add the approach	
Clinic EAB	value 8 Via Natural or Artificial Opening	
& CMS	Endoscopic to the root operations Destruction,	
internal	Drainage, Excision, Extirpation, Inspection,	
review;	Release, Repair, Resection and Supplement, for	
2016,	the applicable ear, nose and sinus body part	
public	values, to capture detail for endoscopic	
comment	procedures.	099^[78]0Z (38 codes)
	In addition, add the approach value 7 Via Natural or Artificial Opening and 8 Via Natural or Artificial Opening Endoscopic to the root operation Drainage table 099, to all body part values that currently lack this approach value, to capture detail for transorifice drainage procedures such as myringotomy to drain the middle ear.	099^[78]Z[XZ] (76 codes) 09B^8Z[XZ] (38 codes) 09J[DEKY]8ZZ (4 codes) 09N^8ZZ (19 codes) 09Q^8ZZ (19 codes) 09Q^8ZZ (19 codes) 09T^8ZZ (19 codes) 09U^8[7JK]Z (24 codes)

Section0 Medical and SurgicalBody System 9 Ear, Nose, SinusOperationB Excision: Cutting out or off, without replacement, a portion of a body part				
Body Part	Approach	Device	Qualifier	
0 External Ear, Right 1 External Ear, Left	0 Open 3 Percutaneous 4 Percutaneous Endoscopic X External	Z NO Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier	
3 External Auditory Canal, Right 4 External Auditory Canal,	4 Percutaneous Endoscopic	Z NO Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier	

	Endoscopic		
	X External		
<ul> <li>5 Middle Ear, Right</li> <li>6 Middle Ear, Left</li> <li>9 Auditory Ossicle, Right</li> <li>A Auditory Ossicle, Left</li> <li>D Inner Ear, Right</li> <li>E Inner Ear, Left</li> </ul>	0 Open ADD 7 Via Natural or Artificial Opening ADD 8 Via Natural or Artificial Opening Endoscopic	<b>Z</b> No Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier
<ul> <li>7 Tympanic Membrane, Right</li> <li>8 Tympanic Membrane, Left</li> <li>F Eustachian Tube, Right</li> <li>G Eustachian Tube, Left</li> <li>L Nasal Turbinate</li> <li>N Nasopharynx</li> </ul>	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>7 Via Natural or Artificial Opening</li> <li>8 Via Natural or Artificial Opening</li> <li>Endoscopic</li> </ul>	Z No Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier
<ul> <li>B Mastoid Sinus, Right</li> <li>C Mastoid Sinus, Left</li> <li>M Nasal Septum</li> <li>P Accessory Sinus</li> <li>Q Maxillary Sinus, Right</li> <li>R Maxillary Sinus, Left</li> <li>S Frontal Sinus, Right</li> <li>T Frontal Sinus, Left</li> <li>U Ethmoid Sinus, Right</li> <li>V Ethmoid Sinus, Left</li> <li>W Sphenoid Sinus, Right</li> <li>X Sphenoid Sinus, Left</li> </ul>	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>ADD 7 Via Natural or Artificial</li> <li>Opening</li> <li>ADD 8 Via Natural or Artificial</li> <li>Opening Endoscopic</li> </ul>	<b>Z</b> No Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier
<b>K</b> Nose	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>ADD 7 Via Natural or Artificial</li> <li>Opening</li> <li>ADD 8 Via Natural or Artificial</li> <li>Opening Endoscopic</li> <li>X External</li> </ul>	Z No Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier

# Transorifice endoscopic respiratory procedures

Source	Description	Code specification
2013,	In the Respiratory body system of the Medical and	0B9[NPRS]80Z (4 codes)
Coding	Surgical section, add the approach value 8 Via	0B9[NPRS]8Z[XZ]
Clinic EAB	Natural or Artificial Opening Endoscopic to the	(8 codes)
& CMS	root operations Drainage, Excision, and	0BB[NPRS]8Z[XZ]
	Supplement, for the applicable respiratory body	(8 codes)

internal	part values, to capture detail for endoscopic	0BU^8[7JK]Z (36 codes)
review	procedures.	

Section0 Medical and SurgicalBody SystemB Respiratory SystemOperationU Supplement: Putting in or on biological or synthetic material that physically reinforces and/or augments the function of a portion of a body part				
Body Part	Approach	Device	Qualifier	
<ol> <li>Trachea</li> <li>Carina</li> <li>Main Bronchus, Right</li> <li>Upper Lobe Bronchus, Right</li> <li>Middle Lobe</li> </ol>	<ul> <li>0 Open</li> <li>4 Percutaneous Endoscopic</li> <li>ADD 8 Via Natural or Artificial</li> </ul>	7 Autologous Tissue Substitute J Synthetic Substitute K Nonautologous Tissue Substitute	Z No Qualifier	

# Transorifice endoscopic hepatobiliary procedures

Source	Description	Code specification
2014,	In the Hepatobiliary and Pancreas body system of	0F[59BCJNQU][4G]8 <sup>^</sup> (20
Coding	the Medical and Surgical section, add the	codes)
Clinic	approach value 8 Via Natural or Artificial	
Editorial	Opening Endoscopic to the root operations	
Advisory	Destruction, Drainage, Excision, Extirpation,	
Board &	Inspection, Release, Repair, and Supplement, for	
CMS	the body part values Gallbladder and Pancreas, to	
internal	capture detail for procedures on the gallbladder	
review		

and pancreas that use the transorifice endoscopic approach.	0F[RU]^8^Z (42 codes)
In addition, add the approach value 8 Via Natural or Artificial Opening Endoscopic to the root operation tables 0FR Replacement, 0FS Reposition, and 0FU Supplement, for all body part values currently in the tables, to capture detail for procedures that use the transorifice endoscopic approach.	

Section 0 Medic	al and Surgical			
Body System F Hepat	Body System <b>F</b> Hepatobiliary System and Pancreas			
Operation 9 Draina	ge: Taking or letting out fluids and/or ga	uses from a body	part	
Body Part	Approach	Device	Qualifier	
0 Liver 1 Liver, Right Lobe 2 Liver, Left Lobe	<ul><li>0 Open</li><li>3 Percutaneous</li><li>4 Percutaneous Endoscopic</li></ul>	0 Drainage Device	<b>Z</b> No Qualifier	
0 Liver 1 Liver, Right Lobe 2 Liver, Left Lobe	<ul><li>0 Open</li><li>3 Percutaneous</li><li>4 Percutaneous Endoscopic</li></ul>	Z No Device	X Diagnostic Z No Qualifier	
<b>4</b> Gallbladder <b>G</b> Pancreas	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>ADD 8 Via Natural or Artificial</li> <li>Opening Endoscopic</li> </ul>	<b>0</b> Drainage Device	<b>Z</b> No Qualifier	
<b>4</b> Gallbladder <b>G</b> Pancreas	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>ADD 8 Via Natural or Artificial</li> <li>Opening Endoscopic</li> </ul>	<b>Z</b> No Device	X Diagnostic Z No Qualifier	
<ul> <li>5 Hepatic Duct, Right</li> <li>6 Hepatic Duct, Left</li> <li>8 Cystic Duct</li> <li>9 Common Bile Duct</li> <li>C Ampulla of Vater</li> <li>D Pancreatic Duct</li> <li>F Pancreatic Duct,</li> <li>Accessory</li> </ul>	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>7 Via Natural or Artificial Opening</li> <li>8 Via Natural or Artificial Opening</li> <li>Endoscopic</li> </ul>	0 Drainage Device	<b>Z</b> No Qualifier	

8 Cystic Duct 9 Common Bile Duct	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>7 Via Natural or Artificial Opening</li> </ul>	<b>X</b> Diagnostic <b>Z</b> No
	8 Via Natural or Artificial Opening Endoscopic	Qualifier
Accessory		

Section0 Medical and SurgicalBody SystemF HepatobiliarySystem and PancreasOperationU Supplement: Putting in or on biological or synthetic material that physically reinforces and/or augments the function of a portion of a body part			
Body Part	Approach	Device	Qualifier
9 Common Rile	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>ADD 8 Via Natural or Artificial</li> <li>Opening Endoscopic</li> </ul>	7 Autologous Tissue Substitute J Synthetic Substitute K Nonautologous Tissue Substitute	<b>Z</b> No Qualifier

# Transorifice reproductive system procedures

Source	Description	Code specification
2016,	In the Female Reproductive body system of the	0U[59CJNQS]^8^^ (42
Coding	Medical and Surgical section, add the approach	codes)
Clinic 1Q	value 8 Via Natural or Artificial Opening	
p.9;	Endoscopic to the root operations Destruction,	
2016	Drainage, Excision, Extirpation, Inspection,	
2016,	Release, Repair, and Reposition, for the	
Coding	applicable body part values, to capture detail for	
Clinic 1Q	procedures that use the transorifice endoscopic	
p.23	approach. Add the approach value 7 Via Natural	0US[9G]7ZZ (2 codes)
	or Artificial Opening to the root operation	
	Reposition for the uterus and vagina body part	

values, to capture transorifice reposition	
procedures such as bimanual reposition of uterus.	0V[5BLNQSU]^8^^ (111
In the Male Reproductive body system of the Medical and Surgical section, add the approach value 8 Via Natural or Artificial Opening Endoscopic to the root operations Destruction, Excision, Inspection, Occlusion, Release, Repair, Reposition and Supplement, for the applicable body part values, to capture detail for endoscopic procedures such as cystoscopic excision of the vas	codes)
deferens.	

<ul> <li>Section 0 Medical and Surgical</li> <li>Body SystemU Female Reproductive System</li> <li>Operation 5 Destruction: Physical eradication of all or a portion of a body part by the direct use of energy, force, or a destructive agent</li> </ul>				
Body Part	Approach	Device	Qualifier	
1 Ovary, Left	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous Endoscopic</li> <li>ADD 8 Via Natural or Artificial Opening Endoscopic</li> </ul>		<b>Z</b> No Qualifier	

Section0 Medical and SurgicalBody SystemV Male Reproductive SystemOperationB Excision: Cutting out or off, without replacement, a portion of a body part				
Body Part	Approach	Device	Qualifier	
<ul> <li>F Spermatic Cord, Right</li> <li>G Spermatic Cord, Left</li> <li>H Spermatic Cords,</li> <li>Bilateral</li> <li>J Epididymis, Right</li> <li>K Epididymis, Left</li> <li>L Epididymis, Bilateral</li> <li>N Vas Deferens, Right</li> <li>P Vas Deferens, Left</li> </ul>	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	<b>Z</b> No Device	<b>X</b> Diagnostic <b>Z</b> No Qualifier	

Q Vas Deferens,		
Bilateral		

# Laparoscopic-assisted intestinal pull-through

Source	Description	Code specification
2015,	In the Gastrointestinal body system of the Medical	0DB[GLMN]FZZ (4 codes)
Coding	and Surgical section, add the approach value F	0DT[GLMN]FZZ (4 codes)
Clinic EAB	Via Natural or Artificial Opening With	
& CMS	Percutaneous Endoscopic Assistance to the root	
internal	operations Excision and Resection, tables 0DB	
review;	and 0DT, for the left colon body part values Large	
2016,	Intestine, Left, Transverse Colon, Descending	
Coding	Colon, and Sigmoid Colon, to capture detail for	
Clinic 1Q	laparoscopic-assisted intestinal pull-through	
p.22	procedures.	

## EXAMPLE

Section0 Medical and SurgicalBody SystemD Gastrointestinal SystemOperationT Resection: Cutting out or off, without replacement, all of a body part				
Body Part	Approach	Device	Qualifier	
Colon M Descending	4 Percutaneous Endoscopic 7 Via Natural or Artificial Opening	<b>Z</b> No Device	<b>Z</b> No Qualifier	

# Manual reduction of hernia

Source	Description	Code specification
2014,	In the Gastrointestinal body system of the Medical	0DS[8E]XZZ (2 codes)
Coding	and Surgical section, add the approach value X	
Clinic EAB	External to the root operation Reposition tables	
& CMS	0DS, for the body part values Large Intestine and	
internal	Small Intestine, to capture detail for manual	
review	reduction of hernia.	

Section0 Medical and SurgicalBody SystemD Gastrointestinal SystemOperationS Reposition: Moving to its normal location, or other suitable location, all or a portion of a body part				
Body Part	Approach	Device	Qualifier	
<ul> <li>5 Esophagus</li> <li>6 Stomach</li> <li>9 Duodenum</li> <li>A Jejunum</li> <li>B Ileum</li> <li>H Cecum</li> <li>K Ascending Colon</li> <li>L Transverse Colon</li> <li>M Descending</li> <li>Colon</li> <li>N Sigmoid Colon</li> <li>P Rectum</li> <li>Q Anus</li> </ul>	<ul> <li>0 Open</li> <li>4 Percutaneous Endoscopic</li> <li>7 Via Natural or Artificial Opening</li> <li>8 Via Natural or Artificial Opening Endoscopic</li> <li>X External</li> </ul>	<b>Z</b> No Device	Z No Qualifier	
ADD 8 Small Intestine ADD E Large Intestine	ADD X External	ADD Z No Device	<b>ADD Z</b> No Qualifier	

# Section 4 Measurement and Monitoring

# Transorifice measurement and monitoring procedures

Source	Description	Code specification
2013,	In section 4 Measurement and Monitoring, add the	4A[01][0126][78]^^
Coding	approach values 7 Via Natural or Artificial	(68 codes)
Clinic	Opening and 8 Via Natural or Artificial Opening	
Editorial	Endoscopic for the axis 4 body system values	
Advisory	Central Nervous, Peripheral Nervous, Cardiac,	
Board &	and Lymphatic, to capture detail for measurement	
CMS	and monitoring procedures that use a transorifice	
internal	approach.	
review	In addition, add the approach value 8 Via Natural	
	or Artificial Opening Endoscopic for the axis 4 body system value Urinary, to capture detail for	4A[01]D8 <sup>A</sup> Z (10 codes)

measurement and monitoring procedures that use
the transorifice endoscopic approach.

Section 4 Measurement and Monitoring Body SystemA Physiological Systems				
-	<i>peration</i> <b>1</b> Monitoring: Determining the level of a physiological or physical function			
16	petitively over a period of time			
Body System	Approach	Function / Device	Qualifier	
<b>0</b> Central Nervous	<ul> <li>3 Percutaneous</li> <li>7 Via Natural or Artificial Opening</li> <li>ADD 8 Via Natural or Artificial Opening</li> <li>Endoscopic</li> </ul>	<b>4</b> Electrical Activity	<b>G</b> Intraoperative <b>Z</b> No Qualifier	
0 Central Nervous	<ul> <li>3 Percutaneous</li> <li>7 Via Natural or Artificial Opening</li> <li>ADD 8 Via Natural or Artificial Opening</li> <li>Endoscopic</li> </ul>	B Pressure K Temperature R Saturation	<b>D</b> Intracranial	

## EXAMPLE

	<ul> <li>Section 4 Measurement and Monitoring</li> <li>Body SystemA Physiological Systems</li> <li>Operation 0 Measurement: Determining the level of a physiological or physical function at a point in time</li> </ul>			
Body System	Approach	Function / Device	Qualifier	
<b>D</b> Urinary	7 Via Natural or Artificial Opening ADD 8 Via Natural or Artificial Opening	<b>R</b> Pressure	<b>Z</b> No Qualifier	

## Medical and Surgical section Axis 6 Device

#### Nerve substitutes

Source	Description	Code specification
2013, Coding	In the body system Central Nervous and	00U^[034][JK]Z (81 codes)
Clinic EAB	Peripheral Nervous body systems of the	01U^[034][JK]Z (78 codes)
& CMS	Medical and Surgical section, add the device	

commeni i addicadie dody dari values.	internal review; 2015, public comment	values Synthetic Substitute and Nonautologous Tissue Substitute to the root operation Supplement table 00U and 01U for all applicable body part values.	
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Section 0 Medical a	Section 0 Medical and Surgical				
Body System0 Central N	Body System <sup>0</sup> Central Nervous System				
Operation U Supplement	ent: Putting in or on b	iological or synthetic material that p	hysically		
reinforces a	and/or augments the fu	nction of a portion of a body part			
Body Part	Approach	Device	Qualifier		
1 Cerebral Meninges					
ADD 6 Cerebral					
Ventricle					
<b>2</b> Dura Mater					
T Spinal Meninges					
F Olfactory Nerve					
G Optic Nerve					
H Oculomotor Nerve	0 Open	7 Autologous Tissue Substitute			
J Trochlear Nerve	<b>3</b> Percutaneous	ADD J Synthetic Substitute	Z No		
K Trigeminal Nerve	4 Percutaneous	ADD K Nonautologous Tissue	Qualifier		
L Abducens Nerve	Endoscopic	Substitute			
M Facial Nerve					
N Acoustic Nerve					
P Glossopharyngeal					
Nerve					
<b>Q</b> Vagus Nerve					
<b>R</b> Accessory Nerve					
S Hypoglossal Nerve					

## Intraluminal device

Source	Description	Code specification
2013, Coding	Add the device value D Intraluminal Device to	0[23456]U^DZ (402 codes)
Clinic	the root operation Supplement tables for body	08U[XY]^DZ (8 codes)
Editorial	systems and applicable body part values that	0[BCDF]U^DZ (178 codes)
Advisory	use the device value D Intraluminal Device.	0[TU]U^DZ (45 codes)
Board &		
CMS internal	In addition, delete the device value D	0[23456BDF]H^^D^ (443
review	Intraluminal Device from the root operation	codes)
	Insertion tables.	

Section 0 Medical and Body System3 Upper Arteri	es		
		gical or synthetic material that p ion of a portion of a body part	hysically
Body Part	Approach	Device	Qualifier
<ul> <li>O Internal Mammary</li> <li>Artery, Right</li> <li>1 Internal Mammary</li> <li>Artery, Left</li> <li>2 Innominate Artery</li> <li>3 Subclavian Artery, Right</li> <li>4 Subclavian Artery, Right</li> <li>6 Axillary Artery, Right</li> <li>6 Axillary Artery, Right</li> <li>6 Axillary Artery, Right</li> <li>7 Brachial Artery, Right</li> <li>8 Brachial Artery, Right</li> <li>8 Brachial Artery, Right</li> <li>7 Brachial Artery, Right</li> <li>8 Brachial Artery, Right</li> <li>7 Bradial Artery, Right</li> <li>7 Bradial Artery, Right</li> <li>7 Bradial Artery, Right</li> <li>7 Hand Artery, Left</li> <li>9 Uhar Artery, Right</li> <li>7 Hand Artery, Left</li> <li>9 Intracranial Artery</li> <li>H Common Carotid Artery, Right</li> <li>9 Common Carotid Artery, Right</li> <li>9 Common Carotid Artery, Right</li> <li>9 L Internal Carotid Artery, Right</li> <li>1 Internal Carotid Artery, Right</li> <li>N External Carotid Artery, Right</li> <li>N External Carotid Artery, Right</li> <li>9 Vertebral Artery, Right</li> <li>9 Vertebral Artery, Right</li> <li>9 Vertebral Artery, Right</li> <li>1 Temporal Artery, Right</li> <li>1 Temporal Artery, Left</li> <li>1 Tyroid Artery, Left</li> <li>1 Vityroid Artery, Left</li> </ul>	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	7 Autologous Tissue Substitute ADD D Intraluminal Device J Synthetic Substitute K Nonautologous Tissue Substitute	Z No Qualifier

Section0 Medical and SurgicalBody SystemB Respiratory SystemOperationU Supplement: Putting in or on biological or synthetic material that physically reinforces and/or augments the function of a portion of a body part				
Body Part	Approach	Device	Qualifier	
<ol> <li>Trachea</li> <li>Carina</li> <li>Main Bronchus, Right</li> <li>Upper Lobe</li> <li>Bronchus, Right</li> <li>Middle Lobe</li> <li>Bronchus, Right</li> <li>Lower Lobe</li> <li>Bronchus, Right</li> <li>Lower Lobe</li> <li>Bronchus, Right</li> <li>Main Bronchus, Left</li> <li>Upper Lobe</li> <li>Bronchus, Left</li> <li>Lingula Bronchus</li> <li>B Lower Lobe</li> <li>Bronchus, Left</li> <li>R Diaphragm, Right</li> <li>S Diaphragm, Left</li> </ol>	0 Open 4 Percutaneous Endoscopic ADD 8 Via Natural or Artificial Opening Endoscopic	7 Autologous Tissue Substitute ADD D Intraluminal Device J Synthetic Substitute K Nonautologous Tissue Substitute	Z No Qualifier	

	Section 0 Medical and Surgical Body System T Urinary System				
- -	<i>Operation</i> U Supplement: Putting in or on biological or synthetic material that physically reinforces and/or augments the function of a portion of a body part				
Body Part	Approach	Device	Qualifier		
4 Kidney Pelvis, Left 6 Ureter, Right 7 Ureter, Left	7 Via Natural or Artificial Opening 8 Via Natural or Artificial	7 Autologous Tissue Substitute ADD D Intraluminal Device J Synthetic Substitute K Nonautologous Tissue Substitute	<b>Z</b> No Qualifier		
	0 Open 4 Percutaneous Endoscopic 7 Via Natural or Artificial	7 Autologous Tissue Substitute ADD D Intraluminal Device	<b>Z</b> No Qualifier		

Opening	J Synthetic Substitute	
8 Via Natural or Artificial	K Nonautologous Tissue	
Opening Endoscopic	Substitute	
X External		

### Other device

Source	Description	Code specification
2015, CMS internal review	In the Medical and Surgical section, add Device value Y Other Device to the root operations Insertion, Removal, and Revision, to applicable body part values.	0[01][HPW] <sup>^</sup> YZ (66 codes) 02[HPW] <sup>^</sup> YZ (54 codes) 0[3456][HPW]Y[034]YZ (36 codes) 0[789][HPW] <sup>^</sup> YZ (141 codes) 0[BCDFG][HPW] <sup>^</sup> YZ (242 codes) 0[HJKLM][HPW] <sup>^</sup> YZ (315 codes)
		0[TUV][HPW]^YZ (310 codes)

## EXAMPLE

<ul> <li>Section 0 Medical and Surgical</li> <li>Body System0 Central Nervous System</li> <li>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</li> </ul>			
Body Part	Approach	Device	Qualifier
E Cranial Nerve	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	2 Monitoring Device 3 Infusion Device M Neurostimulator Lead ADD Y Other Device	<b>Z</b> No Qualifier

Section	0 Medical and Surgical			
Body System2 Heart and Great Vessels				
<i>Operation</i> <b>H</b> 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

<ul> <li>4 Coronary Vein</li> <li>6 Atrium, Right</li> <li>7 Atrium, Left</li> <li>K Ventricle, Right</li> <li>L Ventricle, Left</li> </ul>	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	<ul> <li>0 Monitoring Device, Pressure Sensor</li> <li>2 Monitoring Device</li> <li>3 Infusion Device</li> <li>DELETED D Intraluminal</li> <li>Device</li> <li>J Cardiac Lead, Pacemaker</li> <li>K Cardiac Lead, Defibrillator</li> <li>M Cardiac Lead</li> <li>ADD Y Other Device</li> </ul>	<b>Z</b> No Qualifier
A Heart	<ul><li>0 Open</li><li>3 Percutaneous</li><li>4 Percutaneous</li><li>Endoscopic</li></ul>	Q Implantable Heart Assist System ADD Y Other Device	<b>Z</b> No Qualifier
A Heart	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	<b>R</b> External Heart Assist System	<b>S</b> Biventricular <b>Z</b> No Qualifier
N Pericardium	<ul> <li>0 Open</li> <li>3 Percutaneous</li> <li>4 Percutaneous</li> <li>Endoscopic</li> </ul>	<ul> <li>0 Monitoring Device, Pressure Sensor</li> <li>2 Monitoring Device</li> <li>J Cardiac Lead, Pacemaker</li> <li>K Cardiac Lead, Defibrillator</li> <li>M Cardiac Lead</li> <li>ADD Y Other Device</li> </ul>	<b>Z</b> No Qualifier
<ul> <li>P Pulmonary Trunk</li> <li>Q Pulmonary Artery,</li> <li>Right</li> <li>R Pulmonary Artery,</li> <li>Left</li> <li>S Pulmonary Vein,</li> <li>Right</li> <li>T Pulmonary Vein,</li> <li>Left</li> <li>V Superior Vena Cava</li> <li>W Thoracic Aorta</li> </ul>	0 Open 3 Percutaneous 4 Percutaneous Endoscopic	<ul> <li>0 Monitoring Device, Pressure Sensor</li> <li>2 Monitoring Device</li> <li>3 Infusion Device</li> <li>DELETED D Intraluminal</li> <li>Device</li> <li>ADD Y Other Device</li> </ul>	<b>Z</b> No Qualifier

# Vascular access reservoir

Source	Description	Code specification
2013,	In the Subcutaneous Tissue and Fascia body system of	0J[HPW]^^[WX]Z
Coding	the Medical and Surgical section, revise the title of the	(73 codes)
Clinic EAB	device value X from Vascular Access Device to Vascular	
& CMS	Access Device, Totally Implantable, and the device value	
	W from Vascular Access Device, Reservoir to Vascular	

internal	Access Device, Tunneled, to be consistent with common	
review	usage and to capture detail for implantation of tunneled	
	vascular catheter.	

<ul> <li>Section 0 Medical and Surgical</li> <li>Body SystemJ Subcutaneous Tissue and Fascia</li> <li>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</li> </ul>			
Body Part	Approach	Device	Qualifier
<ul> <li>6 Subcutaneous Tissue and Fascia, Chest</li> <li>8 Subcutaneous Tissue and Fascia, Abdomen</li> <li>D Subcutaneous Tissue and Fascia, Right Upper Arm</li> <li>F Subcutaneous Tissue and Fascia, Left Upper Arm</li> <li>G Subcutaneous Tissue and Fascia, Right Lower Arm</li> <li>H Subcutaneous Tissue and Fascia, Left Lower Arm</li> <li>L Subcutaneous Tissue and Fascia, Right Upper Leg</li> <li>M Subcutaneous Tissue and Fascia, Left Upper Leg</li> <li>N Subcutaneous Tissue and Fascia, Left Upper Leg</li> <li>N Subcutaneous Tissue and Fascia, Left Upper Leg</li> <li>N Subcutaneous Tissue and Fascia, Left Upper Leg</li> <li>P Subcutaneous Tissue and Fascia, Right Lower Leg</li> <li>P Subcutaneous Tissue and Fascia, Left Lower Leg</li> </ul>	0 Open 3 Percutaneous	<b>REVISE from</b> W Vascular Access Device, Reservoir <b>REVISE to W</b> Vascular Access	Z No

## **Branched and Fenestrated Intraluminal Device**

Source	Description	Code specification
CMS internal	Device value Branched or Fenestrated Intraluminal	04V[CD][034]FZ
review	Device, Three or More Arteries, was applied to the	(6 codes)
	common iliac body part values in root operation	
	Restriction table 04V for the FY2017. This value was	
	not included in the C&M proposal, and was	
	unintentionally added.	

## Section 3 Administration

#### Axis 6 Substance value

## Medical induction of labor

Source	Description	Code specification
2013, Coding	In section 3, Administration, add substance	3E0P[37]VZ (2 codes)
Clinic EAB	value Hormone for the axis 4 body region value	
& CMS	Female Reproductive in the root operation	
internal	Introduction table 3E0, to capture detail for	
review	administration of substances for medical	
	induction of labor.	

## EXAMPLE

Section 3 Adm	<i>Tection</i> <b>3</b> Administration			
Body SystemE Physiological Systems and Anatomical Regions				
Operation 0 Introduction: Putting in or on a therapeutic, diagnostic, nutritional, physiological,				
or prophylactic substance except blood or blood products				
Body System / Region	Approach	Substance	Qualifier	
P Female Reproductive	<b>3</b> Percutaneous <b>7</b> Via Natural or Artificial Opening	<ul> <li>3 Anti-inflammatory</li> <li>6 Nutritional Substance</li> <li>7 Electrolytic and Water Balance</li> <li>8 Local Anesthetic</li> <li>H Radioactive Substance</li> <li>K Other Diagnostic Substance</li> <li>L Sperm</li> <li>N Analgesics, Hypnotics,</li> <li>Sedatives</li> <li>T Destructive Agent</li> <li>ADD V Hormone</li> </ul>	<b>Z</b> No Qualifier	

#### Anesthetic substance

Source Description Code specification	Source	Description	Code specification
	bource	Description	coue specification

2015, Coding	In section 3, Administration, revise the title of the	Revise 3E0 <sup>^</sup> BZ
Clinic EAB &	substance value B from Local Anesthetic to Anesthetic	(50 codes)
CMS internal review	Agent. In addition, delete the substance values C Regional Anesthetic and D Inhalation Anesthetic.	Delete 3E0^[CD]Z (6 codes)

Section <b>3</b> Administ Body SystemE Physiolo	ration gical Systems and Anatomical	Regions	
Operation 0 Introduct	ion: Putting in or on a therape	utic, diagnostic, nutritional, p	hysiological,
or prophyla	ctic substance except blood o	r blood products	
Body System / Region	Approach	Substance	Qualifier
<b>0</b> Skin and Mucous Membranes	<b>X</b> External	<b>REVISE from B</b> Local Anesthetic <b>REVISE to B</b> Anesthetic Agent	<b>Z</b> No Qualifier
<ol> <li>Subcutaneous Tissue</li> <li>Muscle</li> <li>Pleural Cavity</li> <li>Peritoneal Cavity</li> <li>Q Cranial Cavity and Brain</li> <li>U Joints</li> <li>V Bones</li> <li>W Lymphatics</li> <li>Y Pericardial Cavity</li> </ol>	<b>3</b> Percutaneous	<b>REVISE from B</b> Local Anesthetic <b>REVISE to B</b> Anesthetic Agent	<b>Z</b> No Qualifier
9 Nose B Ear C Eye D Mouth and Pharynx	<ul> <li>3 Percutaneous</li> <li>7 Via Natural or Artificial</li> <li>Opening</li> <li>X External</li> </ul>	<b>REVISE from B</b> Local Anesthetic <b>REVISE to B</b> Anesthetic Agent	<b>Z</b> No Qualifier
E Products of Conception G Upper GI H Lower GI J Biliary and Pancreatic Tract K Genitourinary Tract N Male Reproductive P Female Reproductive	<ul> <li>3 Percutaneous</li> <li>7 Via Natural or Artificial</li> <li>Opening</li> <li>8 Via Natural or Artificial</li> <li>Opening Endoscopic</li> </ul>	<b>REVISE from B</b> Local Anesthetic <b>REVISE to B</b> Anesthetic Agent	<b>Z</b> No Qualifier
F Respiratory Tract	<b>3</b> Percutaneous	<b>REVISE from B</b> Local Anesthetic <b>REVISE to B</b> Anesthetic Agent	<b>Z</b> No Qualifier

F Respiratory Tract	7 Via Natural or Artificial Opening 8 Via Natural or Artificial Opening Endoscopic	<b>REVISE from B</b> LocalAnesthetic <b>REVISE to B</b> AnestheticAgent <b>DELETE D</b> InhalationAnesthetic	<b>Z</b> No Qualifier
<ul> <li>R Spinal Canal</li> <li>S Epidural Space</li> <li>T Peripheral Nerves</li> <li>and Plexi</li> <li>X Cranial Nerves</li> </ul>	<b>3</b> Percutaneous	<b>REVISE from B</b> LocalAnesthetic <b>REVISE to B</b> AnestheticAgent <b>DELETE C</b> RegionalAnesthetic	<b>Z</b> No Qualifier

# Medical and Surgical section Axis 7 Qualifier

# Left to right carotid bypass

Source	Description	Code specification
2014, Coding	In the Upper Arteries body system of the Medical and	031[HKM]0^K (15
Clinic	Surgical section, add the qualifier value Extracranial	codes)
Editorial	Artery, Right to the root operation Bypass table 031, for	
Advisory	the body part values Common Carotid Artery, Left,	
Board &	Internal Carotid Artery, Left and External Carotid Artery,	
CMS internal	Left.	
review		
	In addition, add the qualifier value Extracranial Artery,	031[JLN]0^J (15
	Left to root operation Bypass table 031, for the body part	codes)
	values Common Carotid Artery, Right, Internal Carotid	
	Artery, Right, and External Carotid Artery, Right. These	
	changes will enable capture of detail for carotid bypass	
	procedures that extend from the left to the right side and	
	vice versa.	

<i>Section</i> <b>0</b> Medical	0 Medical and Surgical			
Body System <b>3</b> Upper Arteries				
<i>Operation</i> <b>1</b> Bypass: Altering the route of passage of the contents of a tubular body			nts of a tubular body part	
Body Part	Approach	Device	Qualifier	
H Common Carotid		9 Autologous Venous Tissue	ADD K Extracranial Artery,	
Artery, Right	0 Open	A Autologous Arterial	Left	
K Internal Carotid		Tissue	Lett	

Artery, Right M External Carotid Artery, Right	J Synthetic Substitute K Nonautologous Tissue Substitute Z No Device	
J Common Carotid Artery, Left L Internal Carotid Artery, Left N External Carotid Artery, Left	Numberic Nubstitute	J Extracranial Artery,

# Aorto-axillary bypass

Source	Description	Code specification
2016, public	In the Heart and Great Vessels body system of the	021W0[JK][GH]
comment	Medical and Surgical section, create new qualifier values Axillary Artery and Brachial Artery, and add to the root operation Bypass table 021, for the body part value Thoracic Aorta, to capture detail for the aorto-axillary and aorto-brachial bypass procedures.	(4 codes)

Section 0 Medical and Surgical					
Body System 2 Heart and Great Vessels					
Operation 1 Bypass: Alt	<i>Operation</i> <b>1</b> Bypass: Altering the route of passage of the contents of a tubular body part				
Body Part	Approach	Device	Qualifier		
W Thoracic Aorta, Descending	0 Open	9 Autologous Venous Tissue A Autologous Arterial Tissue Z No Device	<ul> <li>B Subclavian</li> <li>D Carotid</li> <li>P Pulmonary Trunk</li> <li>Q Pulmonary Artery,</li> <li>Right</li> <li>R Pulmonary Artery,</li> <li>Left</li> </ul>		
W Thoracic Aorta, Descending		<b>J</b> Synthetic Substitute <b>K</b> Nonautologous Tissue Substitute	<ul> <li>B Subclavian</li> <li>D Carotid</li> <li>ADD G Axillary Artery</li> <li>ADD H Brachial Artery</li> <li>P Pulmonary Trunk</li> <li>Q Pulmonary Artery,</li> <li>Right</li> <li>R Pulmonary Artery,</li> <li>Left</li> </ul>		

# Superior Vena Cava dialysis access

Source	Description	Code specification
2015, Coding	In the Upper Arteries body system of the Medical and	031[5678]0^V
Clinic	Surgical section, create new qualifier value Superior	(20 codes)
Editorial	Vena Cava, and add to the root operation Bypass table	
Advisory	031, for the body part values 5 Axillary Artery, Right, 6	
Board &	Axillary Artery, Left, 7 Brachial Artery, Right and 8	
CMS internal	Brachial Artery, Left, to capture detail for dialysis access	
review	procedures that connect directly to the Superior Vena	
	Cava, such as the HerO dialysis access device.	

Section0 Medical and SurgicalBody System 3 Upper ArteriesOperation1 Bypass: Altering the route of passage of the contents of a tubular body part					
Body Part	Approach	Device	Qualifier		
5 Axillary Artery, Right 6 Axillary Artery, Lef	<b>0</b> Open	9 Autologous Venous Tissue A Autologous Arterial Tissue J Synthetic Substitute K Nonautologous Tissue Substitute Z No Device	<ul> <li>0 Upper Arm Artery, Right</li> <li>1 Upper Arm Artery, Left</li> <li>2 Upper Arm Artery, Left</li> <li>2 Upper Arm Artery, Right</li> <li>3 Lower Arm Artery, Right</li> <li>4 Lower Arm Artery, Left</li> <li>5 Lower Arm Artery, Left</li> <li>5 Lower Arm Artery, Right</li> <li>6 Upper Leg Artery, Right</li> <li>7 Upper Leg Artery, Left</li> <li>8 Upper Leg Artery, Right</li> <li>9 Lower Leg Artery, Right</li> <li>B Lower Leg Artery, Left</li> <li>C Lower Leg Artery, Bilateral</li> <li>D Upper Arm Vein</li> <li>F Lower Arm Vein</li> <li>J Extracranial Artery, Right</li> <li>K Extracranial Artery, Left</li> <li>ADD V Superior Vena</li> <li>Cava</li> </ul>		
<b>7</b> Brachial Artery, Right	0 Open	<ul><li>9 Autologous Venous Tissue</li><li>A Autologous Arterial Tissue</li><li>J Synthetic Substitute</li><li>K Nonautologous Tissue</li></ul>	<ul> <li>0 Upper Arm Artery, Right</li> <li>3 Lower Arm Artery, Right</li> <li>D Upper Arm Vein</li> <li>F Lower Arm Vein</li> </ul>		

		Substitute	ADD V Superior Vena
		Z No Device	Cava
		9 Autologous Venous Tissue	<b>1</b> Upper Arm Artery, Left
<b>8</b> Brachial Artery,	0 Open	A Autologous Arterial Tissue	4 Lower Arm Artery, Left
		J Synthetic Substitute	<b>D</b> Upper Arm Vein
Left		K Nonautologous Tissue	F Lower Arm Vein
		Substitute	ADD V Superior Vena
		Z No Device	Cava

# Portal to hepatic shunt

Description	Code specification
In the Lower Veins body system of the Medical and	Add
Surgical section, create new qualifier value Hepatic Vein	06183J[4Y] (2
and add to the root operation Bypass table 061, for the	codes)
body part value Portal Vein, with the approach values	06184J4 (one code)
Percutaneous and Percutaneous Endoscopic, and the	
device value Synthetic Substitute, to capture detail for the	
TIPS procedure.	
In addition, delete the codes 0618[34]DY Bypass Portal Vein to Lower Vein with Intraluminal Device, Percutaneous/Percutaneous Endoscopic Approach from the ICD-10-PCS.	Delete 0618[34]DY (2 codes)
	In the Lower Veins body system of the Medical and Surgical section, create new qualifier value Hepatic Vein and add to the root operation Bypass table 061, for the body part value Portal Vein, with the approach values Percutaneous and Percutaneous Endoscopic, and the device value Synthetic Substitute, to capture detail for the TIPS procedure. In addition, delete the codes 0618[34]DY Bypass Portal Vein to Lower Vein with Intraluminal Device, Percutaneous/Percutaneous Endoscopic Approach from

	0 Medical and Surgical 6 Lower Veins				
Body Part	Approach	Device	Qualifier		
8 Portal Vein	ADD 3 Percutaneous	ADD J Synthetic Substitute	ADD 4 Hepatic Vein ADD Y Lower Vein		
8 Portal Vein	4 Percutaneous Endoscopic	NUNTHATIC NUNCTITUTA	<ul> <li>ADD 4 Hepatic Vein</li> <li>9 Renal Vein, Right</li> <li>B Renal Vein, Left</li> <li>Y Lower Vein</li> </ul>		

# TRAM flap qualifiers

Source	Description	Code specification
2013, Coding	In the Muscles body system of the Medical and Surgical	0KX[FG]^Z[5789]
Clinic	section, create new qualifier value Latissimus Dorsi	(16 codes)
Editorial	Myocutaneous Flap, Deep Inferior Epigastric Artery	
Advisory	Perforator Flap, Superficial Inferior Epigastric Artery	
Board &	Flap, and Gluteal Artery Perforator Flap, for the root	
CMS internal	operation Transfer table 0KX, applied to the body part	
review	values F Trunk Muscle, Right and G Trunk Muscle, Left.	
	These changes enable capture of additional detail for	
	pedicle flap transfer procedures.	

## EXAMPLE

<ul> <li>Section 0 Medical and Surgical</li> <li>Body SystemK Muscles</li> <li>Operation X Transfer: Moving, without taking out, all or a portion of a body part to another location to take over the function of all or a portion of a body part</li> </ul>			
Body Part	Approach	Device	Qualifier
F Trunk Muscle, Right G Trunk Muscle, Left	0 Open 4 Percutaneous Endoscopic	<b>Z</b> No Device	<ul> <li>0 Skin</li> <li>1 Subcutaneous Tissue</li> <li>2 Skin and Subcutaneous Tissue</li> <li>ADD 5 Latissimus Dorsi Myocutaneous</li> <li>Flap</li> <li>ADD 7 Deep Inferior Epigastric Artery</li> <li>Perforator Flap</li> <li>ADD 8 Superficial Inferior Epigastric</li> <li>Artery Flap</li> <li>ADD 9 Gluteal Artery Perforator Flap</li> <li>Z No Qualifier</li> </ul>

# Supracervical hysterectomy

Source	Description	Code specification
2014, Coding	In the Female Reproductive body system of the Medical	0UT9^ZL (5 codes)
Clinic EAB &	and Surgical section, create new qualifier value	
CMS internal	Supracervical and add to the root operation Resection	
review	table 0UT for the body part value Uterus, to capture	
	supracervical (partial) hysterectomy.	

	Section0 Medical and SurgicalBody SystemU Female Reproductive SystemOperationT Resection: Cutting out or off, without replacement, all of a body part				
Body Part	Approach	Device	Qualifier		
9 Uterus	<ul> <li>0 Open</li> <li>4 Percutaneous Endoscopic</li> <li>7 Via Natural or Artificial Opening</li> <li>8 Via Natural or Artificial Opening Endoscopic</li> <li>F Via Natural or Artificial Opening With</li> <li>Percutaneous Endoscopic Assistance</li> </ul>	<b>Z</b> No Device	<b>ADD L</b> Supracervical <b>Z</b> No Qualifier		

## Section 1 Obstetrics

#### Manual extraction of retained POC

Source	Description	Code specification
CMS internal	In the Obstetrics section, create new qualifier value	10D1[78]Z9 (two
review	Manual and add to the root operation Extraction table	codes)
	10D for the body part value Products of Conception,	
	Retained, to capture manual removal of retained placenta.	
	Retained, to capture manual removal of retained placema.	

Section1 ObstetricsBody System0 PregnancyOperationD Extraction: Pulling or stripping out or off all or a portion of a body part by the use of force					
Body Part	Approach	Device	Qualifier		
<b>1</b> Products of Conception, Retained	<ul><li>7 Via Natural or Artificial Opening</li><li>8 Via Natural or Artificial Opening</li><li>Endoscopic</li></ul>	<b>Z</b> No Device	ADD 9 Manual Z No Qualifier		