



Complete Guide for Interventional Radiology

2016

Contents

Introduction	1	Percutaneous Transcatheter Retrieval of Foreign Body	104
CPT Codes and Descriptions	1	Intravascular Ultrasound, Non-coronary	105
Procedure Codes	2	Transcatheter Vascular Stent Placement—	
Chapter 1: The Basics	5	Cervical Carotid	108
APC Basics—Why Is This Important?	5	Transcatheter Vascular Stent Placement—Intracranial	112
CCI Edits—Why Is This Important?	8	Transcatheter Vascular Stent Placement—Extracranial	
Recovery Audit Contractors (RAC)	9	Vertebral or Intrathoracic Carotid Artery	114
Coding Basics	9	Transcatheter Biopsy	116
General Coding Guidelines	9	Transcatheter Endovascular Revascularization	118
Modifiers for Outpatient Hospital Radiology and		Transcatheter Endovascular Revascularization—	
Cardiology Procedures	10	Iliac Vascular Territory	120
Modifiers for Physician Services	11	Transcatheter Endovascular Revascularization—	
Revenue Codes	14	Femoral/Popliteal Vascular Territory	120
General Interventional Radiology Coding Guidelines for		Transcatheter Endovascular Revascularization—	
Selective and Nonselective Catheter Placements	15	Tibial/Peroneal Vascular Territory	121
Catheter Placement Codes for Interventional Radiology	16	Endovascular Transluminal Angioplasty—	
General Cardiac Procedure Coding Guidelines	17	Visceral and Brachiocephalic Arteries, Aorta,	
Documentation	17	and the Venous System	126
Supply Device Codes	18	Transluminal Atherectomy for Supra-Inguinal Arteries	134
Stark/Anti-Kickback Legislation	18	Transcatheter Stent Placement—Visceral and	
Stark Self-Referral Regulations	18	Brachiocephalic Arteries; Venous System	137
Chapter 2: Diagnostic Angiography	21	Chapter 5: Vascular Access Device Placement	
Cervicocerebral Angiography—Carotid and		and Therapy	143
Vertebral Arteries	21	Non-Tunneled Vascular Access Device Placement	144
Aorta Angiography—Thoracic and Abdominal	27	Tunneled Vascular Access Device Placement	147
Internal Mammary and Spinal Angiography	29	Repair/Replacement/Removal of Vascular Access Device	151
Visceral Angiography—Celiac, Hepatic, Splenic,		Maintenance of Vascular Access Device	156
Inferior Phrenic, Superior and Inferior		Chapter 6: Minor Interventional Procedures	159
Mesenteric Arteries, and Bronchial Arteries	33	Arthrography	159
Renal Angiography	38	Image-Guided Interventional Procedures—	
Adrenal Angiography	41	Breast Biopsy	161
Extremity Angiography	44	Image-Guided Interventional Procedures—	
Pelvic Artery Angiography	48	Breast, Other Than Biopsy	166
Pulmonary Artery Angiography	51	Other Biopsy Procedures	168
Chapter 3: Diagnostic Venography	55	Aspiration Procedures	171
Cerebral Veins	55	Image Guided Drainage Procedures	174
Central Veins—Superior and Inferior Vena Cava	58	Endovenous Ablation Therapy	178
Renal and Adrenal Veins	61	Stab Phlebectomy	180
Extremity Veins	65	Venous Sclerotherapy	182
Portal and Hepatic Veins and TIPS	68	Sacropasty	183
Arteriovenous Fistula and Interventions	72	Vertebroplasty	185
Venous Sampling	78	Kyphoplasty	187
Chapter 4: Vascular Interventions	79	Myelography	188
Percutaneous Embolization—Other than Cerebral,		Chapter 7: Gastrointestinal Tract Interventions	193
Head and Neck	79	Percutaneous Transhepatic Cholangiography	193
Percutaneous Embolization—Cerebral (Extracranial		Percutaneous Biliary Stone Removal	195
and Intracranial)	82	Esophageal Dilation	197
Temporary Balloon Occlusion	86	Percutaneous Transhepatic Biliary Duct Dilation	
Transcatheter Thrombolysis	88	and Stent Placement	199
Transcatheter Infusion Therapy	92	Percutaneous Gastrostomy Tube Placement	203
Percutaneous Thrombectomy	95	Percutaneous Jejunostomy or Duodenostomy Tube	
Percutaneous Intracranial Angioplasty	99	Placement	205
Percutaneous Vascular Filter Placement, Repositioning,			
and Removal	101		

Percutaneous Cecostomy Tube Placement	207	Insertion of Electrode for Left Ventricular Pacing (Previously placed pacemaker or ICD)	287
Conversion of Gastrostomy (G tube) to Jejunostomy (G-J tube)	210	Insertion of Electrode for Left Ventricular Pacing at the Same Time as Primary Procedure	290
Replacement and Maintenance of Gastrointestinal System Tubes	212	Reposition Previously Placed Left Ventricular Electrode	291
Chapter 8: Urinary Tract Interventions	215	Removal and Replacement of Pacemaker Generator	293
Nephrostogram	215	Removal of Permanent Pacemaker Generator	295
Percutaneous Placement of Nephrostomy Tube	218	Removal of Pacemaker Electrode(s)	296
Ureteral Stent Placement	220	Removal of Epicardial Pacemaker System by Thoracotomy	298
Nephrostomy or Ureteral Dilatation	222	Removal of Permanent Electrode(s) by Thoracotomy	300
Renal or Ureteral Catheter Removal	224	Insertion of Implantable Defibrillator Generator	302
Chapter 9: Diagnostic Cardiac Catheterization	227	Removal of Implantable Defibrillator Generator	305
Noncongenital Cardiac Catheterization	228	Removal and Replacement of Implantable Defibrillator Generator	306
Heart Catheterization Procedures for Congenital Anomalies	235	Removal of Implantable Defibrillator Electrode(s)	309
Endomyocardial Biopsy	239	Insertion or Replacement of ICD Lead(s) and Generator	311
Catheter Closure of Atrial Septal Defect/Ventricular Septal Defect	240	Chapter 12: Electrophysiology and Ablation	315
Chapter 10: Cardiac Interventional Procedures	241	Bundle of His Recording	316
Intra Aortic Balloon Pump Procedures	241	Intra-atrial Recording	318
Coronary Thrombectomy	243	Right Ventricular Recording	320
Intravascular Brachytherapy	244	EP for Mapping of Tachycardia	322
Coronary Thrombolysis	245	Intra-atrial Pacing	324
Intravascular Coronary Ultrasound (IVUS)	247	Intraventricular Pacing	326
Intravascular Catheter Based Spectroscopy	248	Electrophysiology 3-D Mapping	328
Implantation of Wireless Pulmonary Artery Pressure Sensor	249	Induction of Arrhythmia	330
Percutaneous Coronary Interventions	252	Comprehensive EP Evaluation Without Induction of Arrhythmia	332
Interventional Cardiology Case Examples	258	Comprehensive EP with Arrhythmia Induction	334
Percutaneous Balloon Valvuloplasty	260	Comprehensive EP with Arrhythmia Induction and Left Atrial Pacing and Recording (Add-On Code)	336
Transvenous Atrial Septectomy/Septostomy	262	Comprehensive EP with Arrhythmia Induction and Left Ventricular Pacing and Recording (Add-On Code)	338
Park Septostomy	263	Programmed Stimulation and Pacing—Drug Induced	340
Percutaneous Transluminal Pulmonary Artery Angioplasty	265	EP Follow-up Study	341
Catheter Delivered Implantation of Aortic Valve Prostheses	267	EP Evaluation of ICD System	343
Percutaneous Transcatheter Closure of Left Atrial Appendage	269	Subcutaneous ICD System Procedures (S-ICD)	345
Chapter 11: Pacemaker Insertion and Pacing Cardioverter-Defibrillator Procedures	271	Catheter Ablation of AV Node for Creation of Complete Heart Block	348
Epicardial Electrode Insertion—Permanent Pacemaker or ICD (Cardioverter-Defibrillator)	272	Catheter Ablation for Treatment of Arrhythmia	350
Insertion of New or Replacement of Permanent Pacemaker Plus Electrode Insertion	274	Intracardiac Echocardiography	353
Insertion or Replacement of Temporary Pacemaker	276	Appendix A: APCs and Payment Rates	357
Insertion of Pulse Generator Only	278	Appendix B: HCPCS Level II Codes	377
Upgrade of Single Chamber Pacemaker System	280	Code Definitions	378
Electrode Repositioning	281	Appendix C: Claim Forms	381
Insertion of Transvenous Electrode(s)	282	UB-04 Form	381
Repair of Transvenous Electrode(s)	284	CMS-1500 Form	382
Pocket Relocation	286	Appendix D: 2015 Inpatient Only CPT Codes	383
		Appendix E: 2015 Status Indicators for OPPS Payment	385
		Glossary	387

Chapter 4: Vascular Interventions

Percutaneous Embolization—Other than Cerebral, Head and Neck

Transcatheter embolization is performed with the intent to occlude the blood vessels supplying a previously determined abnormality such as a tumor or aneurysm. Once the blood supply to the abnormality is determined, selective or super-selective catheterization of the feeder vessels is performed and embolic material is injected or placed in each vessel. The most common embolic materials available are gelfoam, coils, glue, balloons, microspheres, and polyvinyl alcohol. Chemo drugs are also used for certain embolization situations. Follow-up angiography is performed to determine the success of the therapy and is coded separately.

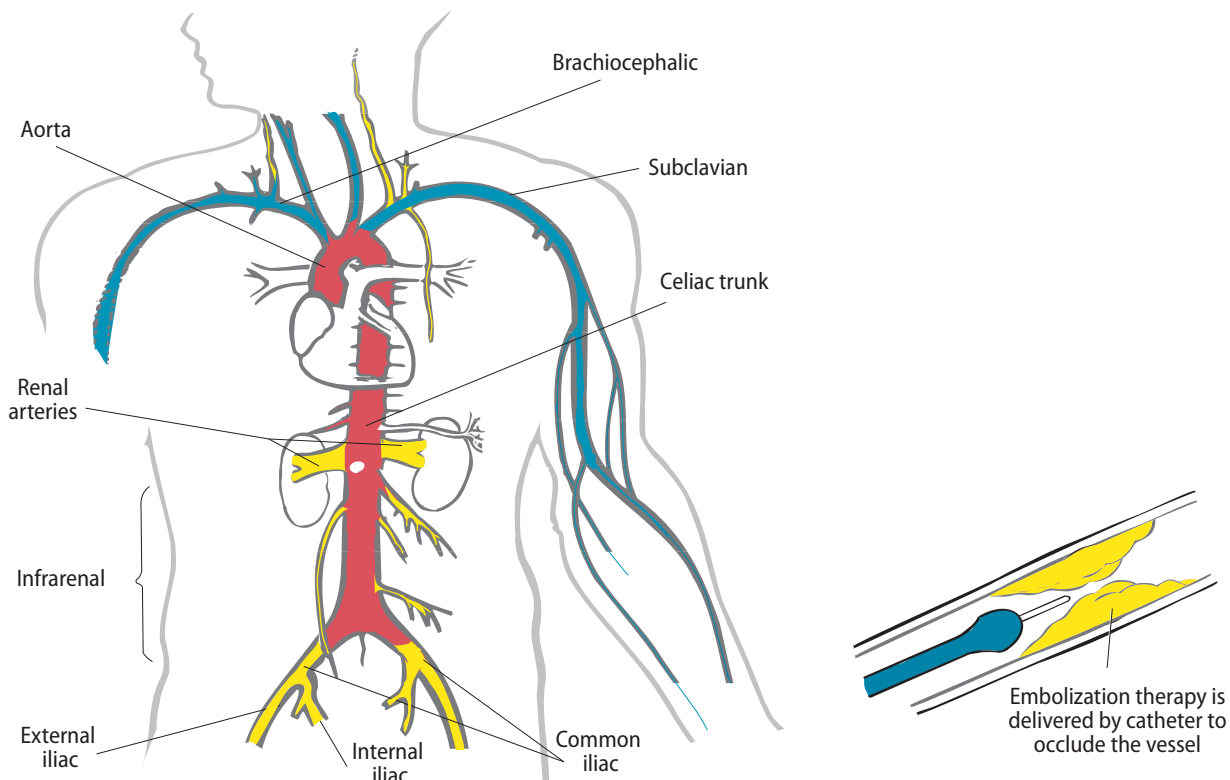
- 37241 Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; venous, other than hemorrhage (eg, congenital or acquired venous malformations, venous and capillary hemangiomas, varices, varicoceles)**
- 37242 arterial, other than hemorrhage or tumor (eg, congenital or acquired arterial malformations, arteriovenous malformations, arteriovenous fistulas, aneurysms, pseudoaneurysms)**

37243 for tumors, organ ischemia, or infarction
37244 for arterial or venous hemorrhage or lymphatic extravasation

Coding Tips

1. Transcatheter vascular embolization is reported with comprehensive codes 37241–37244. These codes include radiological guidance and imaging directly related to the intervention procedure.
2. Do not additionally report CPT® code 75894 or 75898.
3. Separately report catheter placement code(s).
4. Separately report diagnostic angiography per guidelines detailed in chapter 3.
5. A stent or stents placed to facilitate deployment of embolization codes are included in the embolization codes and not separately reported.
6. Stent placement for treatment of aneurysm, extravasation, etc., is reported with stent placement codes rather than with embolization codes.

Percutaneous Embolization



Chapter 12: Electrophysiology and Ablation

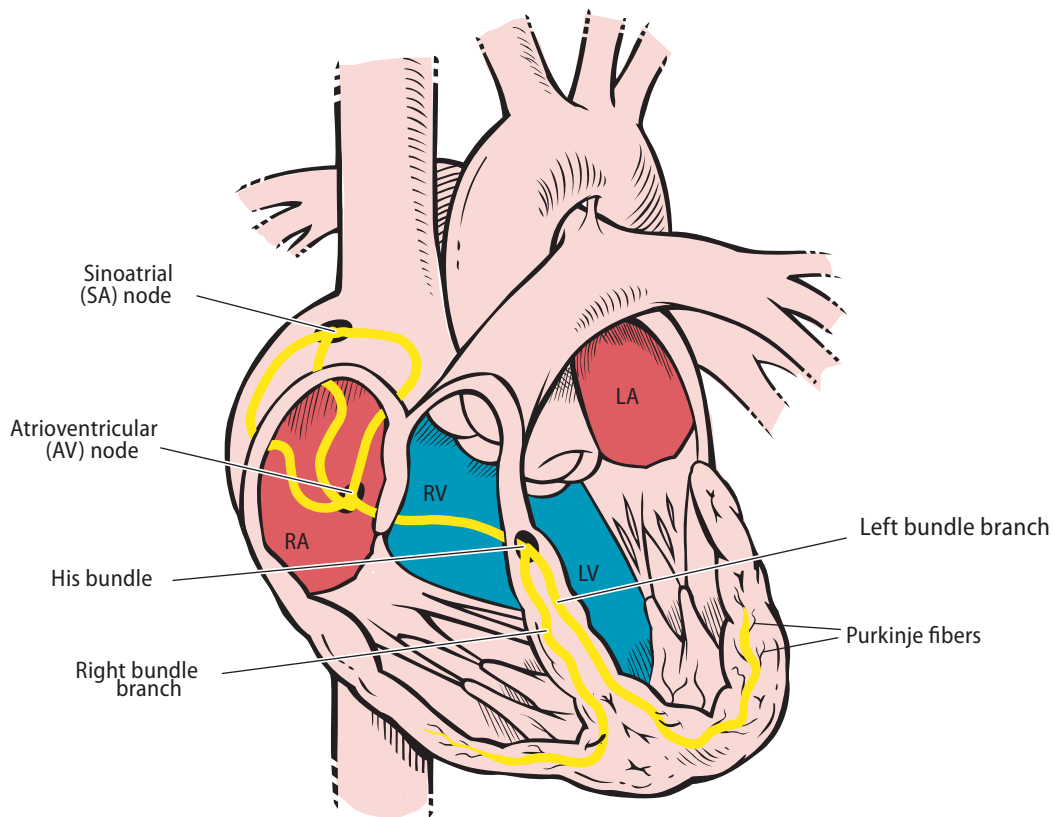
Electrophysiology, or EP, studies are minimally invasive diagnostic studies of the electrical pathways of the heart conduction system. They are commonly performed in the cardiac cath lab or a dedicated EP lab. EP testing assesses patients for cardiac arrhythmias to correlate with clinical symptoms. Special electrode catheters are used to record the electrical pathways. In most EP studies, arrhythmias are induced in order to identify the problem.

EP mapping of arrhythmias is considered to be a distinct procedure and is reported in addition to the diagnostic EP codes using CPT® code 93609 or 93613 for three-dimensional mapping. Special computer equipment is necessary for 3-D mapping.

Catheter ablation procedures are performed to “ablate” the arrhythmia identified in an EP study. Specially designed ablation catheters and special energy creating generators are used to interrupt the pathway identified as causing the arrhythmia.

It is common for a patient to be diagnosed and treated during the same encounter. The EP study is performed and arrhythmias are identified and then ablated during the same visit. Each study should be separately reported whether performed during the same encounter or on different dates.

Heart Conduction System



Bundle of His Recording

93600 Bundle of His Recording

The physician places a venous sheath, usually in a femoral vein, using standard techniques. The physician advances an electrical catheter through the venous sheath and into the right heart under fluoroscopic guidance. The physician attaches the catheter to an electrical recording device to allow depiction of the intracardiac electrograms obtained from electrodes on the catheter tip. The physician moves the catheter tip to the bundle of His, on the anteroseptal tricuspid annulus, and obtains recordings. Alternatively, the physician may obtain similar recordings by placing a catheter into the left ventricular outflow tract via the aorta

Coding Tips

1. CPT code 93600 reports bundle of His recording only. For comprehensive electrophysiologic evaluation bundle of His recording, see 93619–93622.
2. Fluoroscopy is included in 93600 and is not reported separately.
3. Physician Reporting: This code has both a technical and professional component. To report only the professional component, append modifier 26. To report only the technical component, append modifier TC. To report the complete procedure (i.e., both the professional and technical components), submit without a modifier.

Facility HCPCS Coding

HCPCS Level II codes are used to report the supplies provided during the procedure. Hospitals should separately report supplies used during cardiac invasive procedures. Refer to chapter 1 for more information regarding appropriate billing of supplies. Refer to the list of current codes in appendix B.

- C1730 Catheter, electrophysiology, diagnostic, other than 3D mapping (19 or fewer electrodes)
- C1731 Catheter, electrophysiology, diagnostic, other than 3D mapping (20 or more electrodes)
- C1732 Catheter, electrophysiology, diagnostic/ablation, 3D or vector mapping
- C1733 Catheter, electrophysiology, diagnostic/ablation, other than 3D or vector mapping, other than cool-tip
- C1766 Introducer sheath, guiding, intracardiac electrophysiological, steerable, other than peel-away
- C1892 Introducer/sheath, guiding, intracardiac electrophysiological, fixed-curve, peel-away
- C1893 Introducer/sheath, guiding, intracardiac electrophysiological, fixed-curve, other than peel-away
- C1894 Introducer/sheath, other than guiding, intracardiac, electrophysiological, non-laser
- C2629 Introducer/sheath, other than guiding, intracardiac
- C2630 Catheter, electrophysiology, diagnostic/ablation, other than 3D or vector mapping, cool tip

ICD-9-CM Codes

- 426.0 Atrioventricular block, complete

- 426.10 Unspecified atrioventricular block
- 426.11 First degree atrioventricular block
- 426.12 Mobitz (type) II atrioventricular block
- 426.13 Other second degree atrioventricular block
- 426.2 Left bundle branch hemiblock
- 426.3 Other left bundle branch block
- 426.4 Right bundle branch block
- 426.50 Unspecified bundle branch block
- 426.51 Right bundle branch block and left posterior fascicular block
- 426.52 Right bundle branch block and left anterior fascicular block
- 426.53 Other bilateral bundle branch block
- 426.54 Trifascicular block
- 426.6 Other heart block
- 426.7 Anomalous atrioventricular excitation
- 426.81 Lown-Ganong-Levine syndrome
- 426.89 Other specified conduction disorder
- 426.9 Unspecified conduction disorder
- 427.0 Paroxysmal supraventricular tachycardia
- 427.1 Paroxysmal ventricular tachycardia
- 427.2 Unspecified paroxysmal tachycardia
- 427.31 Atrial fibrillation
- 427.32 Atrial flutter
- 427.41 Ventricular fibrillation
- 427.42 Ventricular flutter
- 427.5 Cardiac arrest
- 427.60 Unspecified premature beats
- 427.61 Supraventricular premature beats
- 427.69 Other premature beats
- 427.81 Sinoatrial node dysfunction
- 427.89 Other specified cardiac dysrhythmias
- 427.9 Unspecified cardiac dysrhythmia
- 779.85 Cardiac arrest of newborn
- 780.2 Syncope and collapse
- 780.4 Dizziness and giddiness

CCI Edits

- 93600** 00410, 00537, 0178T-0179T, 0180T, 0213T, 0216T, 0228T, 0230T, 12001-12007, 12011-12057, 13100-13133, 13151-13153, 35201-35206, 35226-35236, 35256-35266, 35286, 36000, 36005-36013, 36120-36140, 36400-36410, 36420-36430, 36440, 36555-36556, 36568-36569, 36600, 36640, 37202, 43752, 51701-51703, 62310-62319, 64400-64435, 64445-64450, 64479, 64483, 64490, 64493, 64505-64530, 75896, 76000-76001, 76942, 76998, 77001-77002, 92012-92014, 92960-92961, 93000-93010, 93040-93042, 93318, 93451-93461, 93530-93533, 93563, 93565-93568, 94002, 94200, 94250, 94680-94690, 94770,