

2024 Cardiac Surgery: Is the Procedure Medicare Inpatient Only or not?

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|-------|--|-------|--|
| xxxxx | Yellow = New CPT/HCPCS Code for CY 2024 | xxxxx | Green = Active CPT/HCPCS changed from "IP only" to "not IP only" on 1/1/2023 and under status denial exemption until 1/1/2025 |
| xxxxx | Blue = Active CPT/HCPCS changed from "not IP only" to "IP only" as of 1/1/2024 | xxxxx | Orange = Active CPT/HCPCS changed from "IP only" to "not IP only" on 1/1/2024 and under status denial exemption until 1/1/2026 |

Coronary Artery Bypass Graft (CABG) and other Revascularization Procedures

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|---|---------------------------------|--|
| 33140 | Transmyocardial laser revascularization, by thoracotomy; (separate procedure) | | |
| 33141 | Transmyocardial laser revascularization, by thoracotomy; performed at the time of other open cardiac procedure(s) (List separately in addition to code for primary procedure) | | |
| 33509 | Harvest of upper extremity artery, 1 segment, for coronary artery bypass procedure, endoscopic | | |
| 33510-33516 | Coronary artery bypass, vein only; 1-6 coronary venous graft(s); codes 33510, 33511, 33512, 33513, 33514, 33516 | | |
| 33517-33523 | Coronary artery bypass, using venous graft(s) and arterial graft(s); 1-6 vein graft(s) (List separately in addition to code for primary procedure); codes 33517, 33518, 33519, 33520, 33522, 33523 | | |
| 33530 | Reoperation, coronary artery bypass procedure or valve procedure, more than 1 month after original operation (List separately in addition to code for primary procedure) | | |
| 33533-33536 | Coronary artery bypass, using arterial graft(s); 1-4 or more coronary arterial graft(s); codes 33533, 33534, 33535, 33536 | | |
| 33572 | Coronary endarterectomy, open, any method, of left anterior descending, circumflex, or right coronary artery performed in conjunction with coronary artery bypass graft procedure, each vessel (List separately in addition to primary procedure) | | |

Valvular Procedures

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|--|---------------------------------|---|
| 0343T | Transcatheter mitral valve repair (TMVR) percutaneous approach including transseptal puncture when performed; initial prosthesis | 92990 | Percutaneous balloon valvuloplasty; pulmonary valve |
| 0344T | Transcatheter mitral valve repair (TMVR) percutaneous approach including transseptal puncture when performed; additional prosthesis (es) during same session (List separately in addition to code for primary procedure) | | |
| 0345T | Transcatheter mitral valve repair (TMVR) percutaneous approach via the coronary sinus | | |
| 0483T | Transcatheter mitral valve implantation/replacement (TMVI) with prosthetic valve; percutaneous approach, including transseptal puncture, when performed | | |
| 0484T | Transcatheter mitral valve implantation/replacement (TMVI) with prosthetic valve; transthoracic exposure (eg, thoracotomy, transapical) | | |
| 0543T | Transapical mitral valve repair, including transthoracic echocardiography, when performed, with placement of artificial chordae tendineae | | |
| 0544T | Transcatheter mitral valve annulus reconstruction, with implantation of adjustable annulus reconstruction device, percutaneous approach including transseptal puncture | | |
| 0545T | Transcatheter tricuspid valve annulus reconstruction | | |

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| | with implantation of adjustable annulus reconstruction device, percutaneous approach | | |
| 0569T | Transcatheter tricuspid valve repair, percutaneous approach; initial prosthesis | | |
| 0570T | Transcatheter tricuspid valve repair, percutaneous approach; each additional prosthesis during same session (List separately in addition to code for primary procedure) | | |
| 0646T | Transcatheter tricuspid valve implantation/replacement (TTVI) with prosthetic valve, percutaneous approach, including right heart catheterization, temporary pacemaker insertion, and selective right ventricular or right atrial angiography, when performed | | |
| 0805T | Transcatheter superior and inferior vena cava prosthetic valve implantation (i.e., caval valve implantation [CAVI]); percutaneous femoral vein approach | | |
| 0806T | Transcatheter superior and inferior vena cava prosthetic valve implantation (i.e., caval valve implantation [CAVI]); open femoral vein approach | | |
| 33361 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; percutaneous femoral artery approach | | |
| 33362 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open femoral artery approach | | |
| 33363 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open axillary artery approach | | |
| 33364 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open iliac artery approach | | |
| 33365 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; transaortic approach (eg, median sternotomy, mediastinotomy) | | |
| 33366 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; transapical exposure (eg, left thoracotomy) | | |
| 33367 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; cardiopulmonary bypass support with percutaneous peripheral arterial and venous cannulation (eg, femoral vessels) (List separately in addition to code for primary procedure) | | |
| 33368 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; cardiopulmonary bypass support with open peripheral arterial and venous cannulation (eg, femoral, iliac, axillary vessels) (List separately in addition to code for primary procedure) | | |
| 33369 | Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; cardiopulmonary bypass support with central arterial and venous cannulation (eg, aorta, right atrium, pulmonary artery) (List separately in addition to code for primary procedure) | | |
| 33390 | Valvuloplasty, aortic valve, open, with cardiopulmonary bypass; simple (ie, valvotomy, debridement, debulking, and/or simple commissural resuspension) | 92986 | Percutaneous balloon valvuloplasty; aortic valve |
| 33391 | Valvuloplasty, aortic valve, open, with cardiopulmonary bypass; complex (eg, leaflet extension, leaflet resection, leaflet reconstruction, or annuloplasty) | | |
| 33405 | Replacement, aortic valve, with cardiopulmonary bypass; with prosthetic valve other than homograft or stentless valve | | |
| 33406 | Replacement, aortic valve, with cardiopulmonary bypass; with allograft valve (freehand) | | |
| 33410 | Replacement, aortic valve, with cardiopulmonary bypass; with stentless tissue valve | | |
| 33411 | Replacement, aortic valve; with aortic annulus enlargement, noncoronary sinus | | |
| 33412 | Replacement, aortic valve; with transventricular aortic annulus enlargement (Konno procedure) | | |
| 33413 | Replacement, aortic valve; by translocation of autologous pulmonary valve with allograft replacement of pulmonary valve (Ross procedure) | | |
| 33420 | Valvotomy, mitral valve; closed heart | | |
| 33422 | Valvotomy, mitral valve; open heart, with cardiopulmonary bypass | | |
| 33425 | Valvuloplasty, mitral valve, with cardiopulmonary | 92987 | Percutaneous balloon valvuloplasty; mitral valve |

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| | bypass; | | |
| 33426 | Valvuloplasty, mitral valve, with cardiopulmonary bypass; with prosthetic ring | | |
| 33427 | Valvuloplasty, mitral valve, with cardiopulmonary bypass; radical reconstruction, with or without ring | | |
| 33430 | Replacement, mitral valve, with cardiopulmonary bypass | | |
| 33440 | Replacement, aortic valve; by translocation of autologous pulmonary valve and transventricular aortic annulus enlargement of the left ventricular outflow tract with valved conduit replacement of pulmonary valve (Ross-Konno procedure) | | |
| 33460 | Valvectomy, tricuspid valve, with cardiopulmonary bypass | | |
| 33463 | Valvuloplasty, tricuspid valve; without ring insertion | | |
| 33464 | Valvuloplasty, tricuspid valve; with ring insertion | | |
| 33465 | Replacement, tricuspid valve, with cardiopulmonary bypass | | |
| 33468 | Tricuspid valve repositioning and plication for Ebstein anomaly | | |
| 33471 | Valvotomy, pulmonary valve, closed heart; via pulmonary artery | | |
| 33474 | Valvotomy, pulmonary valve, open heart; with cardiopulmonary bypass | | |
| 33475 | Replacement, pulmonary valve | | |
| 33477 | Transcatheter pulmonary valve implantation, percutaneous approach, including pre-stenting of the valve delivery site, when performed | | |
| 33496 | Repair of non-structural prosthetic valve dysfunction with cardiopulmonary bypass (separate procedure) | | |
| 33600 | Closure of atrioventricular valve (mitral or tricuspid) by suture or patch | | |
| 33602 | Closure of semilunar valve (aortic or pulmonary) by suture or patch | | |

Atrial Septal and Ventricular Septal Procedures

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|---------------------------------|--|--|---|
| 33641 | Repair atrial septal defect, secundum, with cardiopulmonary bypass, with or without patch | 93580 | Percutaneous transcatheter closure of congenital interatrial communication (ie, Fontan fenestration, atrial septal defect) with implant |
| 33647 | Repair of atrial septal defect and ventricular septal defect, with direct or patch closure | | |
| 33660 | Repair of incomplete or partial atrioventricular canal (ostium primum atrial septal defect), with or without atrioventricular valve repair | | |
| 33665 | Repair of intermediate or transitional atrioventricular canal, with or without atrioventricular valve repair | | |
| 33670 | Repair of complete atrioventricular canal, with or without prosthetic valve | | |
| 33675 | Closure of multiple ventricular septal defects; | | |
| 33676 | Closure of multiple ventricular septal defects; with pulmonary valvotomy or infundibular resection (acyanotic) | | |
| 33677 | Closure of multiple ventricular septal defects; with removal of pulmonary artery band, with or without gusset | | |
| 33681 | Closure of single ventricular septal defect, with or without patch; | 93581 | Percutaneous transcatheter closure of a congenital ventricular septal defect with implant |
| 33684 | Closure of single ventricular septal defect, with or without patch; with pulmonary valvotomy or infundibular resection (acyanotic) | | |
| 33688 | Closure of single ventricular septal defect, with or without patch; with removal of pulmonary artery band, with or without gusset | | |
| 33732 | Repair of cor triatriatum or supravulvar mitral ring by resection of left atrial membrane | | |
| 33735 | Atrial septectomy or septostomy; closed heart (Blalock-Hanlon type operation) | | |
| 33736 | Atrial septectomy or septostomy; open heart with cardiopulmonary bypass | | |
| 33737 | Atrial septectomy or septostomy; open heart, with inflow occlusion | | |
| 33741 | Transcatheter atrial septostomy (TAS) for congenital | | |

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| | cardiac anomalies to create effective atrial flow, including all imaging guidance by the proceduralist, when performed, any method (eg, Rashkind, Sang-Park, balloon, cutting balloon, blade) | | |
| 33745 | Transcatheter intracardiac shunt (TIS) creation by stent placement for congenital cardiac anomalies to establish effective intracardiac flow, including all imaging guidance by the proceduralist, when performed, left and right heart diagnostic cardiac catheterization for congenital cardiac anomalies, and target zone angioplasty, when performed (eg, atrial septum, Fontan fenestration, right ventricular outflow tract, Mustard/Senning/Warden baffles); initial intracardiac shunt | | |
| 33746 | Transcatheter intracardiac shunt (TIS) creation by stent placement for congenital cardiac anomalies to establish effective intracardiac flow, including all imaging guidance by the proceduralist, when performed, left and right heart diagnostic cardiac catheterization for congenital cardiac anomalies, and target zone angioplasty, when performed (eg, atrial septum, Fontan fenestration, right ventricular outflow tract, Mustard/Senning/Warden baffles); each additional intracardiac shunt location (List separately in addition to code for primary procedure) | C9760 | Non-randomized, non-blinded procedure for nyha class ii, iii, iv heart failure; transcatheter implantation of interatrial shunt, including right and left heart catheterization, transeptal puncture, trans-esophageal echocardiography (tee)/intracardiac echocardiography (ice), and all imaging with or without guidance (e.g., ultrasound, fluoroscopy), performed in an approved investigational device exemption (ide) study |
| 93583 | Percutaneous transcatheter septal reduction therapy (eg, alcohol septal ablation) including temporary pacemaker insertion when performed | | |

Aorta/Great Vessel Procedures

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|---|---------------------------------|--|
| 33320 | Suture repair of aorta or great vessels; without shunt or cardiopulmonary bypass | | |
| 33321 | Suture repair of aorta or great vessels; with shunt bypass | | |
| 33322 | Suture repair of aorta or great vessels; with cardiopulmonary bypass | | |
| 33330 | Insertion of graft, aorta or great vessels; without shunt, or cardiopulmonary bypass | | |
| 33335 | Insertion of graft, aorta or great vessels; with cardiopulmonary bypass | | |
| 33404 | Construction of apical-aortic conduit | | |
| 33417 | Aortoplasty (gusset) for supra-avalvular stenosis | | |
| 33606 | Anastomosis of pulmonary artery to aorta (Damus-Kaye-Stansel procedure) | | |
| 33620 | Application of right and left pulmonary artery bands (eg, hybrid approach stage 1) | | |
| 33621 | Trans-thoracic insertion of catheter for stent placement with catheter removal and closure (eg, hybrid approach stage 1) | | |
| 33622 | Reconstruction of complex cardiac anomaly (eg, single ventricle or hypoplastic left heart) with palliation of single ventricle with aortic outflow obstruction and aortic arch hypoplasia, creation of cavopulmonary anastomosis, and removal of right and left pulmonary bands (eg, hybrid approach stage 2, Norwood, bidirectional Glenn, | | |
| 33690 | Banding of pulmonary artery | | |
| 33724 | Repair of isolated partial anomalous pulmonary venous return (eg, Scimitar Syndrome) | | |
| 33726 | Repair of pulmonary venous stenosis | | |
| 33730 | Complete repair of anomalous pulmonary venous return (supracardiac, intracardiac, or infracardiac types) | | |
| 33750 | Shunt; subclavian to pulmonary artery (Blalock-Taussig type operation) | 92997 | Percutaneous transluminal pulmonary artery balloon angioplasty; single vessel |
| 33755 | Shunt; ascending aorta to pulmonary artery (Waterston type operation) | 92998 | Percutaneous transluminal pulmonary artery balloon angioplasty; each additional vessel (List separately in addition to code for primary procedure) |
| 33762 | Shunt; descending aorta to pulmonary artery (Potts-Smith type operation) | | |
| 33764 | Shunt; central, with prosthetic graft | | |
| 33766 | Shunt; superior vena cava to pulmonary artery for flow to 1 lung (classical Glenn procedure) | | |

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| 33767 | Shunt; superior vena cava to pulmonary artery for flow to both lungs (bidirectional Glenn procedure) | | |
| 33768 | Anastomosis, cavopulmonary, second superior vena cava (List separately in addition to primary procedure) | | |
| 33770 | Repair of transposition of the great arteries with ventricular septal defect and subpulmonary stenosis; without surgical enlargement of ventricular septal defect | | |
| 33771 | Repair of transposition of the great arteries with ventricular septal defect and subpulmonary stenosis; with surgical enlargement of ventricular septal defect | | |
| 33774 | Repair of transposition of the great arteries, atrial baffle procedure (eg, Mustard or Senning type) with cardiopulmonary bypass; | | |
| 33775 | Repair of transposition of the great arteries, atrial baffle procedure (eg, Mustard or Senning type) with cardiopulmonary bypass; with removal of pulmonary band | | |
| 33776 | Repair of transposition of the great arteries, atrial baffle procedure (eg, Mustard or Senning type) with cardiopulmonary bypass; with closure of ventricular septal defect | | |
| 33777 | Repair of transposition of the great arteries, atrial baffle procedure (eg, Mustard or Senning type) with cardiopulmonary bypass; with repair of subpulmonic obstruction | | |
| 33778 | Repair of transposition of the great arteries, aortic pulmonary artery reconstruction (eg, Jatene type); | | |
| 33779 | Repair of transposition of the great arteries, aortic pulmonary artery reconstruction (eg, Jatene type); with removal of pulmonary band | | |
| 33780 | Repair of transposition of the great arteries, aortic pulmonary artery reconstruction (eg, Jatene type); with closure of ventricular septal defect | | |
| 33781 | Repair of transposition of the great arteries, aortic pulmonary artery reconstruction (eg, Jatene type); with repair of subpulmonic obstruction | | |
| 33786 | Total repair, truncus arteriosus (Rastelli type operation) | | |
| 33788 | Reimplantation of an anomalous pulmonary artery | | |
| 33800 | Aortic suspension (aortopexy) for tracheal decompression (eg, for tracheomalacia) (separate procedure) | | |
| 33802 | Division of aberrant vessel (vascular ring); | | |
| 33803 | Division of aberrant vessel (vascular ring); with reanastomosis | | |
| 33813 | Obliteration of aortopulmonary septal defect; without cardiopulmonary bypass | | |
| 33814 | Obliteration of aortopulmonary septal defect; with cardiopulmonary bypass | | |
| 33820 | Repair of patent ductus arteriosus; by ligation | 93582 | Percutaneous transcatheter closure of patent ductus arteriosus |
| 33822 | Repair of patent ductus arteriosus; by division, younger than 18 years | | |
| 33824 | Repair of patent ductus arteriosus; by division, 18 years and older | | |
| 33840 | Excision of coarctation of aorta, with or without associated patent ductus arteriosus; with direct anastomosis | | |
| 33845 | Excision of coarctation of aorta, with or without associated patent ductus arteriosus; with graft | | |
| 33851 | Excision of coarctation of aorta, with or without associated patent ductus arteriosus; repair using either left subclavian artery or prosthetic material as gusset for enlargement | | |
| 33852 | Repair of hypoplastic or interrupted aortic arch using autogenous or prosthetic material; without cardiopulmonary bypass | | |
| 33853 | Repair of hypoplastic or interrupted aortic arch using autogenous or prosthetic material; with cardiopulmonary bypass | | |
| 33858 | Ascending aorta graft, with cardiopulmonary bypass, includes valve suspension, when performed; for aortic dissection | | |
| 33859 | Ascending aorta graft, with cardiopulmonary bypass, includes valve suspension, when performed; for aortic disease other than dissection (eg, aneurysm) | | |

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| 33863 | Ascending aorta graft, with cardiopulmonary bypass, with aortic root replacement using valved conduit and coronary reconstruction (eg, Bentall) | | |
| 33864 | Ascending aorta graft, with cardiopulmonary bypass with valve suspension, with coronary reconstruction and valve-sparing aortic root remodeling (eg, David Procedure, Yacoub Procedure) | 33866 | Aortic hemiarch graft including isolation and control of the arch vessels, beveled open distal aortic anastomosis extending under one or more of the arch vessels, and total circulatory arrest or isolated cerebral perfusion (List separately in addition to code for primary procedure) |
| 33871 | Transverse aortic arch graft, with cardiopulmonary bypass, with profound hypothermia, total circulatory arrest and isolated cerebral perfusion with reimplantation of arch vessel(s) (eg, island pedicle or individual arch vessel reimplantation) | | |
| 33875 | Descending thoracic aorta graft, with or without bypass | | |
| 33877 | Repair of thoracoabdominal aortic aneurysm with graft, with or without cardiopulmonary bypass | | |
| 76984 | Ultrasound, intraoperative thoracic aorta (e.g., epiaortic), diagnostic | | |

Electrophysiology Procedures (See Cardiology List for Additional Procedures)

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|--|---------------------------------|---|
| 33202 | Insertion of epicardial electrode(s); open incision (eg, thoracotomy, median sternotomy, subxiphoid approach) | | Insertion, replacement, repair, revision, removal (except by thoracotomy), or upgrade of pacemaker, icd, generator, or transvenous electrodes; codes 33206, 33207, 33208, 33210, 33211, 33212, 33213, 33214, 33215, 33216, 33217, 33218, 33220, 33221, 33224, 33225, 33226, 33227, 33228, 33229, 33230, 33231, 33233, 33234, 33235, 33240, 33241, 33244, 33249, 33262, 33263, 33264 |
| 33203 | Insertion of epicardial electrode(s); endoscopic approach (eg, thoracoscopy, pericardioscopy) | 33222 | Relocation of skin pocket for pacemaker |
| 33236 | Removal of permanent epicardial pacemaker and electrodes by thoracotomy; single lead system, atrial or ventricular | 33223 | Relocation of skin pocket for cardioverter-defibrillator |
| 33237 | Removal of permanent epicardial pacemaker and electrodes by thoracotomy; dual lead system | | |
| 33238 | Removal of permanent transvenous electrode(s) by thoracotomy | | |
| 33243 | Removal of single or dual chamber pacing cardioverter-defibrillator electrode(s); by thoracotomy | | |
| 33250 | Operative ablation of supraventricular arrhythmogenic focus or pathway (eg, Wolff-Parkinson-White, atrioventricular node re-entry), tract(s) and/or focus (foci); without cardiopulmonary bypass | | |
| 33251 | Operative ablation of supraventricular arrhythmogenic focus or pathway (eg, Wolff-Parkinson-White, atrioventricular node re-entry), tract(s) and/or focus (foci); with cardiopulmonary bypass | | |
| 33254 | Operative tissue ablation and reconstruction of atria, limited (eg, modified maze procedure) | | |
| 33255 | Operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure); without cardiopulmonary bypass | | |
| 33256 | Operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure); with cardiopulmonary bypass | | |
| 33257 | Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), limited (eg, modified maze procedure) (List separately in addition to code for primary procedure) | | |
| 33258 | Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), extensive (eg, maze procedure), without cardiopulmonary bypass (List separately in addition to code for primary procedure) | | |
| 33259 | Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), extensive (eg, maze procedure), with cardiopulmonary bypass (List separately in addition to code for primary procedure) | | |
| 33261 | Operative ablation of ventricular arrhythmogenic focus with cardiopulmonary bypass | | |

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| 33265 | Endoscopy, surgical; operative tissue ablation and reconstruction of atria, limited (eg, modified maze procedure), without cardiopulmonary bypass | | |
| 33266 | Endoscopy, surgical; operative tissue ablation and reconstruction of atria, extensive (eg, maze procedure), without cardiopulmonary bypass | | |
| | | 92960 | Cardioversion, elective, electrical conversion of arrhythmia; external |
| | | 92961 | Cardioversion, elective, electrical conversion of arrhythmia; internal (separate procedure) |

Pericardial Surgery

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|--|---------------------------------|--|
| 33017 | Pericardial drainage with insertion of indwelling catheter, percutaneous, including fluoroscopy and/or ultrasound guidance, when performed; 6 years and older without congenital cardiac anomaly | 33016 | Pericardiocentesis, including imaging guidance, when performed |
| 33018 | Pericardial drainage with insertion of indwelling catheter, percutaneous, including fluoroscopy and/or ultrasound guidance, when performed; birth through five years of age or any age with congenital cardiac anomaly | | |
| 33019 | Pericardial drainage with insertion of indwelling catheter, percutaneous, including CT guidance | | |
| 33020 | Pericardiotomy for removal of clot or foreign body (primary procedure) | | |
| 33025 | Creation of pericardial window or partial resection for drainage | | |
| 33030 | Pericardiectomy, subtotal or complete; without cardiopulmonary bypass | | |
| 33031 | Pericardiectomy, subtotal or complete; with cardiopulmonary bypass | | |
| 33050 | Resection of pericardial cyst or tumor | | |

Sternal Surgery

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|--|---------------------------------|--|
| 21620 | Ostectomy of sternum, partial | | |
| 21627 | Sternal debridement | | |
| 21630 | Radical resection of sternum; | | |
| 21632 | Radical resection of sternum; with mediastinal lymphadenectomy | | |
| 21740 | Reconstructive repair of pectus excavatum or carinatum; open | 21742 | Reconstructive repair of pectus excavatum or carinatum; minimally invasive approach (Nuss procedure), without thoracoscopy |
| 21750 | Closure of median sternotomy separation with or without debridement (separate procedure) | 21743 | Reconstructive repair of pectus excavatum or carinatum; minimally invasive approach (Nuss procedure), with thoracoscopy |
| 21825 | Open treatment of sternum fracture with or without skeletal fixation | 21820 | Closed treatment of sternum fracture |

Circulatory Assist/Replacement Procedures

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|---|---------------------------------|--|
| 33927 | Implantation of a total replacement heart system (artificial heart) with recipient cardiectomy | | |
| 33928 | Removal and replacement of total replacement heart system (artificial heart) | | |
| 33929 | Removal of a total replacement heart system (artificial heart) for heart transplantation (List separately in addition to code for primary procedure) | | |
| 33946-33949 | Extracorporeal membrane oxygenation (ECMO)/extracorporeal life support (ECLS) provided by physician; initiation or daily management, veno-venous or veno-arterial; codes 33946, 33947, 33948, 33949 | | |
| | Extracorporeal membrane oxygenation (ECMO)/extracorporeal life support (ECLS) provided by physician; insertion, reposition, or removal of peripheral or central cannula(e); percutaneous, open, | | |

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| | sternotomy, or thoracotomy; codes 33951, 33952, 33953, 33954, 33955, 33956, 33957, 33958, 33959, 33962, 33963, 33964, 33965, 33966, 33969, 33984, 33985, 33986 | | |
| 33967 | Insertion of intra-aortic balloon assist device, percutaneous | | |
| 33968 | Removal of intra-aortic balloon assist device, percutaneous | | |
| 33970 | Insertion of intra-aortic balloon assist device through the femoral artery, open approach | | |
| 33971 | Removal of intra-aortic balloon assist device including repair of femoral artery, with or without graft | | |
| 33973 | Insertion of intra-aortic balloon assist device through the ascending aorta | | |
| 33974 | Removal of intra-aortic balloon assist device from the ascending aorta, including repair of the ascending aorta, with or without graft | | |
| 33975 | Insertion of ventricular assist device; extracorporeal, single ventricle | | |
| 33976 | Insertion of ventricular assist device; extracorporeal, biventricular | | |
| 33977 | Removal of ventricular assist device; extracorporeal, single ventricle | | |
| 33978 | Removal of ventricular assist device; extracorporeal, biventricular | | |
| 33979 | Insertion of ventricular assist device, implantable intracorporeal, single ventricle | | |
| 33980 | Removal of ventricular assist device, implantable intracorporeal, single ventricle | | |
| 33981 | Replacement of extracorporeal ventricular assist device, single or biventricular, pump(s), single or each pump | | |
| 33982 | Replacement of ventricular assist device pump(s); implantable intracorporeal, single ventricle, without cardiopulmonary bypass | | |
| 33983 | Replacement of ventricular assist device pump(s); implantable intracorporeal, single ventricle, with cardiopulmonary bypass | | |
| 33987 | Arterial exposure with creation of graft conduit (eg, chimney graft) to facilitate arterial perfusion for ECMO/ECLS | | |
| 33988 | Insertion of left heart vent by thoracic incision (eg, sternotomy, thoracotomy) for ECMO/ECLS | | |
| 33989 | Removal of left heart vent by thoracic incision (eg, sternotomy, thoracotomy) for ECMO/ECLS | | |
| 33990 | Insertion of ventricular assist device, percutaneous including radiological supervision and interpretation; arterial access only (e.g. Impella device) | | |
| 33991 | Insertion of ventricular assist device, percutaneous including radiological supervision and interpretation; both arterial and venous access, with transeptal puncture (e.g. Impella device) | | |
| 33992 | Removal of percutaneous ventricular assist device at separate and distinct session from insertion (e.g. Impella device) | | |
| 33993 | Repositioning of percutaneous ventricular assist device with imaging guidance at separate and distinct session from insertion (e.g. Impella device) | | |
| 33995 | Insertion of ventricular assist device, percutaneous, including radiological supervision and interpretation; right heart, venous access only (e.g. Impella device) | | |
| 33997 | Removal of percutaneous right heart ventricular assist device, venous cannula, at separate and distinct session from insertion (e.g. Impella device) | | |
| 92970 | Cardioassist-method of circulatory assist; internal | | |
| 92971 | Cardioassist-method of circulatory assist; external | | |

Transplantation Procedures

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|---|---------------------------------|--|
| 33930 | Donor cardiectomy-pneumonectomy (including cold preservation) | | |
| 33933 | Backbench standard preparation of cadaver donor heart/lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to | | |

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| | prepare aorta, superior vena cava, inferior vena cava, and trachea for implantation | | |
| 33935 | Heart-lung transplant with recipient cardiectomy-pneumonectomy | | |
| 33940 | Donor cardiectomy (including cold preservation) | | |
| 33944 | Backbench standard preparation of cadaver donor heart allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare aorta, superior vena cava, inferior vena cava, pulmonary artery, and left atrium for implantation | | |
| 33945 | Heart transplant, with or without recipient cardiectomy | | |

Other Cardiac Surgery

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|---|---------------------------------|--|
| 33267 | Exclusion of left atrial appendage, open, any method (eg, excision, isolation via stapling, oversewing, ligation, plication, clip) | | |
| 33268 | Exclusion of left atrial appendage, open, performed at the time of other sternotomy or thoracotomy procedure(s), any method (eg, excision, isolation via stapling, oversewing, ligation, plication, clip) | | |
| 33269 | Exclusion of left atrial appendage, thoracoscopic, any method (eg, excision, isolation via stapling, oversewing, ligation, plication, clip) | | |
| 33120 | Excision of intracardiac tumor, resection with cardiopulmonary bypass | | |
| 33130 | Resection of external cardiac tumor | | |
| 33300 | Repair of cardiac wound; without bypass | | |
| 33305 | Repair of cardiac wound; with cardiopulmonary bypass | | |
| 33310 | Cardiotomy, exploratory (includes removal of foreign body, atrial or ventricular thrombus); without bypass | | |
| 33315 | Cardiotomy, exploratory (includes removal of foreign body, atrial or ventricular thrombus); with cardiopulmonary bypass | | |
| 33414 | Repair of left ventricular outflow tract obstruction by patch enlargement of the outflow tract | | |
| 33415 | Resection or incision of subvalvular tissue for discrete subvalvular aortic stenosis | | |
| 33416 | Ventriculomyotomy (-myectomy) for idiopathic hypertrophic subaortic stenosis (eg, asymmetric septal hypertrophy) | | |
| 33476 | Right ventricular resection for infundibular stenosis, with or without commissurotomy | | |
| 33478 | Outflow tract augmentation (gusset), with or without commissurotomy or infundibular resection | | |
| 33500 | Repair of coronary arteriovenous or arteriocardiac chamber fistula; with cardiopulmonary bypass | | |
| 33501 | Repair of coronary arteriovenous or arteriocardiac chamber fistula; without cardiopulmonary bypass | | |
| 33502 | Repair of anomalous coronary artery from pulmonary artery origin; by ligation | | |
| 33503 | Repair of anomalous coronary artery from pulmonary artery origin; by graft, without cardiopulmonary bypass | | |
| 33504 | Repair of anomalous coronary artery from pulmonary artery origin; by graft, with cardiopulmonary bypass | | |
| 33505 | Repair of anomalous coronary artery from pulmonary artery origin; with construction of intrapulmonary artery tunnel (Takeuchi procedure) | | |
| 33506 | Repair of anomalous coronary artery from pulmonary artery origin; by translocation from pulmonary artery to aorta | | |
| 33507 | Repair of anomalous (eg, intramural) aortic origin of coronary artery by unroofing or translocation | | |
| 33542 | Myocardial resection (eg, ventricular aneurysmectomy) | | |
| 33545 | Repair of postinfarction ventricular septal defect, with or without myocardial resection | | |
| 33548 | Surgical ventricular restoration procedure, includes prosthetic patch, when performed (eg, ventricular remodeling, SVR, SAVER, Dor procedures) | | |
| 33608 | Repair of complex cardiac anomaly other than | | |

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|-------|--|-------|-------------------------------------|
| | pulmonary atresia with ventricular septal defect by construction or replacement of conduit from right or left ventricle to pulmonary artery | | |
| 33610 | Repair of complex cardiac anomalies (eg, single ventricle with subaortic obstruction) by surgical enlargement of ventricular septal defect | | |
| 33611 | Repair of double outlet right ventricle with intraventricular tunnel repair; | | |
| 33612 | Repair of double outlet right ventricle with intraventricular tunnel repair; with repair of right ventricular outflow tract obstruction | | |
| 33615 | Repair of complex cardiac anomalies (eg, tricuspid atresia) by closure of atrial septal defect and anastomosis of atria or vena cava to pulmonary artery (simple Fontan procedure) | | |
| 33617 | Repair of complex cardiac anomalies (eg, single ventricle) by modified Fontan procedure | | |
| 33619 | Repair of single ventricle with aortic outflow obstruction and aortic arch hypoplasia (hypoplastic left heart syndrome) (eg, Norwood procedure) | | |
| 33645 | Direct or patch closure, sinus venosus, with or without anomalous pulmonary venous drainage | | |
| 33692 | Complete repair tetralogy of Fallot without pulmonary atresia; | | |
| 33694 | Complete repair tetralogy of Fallot without pulmonary atresia; with transannular patch | | |
| 33697 | Complete repair tetralogy of Fallot with pulmonary atresia including construction of conduit from right ventricle to pulmonary artery and closure of ventricular septal defect | | |
| 33702 | Repair sinus of Valsalva fistula, with cardiopulmonary bypass; | | |
| 33710 | Repair sinus of Valsalva fistula, with cardiopulmonary bypass; with repair of ventricular septal defect | | |
| 33720 | Repair sinus of Valsalva aneurysm, with cardiopulmonary bypass | | |
| 33782 | Aortic root translocation with ventricular septal defect and pulmonary stenosis repair (ie, Nikaidoh procedure); without coronary ostium reimplantation | | |
| 33783 | Aortic root translocation with ventricular septal defect and pulmonary stenosis repair (ie, Nikaidoh procedure); with reimplantation of 1 or both coronary ostia | 33999 | Unlisted procedure, cardiac surgery |
| 76987 | Intraoperative epicardial cardiac (e.g., echocardiography) ultrasound for congenital heart disease, diagnostic; including placement and manipulation of transducer, image acquisition, interpretation and report | | |
| 76988 | Intraoperative epicardial cardiac ultrasound (ie, echocardiography) for congenital heart disease, diagnostic; placement, manipulation of transducer, and image acquisition only | | |
| 76989 | Intraoperative epicardial cardiac ultrasound (ie, echocardiography) for congenital heart disease, diagnostic; interpretation and report only | | |

Miscellaneous Surgery

| Inpatient Only Procedure | | Not an Inpatient Only Procedure | |
|--------------------------|-----------------------------------|---------------------------------|---|
| 32160 | Thoracotomy; with cardiac massage | 32551 | Tube thoracostomy, includes connection to drainage system (eg, water seal), when performed, open (separate procedure) |