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CPT® Codes and Physician Reimbursement

Medicare Part B pays for physician services based upon the Medicare Physician Fee Schedule (MPFS). Fee schedule amounts are calculated according to the Resource-Based Relative Value Scale (RBRVS), which is updated each year. Procedures are reported using CPT® codes. The 2018 CPT Professional Edition Manual also provides specific instructions for reporting particular families of codes. Individual payers may also have guidelines and coverage policies regarding certain services. The following table lists the most commonly used codes for coronary procedures.

Procedure Codes and Physician Reimbursement for Coronary Procedures				
CPT® Code	Description	2018 Work RVUs	2018 Medicare Base Payment Rate ²	
			Non-Facility	Facility
Diagnostic Procedures and Imaging				
93451	Right heart catheterization	2.47	\$745	\$136
93452	Left heart catheterization	4.50	\$847	\$249
93453	Right and left heart catheterization	5.99	\$1,101	\$333
93454	Coronary angiography	4.54	\$859	\$252
93455	Coronary angiography with bypass grafts	5.29	\$1,006	\$294
93456	Coronary angiography with right heart catheterization	5.90	\$1,088	\$328
93457	Coronary angiography and bypass grafts, with right heart catheterization	6.64	\$1,232	\$369
93458	Coronary angiography with left heart catheterization	5.60	\$1,036	\$311
93459	Coronary angiography and bypass grafts, with left heart catheterization	6.35	\$1,148	\$353
93460	Coronary angiography with right and left heart catheterization	7.10	\$1,237	\$395
93461	Coronary angiography with bypass grafts, right and left heart catheterization	7.85	\$1,416	\$436
+93462	Left heart access via transseptal or transapical puncture	3.73	\$220	\$220
+93463	Pharmacological agent administration with hemodynamic assessment	2.00	\$101	\$101
+93464	Physiologic exercise study with hemodynamic assessment	1.80	\$261	\$90
93503	Placement of flow directed catheter (eg, Swan-Ganz) for monitoring	2.00	\$0	\$108
93505	Endomyocardial biopsy	4.12	\$719	\$228

¹ 2018 Current Procedural Terminology (CPT®), ©2016 American Medical Association. CPT® is a registered trademark of the American Medical Association.

² The MPFS payment amounts are based upon data elements published by the Centers for Medicare and Medicaid Services (CMS) in the Final Rule [CMS-1677-F] on August 14, 2017, and published in the Federal Register on December 14, 2017, with a conversion factor of \$35.99. CMS may make adjustments to any or all of the data inputs from time to time.

Procedure Codes and Physician Reimbursement for Coronary Procedures				
CPT® Code	Description	2018 Work RVUs	2018 Medicare Base Payment Rate ²	
			Non-Facility	Facility
93530	Right heart catheterization for congenital cardiac anomalies	3.97	\$0	\$214
93531	Combined right & retrograde left heart cath for congenital cardiac anomalies	8.34	\$0	\$446
93532	Combined right & transseptal left heart cath through intact septum for congenital cardiac anomalies	9.99	\$0	\$537
93533	Combined right & transseptal left heart cath through existing septum opening for congenital cardiac anomalies	6.69	\$0	\$361
93561	Indicator dilution study with cardiac output (separate procedure)	0.25	\$0	\$13
93562	Indicator dilution study; subsequent measurement of cardiac output	0.01	\$0	\$1
+93563	Injection/imaging for coronary angiography with cath for congenital anomaly	1.11	\$61	\$61
+93564	Injection/imaging for bypass graft angiography with cath for congenital anomaly	1.13	\$64	\$64
+93565	Injection/imaging for left heart angiography with cath for congenital anomaly	0.86	\$47	\$47
+93566	Injection/imaging for right heart angiography with cath for congenital anomaly	0.86	\$166	\$49
+93567	Injection/imaging procedure for supraaortic aortography	0.97	\$140	\$55
+93568	Injection/imaging procedure for pulmonary angiography	0.88	\$149	\$50
+93571	Intravascular coronary flow reserve measurement, initial vessel	1.80	\$0	\$100
+93572	Intravascular coronary flow reserve measurement, each additional vessel	1.44	\$0	\$80
+92978	Coronary vessel or graft imaging with IVUS or OCT, initial vessel	1.80	\$0	\$100
+92979	Coronary vessel or graft imaging with IVUS or OCT, each additional vessel	1.44	\$0	\$80
Therapeutic / Interventional Procedures				
92920	Angioplasty, single vessel	9.85	\$0	\$557
+92921	Angioplasty, additional branch	0.00	\$0	\$0
92924	Atherectomy, single vessel	11.74	\$0	\$664
+92925	Atherectomy, additional branch	0.00	\$0	\$0
92928	Stent, single vessel	10.96	\$0	\$620
+92929	Stent, additional branch	0.00	\$0	\$0
92933	Atherectomy + stent, single vessel	12.29	\$0	\$694
+92934	Atherectomy + stent, additional branch	0.00	\$0	\$0
92937	PCI of or through bypass, any method(s)	10.95	\$0	\$619
+92938	PCI of or through bypass, additional branch	0.00	\$0	\$0
92941	PCI of acute MI, all interventions, single vessel	12.31	\$0	\$696
92943	PCI of chronic total occlusion, any method(s)	12.31	\$0	\$696
+92944	PCI of chronic total occlusion, additional branch	0.00	\$0	\$0
+92973	Percutaneous coronary thrombectomy, mechanical	3.28	\$0	\$185

Procedure Codes and Physician Reimbursement for Coronary Procedures				
CPT® Code	Description	2018 Work RVUs	2018 Medicare Base Payment Rate ²	
			Non-Facility	Facility
Other Supportive Therapies				
92975	Thrombolysis, coronary, by intracoronary infusion	6.99	\$0	\$395
92977	Thrombolysis, coronary, by intravenous infusion	0.00	\$70	\$0
33967	Insertion of intra-aortic balloon assist device, percutaneous	4.84	\$0	\$272
33968	Removal of intra-aortic balloon assist device, percutaneous	0.64	\$0	\$35
33990	Insert ventricular assist device (VAD), percutaneous, arterial access only	7.90	\$0	\$446
33991	Insert VAD, percutaneous, arterial & venous access, transseptal	11.63	\$0	\$658
33992	Remove ventricular assist device, at separate session from insertion	3.75	\$0	\$210
33993	Reposition ventricular assist device, with imaging, at separate session	3.26	\$0	\$183
G0269	Placement of occlusive device into vascular access site	0.00	\$0	\$0

Note: Procedures with a zero value in the non-facility column are carrier priced outside a facility setting, and may not be approved. Additional branch interventions and placement of occlusive device are packaged into the primary code.

Ambulatory Surgery Center (ASC) Reimbursement

In general, the ASC payment rate for services is set at approximately 65% of the payment rate for the same service under the HOPPS, with some exceptions.³ For example, for device-intensive services (where device costs account for more than 50 percent of the total cost of the service), ASCs receive the same payment rate for the device cost as under the HOPPS, with payment for the service portion of the ASC rate calculated at the usual percentage rate of the corresponding OPSS service payment. ASCs will not typically bill separately for these devices.⁴

CMS has assigned APC-based payment rates in an Ambulatory Surgery Center only to surgical procedure codes – CPT® codes in the range 10000 – 69999, plus a few Category III codes, C-codes, and G-codes – and does not include cardiac catheterization codes. Intra-aortic balloon and ventricular assist devices are designated inpatient-only.⁵

Hospital Outpatient Reimbursement

Outpatient facility claims also report CPT® and HCPCS⁶ codes, which map to Ambulatory Payment Classifications (APCs), which assign a Medicare hospital outpatient payment rate for the service. Depending upon the services provided, hospitals may receive payment for more than one APC per patient encounter. If a claim contains services that result in an APC payment but also contains packaged services, no separate payment for the packaged services will be provided, as these are included in the APC. However, charges related to the packaged services are used for outlier and Transitional Corridor Payments (TOPs) as well as for future rate setting. Therefore, it is extremely important that hospitals report all HCPCS codes consistent with their descriptors; CPT® and/or CMS instructions and correct coding principles, and all charges for all services they furnish, whether payment for the services is made separately or is packaged.

The C-codes below are reported by outpatient facilities for cases that involve drug-eluting stents. Please note that coronary interventions of additional branches are bundled procedures, which will not be reimbursed under the Medicare physician fee schedule or the HOPPS payment methodology.

⁶ Healthcare Common Procedural Coding System (HCPCS) codes are developed by CMS and available in book form from several different publishers.

⁷ Medicare and Medicaid Programs: Hospital Outpatient Prospective Payment and Ambulatory Surgical Center Payment Systems and Quality Reporting Programs; Addenda AA, BB, and D1; <http://www.cms.gov/HospitalOutpatientPPS>, published by the Centers for Medicare and Medicaid Services (CMS) in the Final Rule [CMS-1678-FC] on August 14, 2017, and published in the Federal Register on December 14, 2017.

⁸ Healthcare Common Procedural Coding System (HCPCS) codes are developed by CMS and available in book form from several different publishers.

Procedure Codes and Physician Reimbursement for Coronary Procedures				
APC	Description	Status Indicator	2018 Relative Weight	2018 Medicare Base Payment Rate ⁷
Diagnostic Procedures and Imaging				
5181	Level 1 Vascular Procedures (code 93503)	T	7.7894	\$613
5182	Level 2 Vascular Procedures (code 93505)	T	12.4994	\$983
5192	Level 2 Endovascular Procedures (code 92920)	J1	61.6254	\$4,846.00
5193	Level 3 Endovascular Procedures (codes 92924, 92928, 92937, 92941, 92943, C9600, C9604)	J1	109.361	\$8,600
5194	Level 4 Endovascular Procedures (codes 92933, C9602, C9606, C9607)	J1	169.0312	\$13,292
5694	Level 4 Drug Administration (code 92977)	T	3.7838	\$298

Notes: Codes 33697 – 33993 and 92975 are not reimbursed through HOPPS, but are classified as inpatient-only procedures. Most add-on codes are status "N", indicating they are packaged into the primary procedure.

Procedure Codes and Physician Reimbursement for Coronary Procedures		
Code	Description	APC
C9600	Drug eluting stent, single vessel	5193
+C9601	Drug eluting stent, additional branch	Bundled
C9602	Atherectomy + drug eluting stent, single vessel	5194
+C9603	Atherectomy + drug eluting stent, additional branch	Bundled
C9604	PCI of or through bypass, any method(s), with drug-eluting stent	5193
+C9605	PCI of or through bypass, any method(s), with drug-eluting stent, additional branch	Bundled
C9606	PCI of acute MI, all interventions, with drug-eluting stent, single vessel	5194
C9607	PCI of chronic total occlusion, any method(s), with drug-eluting stent	5194
+C9608	PCI of chronic total occlusion, any method(s), with drug-eluting stent, additional branch	Bundled

Notes: Additional C-codes may be reported for devices, such as catheters, introducers, guidewires, and stents. These devices are packaged into the reimbursement for the procedure and not reimbursed separately, but are tracked for cost statistics.

OPPS payment status indicators (SIs) indicate whether a service represented by a HCPCS or CPT® code is payable under the OPPS or another payment system, and also whether particular OPPS policies apply to the code (eg, multiple procedure discounts or other payment reductions, full separate payment, or is a service packaged with another procedure). Relevant OPPS Status Indicators include:

- C Inpatient Procedures; not paid under OPPS.
- J1 Comprehensive code: all covered Part B services on the claim are packaged with the primary J1 service for the claim, except services with OPPS SI = F, G, H, L and U; ambulance services; diagnostic and screening mammography; all preventive services; and certain Part B inpatient services.
- N Payment is packaged into payment for other services, including outliers; no separate APC payment.
- T Significant procedure, multiple procedure reduction applies; separate APC payment.

Modifiers

When submitting a particular service on a claim, it is sometimes necessary to report a modifier with the CPT® code. A modifier allows a way to indicate that a service or procedure that has been performed has been altered by some specific circumstance but not changed in its definition or code. Modifiers also enable health care professionals to effectively respond to payment policy requirements established by other entities. Some modifiers apply to either physician or hospital outpatient claims; some may only be relevant for one or the other. A complete list of modifiers is included in the HCPCS and CPT® coding books; the concept of modifiers does not apply to ICD-10-PCS procedure codes.

Hospital Inpatient Reimbursement

Selecting the Appropriate ICD-10-PCS Code

ICD-10-PCS, including the ICD-10-PCS Official Guidelines for Coding and Reporting, replaced ICD-9-CM procedure codes for dates of discharge for inpatients that occur on or after October 1, 2015. ICD-10-PCS is not related to ICD-10-CM, but was developed specifically to meet healthcare needs for a procedure code system.⁹

The ICD-10 updates for the Fiscal Year (FY) 2018 represents the first code update since the implementation of ICD-10-CM/PCS in the US.

The following table lists some of the most commonly used code categories for coronary procedures. Given the large number of individual procedure codes available for procedures in ICD-10-PCS, please refer to your coding reference book or coding software to look up the associated Body Part, Approach, Contrast, Device and/or Qualifier that best aligns to the procedure performed as identified below.

Common ICD-10-PCS Coronary Procedure Code Categories			
Procedure	Description	Procedure	Description
Angiography and Other Imaging		Percutaneous Atherectomy or Thrombectomy	
B21- - - -	Imaging of heart, fluoroscopy	02C-3ZZ	Percutaneous extirpation of coronary arteries
B31- - - -	Imaging of upper arteries, fluoroscopy	03C-3ZZ	Percutaneous extirpation of upper arteries
B22- - - -	Computed tomography, heart	Other Supportive Therapies	
B32- - - -	Computed tomography, upper arteries	3E0- - - -	Injection or infusion
B24-ZZ3	Intravascular imaging of coronary vessels	5A0- - - -	Extracorporeal assistance (includes super-saturated oxygen therapy, balloon pump, impeller pump)
Measurement and Monitoring			
4A023N -	Measurement, cardiac, percutaneous, sampling and pressure (cardiac cath)	02HA3R-	Insertion of percutaneous external heart assist device
4A033- -	Measurement, arterial, percutaneous	02PYXDZ	Non-operative removal of heart assist system
Percutaneous Angioplasty / Stent Placement			
027-3 - -	Percutaneous dilation of coronary arteries		
037-3 - -	Percutaneous dilation of upper arteries		

Under ICD-10-PCS, the 4th character Body Part for coronary interventions indicates number of sites within the coronary arteries, so a single code may capture all services provided. However, if different methodologies are used in different sites (e.g., angioplasty only, angioplasty with stenting, or atherectomy), or if multiple root operations with different objectives are performed on the same body part, code each separately.⁹

⁹ CMS Fact Sheet: ICD-10-CM/PCS, The Next Generation of Coding, <https://www.cms.gov/Medicare/Coding/ICD10/downloads/ICD-10Overview.pdf> and 2016 ICD-10-PCS Reference Manual, <https://www.cms.gov/Medicare/Coding/ICD10/2016-ICD-10-PCS-and-GEMs.html>

MS-DRGs

Medicare reimburses inpatient hospital services under the Inpatient Prospective Payment System (IPPS), which bases payment on Medicare Severity Diagnosis-Related Groups (MS-DRGs). The MS-DRG payment system groups similar diagnoses into a single payment level, and reimburses the hospital according to the extent of resources typically required to treat patients with similar diagnoses undergoing similar treatments. All services and supplies provided during the inpatient admission are bundled into a single MS-DRG reimbursement rate, regardless of the length of the inpatient stay, the intensity of treatments, or the number of procedures performed for the specific individual.

Common MS-DRGs for Coronary Procedures¹⁰				
MS-DRG	Description	2018 Mean Length of Stay	2018 FY Relative Weight	2018 Medicare FY Base Payment Rate¹¹
246	Percutaneous cardiovascular procedure with drug-eluting stent with MCC or 4+ vessels/stents	5.5	3.2103	\$19,352
247	Percutaneous cardiovascular procedure with drug-eluting stent without MCC	2.6	2.1159	\$12,754
248	Percutaneous cardiovascular procedure with non-drug-eluting stent with MCC or 4+ vessels/stents	6.3	3.0479	\$18,373
249	Percutaneous cardiovascular procedure with non-drug-eluting stent without MCC	3.00	1.957	\$11,797
250	Percutaneous cardiovascular procedure without coronary artery stent with MCC	5.3	2.506	\$15,106
251	Percutaneous cardiovascular procedure without coronary artery stent without MCC	2.7	1.6629	\$10,024
273	Percutaneous intracardiac procedures with MCC	7.7	3.5792	\$21,576
274	Percutaneous intracardiac procedures without MCC	3.0	2.7685	\$16,689
286	Circulatory disorders except acute myocardial infarction, with cardiac catheterization with MCC	7.0	2.2281	\$13,431
287	Circulatory disorders except acute myocardial infarction, with cardiac catheterization without MCC	3.3	1.1751	\$7,084

MCC = major complication or comorbidity
 CC = complication or comorbidity

¹⁰ Centers for Medicare and Medicaid Services, FY2018 Final Notice Data, Table 5 - List of Medicare Severity Diagnosis-Related Groups (MS-DRGs), Relative Weighting Factors, and Geometric and Arithmetic Mean Length of Stay; <http://www.cms.gov/AcuteInpatientPPS/> (under Acute Inpatient – Files for Download)

¹¹ The MS-DRG payment amounts indicated are estimates only based upon data elements derived from various CMS sources. MS-DRG national average payments were calculated with a base rate of \$6,028.08 using the national adjusted operating standardized amounts and the capital standard federal payment rate as issued in the Medicare Inpatient Prospective Payment System Final Rule published in the Federal Register (Vol. 82, Issue 239) on 12/14/17; Tables 1A and 1D, Table 5, and assume that all hospitals are receiving the full 1.65% quality reporting and meaningful use updates. Actual payment may vary based on various hospital-specific factors not reflected in the source data.

The information in this guide is broad-based and references many different procedures and types of devices. Such a broad discussion is not intended to suggest or imply that Cordis® offers products for every use or procedure discussed and the FDA-cleared or approved labeling for all products may not be consistent with the information in this guide. Important information: Prior to use, refer to the instruction for use supplied with this device for indications, contraindications, side effects, suggested procedure, warnings and precautions.

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