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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 2019 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 | 2019 Medicare Base Payment Rate[2] | |
|---|---|---|---|
| | | Non-Facility | Facility |
| **Diagnostic Procedures and Imaging** | | | |
| 93451 | Right heart catheterization | $798 | $137 |
| 93452 | Left heart catheterization | $887 | $249 |
| 93453 | Right and left heart catheterization | $1,151 | $335 |
| 93454 | Coronary angiography | $896 | $253 |
| 93455 | Coronary angiography with bypass grafts | $1,032 | $295 |
| 93456 | Coronary angiography with right heart catheterization | $1,134 | $328 |
| 93457 | Coronary angiography and bypass grafts, with right heart catheterization | $1,268 | $369 |
| 93458 | Coronary angiography with left heart catheterization | $1,063 | $312 |
| 93459 | Coronary angiography and bypass grafts, with left heart catheterization | $1,168 | $353 |
| 93460 | Coronary angiography with right and left heart catheterization | $1,276 | $395 |
| 93461 | Coronary angiography with bypass grafts, right and left heart catheterization | $1,445 | $437 |
| +93462 | Left heart access via transseptal or transapical puncture | $220 | $220 |
| +93463 | Pharmacological agent administration with hemodynamic assessment | $102 | $102 |
| +93464 | Physiologic exercise study with hemodynamic assessment | $254 | $90 |
| 93503 | Placement of flow directed catheter (eg, Swan-Ganz) for monitoring | $0 | $92 |
| 93505 | Endomyocardial biopsy | $720 | $231 |

[1] 2019 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-1693-F on November 1, 2018, and published in the Federal Register on November 23, 2018, with a conversion factor of $36.04. 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** | **2019 Medicare Base Payment Rate[2]** | |
| | | **Non-Facility** | **Facility** |
| 93530 | Right heart catheterization for congenital cardiac anomalies | $0 | $215 |
| 93531 | Combined right & retrograde left heart cath for congenital cardiac anomalies | $0 | $447 |
| 93532 | Combined right & transseptal left heart cath through intact septum for congenital cardiac anomalies | $0 | $558 |
| 93533 | Combined right & transseptal left heart cath through existing septum opening for congenital cardiac anomalies | $0 | $372 |
| 93561 | Indicator dilution study with cardiac output (separate procedure) | $0 | $47 |
| 93562 | Indicator dilution study; subsequent measurement of cardiac output | $0 | $38 |
| +93563 | Injection/imaging for coronary angiography with cath for congenital anomaly | $61 | $61 |
| +93564 | Injection/imaging for bypass graft angiography with cath for congenital anomaly | $64 | $64 |
| +93565 | Injection/imaging for left heart angiography with cath for congenital anomaly | $47 | $47 |
| +93566 | Injection/imaging for right heart angiography with cath for congenital anomaly | $158 | $49 |
| +93567 | Injection/imaging procedure for supravalvular aortography | $134 | $55 |
| +93568 | Injection/imaging procedure for pulmonary angiography | $143 | $50 |
| +93571 | Intravascular coronary flow reserve measurement, initial vessel | $0 | $81 |
| +93572 | Intravascular coronary flow reserve measurement, each additional vessel | $0 | $65 |
| +92978 | Coronary vessel or graft imaging with IVUS or OCT, initial vessel | $0 | $101 |
| +92979 | Coronary vessel or graft imaging with IVUS or OCT, each additional vessel | $0 | $80 |
| **Therapeutic / Interventional Procedures** | | | |
| 92920 | Angioplasty, single vessel | $0 | $558 |
| +92921 | Angioplasty, additional branch | $0 | $0 |
| 92924 | Atherectomy, single vessel | $0 | $666 |
| +92925 | Atherectomy, additional branch | $0 | $0 |
| 92928 | Stent, single vessel | $0 | $621 |
| +92929 | Stent, additional branch | $0 | $0 |
| 92933 | Atherectomy + stent, single vessel | $0 | $697 |
| +92934 | Atherectomy + stent, additional branch | $0 | $0 |
| 92937 | PCI of or through bypass, any method(s) | $0 | $621 |
| +92938 | PCI of or through bypass, additional branch | $0 | $0 |
| 92941 | PCI of acute MI, all interventions, single vessel | $0 | $698 |
| 92943 | PCI of chronic total occlusion, any method(s) | $0 | $698 |
| +92944 | PCI of chronic total occlusion, additional branch | $0 | $0 |
| +92973 | Percutaneous coronary thrombectomy, mechanical | $0 | $186 |

| Procedure Codes and Physician Reimbursement for Coronary Procedures | | | |
|---|---|---|---|
| CPT® Code | Description | 2019 Medicare Base Payment Rate[2] | |
| | | Non-Facility | Facility |
| **Other Supportive Therapies** | | | |
| 92975 | Thrombolysis, coronary, by intracoronary infusion | $0 | $396 |
| 92977 | Thrombolysis, coronary, by intravenous infusion | $56 | $0 |
| 33967 | Insertion of intra-aortic balloon assist device, percutaneous | $0 | $272 |
| 33968 | Removal of intra-aortic balloon assist device, percutaneous | $0 | $35 |
| 33990 | Insert ventricular assist device (VAD), percutaneous, arterial access only | $0 | $447 |
| 33991 | Insert VAD, percutaneous, arterial & venous access, transseptal | $0 | $656 |
| 33992 | Remove ventricular assist device, at separate session from insertion | $0 | $209 |
| 33993 | Reposition ventricular assist device, with imaging, at separate session | $0 | $183 |
| G0269 | Placement of occlusive device into vascular access site | $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

New for CY2019. CMS has approved 17 new procedure codes for diagnostic cardiac catheterizations for use in the ASC. The codes are: 93451, 93452, 93453, 93454, 93455, 93456, 93457, 93458, 93459, 93460, 93461, 93462, 93566, 93567, 93571, 93572.

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 OPPS 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 percutaneous coronary intervention codes. Intra-aortic balloon and ventricular assist devices are designated inpatient-only.[5]

## Hospital Outpatient Reimbursement

Outpatient facility claims also report CPT® and HCPCS[6] 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-1695-FC on November 2, 2018, and published in the Federal Register on November 23, 2018.
[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** | **2019 Relative Weight** | **2019 Medicare Base Payment Rate[7]** |
| **Diagnostic Procedures and Imaging** | | | | |
| 5181 | Level 1 Vascular Procedures (code 93503) | T | 7.799 | $620 |
| 5182 | Level 2 Vascular Procedures (code 93505) | T | 13.758 | $983 |
| 5192 | Level 2 Endovascular Procedures (code 92920) | J1 | 48.921 | $3,889 |
| 5193 | Level 3 Endovascular Procedures (codes 92924, 92928, 92937, 92941, 92943, C9600, C9604) | J1 | 99.104 | $7,888 |
| 5194 | Level 4 Endovascular Procedures (codes 92933, C9602, C9606, C9607) | J1 | 160.826 | $12,784 |
| 5694 | Level 4 Drug Administration (code 92977) | T | 3.627 | $288 |

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 healthcare 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 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 ICD-10-PCS and GEMS updated code sets for FY2019 located at: https://www.cms.gov/Medicare/Coding/ICD10/2019-ICD-10-CM.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 Procedures[10]**

| MS-DRG | Description | 2019 Mean Length of Stay | 2019 FY Relative Weight | 2019 Medicare FY Base Payment Rate[11] |
|---|---|---|---|---|
| 246 | Percutaneous cardiovascular procedure with drug-eluting stent with MCC or 4+ vessels/stents | 5.4 | 3.2388 | $19,352 |
| 247 | Percutaneous cardiovascular procedure with drug-eluting stent without MCC | 2.6 | 2.0771 | $12,682 |
| 248 | Percutaneous cardiovascular procedure with non-drug-eluting stent with MCC or 4+ vessels/stents | 6.3 | 3.1726 | $19,370 |
| 249 | Percutaneous cardiovascular procedure with non-drug-eluting stent without MCC | 3.0 | 1.9901 | $12,151 |
| 250 | Percutaneous cardiovascular procedure without coronary artery stent with MCC | 5.3 | 2.5868 | $15,794 |
| 251 | Percutaneous cardiovascular procedure without coronary artery stent without MCC | 2.7 | 1.6778 | $10,244 |
| 273 | Percutaneous intracardiac procedures with MCC | 7.3 | 3.6525 | $22,300 |
| 274 | Percutaneous intracardiac procedures without MCC | 2.6 | 2.9783 | $18,184 |
| 286 | Circulatory disorders except acute myocardial infarction, with cardiac catheterization with MCC | 6.0 | 2.1808 | $13,315 |
| 287 | Circulatory disorders except acute myocardial infarction, with cardiac catheterization without MCC | 3.0 | 1.1389 | $6,954 |

MCC = major complication or comorbidity
CC = complication or comorbidity

[10] Centers for Medicare and Medicaid Services, FY2019 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 $6105.49 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 83, Issue 119) on 11/23/18; 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.



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