

CY2019 Medicare Final Rules Issued for Hospital Outpatient, Ambulatory Surgical Center and Physician Fee Schedule

Interventional Cardiology, Peripheral Interventions & Rhythm Management

On November 1, 2018, the Centers for Medicare and Medicaid Services (CMS) released the 2019 final policies and payment rates for the Physician Fee Schedule (PFS) and Quality Payment Program (QPP). On November 2, 2018, CMS released the 2019 final policies and payment rates for the Outpatient Prospective Payment System (OPPS) and Ambulatory Surgical Centers (ASC). The final policies and rates are effective on **January 1, 2019**.

Hospital Outpatient: Total OPPS payments will increase by 1.35%.

Ambulatory Surgical Center (ASC): Overall payment rates will increase by 2.1%.

Physician Fee Schedule: The physician conversion factor will increase 0.25%.

At the end of this document are tables that list final national payment rates and the national average percent changes for select Interventional Cardiology (IC), Peripheral Interventions (PI) and Rhythm Management (RM) related procedures.

Table 1: CY2019 Hospital Outpatient (OPPS) final payment tables.

Table 2: CY2019 Ambulatory Surgical Center (ASC) final payment rates.

Table 3: CY2019 Physician Fee Schedule (PFS) final payment rates.

Hospital Outpatient Prospective Payment System

Site Neutrality: In the CY2019 OPPS final rule, CMS finalized its proposal to continue pursuing greater payment neutrality between sites of service to reduce Medicare spending and patient cost-sharing.

- CMS finalized its proposal to pay for hospital clinic visits located at off-campus physician offices at the physician fee schedule level. They are currently paid as if they took place at the hospital, which is a higher rate than in the physician office. CMS estimates that this will result in \$380 million in savings.

In addition, CMS is finalizing changes designed to further encourage utilization of ASCs over hospital outpatient departments by:

- Using an alternative model for five years to stabilize the differential between ASC and hospital outpatient department payment rates.
- Expanding the number of procedures payable at ASCs to include twelve diagnostic cardiac catheterization procedures and five additional imaging procedures performed during diagnostic cardiac catheterization. PCI procedures are still not allowed to be performed in the ASC setting.

Device-Intensive Procedure Criteria: For CY2019, CMS finalized several changes to the criteria that deem a procedure “device-intensive.” Now, procedures that involve single-use devices, even if devices do not remain in the body after the conclusion of the procedure, will qualify as device-intensive procedures. Additionally, procedures with a device offset percentage of greater than 30% will qualify as device-intensive procedures.

Quality Payment Programs: Hospitals and ASCs must meet quality reporting requirements under the Hospital Outpatient Quality Reporting (OQR) Program and Ambulatory Surgical Center Quality Reporting (ASCQR) Program or receive a 2.0% reduction in their annual payment update. CMS finalized its proposal to remove and modify certain measures from both programs, in accordance with its desire to use a smaller set of meaningful measures and reduce the paperwork and reporting burden on providers.

Comprehensive APCs (C-APCs): Implemented in CY2015, C-APCs provide a single all-inclusive payment for a primary service and all supporting adjunct services (similar to inpatient MS-DRG payments). Medicare currently uses C-APCs to pay for pacemaker, ICD and similar procedures, electrophysiological (EP) procedures, and endovascular procedures (coronary and peripheral). This policy currently only impacts the Outpatient Hospital Setting and does not apply to Ambulatory Surgery Centers. For CY2019, CMS is creating three new C-APCs, two of which relate to vascular procedures. APC 5183 (Level 3 Vascular Procedures) and APC 5184 (Level 4 Vascular Procedures) will be converted to Comprehensive APCs on January 1st, 2019. After this occurs, there will be 65 C-APCs.

Highlights for Interventional Cardiology, Peripheral Interventions and Rhythm Management:

Interventional Cardiology

- CMS groups procedures into APCs by clinical similarity and historical cost of care. APC reimbursement levels reflect an average of all procedures that are within an APC. Several new codes reporting revascularization of the AV fistula with lower cost have been grouped into APCs 5192-5194, which is driving decreased reimbursement levels for IC procedures within the APCs.
- For Complex Percutaneous Coronary Interventions (CPCIs), APC 5194 (DES CTO PCI, DES w/Atherectomy, BMS w/Atherectomy) payment rates will decrease by 4.15%.
- For Percutaneous Coronary Interventions (PCIs), APC 5193 (DES w/ PTCA, DES Bypass Graft, BMS w/ PTCA, BMS Bypass Graft, BMS CTO PCI, PTCA/Atherectomy) payment rates will decrease by 8.00%.
- For the second year, CMS allowed for a complexity adjustment from APC 5191 to APC 5192 when performing certain diagnostic cardiac catheterization procedures with IVUS or FFR.
- CMS will reintroduce the DES + DES multi-vessel complexity adjustment coding combination assigned to APC 5194.

Peripheral Interventions

- FemPop PTA, Arterial Thrombectomy and Venous Thrombectomy payment rates will decrease by 7.98%.
- FemPop Stent, FemPop Atherectomy, Embolization, AV Stent and Venous Stent payment rates will decrease by 8.00%.
- FemPop Atherectomy + Stent, TibPer Stent, TibPer Atherectomy, TibPer Stent + Atherectomy payment rates will decrease by 4.15%.

Rhythm Management

- OPPS payment rates for RM procedures will largely remain flat, with intracardiac ablation procedures payment rates seeing a modest increase.
- ICD/S-ICD system implant payment rates will decrease slightly by -0.99% and ICD replacements will decrease slightly by -0.52%.
- Pacemaker system implant payment rates will increase by 0.94% and pacemaker replacements will increase by 0.45%.
- Payment rates for ablation procedures performed in conjunction with a comprehensive EP study will increase by 3.77%.

Ambulatory Surgical Center (ASC)

For CY2019, CMS is implementing an 2.1% increase in payment rates. This would mean increased payments of \$200 million for ASCs in CY2019 versus CY2018 payments.

Interventional Cardiology

- CMS finalized its proposal to include 12 diagnostic cardiac catheterization procedures, 3 injection procedures, and 2 FFR procedures to the list of ASC Covered Surgical Procedures, but will continue to not allow PCI procedures in an ASC setting.

Peripheral Interventions

- Arterial Thrombectomy payment rates will increase by 15.37%. Venous thrombectomy payment rates will increase by 7.79%.
- FemPop PTA payment rates will increase by 14.37%.
- In the dialysis circuit, PTA payment rates will decrease by 20.69%, PTA + Stent payment rates will increase by 33.97%, Thrombectomy + PTA payment rates will decrease by 9.46%.

Rhythm Management

- ASC payment rates for RM procedures will largely remain flat:
 - Pacemaker implants payment rates on average will increase by 0.45%.
 - ICD System implants payment rates on average will decrease slightly by -0.69%.
 - SICD System implants payment rates will decrease slightly by -0.95%.

Physician Fee Schedule (PFS)

The CY2019 Physician Fee Schedule released policies focused on physician-patient interaction, access to virtual care, and improving EHR reporting efficiency and value. CMS indicates that these changes will increase clinician productivity and reduce administrative costs.

Practice Expense (PE): CMS is updating how the cost of physician practice expenses (e.g., medical devices and equipment, office rent, personnel wages, and utilities) are factored into overall payment rates for procedures performed in physician offices. CMS' approach to recalculating practice expense has caused the valuation of certain types of devices and supplies to decrease, and other types of devices and supplies to increase. CMS will phase in its changes to practice expenses over a four-year period.

Quality Payment Program (QPP): Finalized changes to the QPP are relatively minor. CMS is removing certain quality measures to focus on measures with greater impact on health outcomes. In addition, CMS is emphasizing the importance of increasing electronic health record (EHR) interoperability.

Evaluation and Management Codes: CMS will delay implementation of proposed coding and payment changes that were aimed at reducing administrative burden and improving payment accuracy for evaluation and management visits. Specifically, the proposal to create single blended payment rates for office/outpatient E/M Level 2 through 5 visits has been delayed until 2021.

Interventional Cardiology

- **Coronary Stenting:** Overall, Percutaneous Coronary Intervention (PCI) and Complex Percutaneous Coronary Interventions (CPCI) final physician payment rates will remain flat.
 - Chronic Total Occlusion (CTO) PCIs payment rates will remain flat.
 - Atherectomy with stent payment rates will remain flat.
 - Atherectomy without stent payment rates will remain flat.
 - PCI with stent placement payment rates will remain flat.
 - Percutaneous Transluminal Coronary Angioplasty (PTCA) payment rates will remain flat.
- **Fractional flow reserve (FFR)**
 - CPT® codes 93571 and 93572 were listed on the review of potentially Misvalued Services. The total time for this service decreased from 20 minutes to 15 minutes.
 - After CMS compared and cross walked similar codes for evaluation, CMS finalized a work RVU of 1.38 for CPT® 93571 and a work RVU of 1.00 for CPT® 93572. This change will result in a payment rate decrease of 19.04% and 18.75% respectively. This reduction was based on physician responses to survey questions on time, complexity, resource use and risk.
- **Structural Heart and WATCHMAN™:**
 - Transcatheter Aortic Valve Replacement (TAVR) payments will remain flat.
 - WATCHMAN™ LAAC payment will remain flat.

Peripheral Interventions

- For procedures performed in Office Based Labs (OBLs):
 - Fem/Pop Atherectomy payment rates will increase by 11.8%.
 - Fem/Pop Stent payment rates will increase by 18.6%.
 - Fem/Pop Atherectomy with stent payment rates will increase by 6.5%.
 - BTK Atherectomy payment rates will increase by 13.4%.
 - BTK Stent payment rates will increase by 26.4%.
 - Venous Stent payment rates will decrease by 13.0%..
 - IVUS payment rates will decrease by 7.8%.
- Physician payments for PI procedures performed in the hospital are will remain relatively flat.

Rhythm Management

- Physician payment rates for RM procedures will largely remain flat:
 - Physician Ablation procedures performed in conjunction with a comprehensive EP study, which includes most ablation procedures, payment rates will increase by 0.18%.
 - Physician pacemaker system implant payment rates will increase by an average of 0.23%.
 - Physician defibrillator implant procedure payment rates will increase by an average of 0.06%.
 - The technical component for in-person device programming of pacemakers, defibrillators, and ICMs will increase ~30% due to a favorable revision in practice expense calculations for the service. Practice expense is the portion of the procedure/service that CMS attributes to items such as equipment, office rent, personnel wages.

COMMENTS / QUESTIONS

If you have questions or would like additional information contact:

Interventional Cardiology (IC), Peripheral Interventions (PI) & Rhythm Management (RM)	WATCHMAN™ LAAC
Call: 1-800-CARDIAC and request ext. 24114 for Reimbursement Support) Email: CRM.Reimbursement@bsci.com Email: IC.Reimbursement@bsci.com	Email: WATCHMMAN.Reimbursement@bsci.com Call: 1-877-786-1050 and select option 2

SOURCE INFORMATION

Read the full CY2019 Proposed OPPS Rule (CMS-1656-P) at the following link:

<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalOutpatientPPS/Hospital-Outpatient-Regulations-and-Notices-Items/CMS-1695-FC.html?DLPage=1&DLEntries=10&DLSort=2&DLSortDir=descending>

Read the full CY2019 Proposed Physician Fee Schedule (CMS-1654-P) at the following Link:

<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/PFS-Federal-Regulation-Notices-Items/CMS-1693-F.html?DLPage=1&DLEntries=10&DLSort=2&DLSortDir=descending>

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Table 1: CY2019 Hospital Outpatient Final Payment Rates for Select Procedures

Final 2019 OPPS Rates Compared to Final 2018

APC	Status Indicator ¹	Descriptor	CY2019 Final Rate	CY2018 Final Rate	Variance 2019 Final vs. 2018 Final	% YoY Change
Interventional Cardiology						
5191	J1	Level 1 Endovascular Procedures	\$2,810	\$2,814	-\$3	-0.11%
		Diagnostic Cardiac Catheterization				
5192	J1	Level 2 Endovascular Procedures	\$4,679	\$5,085	-\$406	-7.99%
		POBA				
		Complexity Adjustments: Right heart cath + Right heart cath (93451 + 93451); Left hrt cath w/ventriclgrphy + L hrt artery/ventricle angio (93452 + 93458); Endoluminl ivus oct c 1st + Coronary artery angio s&i (93454 + 92978); Coronary artery angio s&i + Coronary artery angio s&i (93454 + 93454); Biopsy of heart lining + Coronary artery angio s&i (93454 + 93505); Endoluminl ivus oct c 1st + Coronary art/grft angio s&i (93455 + 92978); Heart flow reserve measure + Coronary art/grft angio s&i (93455 + 93571); Endoluminl ivus oct c 1st + R hrt coronary artery angio (93456 + 92978); Biopsy of heart lining + R hrt coronary artery angio (93456 + 93505); Heart flow reserve measure + R hrt coronary artery angio (93456 + 93571); Heart flow reserve measure + R hrt art/grft angio (93457 + 93571); Endoluminl ivus oct c 1st + L hrt artery/ventricle angio (93458 + 92978); Right heart cath + L hrt artery/ventricle angio (93458 + 93451); Coronary artery angio s&i + L hrt artery/ventricle angio (93458 + 93454); L hrt artery/ventricle angio + L hrt artery/ventricle angio (93458 + 93458); Biopsy of heart lining + L hrt artery/ventricle angio (93458 + 93505); Heart flow reserve measure + L hrt artery/ventricle angio (93458 + 93571); Endoluminl ivus oct c 1st + L hrt art/grft angio (93459 + 92978); L hrt art/grft angio + L hrt artery/ventricle angio (93459 + 93458); hrt art/grft angio + L hrt art/grft angio (93459 + 93459); Heart flow reserve measure + L hrt art/grft angio (93459 + 93571); Endoluminl ivus oct c 1st + R&l hrt art/ventricle angio (93460 + 92978); Coronary artery angio s&i + R&l hrt art/ventricle angio(93460 + 93454); R&l hrt art/ventricle angio + R&l hrt art/ventricle angio (93460 + 93460); Biopsy of heart lining + R&l hrt art/ventricle angio (93460 + 93505); Heart flow reserve measure + R&l hrt art/ventricle angio (93460 + 93571); Heart flow reserve measure + R&l hrt art/ventricle angio (93461 + 93571)				
5193	J1	Level 3 Endovascular Procedures	\$9,669	\$10,510	-\$841	-8.01%
		DES w/ PTCA (C9600), DES Bypass Graft (C9604), BMS w/ PTCA (92928), BMS Bypass Graft (92937), BMS CTO PCI (92943), PTCA/Atherectomy (92924)				
		Complexity Adjustments: Prq cardiac angioplast 1 art + Prq cardiac angioplast 1 art (92920 + 92920), Prq cardiac angioplast 1 art + Cath place cardio brachytx (92920 + 92974); Revision of aortic valve + R&l hrt cath w/ventriclgrphy (92986 + 93453); Revision of aortic valve + R&l hrt art/ventricle angio (92986 + 93460)				

5194	J1	Level 4 Endovascular Procedures	\$15,355	\$16,020	-\$666	-4.16%
		DES CTO PCI (C9607), DES w/Atherectomy (C9602), BMS w/Atherectomy (92933)				
		Complexity Adjustments: Prq card angio/athrect 1 art + Prq card angio/athrect 1 art (92924 +92924); Prq card angio/athrect 1 art + Perc drug-el cor stent sing (92924 +C9600); Prq card stent w/angio 1 vsl + Prq card stent w/angio 1 vsl (92928 +92928); Prq card revasc chronic 1vsl + Prq card stent w/angio 1 vsl (92943 + 92928); Prq revasc byp graft 1 vsl (C9600 + 92937); Perc drug-el cor stent sing + Revision of aortic valve (C9600 + 92986); Perc drug-el cor stent sing + Perc drug-el cor stent sing (C9600 + C9600); Perc d-e cor revasc t cabg s + Perc drug-el cor stent sing (C9604 + C9600); Perc d-e cor revasc t cabg s + Perc d-e cor revasc t cabg s (C9604 + C9604)				
BSC currently has no stents FDA-approved for CTOs						
Peripheral Interventions						
5192	J1	Level 2 Endovascular Procedures	\$4,679	\$5,085	-\$406	-7.99%
		Iliac PTA (37220), FemPop PTA (37224), Dialysis Circuit PTA (36902), Dialysis Circuit Thombectomy (36904), Arterial Mechanical Thrombectomy (37184), Venous Mechanical Thrombectomy (37187)				
5193	J1	Level 3 Endovascular Procedures	\$9,669	\$10,510	-\$841	-8.01%
		TibPer PTA (37228), Iliac Stent (37221), FemPop Atherectomy (37225), FemPop Stent (37226), Vasc Embolization (37241-37244), Dialysis Circuit Thrombectomy + PTA (36905), Dialysis Circuit Stent + PTA (36903)				
5194	J1	Level 4 Endovascular Procedures	\$15,355	\$16,020	-\$666	-4.16%
		FemPop Stent & Atherectomy (37227), TibPer Atherectomy (37229), TibPer Stent (37230), TibPer Stent & Atherectomy (37231), Dialysis Circuit Thrombectomy + Stent + PTA (36906)				
		Complexity Adjustments: Iliac Stent + Vasc Stent (37221 + 37236), FemPop Ather + Iliac Stent (37225 + 37221), FemPop Ather + FemPop Stent (37225 + 37226), FemPop Ather + Vasc Stent (37225 + 37236), FemPop Stent + Iliac Stent (37226 + 37221), FemPop Stent + FemPop Stent (37226 + 37226), FemPop Stent + Vasc Stent (37226 + 37236), Venous Stent + Venous Stent (37238 + 37238), Venous Stent + Vasc Embolization (37238 + 37241), Vasc Embolization + Iliac Stent (37242 + 37221), Vasc Embolization + Vasc Embolization (37242 + 37243), Iliac Stent + Art Mech. Thromb (37221 +37184), FemPop Ather + Art Mech. Thromb (37225 +37184), FemPop Stent (37226 + 37184), Venous Stent + Venous Mech Thromb (37238 +37187), Venous stent + Venous Stent add'l vein (37238+37239) Combinations below as listed within CMS' Addendum J: Intro cath dialysis circuit + Stent plmt ctr dialysis seg (369X3 + 368X8), Thrmbc/nfs dialysis circuit + Stent plmt ctr dialysis seg (369X5 + 368X8)				
BSC currently has no stent approved for use in the veins of the lower extremities						

Rhythm Management						
5191	J1	Diagnostic Cardiac Catheterization	\$2,810	\$2,814	-\$3	-0.11%
5211	J1	Level 1 Electrophysiologic Procedures	\$919	\$909	\$10	1.11%
		Right ventricular recording (93603)				
		Induction of arrhythmia (93618)				
		DFT testing not at implant (93642)				
5212	J1	Level 2 Electrophysiologic Procedures	\$5,097	\$5,314	-\$217	-4.08%
		Bundle of HIS recording (93600)				
		Intra-atrial recording (93602)				
		Intra-atrial pacing (93610)				
		Intraventricular pacing (93612)				
		Comprehensive EP study without induction (93619)				
		Comprehensive EP study with induction (93620)				
		EP follow up study (93624)				
		AV Node Ablation (93650)				
5213	J1	Level 3 Electrophysiologic Procedures	\$19,214	\$18,516	\$698	3.77%
		SVT ablation with EP study (93653)				
		VT ablation with EP study (93654)				
		A Fib ablation with EP study (93656)				
5221	T	Level 1 Pacemaker and Similar Procedures	\$3,131	\$2,868	\$263	9.16%
		Repair single transvenous electrode (33218)				
		Repair 2 transvenous electrodes (33220)				
		Removal of transvenous pacemaker electrode - single (33234)				
		Removal of transvenous pacemaker electrode - dual (33235)				
		Removal of ICD pulse generator only (33241)				
		Removal of ICD electrode(s) (33244)				
		Removal of S-ICD electrode (33272)				
		Repositioning of S-ICD electrode (33273)				
5222	J1	Level 2 Pacemaker and Similar Procedures	\$7,404	\$7,371	\$33	0.45%
		Insertion of single chamber pacemaker generator only (33212)				
		Insertion of single transvenous electrode, pacemaker or ICD (33216)				
		Insertion of 2 transvenous electrodes, pacemaker or ICD (33217)				
		Single chamber pacemaker change out (33227)				
		Removal of pacemaker generator only (33233)				
		Insertion of subcutaneous Cardiac Rhythm Monitor (ICM)(33285)				
		Insertion of S-ICD electrode (33271)				
5223	J1	Level 3 Pacemaker and Similar Procedures	\$9,879	\$9,748	\$131	1.35%
		Insertion of single and dual chamber pacemaker (33206,33207, 33208)				
		Insertion of dual chamber pacemaker generator only (33213)				
		Upgrade of single to dual chamber pacemaker (33214)				

		LV lead insertion with attachment to previously placed device (33224)				
		Dual chamber pacemaker change out (33228)				
		Removal of PM generator + LV pacing lead add-on (33233 + 33225)				
		Implant pat-active ht record + EP Eval (33282 + 93619)				
5224	J1	Level 4 Pacemaker and Similar Procedures	\$17,679	\$17,586	\$93	0.53%
		Insertion of multiple lead pacemaker generator only (33221)				
		Multiple lead pacemaker change out (33229)				
		Insert PM ventricular + LV lead add-on (33207 + 33225), Insert PM atrial & Vent + LV pacing lead add-on (33208 + 33225), Insert PM atrial & vent + Ablate heart dys focus (33208 + 93650), Insert pacing lead & connect + Insert 1 electrode pm-defib (33224+ 33216), Remv & replc pm gen dual lead + LV pacing lead add-on (33228 + 33225)				
5231	J1	Level 1 ICD and Similar Procedures	\$21,996	\$22,111	-\$114	-0.52%
		Insertion of single and dual lead defibrillator pulse generator only (33240,33230)				
		Single or dual lead ICD change out (33262, 33263)				
5232	J1	Level 2 ICD and Similar Procedures	\$30,656	\$30,962	-\$306	-0.99%
		Insertion of multiple lead defibrillator pulse generator only (33231)				
		Insertion of single or dual chamber transvenous ICD system (33249)				
		Multiple lead ICD change out (33264)				
		Insertion of subcutaneous ICD system (33270)				
		CRT-D system implant (33249 + 33225)				

1 Status Indicator: (Source: CMS OPPS Addendum D1)

J1 - Hospital part B services paid through comprehensive APC

T - Procedure or service, multiple procedure reduction applies

Table 2: Ambulatory Surgical Center (ASC)

ASC CY2019 Final Payment Rates for Select Procedures

CPT®	Abbreviated (Partial) Description	CY2019 Final Payment	CY2018 Final Payment	Variance 2019 Final vs. 2018 Final	
		\$	\$	\$	%
Peripheral Interventions					
Iliac Artery Revascularization					
37220	Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal angioplasty	\$2,002	\$2,525	(\$522)	-20.69%
37221	Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within same vessel, when performed	\$5,834	\$6,402	(\$568)	-8.87%
37222	Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal angioplasty (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
37223	Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
Femoral/Popliteal Artery Revascularization					
37224	Revascularization, endovascular, open or percutaneous, femoral/popliteal artery(s), unilateral; with transluminal angioplasty	\$2,887	\$2,525	\$363	14.37%
37225	Revascularization, endovascular, open or percutaneous, femoral/popliteal artery(s), unilateral; with atherectomy, includes angioplasty within same vessel, when performed	\$6,411	\$7,024	(\$613)	-8.73%
37226	Revascularization, endovascular, open or percutaneous, femoral/popliteal artery(s),unilateral;with transluminal stent placement(s), includes angioplasty within the same vessel, when performed	\$6,223	\$6,749	(\$526)	-7.79%
37227	Revascularization, endovascular, open or percutaneous, femoral/popliteal artery(s), unilateral; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed	\$10,354	\$10,865	(\$510)	-4.70%
Tibial / Peroneal Artery Revascularization					
37228	Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, initial vessel; with transluminal angioplasty	\$5,484	\$4,480	\$1,004	22.42%
37229	Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, initial vessel; with atherectomy, includes angioplasty within the same vessel, when performed	\$9,787	\$10,228	(\$440)	-4.31%
37230	Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed	\$9,604	\$10,207	(\$604)	-5.91%

37231	Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, initial vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed	\$9,851	\$10,276	(\$424)	-4.13%
37232	Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, each additional vessel; with transluminal angioplasty (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
37233	Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, each additional vessel; with atherectomy, includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
37234	Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
37235	Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
Vascular Stent					
37236	Transcatheter placement of an intravascular stent(s) (except lower extremity, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; initial artery	\$5,741	\$4,480	\$1,261	28.14%
37237	Transcatheter placement of an intravascular stent(s) (except lower extremity, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; each additional artery (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
37238	Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including angioplasty within the same vessel, when performed; initial vein	\$5,873	\$6,518	(\$645)	-9.90%
37239	Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including angioplasty within the same vessel, when performed; each additional vein (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
BSC currently has no stent approved for use in the veins of the lower extremities					

Dialysis Circuit					
36901	Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report	\$523	\$319	\$203	63.74%
36902	Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report; with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty	\$2,002	\$2,525	(\$522)	-20.69%
36903	Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report; with transcatheter placement of intravascular stent(s) peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the stenting, and all angioplasty within the peripheral dialysis segment	\$6,002	\$4,480	\$1,522	33.97%
36904	Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s)	\$2,663	\$2,525	\$138	5.48%
36905	Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty	\$4,056	\$4,480	(\$424)	-9.46%

36906	Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transcatheter placement of an intravascular stent(s), peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the stenting, and all angioplasty within the peripheral dialysis circuit	\$9,724	\$6,924	\$2,800	40.43%
36907	Transluminal balloon angioplasty, central dialysis segment, performed through dialysis circuit, including all imaging and radiological supervision and interpretation required to perform the angioplasty (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
36908	Transcatheter placement of an intravascular stent(s), central dialysis segment, performed through dialysis circuit, including all imaging radiological supervision and interpretation required to perform the stenting, and all angioplasty in the central dialysis segment (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
36909	Dialysis circuit permanent vascular embolization or occlusion (including main circuit or any accessory veins), endovascular, including all imaging and radiological supervision and interpretation necessary to complete the intervention (List separately in addition to code for primary procedure)	\$0	\$0	NA	NA
Thrombectomy					
37184	Primary percutaneous transluminal mechanical thrombectomy, noncoronary, arterial or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injection(s); initial vessel	\$2,912	\$2,525	\$388	15.37%
37187	Percutaneous transluminal mechanical thrombectomy, vein(s), including intraprocedural pharmacological thrombolytic injections and fluoroscopic guidance	\$2,721	\$2,525	\$197	7.79%
Biliary Stenting					
47556	Biliary endoscopy, percutaneous via T-tube or other tract; with dilation of biliary duct stricture(s) with stent	\$3,048	\$2,097	\$951	45.35%
49421	Insert abdom drain, perm	\$1,343	\$1,333	\$10	0.76%
49423	Exchange drainage catheter	\$642	\$627	\$15	2.39%
Rhythm Management					
33206	Pacemaker - single chamber system, atrial lead	\$7,940	\$7,779	\$161	2.07%
33207	Pacemaker - single chamber system, ventricular lead	\$7,920	\$7,832	\$88	1.12%
33208	Pacemaker - dual chamber system implant	\$8,065	\$8,010	\$54	0.68%
33240	Insertion of ICD / S-ICD pulse generator only with existing lead	\$19,901	\$20,003	(\$101)	-0.51%
33249	ICD system implant	\$27,056	\$27,340	(\$284)	-1.04%
33270	S-ICD system implant	\$27,006	\$27,265	(\$258)	-0.95%

33249 + 33225	CRT-D System implant (33249 & 33225 when performed on the same day)	\$27,056	\$27,340	(\$284)	-1.04%
33227	Pacemaker - single chamber replacement	\$5,831	\$5,857	(\$27)	-0.45%
33228	Pacemaker - dual chamber replacement	\$7,875	\$7,807	\$67	0.86%
33229	Pacemaker - multiple lead replacement	\$12,783	\$12,781	\$3	0.02%
33262	Defibrillator - single chamber replacement	\$19,280	\$19,388	(\$108)	-0.56%
33263	Defibrillator - dual chamber replacement	\$19,564	\$19,514	\$49	0.25%
33264	Defibrillator - multiple lead replacement	\$27,119	\$27,391	(\$272)	-0.99%
Interventional Cardiology - Diagnostic Cardiac Catheterization					
93451	Right heart cath	\$1,359	N/A	N/A	N/A
93452	Left hrt cath w/ventriclgrphy	\$1,359	N/A	N/A	N/A
93453	R&L hrt cath w/ventriclgrphy	\$1,359	N/A	N/A	N/A
93454	Coronary artery angio s&i	\$1,359	N/A	N/A	N/A
93455	Coronary art/grft angio s&i	\$1,359	N/A	N/A	N/A
93456	R hrt coronary artery angio	\$1,359	N/A	N/A	N/A
93457	R hrt art/grft angio	\$1,359	N/A	N/A	N/A
93458	L hrt artery/ventricle angio	\$1,359	N/A	N/A	N/A
93459	L hrt art/grft angio	\$1,359	N/A	N/A	N/A
93460	R&L hrt art/ventricle angio	\$1,359	N/A	N/A	N/A
93461	R&L hrt art/ventricle angio	\$1,359	N/A	N/A	N/A

Table 3: Physician Fee Schedule (PFS) CY2019 Final Rule Payment Rates

Final 2019 PFS Rates Compared to Final 2018

CPT®	Modifier	Abbreviated (Partial) Description	Final 2019 In-Facility Rate	Variance Final 2019 vs. Final 2018		Final 2019 In-Office Rate	Final 2019 vs. Final 2018	
			\$	\$	%	\$	\$	%
Interventional Cardiology								
Diagnostic Catheterization								
93451	26	Right heart catheterization including measurement(s) of oxygen saturation and cardiac output, when performed	\$137	\$0	0.11%	NA	NA	NA
93451			NA	NA	NA	\$798	\$53	7.13%
93452	26	Left heart catheterization including intraprocedural injection(s) for left ventriculography; imaging supervision and interpretation, when performed	\$249	(\$0)	-0.03%	NA	NA	NA
93452			NA	NA	NA	\$887	\$39	4.66%
93453	26	Combined right heart cath and left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed	\$334	\$1	0.33%	NA	NA	NA
93453			NA	NA	NA	\$1,150	\$50	4.50%
93454	26	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation;	\$253	\$1	0.40%	NA	NA	NA
93454			NA	NA	NA	\$896	\$36	4.22%
93455	26	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial venous grafts) including intraprocedural injection(s) for bypass graft angiography	\$294	\$1	0.23%	NA	NA	NA
93455			NA	NA	NA	\$1,032	\$26	2.62%
93456	26	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right heart catheterization	\$328	\$1	0.22%	NA	NA	NA
93456			NA	NA	NA	\$1,134	\$46	4.25%
93457	26	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) including intraprocedural injection(s) for bypass graft angiography and right heart catheterization	\$369	\$0	0.11%	NA	NA	NA
93457			NA	NA	NA	\$1,268	\$36	2.92%
93458	26	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed	\$312	\$1	0.23%	NA	NA	NA
93458			NA	NA	NA	\$1,063	\$27	2.61%
93459	26	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography	\$353	\$0	0.01%	NA	NA	NA
93459			NA	NA	NA	\$1,168	\$19	1.68%
93460	26		\$395	(\$0)	-0.07%	NA	NA	NA

93460		Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed	NA	NA	NA	\$1,275	\$38	3.08%
93461	26	Catheter placement in coronary artery(s) for coronary angiography, including intraprocedural injection(s) for coronary angiography, imaging supervision and interpretation; with right and left heart catheterization including intraprocedural injection(s) for left ventriculography, when performed, catheter placement(s) in bypass graft(s) (internal mammary, free arterial, venous grafts) with bypass graft angiography	\$437	\$1	0.19%	NA	NA	NA
93461			NA	NA	NA	\$1,444	\$28	1.97%
93462		Left heart catheterization by transseptal puncture through intact septum or by transapical puncture (List separately in addition to code for primary procedure)	\$220	\$0	0.11%	\$220	\$0	0.11%
93463		Pharmacologic agent administration (eg, inhaled nitric oxide, intravenous infusion of nitroprusside, dobutamine, milrinone, or other agent) including assessing hemodynamic measurements before, during, after and repeat pharmacologic agent administration, when performed (List separately in addition to code for primary procedure)	\$102	\$0	0.47%	\$102	\$0	0.47%
93464	26	Physiologic exercise study (eg, bicycle or arm ergometry) including assessing hemodynamic measurements before and after (List separately in addition to code for primary procedure)	\$90	\$0	0.51%	NA	NA	NA
93464			NA	NA	NA	\$254	(\$8)	-2.92%
93531	26	Combined right heart catheterization and retrograde left heart cath, for congenital cardiac anomalies	\$447	\$1	0.19%	\$447	\$1	0.19%
93532	26	Combined right heart catheterization and transseptal left heart cath through intact septum with or w/o retrograde left heart catheterization, for congenital cardiac anomalies	\$558	\$21	3.87%	\$558	\$21	3.87%
93533	26	Combined right heart catheterization and transseptal left heart cath through existing septal opening, with or w/o retrograde left heart catheterization, for congenital cardiac anomalies	\$372	\$11	3.00%	\$372	\$11	3.00%
Diagnostic Cath Injection								
93565		Injection procedure during cardiac catheterization including imaging supervision and interpretation, and report; for selective left ventricular or left arterial angiography (List separately in addition to code for primary procedure)	\$47	\$0	0.11%	\$47	\$0	0.11%
93566		Injection procedure during cardiac catheterization including imaging supervision and interpretation, and report; for selective right ventricular or right atrial angiography (List separately in addition to code for primary procedure)	\$49	\$0	0.11%	\$158	(\$8)	-5.09%
93567		Injection procedure during cardiac catheterization including imaging supervision and interpretation, and report; for supraaortic angiography (List separately in addition to code for primary procedure)	\$55	\$0	0.11%	\$134	(\$6)	-4.52%

93568		Injection procedure during cardiac catheterization including imaging supervision and interpretation, and report; for pulmonary angiography (List separately in addition to code for primary procedure)	\$50	\$0	0.11%	\$143	(\$6)	-3.77%
Angioplasty without Stent								
92920		Percutaneous transluminal coronary angioplasty; single major coronary artery or branch	\$558	\$1	0.24%	NA	NA	NA
92921		Percutaneous transluminal coronary angioplasty; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)	\$0	\$0	NA	\$0	\$0	NA
Atherectomy without Stent								
92924		Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; single major coronary artery or branch	\$666	\$2	0.33%	NA	NA	NA
92925		Percutaneous transluminal coronary atherectomy, with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)	\$0	\$0	NA	\$0	\$0	NA
Stent with Angioplasty								
92928		Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; single major coronary artery or branch	\$621	\$2	0.28%	NA	NA	NA
92929		Percutaneous transcatheter placement of intracoronary stent(s), with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)	\$0	\$0	NA	\$0	\$0	NA
Stent with Atherectomy								
92933		Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; single major coronary artery or branch	\$697	\$3	0.37%	NA	NA	NA
92934		Percutaneous transluminal coronary atherectomy, with intracoronary stent, with coronary angioplasty when performed; each additional branch of a major coronary artery (list separately in addition to code for primary procedure)	\$0	\$0	NA	\$0	\$0	NA
Bypass Graft								
92937		Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; single vessel	\$621	\$2	0.34%	NA	NA	NA
92938		Percutaneous transluminal revascularization of or through coronary artery bypass graft (internal mammary, free arterial, venous), any combination of intracoronary stent, atherectomy and angioplasty, including distal protection when performed; each additional branch subtended by the bypass graft (list separately in addition to code for primary procedure)	\$0	\$0	NA	\$0	\$0	NA

Acute Myocardial Infarction								
92941		Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty, including aspiration thrombectomy when performed, single vessel	\$699	\$3	0.42%	NA	NA	NA
Chronic Total Occlusion								
92943		Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; single vessel	\$698	\$3	0.37%	NA	NA	NA
92944		Percutaneous transluminal revascularization of chronic total occlusion, coronary artery, coronary artery branch, or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty; each additional coronary artery, coronary artery branch, or bypass graft (list separately in addition to code for primary procedure)	\$0	\$0	NA	\$0	\$0	NA
Thrombectomy								
92973		Percutaneous transluminal coronary thrombectomy mechanical	\$186	\$0	0.11%	NA	NA	NA
IVUS								
92978	26	Endoluminal imaging of coronary vessel or graft using intravascular ultrasound (IVUS) or optical coherence tomography (OCT) during diagnostic evaluation and/or therapeutic intervention including imaging supervision, interpretation and report; initial vessel (List separately in addition to code for primary procedure)	\$101	\$1	0.83%	\$101	\$1	0.83%
92979	26	Endoluminal imaging of coronary vessel or graft using intravascular ultrasound (IVUS) or optical coherence tomography (OCT) during diagnostic evaluation and/or therapeutic intervention including imaging supervision, interpretation and report; each additional vessel (List separately in addition to code for primary procedure)	\$80	(\$0)	-0.34%	\$80	(\$0)	-0.34%
FFR								
93571	26	Intravascular Doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; each additional vessel (List separately in addition to code for primary procedure)	\$81	(\$19)	-19.04%	\$81	(\$19)	-19.04%
93572	26	Intravascular Doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; initial vessel (List separately in addition to code for primary procedure)	\$65	(\$15)	-18.75%	\$65	(\$15)	-18.75%
Valvuloplasty								
92986		Percutaneous balloon valvuloplasty; aortic valve	\$1,383	\$3	0.24%	NA	NA	NA
92987		Percutaneous balloon valvuloplasty; mitral valve	\$1,427	\$3	0.24%	NA	NA	NA
92990		Percutaneous balloon valvuloplasty; pulmonary valve	\$1,140	\$2	0.20%	NA	NA	NA

Transcatheter Aortic Valve Replacement								
33361		Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; percutaneous femoral artery approach	\$1,423	\$2	0.16%	NA	NA	NA
33362		Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; open femoral artery approach	\$1,553	\$2	0.16%	NA	NA	NA
33363		Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; open axillary artery approach	\$1,609	\$0	0.02%	NA	NA	NA
33364		Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; open iliac artery approach	\$1,663	(\$31)	-1.85%	NA	NA	NA
33365		Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; transaortic approach (e.g., median sternotomy, mediastinotomy)	\$1,868	\$5	0.25%	NA	NA	NA
33366		Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; transapical exposure (eg, left thoracotomy)	\$2,019	\$4	0.20%	NA	NA	NA
33367		Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; cardiopulmonary bypass support with percutaneous peripheral arterial and venous cannulation (e.g., femoral vessels) (list separately in addition to code for primary procedure)	\$659	\$2	0.27%	NA	NA	NA
33368		Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; cardiopulmonary bypass support with open peripheral arterial and venous cannulation (e.g., femoral, iliac, axillary vessels) (list separately in addition to code for primary procedure)	\$783	\$2	0.20%	NA	NA	NA
33369		Transcatheter aortic valve replacement (tavr/tavi) with prosthetic valve; cardiopulmonary bypass support with central arterial and venous cannulation (e.g., aorta, right atrium, pulmonary artery) (list separately in addition to code for primary procedure)	\$1,033	\$2	0.18%	NA	NA	NA
Paravalvular Leak Repair								
93590		Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, mitral valve	\$1,124	\$6	0.53%	NA	NA	NA
93591		Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, aortic valve	\$926	(\$3)	-0.28%	NA	NA	NA
93592		Percutaneous transcatheter closure of paravalvular leak; each additional occlusion device (List separately in addition to code for primary procedure)	\$410	\$2	0.46%	NA	NA	NA
Watchman™ Left Atrial Appendage Closure (LAAC) Procedure								
33340		Percutaneous transcatheter closure of the left atrial appendage with endocardial implant, including fluoroscopy, transseptal puncture, catheter placement(s), left atrial angiography, left atrial appendage angiography, when performed, and radiological supervision and interpretation	\$829	(\$2)	-0.24%	NA	NA	NA

Peripheral Interventions								
Non-Coronary Angioplasty								
37246		Transluminal balloon angioplasty (except lower extremity artery(s) for occlusive disease, intracranial, coronary, pulmonary, or dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same artery; initial artery	\$365	(\$0)	-0.09%	\$2,136	(\$46)	-2.09%
37247		Transluminal balloon angioplasty (except lower extremity artery(s) for occlusive disease, intracranial, coronary, pulmonary, or dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same artery; each additional artery (List separately in addition to code for primary procedure)	\$179	(\$0)	-0.09%	\$814	(\$68)	-7.66%
37248		Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same vein; initial vein	\$312	(\$5)	-0.50%	\$1,527	\$7	2.50%
37249		Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same vein; each additional vein (List separately in addition to code for primary procedure)	\$152	(\$3)	-0.30%	\$604	\$3	1.60%
Dialysis Circuit								
36901		Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report	\$176	(\$1)	-0.30%	\$661	\$49	8.07%
36902		Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report; with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty	\$252	\$0	0.11%	\$1,301	\$28	2.23%

36903	Introduction of needle(s) and/or catheter(s), dialysis circuit, with diagnostic angiography of the dialysis circuit, including all direct puncture(s) and catheter placement(s), injection(s) of contrast, all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava, fluoroscopic guidance, radiological supervision and interpretation and image documentation and report; with transcatheter placement of intravascular stent(s) peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the stenting, and all angioplasty within the peripheral dialysis segment	\$333	\$0	0.00%	\$5,485	(\$240)	-4.20%
36904	Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s)	\$388	\$0	0.02%	\$1,914	\$65	3.52%
36905	Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transluminal balloon angioplasty, peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty	\$465	(\$1)	-0.12%	\$2,407	\$64	2.72%
36906	Percutaneous transluminal mechanical thrombectomy and/or infusion for thrombolysis, dialysis circuit, any method, including all imaging and radiological supervision and interpretation, diagnostic angiography, fluoroscopic guidance, catheter placement(s), and intraprocedural pharmacological thrombolytic injection(s); with transcatheter placement of an intravascular stent(s), peripheral dialysis segment, including all imaging and radiological supervision and interpretation necessary to perform the stenting, and all angioplasty within the peripheral dialysis circuit	\$537	(\$1)	-0.23%	\$6,723	(\$225)	-3.24%
36907	Transluminal balloon angioplasty, central dialysis segment, performed through dialysis circuit, including all imaging and radiological supervision and interpretation required to perform the angioplasty (List separately in addition to code for primary procedure)	\$154	(\$1)	-0.36%	\$736	(\$34)	-4.38%
36908	Transcatheter placement of an intravascular stent(s), central dialysis segment, performed through dialysis circuit, including all imaging radiological supervision and interpretation required to perform the stenting, and all angioplasty in the central dialysis segment (List separately in addition to code for primary procedure)	\$217	(\$2)	-1.04%	\$2,451	(\$312)	-11.28%

36909		Dialysis circuit permanent vascular embolization or occlusion (including main circuit or any accessory veins), endovascular, including all imaging and radiological supervision and interpretation necessary to complete the intervention (List separately in addition to code for primary procedure)	\$210	(\$7)	-3.21%	\$1,981	(\$27)	-1.33%
Iliac Artery Revascularization								
37220		Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal angioplasty	\$421	(\$1)	-0.23%	\$3,019	(\$103)	-3.30%
37221		Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within same vessel, when performed	\$520	(\$1)	-0.10%	\$4,284	(\$347)	-7.49%
37222		Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal angioplasty (List separately in addition to code for primary procedure)	\$195	(\$1)	-0.44%	\$816	(\$61)	-7.00%
37223		Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (List separately in addition to code for primary procedure)	\$223	(\$1)	-0.37%	\$2,256	(\$338)	-13.04%
Femoral/Popliteal Artery Revascularization								
37224		Revascularization, endovascular, open or percutaneous, femoral/popliteal artery(s), unilateral; with transluminal angioplasty	\$466	(\$1)	-0.12%	\$3,628	(\$162)	-4.27%
37225		Revascularization, endovascular, open or percutaneous, femoral/popliteal artery(s), unilateral; with atherectomy, includes angioplasty within same vessel, when performed	\$635	(\$2)	-0.34%	\$12,444	\$1,313	11.80%
37226		Revascularization, endovascular, open or percutaneous, femoral/popliteal artery(s), unilateral; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed	\$547	(\$2)	-0.35%	\$10,793	\$1,693	18.61%
37227		Revascularization, endovascular, open or percutaneous, femoral/popliteal artery(s), unilateral; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed	\$763	(\$2)	-0.31%	\$16,033	\$972	6.45%
Tibial / Peroneal Artery Revascularization								
37228		Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, initial vessel; with transluminal angioplasty	\$570	(\$2)	-0.33%	\$5,260	(\$165)	-3.04%
37229		Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, initial vessel; with atherectomy, includes angioplasty within the same vessel, when performed	\$741	(\$1)	-0.18%	\$12,451	\$1,475	13.44%
37230		Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed	\$735	\$0	0.01%	\$10,600	\$2,211	26.36%

37231		Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, initial vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed	\$799	\$1	0.06%	\$15,230	\$1,625	11.94%
37232		Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, each additional vessel; with transluminal angioplasty (List separately in addition to code fore primary procedure)	\$211	(\$1)	-0.57%	\$1,122	(\$88)	-7.30%
37233		Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, each additional vessel; with atherectomy, includes angioplasty within the same vessel, when performed (List separately in addition to code fore primary procedure)	\$343	(\$2)	-0.62%	\$1,367	(\$98)	-6.66%
37234		Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed (List separately in addition to code fore primary procedure)	\$300	(\$0)	-0.01%	\$3,955	(\$14)	-0.34%
37235		Revascularization, endovascular, open or percutaneous, tibial\peroneal artery, unilateral, each additional vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed (List separately in addition to code fore primary procedure)	\$421	\$0	0.11%	\$4,291	\$97	2.31%
Vascular Stent								
37236		Transcatheter placement of an intravascular stent(s) (except lower extremity, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; initial artery	\$466	(\$2)	-0.35%	\$3,662	(\$261)	-6.65%
37237		Transcatheter placement of an intravascular stent(s) (except lower extremity, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; each additional artery (List separately in addition to code for primary procedure)	\$223	(\$1)	-0.37%	\$2,175	(\$294)	-11.92%
37238		Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including angioplasty within the same vessel, when performed; initial vein	\$318	\$4	1.14%	\$3,699	(\$551)	-12.97%
37239		Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including angioplasty within the same vessel, when performed; each additional vein (List separately in addition to code for primary procedure)	\$159	(\$0)	-0.12%	\$1,765	(\$293)	-14.23%
BSC currently has no stent approved for use in the veins of the lower extremities								
Catheter Access								
36140		Introduction of needle or intracatheter; extremity artery	\$94	(\$0)	-0.27%	\$459	\$22	5.15%

36160		Introduction of needle or intracatheter, aortic, translumbar	\$129	\$0	0.11%	\$527	\$24	4.70%
36200		Introduction of catheter, aorta	\$146	(\$0)	-0.14%	\$585	\$13	2.2%
Catheter Placement								
36215		Selective catheter placement, arterial system; each first order thoracic or brachiocephalic branch, within a vascular family	\$222	(\$0)	-0.21%	\$1,060	\$29	2.77%
36216		Selective catheter placement, arterial system; initial second order thoracic or brachiocephalic branch, within a vascular family	\$286	(\$0)	-0.14%	\$1,142	\$24	2.11%
36217		Selective catheter placement, arterial system; initial third order or more selective thoracic or brachiocephalic branch, within a vascular family	\$343	\$1	0.32%	\$1,914	\$15	0.81%
36218		Selective catheter placement, arterial system; additional second order, third order, and beyond, thoracic or brachiocephalic branch, within a vascular family (list in addition to code for initial second or third order vessel as appropriate)	\$54	\$0	0.11%	\$248	(\$10)	-3.80%
36245		Selective catheter placement, arterial system; each first order abdominal, pelvic, or lower extremity artery branch, within a vascular family	\$248	(\$1)	-0.47%	\$1,349	\$12	0.89%
36246		Selective catheter placement, arterial system; initial second order abdominal, pelvic, or lower extremity artery branch, within a vascular family	\$266	(\$0)	-0.16%	\$858	\$18	2.17%
36247		Selective catheter placement, arterial system; initial third order or more selective abdominal, pelvic, or lower extremity artery branch, within a vascular family	\$316	(\$1)	-0.23%	\$1,535	\$5	0.32%
36248		Selective catheter placement, arterial system; additional second order, third order, and beyond, abdominal, pelvic, or lower extremity artery branch, within a vascular family (List in addition to code for initial second or third order vessel as appropriate)	\$51	\$0	0.11%	\$148	(\$8)	-4.98%
Carotid Artery Stenting								
37215		Transcatheter placement of intravascular stent(s), cervical carotid artery, percutaneous; with distal embolic protection	\$1,053	\$2	0.21%	NA	NA	NA
37216		Transcatheter placement of intravascular stent(s), cervical carotid artery, percutaneous; without distal embolic protection	\$0	(\$1,055)	-100.00%	NA	NA	NA
Vena Cava Filters								
37191		Insertion of inferior vena cava filter, endovascular approach including vascular access, vessel selection and radiological supervision and interpretation (including ultrasound) when performed.	\$234	(\$1)	-0.50%	\$2,521	(\$97)	-3.70%
37192		Repositioning of inferior vena cava filter, endovascular approach including vascular access, vessel selection and radiological supervision and interpretation (including ultrasound) when performed.	\$360	(\$8)	-2.15%	\$1,351	(\$30)	-2.16%
37193		Retrieval (removal) of inferior vena cava filter, endovascular approach including vascular access, vessel selection and radiological supervision and interpretation (including ultrasound) when performed.	\$366	(\$1)	-0.28%	\$1,588	\$26	1.63%

Thrombectomy								
37184		Primary percutaneous transluminal mechanical thrombectomy, noncoronary, arterial or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injection(s); initial vessel	\$467	(\$4)	-0.81%	\$2,171	(\$90)	-3.97%
37185		Primary percutaneous transluminal mechanical thrombectomy, noncoronary, arterial or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injection(s); second and all subsequent vessel(s) within the same vascular family (List separately in addition to code for primary mechanical thrombectomy procedure)	\$175	(\$2)	-0.91%	\$669	(\$50)	-6.96%
37186		Secondary percutaneous transluminal thrombectomy (eg, nonprimary mechanical, snare basket, suction technique), noncoronary, arterial or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injections, provided in conjunction with another percutaneous intervention other than primary mechanical thrombectomy (List separately in addition to code for primary procedure)	\$256	(\$1)	-0.45%	\$1,350	(\$11)	-0.79%
37187		Percutaneous transluminal mechanical thrombectomy, vein(s), including intraprocedural pharmacological thrombolytic injections and fluoroscopic guidance	\$411	(\$0)	-0.07%	\$2,002	(\$22)	-1.10%
37188		Percutaneous transluminal mechanical thrombectomy, vein(s), including intraprocedural pharmacological thrombolytic injections and fluoroscopic guidance, repeat treatment on subsequent day during course of thrombolytic therapy	\$289	(\$3)	-1.12%	\$1,684	(\$24)	-1.39%
Thrombolysis								
37211		Transcatheter therapy, arterial infusion for thrombolysis other than coronary, any method, including radiological supervision and interpretation, initial treatment day	\$404	\$0	0.11%	NA	NA	NA
37212		Transcatheter therapy, venous infusion for thrombolysis, any method, including radiological supervision and interpretation, initial treatment day	\$354	\$0	0.01%	NA	NA	NA
37213		Transcatheter therapy, arterial or venous infusion for thrombolysis other than coronary, any method, including radiological supervision and interpretation, continued treatment on subsequent day during course of thrombolytic therapy, including follow-up catheter contrast injection, position change, or exchange, when performed	\$244	(\$1)	-0.33%	NA	NA	NA
37214		Transcatheter therapy, arterial or venous infusion for thrombolysis other than coronary, any method, including radiological supervision and interpretation, continued treatment on subsequent day during course of thrombolytic therapy, including follow-up catheter contrast injection, position change, or exchange, when performed; cessation of thrombolysis including removal of catheter and vessel closure by any method	\$129	\$1	0.39%	NA	NA	NA

Non-Coronary IVUS								
37252		Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention; including radiological supervision and interpretation; initial non-coronary vessel (List separately in addition to code for primary procedure)	\$96	(\$0)	-0.27%	\$1,289	(\$108)	-7.75%
37253		Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention; including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)	\$77	(\$0)	-0.36%	\$202	(\$9)	-4.33%
Angiograms								
75710	26	Angiography, extremity, unilateral, radiological supervision and interpretation	\$88	\$0	0.11%	\$88	\$0	0.11%
75710			NA	NA	NA	\$170	(\$5)	-2.77%
75716	26	Angiography, extremity, bilateral, radiological supervision and interpretation	\$98	(\$0)	-0.26%	\$98	(\$0)	-0.26%
75716			NA	NA	NA	\$182	(\$17)	-8.76%
75726	26	Angiography, visceral, selective or supraselective (with or without flush aortogram), radiological supervision and interpretation	\$56	(\$0)	-0.53%	\$56	(\$0)	-0.53%
75726			NA	NA	NA	\$147	(\$5)	-3.21%
75731	26	Angiography, adrenal, unilateral, selective, radiological supervision and interpretation	\$59	\$0	0.11%	\$59	\$0	0.11%
75731			NA	NA	NA	\$170	(\$5)	-2.77%
75733	26	Angiography, adrenal, bilateral, selective, radiological supervision and interpretation	\$65	\$0	0.11%	\$65	\$0	0.11%
75733			NA	NA	NA	\$183	(\$5)	-2.57%
75736	26	Angiography, pelvic, selective or supraselective, radiological supervision and interpretation	\$56	\$0	0.11%	\$56	\$0	0.11%
75736			NA	NA	NA	\$158	(\$5)	-2.99%
Bronchoscopy								
31631		Bronchoscopy; with placement of tracheal stent(s) (includes tracheal/bronchial dilation as required)	\$237	(\$0)	-0.04%	NA	NA	NA
Biliary Stenting								
47556		Biliary endoscopy, percutaneous via T-Tube or other tract; with dilation of biliary duct stricture(s) with stent	\$386	\$2	0.48%	NA	NA	NA
Radiological S&I (Biliary stenting)								
74363	26	Percutaneous transhepatic dilation of biliary duct stricture with or without placement of stent, radiological supervision and interpretation	\$44	\$0	0.94%	\$44	\$0	0.94%
Transhepatic Shunts (TIPS)								
37182		Insertion of transvenous intrahepatic portosystemic shunt(s) (TIPS) (includes venous access, hepatic and portal vein cath, portography with hemodynamic evaluation, intrahepatic tract formation/dilation, stent placement and all associated imaging and guidance and documentation)	\$857	(\$3)	-0.35%	NA	NA	NA
37183		Revision of transvenous intrahepatic portosystemic shunt(s) (TIPS)(includes venous access, hepatic and portal vein cath, portography with hemodynamic evaluation, intrahepatic tract recanalization / dilation, stent placement and all associated imaging and guidance and documentation)	\$392	(\$0)	-0.07%	\$6,140	\$205	3.46%

Embolization								
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	\$463	(\$1)	-0.28%	\$4,950	\$119	2.47%
37242		Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; arterial, other than hemorrhage or tumor	\$500	(\$3)	-0.54%	\$7,622	\$148	1.98%
37243		Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; for tumors, organ ischemia, or infarction	\$589	(\$1)	-0.20%	\$9,861	(\$39)	-0.40%
37244		Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; for arterial or venous hemorrhage or lymphatic extravasation	\$696	(\$1)	-0.20%	\$7,052	\$151	2.18%
Drainage								
47531		Injection procedure for cholangiography, percutaneous, complete diagnostic procedure including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation; existing access	\$74	(\$0)	-0.37%	\$356	\$32	10.01%
47532		Injection procedure for cholangiography, percutaneous, complete diagnostic procedure including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation; new access (eg, percutaneous transhepatic cholangiogram)	\$223	\$0	0.11%	\$837	\$22	2.72%
47533		Placement of biliary drainage catheter, percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; external	\$279	(\$1)	-0.28%	\$1,270	\$10	0.77%
47534		Placement of biliary drainage catheter, percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; internal-external	\$390	(\$0)	-0.08%	\$1,480	(\$26)	-1.71%
47535		Conversion of external biliary drainage catheter to internal-external biliary drainage catheter, percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation	\$207	(\$0)	-0.06%	\$1,025	(\$14)	-1.38%
47536		Exchange of biliary drainage catheter (eg, external, internal-external, or conversion of internal-external to external only), percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation	\$138	(\$1)	-0.41%	\$706	\$1	0.11%

47537		Removal of biliary drainage catheter, percutaneous, requiring fluoroscopic guidance (eg, with concurrent indwelling biliary stents), including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation	\$101	(\$0)	-0.25%	\$415	\$40	10.58%
47538		Placement of stent(s) into a bile duct, percutaneous, including diagnostic cholangiography, imaging guidance (eg, fluoroscopy and/or ultrasound), balloon dilation, catheter exchange(s) and catheter removal(s) when performed, and all associated radiological supervision and interpretation, each stent; existing access	\$248	\$0	0.11%	\$4,390	(\$32)	-0.73%
47539		Placement of stent(s) into a bile duct, percutaneous, including diagnostic cholangiography, imaging guidance (eg, fluoroscopy and/or ultrasound), balloon dilation, catheter exchange(s) and catheter removal(s) when performed, and all associated radiological supervision and interpretation, each stent; new access, without placement of separate biliary drainage catheter	\$448	(\$1)	-0.21%	\$4,869	(\$31)	-0.63%
47540		Placement of stent(s) into a bile duct, percutaneous, including diagnostic cholangiography, imaging guidance (eg, fluoroscopy and/or ultrasound), balloon dilation, catheter exchange(s) and catheter removal(s) when performed, and all associated radiological supervision and interpretation, each stent; new access, with placement of separate biliary drainage catheter (eg, external or internal-external)	\$462	(\$1)	-0.20%	\$4,952	(\$54)	-1.09%
47541		Placement of access through the biliary tree and into small bowel to assist with an endoscopic biliary procedure (eg, rendezvous procedure), percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation, new access	\$347	(\$1)	-0.41%	\$1,218	\$18	1.46%
47542		Balloon dilation of biliary duct(s) or of ampulla (sphincteroplasty), percutaneous, including imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation, each duct (List separately in addition to code for primary procedure)	\$142	(\$0)	-0.14%	\$502	\$29	6.13%
47543		Endoluminal biopsy(ies) of biliary tree, percutaneous, any method(s) (eg, brush, forceps, and/or needle), including imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation, single or multiple (List separately in addition to code for primary procedure)	\$151	\$0	0.11%	\$482	(\$6)	-1.15%
47544		Removal of calculi/debris from biliary duct(s) and/or gallbladder, percutaneous, including destruction of calculi by any method (eg, mechanical, electrohydraulic, lithotripsy) when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)	\$166	(\$1)	-0.75%	\$1,055	(\$45)	-4.05%

Rhythm Management								
Device Implant Procedures								
33206		Insertion of heart pacemaker and atrial electrode	\$474	\$2	0.34%	NA	NA	NA
33207		Insertion of heart pacemaker and ventricular electrode	\$503	\$1	0.11%	NA	NA	NA
33208		Insertion of heart pacemaker, atrial and ventricular electrodes	\$546	\$1	0.24%	NA	NA	NA
33212		Insertion of pulse generator only with existing single lead	\$336	\$1	0.22%	NA	NA	NA
33213		Insertion of pulse generator only with existing dual lead	\$351	\$1	0.21%	NA	NA	NA
33221		Insertion of pulse generator only with existing multiple leads	\$376	\$0	0.01%	NA	NA	NA
33214		Upgrade of pacemaker system	\$501	\$1	0.18%	NA	NA	NA
33215		Reposition pacing-defib lead	\$325	\$0	0.11%	NA	NA	NA
33216		Insert lead pace-defib, one	\$388	\$1	0.20%	NA	NA	NA
33217		Insert lead pace-defib, dual	\$382	\$2	0.49%	NA	NA	NA
33218		Repair of single lead, pacer or ICD	\$405	\$0	0.02%	NA	NA	NA
33220		Repair of 2 leads, pacer or ICD	\$408	(\$1)	-0.15%	NA	NA	NA
33222		Revise/relocate pocket, pacemaker	\$354	\$1	0.31%	NA	NA	NA
33223		Revise pocket, defib	\$428	\$1	0.19%	NA	NA	NA
33225		L ventric pacing lead (add-on)	\$493	\$1	0.11%	NA	NA	NA
33227		Removal and replacement of pacemaker gen, single lead	\$354	\$1	0.21%	NA	NA	NA
33228		Removal and replacement of pacemaker gen, dual lead	\$370	\$0	0.01%	NA	NA	NA
33229		Removal and replacement of pacemaker gen, multiple lead	\$392	\$0	0.11%	NA	NA	NA
33230		Insert ICD pulse generator with existing dual leads	\$400	\$0	0.11%	NA	NA	NA
33231		Insert ICD pulse generator with existing multiple leads	\$420	\$0	0.11%	NA	NA	NA
33233		Removal of pacemaker system gen only	\$241	\$1	0.26%	NA	NA	NA
33234		Removal of pacemaker system lead, single	\$508	\$1	0.25%	NA	NA	NA
33235		Removal pacemaker electrode, dual lead	\$667	\$1	0.11%	NA	NA	NA
33240		Insertion of implantable defibrillator pulse generator only; with existing single lead	\$382	\$0	0.11%	NA	NA	NA
33241		Remove pulse generator only	\$225	(\$0)	-0.05%	NA	NA	NA
33262		Removal and replacement of defib gen, single lead	\$390	\$1	0.20%	NA	NA	NA
33263		Removal and replacement of defib gen, dual lead	\$406	\$0	0.02%	NA	NA	NA
33264		Removal and replacement of defib gen, multiple lead	\$424	\$1	0.19%	NA	NA	NA
33244		Remove eltrd, transven	\$904	\$5	0.51%	NA	NA	NA
33249		Eltrd/insert pace-defib	\$961	\$2	0.26%	NA	NA	NA
33270		Insertion or replacement of permanent S-ICD system, with subcutaneous electrode, including DFT, when performed	\$594	(\$1)	-0.13%	NA	NA	NA
33271		Insertion of S-ICD electrode	\$478	(\$0)	-0.04%	NA	NA	NA
33272		Removal of S-ICD electrode	\$363	(\$2)	-0.58%	NA	NA	NA
33273		Repositioning of previously implanted S-ICD electrode	\$421	\$0	0.02%	NA	NA	NA
Watchman™ Left Atrial Appendage Closure (LAAC) Procedure								
33340		Percutaneous transcatheter closure of the left atrial appendage with implant, including fluoroscopy, transeptal puncture, catheter placement(s) left atrial angiography, left atrial appendage angiography, radiological supervision and interpretation	\$829	(\$2)	-0.24%	NA	NA	NA

Device Evaluation								
93641	26	Electrophysiology evaluation -ICD system	\$328	\$1	0.22%	\$328	\$1	0.22%
93260		S-ICD Programming device evaluation (in person)	NA	NA	NA	\$70	\$3	4.44%
93260	TC		NA	NA	NA	\$26	\$3	14.64%
93260	26		\$44	(\$0)	-0.70%	\$44	(\$0)	-0.70%
93261		S-ICD Interrogation device evaluation (in person)	NA	NA	NA	\$64	\$3	5.47%
93261	TC		NA	NA	NA	\$26	\$4	16.52%
93261	26		\$38	(\$0)	-0.83%	\$38	(\$0)	-0.83%
93288		PM Interrogation in person all lead configurations	NA	NA	NA	\$45	\$6	14.80%
93288	TC		NA	NA	NA	\$23	\$6	33.48%
93288	26		\$22	\$0	0.11%	\$22	\$0	0.11%
93279		PM Programming eval 1 lead	NA	NA	NA	\$56	\$6	11.55%
93279	TC		NA	NA	NA	\$23	\$6	33.48%
93279	26		\$33	\$0	0.11%	\$33	\$0	0.11%
93280		PM Programming eval 2 lead	NA	NA	NA	\$66	\$7	11.03%
93280	TC		NA	NA	NA	\$27	\$7	32.29%
93280	26		\$39	\$0	0.11%	\$39	\$0	0.11%
93281		PM Programming eval 3 lead	NA	NA	NA	\$71	\$7	10.18%
93281	TC		NA	NA	NA	\$27	\$7	31.72%
93281	26		\$44	\$0	0.11%	\$44	\$0	0.11%
93289		ICD interrogation in person all lead configurations	NA	NA	NA	\$61	\$6	10.51%
93289	TC		NA	NA	NA	\$23	\$6	33.48%
93289	26		\$38	\$0	0.11%	\$38	\$0	0.11%
93282		ICD Programming eval 1 lead	NA	NA	NA	\$68	\$6	9.95%
93282	TC		NA	NA	NA	\$25	\$6	32.84%
93282	26		\$44	\$0	0.11%	\$44	\$0	0.11%
93283		ICD Programming eval 2 lead	NA	NA	NA	\$86	\$7	8.26%
93283	TC		NA	NA	NA	\$27	\$7	31.72%
93283	26		\$59	\$0	0.11%	\$59	\$0	0.11%
93284		ICD Programming eval 3 lead	NA	NA	NA	\$93	\$7	7.59%
93284	TC		NA	NA	NA	\$29	\$7	29.17%
93284	26		\$65	\$0	0.11%	\$65	\$0	0.11%
93291		ILR Interrogation in person	NA	NA	NA	\$39	\$5	15.18%
93291	TC		NA	NA	NA	\$20	\$5	34.29%
93291	26		\$19	\$0	0.11%	\$19	\$0	0.11%
93285		ILR Programming eval	NA	NA	NA	\$49	\$6	13.35%
93285	TC		NA	NA	NA	\$22	\$6	34.93%
93285	26		\$27	\$0	0.11%	\$27	\$0	0.11%
93290		ICM Interrogation in person	NA	NA	NA	\$43	\$5	14.55%
93290	TC		NA	NA	NA	\$21	\$5	35.86%
93290	26		\$22	\$0	0.11%	\$22	\$0	0.11%
93292		Wearable defib Interrogation in person	NA	NA	NA	\$41	\$4	9.74%
93292	TC		NA	NA	NA	\$19	\$4	23.39%
93292	26		\$22	\$0	0.11%	\$22	\$0	0.11%
93286		PM Peri-px eval and programming	NA	NA	NA	\$36	\$5	16.60%
93286	TC		NA	NA	NA	\$20	\$5	33.48%
93286	26		\$15	\$0	0.11%	\$15	\$0	0.11%
93287		ICD Peri-px eval and programming	NA	NA	NA	\$44	\$5	13.09%
93287	TC		NA	NA	NA	\$20	\$5	33.48%
93287	26		\$24	\$0	0.11%	\$24	\$0	0.11%
93293		TTM rhythm strip pacemaker eval	NA	NA	NA	\$53	(\$1)	-1.88%
93293	TC		NA	NA	NA	\$38	(\$1)	-2.67%
93293	26		\$15	\$0	0.11%	\$15	\$0	0.11%
93228		Wearable defib mobile telemetry w/phy r&l w/report	\$27	\$0	0.11%	\$27	\$0	0.11%
93294		PM Remote Interrogation 90 days all lead config	\$31	\$0	0.11%	\$31	\$0	0.11%

93295		ICD Remote interrogation 90 days all lead config	\$45	(\$11)	-19.14%	\$45	(\$11)	-19.14%
93296		PE- Remote data aquisition PM or ICD	NA	NA	NA	\$26	(\$1)	-3.89%
93297		ICM Remote interrogation eval 30 days	\$27	\$0	0.11%	\$27	\$0	0.11%
93298		ILR Remote interrogation eval 30 days	\$27	(\$0)	-1.21%	\$27	(\$0)	-1.21%
93299		ICM and ILR Remote interr 30 days, tech	\$0	\$0	NA	Contractor Priced		
Electrophysiology Procedures								
93462		L hrt cath trnsptl puncture	\$220	\$0	0.11%	\$220	\$0	0.11%
93609	26	Intraventricular and/or intra-atrial mapping of tachycardia site(s) with catheter manipulation to record from multiple sites to identify origin of tachycardia (add on)	\$292	\$1	0.23%	\$292	\$1	0.23%
93613		Intracardiac electrophysiologic 3-dimensional mapping (add on)	\$311	(\$27)	-7.89%	NA	NA	NA
93619	26	Comprehensive electrophysiologic evaluation with right atrial pacing and recording, right ventricular pacing and recording, HIS bundle recording, including insertion and repositioning of multiple electrode catheters, without induction or attempted induction of arrhythmia	\$410	\$0	0.11%	\$410	\$0	0.11%
93620	26	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording	\$659	\$1	0.22%	\$659	\$1	0.22%
93621	26	with left atrial pacing and recording from coronary sinus or left atrium (add on)	\$122	(\$1)	-0.48%	\$122	(\$1)	-0.48%
93622	26	with left ventricular pacing and recording (add on)	\$181	\$1	0.31%	\$181	\$1	0.31%
93623	26	Programmed stimulation and pacing after intravenous drug infusion (add on)	\$166	(\$0)	-0.11%	\$166	(\$0)	-0.11%
93644		EP Evaluation of S-ICD	NA	NA	NA	\$204	(\$6)	-2.65%
93650		Intracardiac catheter ablation of atrioventricular node function, atrioventricular conduction for creation of complete heart block, with or without temporary pacemaker placement	\$620	\$1	0.11%	NA	NA	NA
93653		Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, right ventricular pacing and recording, HIS recording, with intracardiac catheter ablation of arrhythmogenic focus; with treatment of supraventricular tachycardia by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry.	\$878	\$2	0.23%	NA	NA	NA
93654		with treatment of ventricular tachycardia or focus of ventricular ectopy including intracardiac electrophysiologic 3D mapping, when performed, and left ventricular pacing and recording, when performed	\$1,175	\$2	0.14%	NA	NA	NA
93655		Intracardiac catheter ablation of a discrete mechanism of arrhythmia which is distinct from the primary ablated mechanism, including repeat diagnostic maneuvers, to treat a spontaneous or induced arrhythmia (add on)	\$447	\$0	0.11%	NA	NA	NA

93656		Comprehensive electrophysiologic evaluation including transseptal catheterizations, insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with atrial recording and pacing, when possible, right ventricular pacing and recording, HIS bundle recording with intracardiac catheter ablation of arrhythmogenic focus, with treatment of atrial fibrillation by ablation by pulmonary vein isolation	\$1,178	\$2	0.17%	NA	NA	NA
93657		Additional linear or focal intracardiac catheter ablation of the left or right atrium for treatment of atrial fibrillation remaining after completion of pulmonary vein isolation (add on)	\$446	\$0	0.03%	NA	NA	NA
93662	26	Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation (add on)	\$147	(\$0)	-0.14%	\$147	(\$0)	-0.14%
BSC currently has no FDA-approved ablation catheters for the treatment of atrial fibrillation								
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