

Medicare Payments

The following table includes information about payments made by Medicare for the procedures included in this *Cardiac Procedures Report* – 1) coronary artery bypass graft, 2) percutaneous coronary intervention for a heart attack, 3) percutaneous coronary intervention without a heart attack, 4) surgical aortic valve replacement, 5) surgical aortic valve replacement with coronary artery bypass graft, and 6) transcatheter aortic valve replacement. This analysis is based on data from calendar years (CY) 2021 – 2022. Displayed are the average amounts paid by Medicare fee-for-service for inpatient hospitalizations of Pennsylvania residents only. Payments from Medicare Advantage plans (e.g., Medicare HMOs) are not included, nor are patient liabilities (e.g., coinsurance and deductible dollar amounts).

The average Medicare fee-for-service payment is calculated using the claim payment amount based on data provided by the Centers for Medicare and Medicaid Services. The average payment is calculated by summing the payment amounts for the cases in a particular procedure group and dividing the sum by the number of cases in that procedure group.

The procedure groups included in this report are defined using ICD-10-CM/PCS (International Classification of Diseases, Tenth Revision, Clinical Modification/Procedure Coding System) diagnosis and procedure codes, with a secondary requirement that they be limited to particular MS-DRGs (Medicare Severity Diagnosis-Related Groups) and Major Diagnostic Category (MDC) where appropriate – information available from the discharge data that PHC4 receives from Pennsylvania hospitals. Technical Notes relevant to this report provide additional detail. They are posted to PHC4's website at www.phc4.org.

In this section, average payments by MS-DRGs are displayed for the procedures included in this report. While these procedures have been defined using ICD-10-CM/PCS codes that represent a clinically cohesive population, the payment data is displayed by the individual MS-DRGs included within each procedure to account for variations in case mix.



For the procedures included in this Cardiac Procedures Report

MS-DRG	MS-DRG Title	Number of Cases	Average Payment
Coronary	Artery Bypass Graft	3,208	\$40,860
001	Heart Transplant or Implant of Heart Assist System with MCC	NR	NR
002	Heart Transplant or Implant of Heart Assist System without MCC	NR	NR
003	ECMO or Tracheostomy with Mechanical Ventilation >96 Hours or Principal Diagnosis Except Face, Mouth and Neck with Major O.R. Procedures	23	\$182,031
215	Other Heart Assist System Implant	20	\$117,790
216	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with MCC	NR	NR
217	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with CC	NR	NR
218	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization without CC/MCC	NR	NR
219	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization with MCC	NR	NR
220	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization with CC	NR	NR
221	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization without CC/MCC	NR	NR
222	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction, Heart Failure or Shock with MCC	NR	NR
223	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction, Heart Failure or Shock without MCC	NR	NR
224	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction, Heart Failure or Shock with MCC	NR	NR
225	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction, Heart Failure or Shock without MCC	NR	NR

NR - Not reported due to low volume

CC - Complication or Comorbidity



For the procedures included in this Cardiac Procedures Report

MS-DRG	MS-DRG Title	Number of Cases	Average Payment
Coronary	Artery Bypass Graft Continued		
226	Cardiac Defibrillator Implant without Cardiac Catheterization with MCC	NR	NR
227	Cardiac Defibrillator Implant without Cardiac Catheterization without MCC	NR	NR
228	Other Cardiothoracic Procedures with MCC	20	\$46,914
229	Other Cardiothoracic Procedures without MCC	25	\$30,701
231	Coronary Bypass with PTCA with MCC	46	\$65,119
232	Coronary Bypass with PTCA without MCC	55	\$44,752
233	Coronary Bypass with Cardiac Catheterization or Open Ablation with MCC	593	\$54,864
234	Coronary Bypass with Cardiac Catheterization or Open Ablation without MCC	625	\$35,665
235	Coronary Bypass without Cardiac Catheterization with MCC	672	\$41,327
236	Coronary Bypass without Cardiac Catheterization without MCC	1,112	\$28,812
Percutaneous Coronary Intervention for a Heart Attack		4,891	\$16,267
246	Percutaneous Cardiovascular Procedures with Drug- Eluting Stent with MCC or 4+ Arteries or Stents	1,513	\$22,841
247	Percutaneous Cardiovascular Procedures with Drug- Eluting Stent without MCC	3,152	\$13,258
248	Percutaneous Cardiovascular Procedures with Non Drug- Eluting Stent with MCC or 4+ Arteries or Stents	17	\$22,933
249	Percutaneous Cardiovascular Procedures with Non Drug- Eluting Stent without MCC	24	\$12,282
250	Percutaneous Cardiovascular Procedures without Coronary Artery Stent with MCC	63	\$18,364
251	Percutaneous Cardiovascular Procedures without Coronary Artery Stent without MCC	122	\$11,262

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For the procedures included in this Cardiac Procedures Report

MS-DRG	MS-DRG Title	Number of Cases	Average Payment
Percutan	eous Coronary Intervention without a Heart Attack	2,449	\$17,990
246	Percutaneous Cardiovascular Procedures with Drug- Eluting Stent with MCC or 4+ Arteries or Stents	1,128	\$22,943
247	Percutaneous Cardiovascular Procedures with Drug- Eluting Stent without MCC	1,112	\$13,370
248	Percutaneous Cardiovascular Procedures with Non Drug- Eluting Stent with MCC or 4+ Arteries or Stents	NR	NR
249	Percutaneous Cardiovascular Procedures with Non Drug- Eluting Stent without MCC	NR	NR
250	Percutaneous Cardiovascular Procedures without Coronary Artery Stent with MCC	120	\$18,747
251	Percutaneous Cardiovascular Procedures without Coronary Artery Stent without MCC	77	\$11,327
Surgical A	Aortic Valve Replacement	631	\$54,532
001	Heart Transplant or Implant of Heart Assist System with MCC	NR	NR
002	Heart Transplant or Implant of Heart Assist System without MCC	NR	NR
003	ECMO or Tracheostomy with Mechanical Ventilation >96 Hours or Principal Diagnosis Except Face, Mouth and Neck with Major O.R. Procedures	NR	NR
215	Other Heart Assist System Implant	NR	NR
216	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with MCC	39	\$87,745
217	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with CC	11	\$51,503
218	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization without CC/MCC	NR	NR
219	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization with MCC	217	\$61,018
220	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization with CC	303	\$41,880

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For the procedures included in this Cardiac Procedures Report

MS-DRG	MS-DRG Title	Number of Cases	Average Payment
Surgical A	Aortic Valve Replacement <i>Continued</i>		
221	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization without CC/MCC	50	\$35,200
222	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction, Heart Failure or Shock with MCC	NR	NR
223	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction, Heart Failure or Shock without MCC	NR	NR
224	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction, Heart Failure or Shock with MCC	NR	NR
225	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction, Heart Failure or Shock without MCC	NR	NR
226	Cardiac Defibrillator Implant without Cardiac Catheterization with MCC	NR	NR
227	Cardiac Defibrillator Implant without Cardiac Catheterization without MCC	NR	NR
228	Other Cardiothoracic Procedures with MCC	NR	NR
229	Other Cardiothoracic Procedures without MCC	NR	NR
Surgical Aortic Valve Replacement with Coronary Artery Bypass Graft		578	\$58,454
001	Heart Transplant or Implant of Heart Assist System with MCC	NR	NR
002	Heart Transplant or Implant of Heart Assist System without MCC	NR	NR
003	ECMO or Tracheostomy with Mechanical Ventilation >96 Hours or Principal Diagnosis Except Face, Mouth and Neck with Major O.R. Procedures	NR	NR
215	Other Heart Assist System Implant	NR	NR
216	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with MCC	64	\$79,402

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CC - Complication or Comorbidity



For the procedures included in this Cardiac Procedures Report

MS-DRG	MS-DRG Title	Number of Cases	Average Payment
Surgical A	Aortic Valve Replacement with Coronary Artery Bypas	s Graft <i>Conti</i>	inued
217	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with CC	25	\$49,470
218	Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization without CC/MCC	NR	NR
219	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization with MCC	204	\$66,410
220	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization with CC	245	\$41,565
221	Cardiac Valve and Other Major Cardiothoracic Procedures without Cardiac Catheterization without CC/MCC	25	\$32,740
222	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction, Heart Failure or Shock with MCC	NR	NR
223	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction, Heart Failure or Shock without MCC	NR	NR
224	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction, Heart Failure or Shock with MCC	NR	NR
225	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction, Heart Failure or Shock without MCC	NR	NR
226	Cardiac Defibrillator Implant without Cardiac Catheterization with MCC	NR	NR
227	Cardiac Defibrillator Implant without Cardiac Catheterization without MCC	NR	NR
228	Other Cardiothoracic Procedures with MCC	NR	NR
229	Other Cardiothoracic Procedures without MCC	NR	NR

NR - Not reported due to low volume

CC - Complication or Comorbidity

MCC - Major Complication or Comorbidity



For the procedures included in this Cardiac Procedures Report

MS-DRG	MS-DRG Title	Number of Cases	Average Payment
Transcath	neter Aortic Valve Replacement	3,886	\$46,013
001	Heart Transplant or Implant of Heart Assist System with MCC	NR	NR
002	Heart Transplant or Implant of Heart Assist System without MCC	NR	NR
003	ECMO or Tracheostomy with Mechanical Ventilation >96 Hours or Principal Diagnosis Except Face, Mouth and Neck with Major O.R. Procedures	NR	NR
228	Other Cardiothoracic Procedures with MCC	NR	NR
229	Other Cardiothoracic Procedures without MCC	NR	NR
266	Endovascular Cardiac Valve Replacement and Supplement Procedures with MCC	NR	NR
267	Endovascular Cardiac Valve Replacement and Supplement Procedures without MCC	2,477	\$41,943

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CC - Complication or Comorbidity

MCC - Major Complication or Comorbidity