The following table includes information about payments made by Medicare for the four procedures included in this *Cardiac Procedures Report* – coronary artery bypass graft (CABG), percutaneous coronary intervention (PCI) for a heart attack, PCI without a heart attack and transcatheter aortic valve replacement (TAVR). This analysis is based on data from calendar years (CY) 2019 – 2020. 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 (CMS). The average payment is calculated by summing the payment amounts for the cases in a particular procedure

The payments analysis is based on data from CY 2019 – 2020. This information, provided by CMS, reflects the average amounts paid by Medicare fee-for-service for inpatient hospitalizations of Pennsylvania residents only. 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 four 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.

		Medicare Fee-for-Service	
	MS-DRG Title	Number of Cases	Average
	Artery Bypass Graft (CABG)	3,733	Paymen \$37,371
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.	21	\$193,153
215	Other Heart Assist System Implant	25	\$125,758
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/Shock with MCC	NR	NR
223	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction/Heart Failure/Shock without MCC	NR	NR
224	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction/Heart Failure/Shock with MCC	NR	NR
225	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction/Heart Failure/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	61	\$49,355
229	Other Cardiothoracic Procedures without MCC	61	\$30,708
231	Coronary Bypass with PTCA with MCC	63	\$61,904
232	Coronary Bypass with PTCA without MCC	59	\$40,532

NR - Not reported due to low volume.

CC - Complication or Comorbidity

MCC - Major Complication or Comorbidity

MS-DRG	For the four procedures included in this Cardiac Procedures Report MS-DRG Title	Medicare Fee-for-Service	
		Number of Cases	Average Paymen
Coronary	Artery Bypass Graft (CABG) Continued		
233	Coronary Bypass with Cardiac Catheterization with MCC	617	\$51,109
234	Coronary Bypass with Cardiac Catheterization without MCC	830	\$32,839
235	Coronary Bypass without Cardiac Catheterization with MCC	704	\$38,874
236	Coronary Bypass without Cardiac Catheterization without MCC	1,274	\$26,269
Percutan	eous Coronary Intervention for a Heart Attack	6,006	\$15,737
246	Percutaneous Cardiovascular Procedures with Drug-Eluting Stent with MCC or 4+ Arteries or Stents	1,675	\$22,137
247	Percutaneous Cardiovascular Procedures with Drug-Eluting Stent without MCC	3,905	\$13,147
248	Percutaneous Cardiovascular Procedures with Non Drug-Eluting Stent with MCC or 4+ Arteries or Stents	61	\$22,563
249	Percutaneous Cardiovascular Procedures with Non Drug-Eluting Stent without MCC	108	\$12,555
250	Percutaneous Cardiovascular Procedures without Coronary Artery Stent with MCC	101	\$16,980
251	Percutaneous Cardiovascular Procedures without Coronary Artery Stent without MCC	156	\$10,574
Percutan	eous Coronary Intervention without a Heart Attack	2,927	\$17,011
246	Percutaneous Cardiovascular Procedures with Drug-Eluting Stent with MCC or 4+ Arteries or Stents	1,134	\$22,467
247	Percutaneous Cardiovascular Procedures with Drug-Eluting Stent without MCC	1,536	\$13,273
248	Percutaneous Cardiovascular Procedures with Non Drug-Eluting Stent with MCC or 4+ Arteries or Stents	37	\$21,136
249	Percutaneous Cardiovascular Procedures with Non Drug-Eluting Stent without MCC	42	\$12,742
250	Percutaneous Cardiovascular Procedures without Coronary Artery Stent with MCC	98	\$17,809
251	Percutaneous Cardiovascular Procedures without Coronary Artery Stent without MCC	80	\$10,801
Transcatheter Aortic Valve Replacement		3,545	\$45,184
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.	NR	NR
266	Endovascular Cardiac Valve Replacement and Supplement Procedures with MCC	NR	NR
267	Endovascular Cardiac Valve Replacement and Supplement Procedures without MCC	2,331	\$41,412

NR - Not reported due to low volume.

CC - Complication or Comorbidity