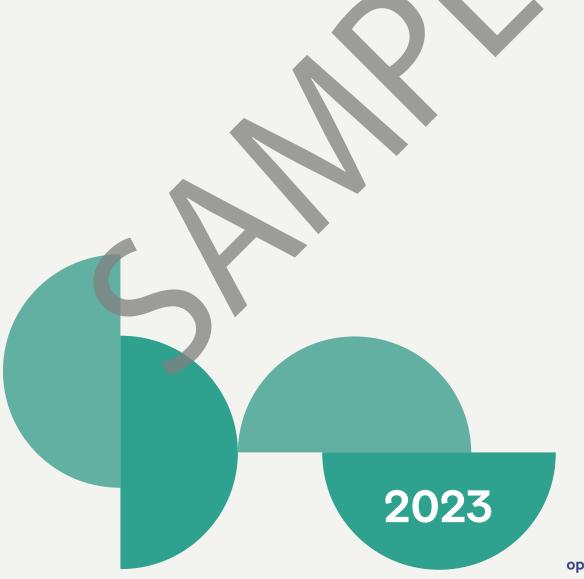


DRG Desk Reference

The ultimate resource for improving MS-DRG assignment practices



optumcoding.com

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Optimizing Ti

Diseases And Disorders Of The Circulatory System

DRG 215 Other Heart Assist System Implant

Potential DRGs

001 Heart Transplant or Implant of Heart Assist System with MCC 002 Heart Transplant or Implant of Heart Assist System without MCC RW 10.5584 28.9132

14.9701

DRG	PDx/SDx/Procedure	Tips				
001	Insertion of implantable heart assist system or implantation of total internal biventricular heart replacement system	Review operative report carefully to determine extent of all procedures. Implantable ventricular assist devices are mechanical support devices attached to the native heart and can be internal or external.				
		A total artificial heart (TAH) is a surgically implantable biventricular support device that serves as a total replacement for both right and left ventricles of the failing heart. Both ICD-10-PCS procedure codes, Ø2RKØJZ Replacement of right ventricle with synthetic substitute, open approach, and Ø2RLØJZ Replacement of left ventricle with synthetic substitute, open approach, must be reported together to describe a biventricular heart replacement (artificial heart). The excision of the native ventricles is integral to the replacement procedure and is not reported separately.				
	OR					
	Insertion of external heart assist system with removal of existing heart assist system (e.g. replacement, exchange)	Review operative report carefully to determine extent of all procedures. External (sometimes called percutaneous ventricular assist devices (pVADs) are generally placed through the femoral artery via catheter. Both insertion and removal must be performed for this DRG.				
	OR					
	Removal and revision of heart assist system	Root operation Revision is correcting, to the extent possible, a portion of a malfunctioning device or the position of a displaced device. Removal must be performed in conjunction with revision for this DRG.				
	AND					
	MCC condition	See appendix B.				
002	Insertion of implantable heart assist system or implantation of total internal biventricular heart replacement system OR	See DRG 001.				
	Insertion of external heart assist system with removal of existing heart assist system (e.g. replacement, exchange)	See DRG 001.				
	OR					
	Removal and revision of heart assist system	See DRG 001.				

DRG 216 Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with MCC

No Potential DRGs

DRG 217 Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with CC

Potential DRGs

216 Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with MCC

10.0393

RW 6.4835

RW 10.0393

DRG PDx/SDx/Procedure		Tips
216 MCC condition		See appendix B.

DRG 218 Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization without CC/MCC

Potential DRGs

216 Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with MCC
217 Cardiac Valve and Other Major Cardiothoracic Procedures with Cardiac Catheterization with CC

RW 6.1093

6.4835

DRG	PDx/SDx/Procedure	Tips
216	MCC condition	See appendix B.
217	CC condition	See appendix B.

DRG 243 (Continued)

DRG	PDx/SDx/Procedure	Tips				
228	Leadless pacemaker insertion, replacement, or revision	Review the operative report carefully. Leadless or transcatheter pacemakers do not require a subcutaneous pocket or a tunneled lead. The device is placed within the heart chamber (intracardiac), typically the right ventricle, via a peripheral vessel.				
	AND					
	MCC condition	See appendix B.				
229	Leadless pacemaker insertion	See DRG 228.				
242	MCC condition	See appendix B.				
258	Pacemaker device replacement - insertion with removal of old device	Review record for pacemaker replacement procedure. Two codes must be reported—both removal and insertion.				
	AND					
	MCC condition	See appendix B.				
260	AND MCC condition Leadless pacemaker insertion, replacement, or revision MCC condition Leadless pacemaker insertion MCC condition Pacemaker device replacement - insertion with removal of old device AND MCC condition Cardiac pacemaker revision procedure	Root operation Revision is defined as: "Correcting, to the extent possible, a malfunctioning or displaced device" and is coded wher objective of the procedure is to correct the position or function of previously placed device, without taking the entire device out and putting in a whole new device in its place. Revision can include correcting a malfunctioning device by taking out and/or putting in part, but not all, of the device, Example of pacemaker revision wou adjustment of the position of pacemaker lead without removing or replacing the lead.				
	AND					
	MCC condition	See appendix B.				

DRG 244 Permanent Cardiac Pacemaker Implant without CC/MCC

RW 2.0633

Potent	cial DRGs	
222	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction/Heart Failure/Shock with MCC	7.9510
223	Cardiac Defibrillator Implant with Cardiac Catheterization with Acute Myocardial Infarction/Heart Failure/Shock without MCC	5.7986
224	Cardiac Defibrillator Implant with Cardiac Cathetefization without Acute Myocardial Infarction/Heart Failure/Shock with MCC	7.5191
225	Cardiac Defibrillator Implant with Cardiac Catheterization without Acute Myocardial Infarction/Heart Failure/Shock without MCC	5.6178
226	Cardiac Defibrillator Implant without Cardiac Catheterization with MCC	6.5650
227	Cardiac Defibrillator Implant without Cardiac Catheterization without MCC	5.2121
228	Other Cardiothoracic Procedures with MCC	5.3303
229	Other Cardiothoracic Procedures without MCC	3.4412
242	Permanent Cardiac Pacemaker Implant with MCC	3.7276
243	Permanent Cardiac Pacemaker Implant with CC	2.5185
258	Cardiac Pacemaker Device Replacement with MCC	3.1681
260	Cardiac Pacemaker Revision Except Device Replacement with MCC	3.5673

DRG	PDx/SDx/Procedure	Tips				
222	Cardiac defibrillator implant	Two codes must be reported—both the generator and lead(s) are inserted.				
	AND					
	Hypertensive heart and kidney disease with heart failure	According to the ICD-10-CM guidelines the classification presumes a causal relationship between hypertension and heart and kidney involvement, as these terms are linked by the term "with" in the alphabetic index (either under a main term or subterm). Heart and kidney disease should be coded as related to hypertension unless the documentation clearly states the conditions are unrelated, in which case they may be coded separately. These conditions do not require provider documentation linking them to hypertension.				
	Acute myocardial infarction, initial episode of care	A code from category I22 Subsequent ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction, is to be used when a patient who has suffered a type 1 or unspecified AMI has a new AMI within the 4-week time frame of the initial AMI. A code from category I22 must be used in conjunction with a code from category I21. The sequencing of the I22 and I21 codes depends on the circumstances of the encounter.				
		Do not assign code I22 for subsequent myocardial infarctions other than type 1 or unspecified. For subsequent type 2 AMI, assign only code I21.A1. For subsequent type 4 or type 5 AMI, assign only code I21.A9.				
		If a subsequent myocardial infarction of one type occurs within 4 weeks of a myocardial infarction of a different type, assign the appropriate codes from category I21 to identify each type. Do not assign a code from I22. Codes from category I22 should be assigned only if both the initial and subsequent myocardial infarctions are type 1 or unspecified.				
	Heart failure, all types	Code first underlying cause.				
	Shock, cardiogenic or unspecified					
	AND					
	Cardiac catheterization (right, left, bilateral) for measurement of cardiac sampling and pressure, or with angiocardiography (coronary angiography)					
	AND					
	MCC condition	See appendix B.				

Appendix B: Numeric Lists of CCs and MCCs

Numeric CC List

1 aa a	A18.12	A36.1	A51.49	A77.8	BØ2.23	B4Ø.2	B6Ø.2	B97.34	C37	C49.A2
AØØ.Ø	A18.13	A36.2	A52.ØØ	A77.9	BØ2.29	B4Ø.3	B65.Ø	B97.35	C38.Ø	C49.A3
AØØ.1		A36.3		A77.5	BØ2.3Ø	B4Ø.7	B65.1	C15.3	C38.1	C49.A4
AØØ.9	A18.14		A52.Ø1							C49.A4
AØ1.ØØ	A18.15	A36.81	A52.Ø2	A79.Ø	BØ2.31	B4Ø.81	B65.2	C15.4	C38.2	
AØ1.Ø1	A18.16	A36.82	A52.Ø3	A79.1	BØ2.32	B4Ø.89	B65.3	C15.5	C38.3	C49.A9
AØ1.Ø2	A18.17	A36.83	A52.Ø4	A79.81	BØ2.33	B4Ø.9	B65.8	C15.8	C38.4	C56.1
AØ1.Ø3	A18.18	A36.84	A52.Ø5	A79.82	BØ2.34	B41.Ø	B65.9	C15.9	C38.8	C56.2
AØ1.Ø4	A18.2	A36.85	A52.Ø6	A79.89	BØ2.39	B41.7	B66.0	C16.Ø	C4Ø.ØØ	C56.3
	A18.32	A36.86	A52.Ø9	A79.9	BØ2.7	B41.8	B66.1	C16.1	C4Ø.Ø1	C56.9
AØ1.Ø5	A18.39	A36.89	A52.1Ø	A81.ØØ	BØ2.8	B41.9	B66.2	C16.2	C4Ø.Ø2	C64.1
AØ1.Ø9						B44.1	B66.3	C16.3	C4Ø.1Ø	C64.2
AØ1.1	A18.4	A36.9	A52.11	A81.Ø1	BØ3					
AØ1.2	A18.5Ø	A37.ØØ	A52.12	A81.Ø9	BØ4	B44.2	B66.4	C16.4	C4Ø.11	C64.9
AØ1.3	A18.51	A37.1Ø	A52.15	A81.1	BØ5.1	B44.7	B66.5	C16.5	C4Ø.12	C65.1
AØ1.4	A18.52	A37.8Ø	A52.16	A81.2	BØ5.4	B44.81	B66.8	C16.6	C4Ø.2Ø	C65.2
AØ2.Ø	A18.53	A37.9Ø	A52.17	A81.81	BØ5.81	B44.89	B67.0	C16.8	C4Ø.21	C65.9
AØ2.23	A18.54	A38.Ø	A52.19	A81.82	BØ5.89	B44.9	B67.1	C16.9	C4Ø.22	C66.1
	A18.59	A38.1	A52.2	A81.83	BØ6.ØØ	B45.Ø	B67.2	C17.0	C4Ø.3Ø	C66.2
AØ2.24	A18.6	A38.8	A52.3	A81.89	BØ6.Ø2	B45.2	B67.31	C17.1	C4Ø.31	C66.9
AØ2.25		A38.9	A52.71	A81.9	BØ6.Ø9	B45.3	B67.32	C17.2	C4Ø.32	C68.Ø
AØ2.29	A18.7									C68.1
AØ2.8	A18.81	A39.82	A52.72	A82.Ø	BØ6.81	B45.7	B67.39	C17.3	C40.80	
AØ2.9	A18.82	A39.83	A52.73	A82.1	BØ6.82	B45.8	B67.4	C17.8	C4Ø.81	C68.8
AØ3.Ø	A18.83	A39.84	A52.74	A82.9	BØ6.89	B45.9	B67.5	C17.9	C4Ø.82	C68.9
AØ4.Ø	A18.84	A39.89	A52.75	A85.Ø	BØ8.3	B47.0	B67.61	C18.0	C4Ø.9Ø	C7Ø.Ø
AØ4.1	A18.85	A39.9	A52.76	A85.1	BØ8.71	B47.1	B67.69	C18.1	C4Ø.91	C7Ø.1
	A18.89	A42.Ø	A52.77	A85.8	B15.9	B47.9	B67.7	C18.2	C4Ø.92	C7Ø.9
AØ4.2	A21.Ø	A42.1	A52.78	A86	B16.1	B48.2	B67.8	C18.3	C41.Ø	C71.Ø
AØ4.3					B16.9	B48.3	B67.90	C18.4	C41.1	C71.0
AØ4.4	A21.1	A42.2	A52.79	A87.Ø					C41.1 C41.2	C71.1
AØ4.5	A21.2	A42.81	A54.ØØ	A87.1	B17.0	B48.4	B67.99	C18.5	C41.2	
AØ4.6	A21.3	A42.82	A54.Ø1	A87.2	B17.10	B48.8	B68.0	C18.6	C41.3	C71.3
AØ4.71	A21.7	A42.89	A54.02	A87.8	B17.2	B49	B68.1	C18.7	C41.4	C71.4
AØ4.72	A21.8	A42.9	A54.03	A87.9	B17.8	B5Ø.Ø	B68.9	C18.8	C41.9	C71.5
AØ4.72 AØ4.8	A21.9	A43.Ø	A54.Ø9	A88.0	B17.9	B5Ø.8	B69.0	C18.9	C45.Ø	C71.6
	A22.Ø	A43.1	A54.1	A88.8	B18.Ø	B51.Ø	B69.1	C19	C45.1	C71.7
AØ4.9	A22.2	A43.8	A54.21	A89	B18.1	B51.8	B69.81	C2Ø	C45.2	C71.8
AØ5.Ø			A54.22	A9Ø	B18.8	B51.9	B69.89	C21.Ø	C46.Ø	C71.9
AØ5.1	A22.8	A43.9								
AØ5.2	A22.9	A44.Ø	A54.23	A91	B18.9	B52.0	B69.9	C21.1	C46.1	C72.Ø
AØ5.3	A23.8	A44.1	A54.24	A92.Ø	B19.10	B52.8	B7Ø.Ø	C21.2	C46.2	C72.1
AØ5.4	A23.9	A44.8	A54.29	A92.1	B19.9	B52.9	B7Ø.1	C21.8	C46.3	C72.2Ø
AØ5.5	A24.Ø	A44.9	A54.30	A92.2	B2Ø	B53.0	B71.Ø	C22.Ø	C46.4	C72.21
AØ5.8	A24.1	A48.51	A54.31	A92.4	B25,1	B53.1	B71.1	C22.1	C46.5Ø	C72.22
	A24.2	A48.52	A54.32	A92.5	B25.8	B53.8	B71.8	C22.2	C46.51	C72.3Ø
AØ6.Ø	A24.3	A50.01	A54.33	A92.8	B25.9	B54	B72	C22.3	C46.52	C72.31
AØ6.1			A54.39	A92.9	B26.Ø	B55.Ø	B73.ØØ	C22.4	C46.7	C72.32
AØ6.2	A24.9	A50.02						C22.7	C46.9	C72.32
AØ6.3	A25.Ø	A5Ø.Ø3	A54.40	A93.0	B26.3	B55.1	B73.Ø1			
AØ6.81	A25.1	A5Ø.Ø4	A54.41	A93.1	B26.81	B55.2	B73.Ø2	C22.8	C47.Ø	C72.41
AØ6.82	A25.9	A5Ø.Ø5	A54.42	A93.2	B26.82	B55.9	B73.Ø9	C22.9	C47.1Ø	C72.42
AØ6.89	A27.0	A50.06	A54.43	A93.8	B26.83	B56.Ø	B73.1	C23	C47.11	C72.5Ø
AØ7.1	A27.89	A5Ø.Ø7	A54.49	A94	B26.84	B56.1	B74.Ø	C24.Ø	C47.12	C72.59
AØ7.2	A27.9	A5Ø.Ø8	A54.82	A95.Ø	B26.85	B56.9	B74.1	C24.1	C47.2Ø	C72.9
	A28.Ø	A5Ø.Ø9	A54.83	A95.1	B26.89	B57.Ø	B74.2	C24.8	C47.21	C74.00
AØ7.3	A28.1	A50.2	A54.84	A95.9	B33.1	B57.1	B74.3	C24.9	C47.22	C74.Ø1
AØ7.4	A28.2	A50.30	A54.85	A96.Ø	B33.2Ø	B57.2	B74.4	C25.Ø	C47.3	C74.02
AØ7.8								C25.0		C74.10
AØ7.9	A28.8	A50.31	A54.89	A96.1	B33.21	B57.3Ø	B74.8		C47.4	
AØ8.Ø	A28.9	A5Ø.32	A54.9	A96.8	B33.22	B57.31	B74.9	C25.2	C47.5	C74.11
AØ8.11	A3Ø.Ø	A5Ø.39	A68.Ø	A96.9	B33.23	B57.32	B75	C25.3	C47.6	C74.12
AØ8.19	A3Ø.1	A5Ø.4Ø	A68.1	A98.Ø	B33.4	B57.39	B76.Ø	C25.4	C47.8	C74.90
AØ8.2	A3Ø.2	A5Ø.43	A68.9	A98.1	B34.3	B57.4Ø	B76.1	C25.7	C47.9	C74.91
AØ8.31	A3Ø.3	A50.44	A69.1	A98.2	B37.Ø	B57.41	B76.8	C25.8	C48.Ø	C74.92
AØ8.32	A3Ø.4	A50.45	A69.20	A98.5	B37.41	B57.42	B76.9	C25.9	C48.1	C75.Ø
	A3Ø.5	A5Ø.49	A69.21	A98.8	B37.49	B57.49	B77.Ø	C33	C48.2	C75.1
AØ8.39	A3Ø.8	A5Ø.51	A69.22	A99	B37.81	B57.5	B77.89	C34.00	C48.8	C75.2
AØ9			A69.23	BØØ.2	B37.82	B58.ØØ	B77.9	C34.Ø1	C49.Ø	C75.3
A15.Ø	A3Ø.9	A5Ø.52								C75.4
A15.4	A31.Ø	A5Ø.53	A69.29	BØØ.5Ø	B37.83	B58.Ø1	B78.Ø	C34.Ø2	C49.10	C75.4 C75.5
A15.5	A31.1	A5Ø.54	A7Ø	BØØ.51	B37.84	B58.09	B78.7	C34.1Ø	C49.11	
A15.6	A31.2	A5Ø.55	A75.Ø	BØØ.52	B37.89	B58.1	B78.9	C34.11	C49.12	C75.8
A15.7	A31.8	A5Ø.56	A75.1	BØØ.53	B38.Ø	B58.82	B79	C34.12	C49.2Ø	C75.9
A15.8	A31.9	A5Ø.57	A75.2	BØØ.59	B38.1	B58.83	B8Ø	C34.2	C49.21	C77.Ø
A15.8 A15.9	A32.Ø	A5Ø.59	A75.3	BØØ.81	B38.2	B58.89	B81.Ø	C34.3Ø	C49.22	C77.1
	A32.11	A51.31	A75.9	BØØ.89	B38.3	B58.9	B81.1	C34.31	C49.3	C77.2
A17.9	A32.11	A51.32	A77.Ø	BØ1.Ø	B38.7	B6Ø.ØØ	B81.2	C34.32	C49.4	C77.3
A18.Ø1	A32.12 A32.81	A51.39	A77.1	BØ1.81	B38.81	B6Ø.Ø1	B81.3	C34.8Ø	C49.5	C77.4
A18.Ø2						B6Ø.Ø2		C34.81	C49.6	C77.4
A18.Ø3	A32.82	A51.42	A77.2	BØ1.89	B38.89		B81.4			
A18.Ø9	A32.89	A51.43	A77.3	BØ1.9	B38.9	B6Ø.Ø3	B81.8	C34.82	C49.8	C77.8
A18.1Ø	A32.9	A51.44	A77.4Ø	BØ2.Ø	B39.3	B60.09	B82.Ø	C34.9Ø	C49.9	C77.9
A18.11	A34	A51.45	A77.41	BØ2.21	B4Ø.Ø	B6Ø.1Ø	B97.21	C34.91	C49.AØ	C78.ØØ
	A36.Ø	A51.46	A77.49	BØ2.22	B4Ø.1	B6Ø.19	B97.33	C34.92	C49.A1	C78.Ø1