

ABBOTT CODING GUIDE

ACUTE MECHANICAL CIRCULATORY SUPPORT (MCS)

**CENTRIMAG™ ACUTE CIRCULATORY SUPPORT SYSTEM INCLUDING THE
CENTRIMAG™ BLOOD PUMP AND PEDIMAG™ BLOOD PUMP**

Effective January 1, 2020

ACUTE MECHANICAL CIRCULATORY SUPPORT (MCS)

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Introduction

The Acute Mechanical Circulatory Support (MCS) Coding Guide is intended to provide hospital coding and reimbursement information for physicians regarding the CentriMag™ Acute Circulatory Support System including the CentriMag™ pump and the PediMag™ pump procedures.

Reimbursement Hotline

In addition, Abbott offers a reimbursement hotline, which provides live coding and reimbursement information from dedicated reimbursement specialists. Coding and reimbursement support is available from 8 a.m. to 5 p.m. central time, Monday through Friday at (855) 569-6430 or hce@abbott.com. This guide and all supporting documents are available:

cardiovascular.abbott/us/en/hcp/reimbursement.html.

Coding and reimbursement assistance is provided subject to the disclaimers set forth in this guide.

Disclaimer

This document and the information contained herein is for general information purposes only and is not intended and does not constitute legal, reimbursement, coding, business or other advice. Furthermore, it is not intended to increase or maximize payment by any payer. Nothing in this document should be construed as a guarantee by Abbott regarding levels of reimbursement, payment or charge, or that reimbursement or other payment will be received. Similarly, nothing in this document should be viewed as instructions for selecting any particular code. The ultimate responsibility for coding and obtaining payment/reimbursement remains with the customer. This includes the responsibility for accuracy and veracity of all coding and claims submitted to third-party payers. Also note that the information presented herein represents only one of many potential scenarios, based on the assumptions, variables and data presented. In addition, the customer should note that laws, regulations, coverage and coding policies are complex and updated frequently. Therefore, the customer should check with their local carriers or intermediaries often and should consult with legal counsel or a financial, coding or reimbursement specialist for any coding, reimbursement or billing questions or related issues. This information is for reference purposes only. It is not provided or authorized for marketing use.

COVERAGE FOR ACUTE CIRCULATORY SUPPORT SYSTEM

Acute Mechanical Circulatory Support Systems, such as the CentriMag™ device, are generally covered as a medically necessary procedure under most commercial payer policies for Mechanical Circulatory Assist Devices (Ventricular Assist Devices, Percutaneous Ventricular Assist Devices and Artificial Hearts). These commercial policies have been long-established as a clinically efficacious treatment for temporary circulatory support for individuals who have limited options for short-term cardiac support to improve function of the native heart as part of life-sustaining therapy. The Centers for Medicare and Medicaid Services (CMS) does not have a national coverage determination (NCD) for external heart assist procedures involving technologies like CentriMag and coverage is based on medical necessity. It is strongly encouraged that you verify with your local and commercial payer policies to ensure medical appropriateness.

Please refer to the last page for Important Safety Information for CentriMag™ Acute Circulatory Support System and PediMag™ Blood Pump.

TYPE OF SUPPORT	REGULATORY PATHWAY	INDICATION
Left ventricular support	PMA Approval	Up to 30 days to treat post-cardiotomy patients who fail to wean from cardiopulmonary bypass*
Right ventricular support	PMA Approval	Up to 30 days to treat post-cardiotomy patients who fail to wean from cardiopulmonary bypass*
	Humanitarian Device Exemption	Up to 30 days for patients in cardiogenic shock due to acute right ventricular failure*
Bi-ventricular support	PMA Approval	Up to 30 days to treat post-cardiotomy patients who fail to wean from cardiopulmonary bypass*
In use during Cardiopulmonary support	501(k) Clearance	Periods appropriate to cardiopulmonary bypass (up to six hours)

Abbott. CentriMag™ Acute Circulatory Support System. Indications, Safety & Warnings.
<https://www.cardiovascular.abbott/us/en/hcp/products/heart-failure/centrimag-acute-circulatory-support-system.html>

* Excludes PediMag™

CODING AND REIMBURSEMENT FOR ACUTE MECHANICAL CIRCULATORY SUPPORT SYSTEM

Physician¹

CPT# CODE	DESCRIPTION	WORK RVU	NATIONAL MEDICARE RATE	
			FACILITY	NON FACILITY
ACUTE MCS SYSTEM IMPLANT				
33975	Insertion of ventricular assist device; extracorporeal, single ventricle	25.00	\$1,367	NA
33976	Insertion of ventricular assist device; extracorporeal, biventricular	30.75	\$1,662	NA
ACUTE MCS SYSTEM REMOVAL				
33977	Removal of ventricular assist device; extracorporeal, single ventricle	20.86	\$1,177	NA
33978	Removal of ventricular assist device; extracorporeal, biventricular	25.00	\$1,392	NA
ACUTE MCS SYSTEM REPLACEMENT				
33981	Replacement of extracorporeal ventricular assist device; single or biventricular, pump(s) single or each pump	16.11	\$871	NA
ACUTE MCS SYSTEM REVISION				
33993	Repositioning of percutaneous ventricular assist device with imaging guidance at separate and distinct session from insertion	3.26	\$182	NA

The CPT# codes above describe possible surgeon services in the hospital inpatient setting where the Acute MCS system procedure (e.g., CentriMag™ or PediMag™ Pumps) occurs. These services are restricted to the inpatient hospital site of service.

It is incumbent upon the physician to determine which, if any modifiers should be used first. A list of CPT# code modifiers can be found at cardiovascular.abbott/us/en/hcp/reimbursement.html

Effective Dates: January 1, 2020 - December 31, 2020

CODING AND REIMBURSEMENT FOR ACUTE MECHANICAL CIRCULATORY SUPPORT SYSTEM

Hospital Inpatient²

ICD-10 PCS CODE ⁴	DESCRIPTION	TYPICAL MS-DRG ASSIGNMENT	NATIONAL MEDICARE RATE
CHOOSE THE APPROPRIATE ICD-10 PROCEDURE CODE BASED ON CLINICAL TYPE			
02HA0RJ*	Insertion of Short-Term External Heart Assist System into Heart, Intraoperative, Open Approach	215 Other heart assist system implant	\$80,653
02HA0RZ*	Insertion of Short-term External Heart Assist System into Heart, Open Approach		
02HA3RJ*	Insertion of Short-Term External Heart Assist System into Heart, Intraoperative, Percutaneous Approach		
02HA3RZ*	Insertion of Short-term External Heart Assist System into Heart, Percutaneous Approach		
CHOOSE THE APPROPRIATE ICD-10 PROCEDURE CODE BASED ON DURATION OR SUPPORT TYPE			
5A02116	Assistance with cardiac output using other pump, intermittent		
5A02216	Assistance with cardiac output using other pump, continuous		
COMMON CLINICAL SCENARIOS FOR ACUTE MCS SYSTEM - EXTERNAL SHORT-TERM VAD PLACED			
Case A	Acute MCS system is place. Specify and document clinical approach.		MS-DRG 215
Case B	Acute MCS system is placed. Patient is transferred to another hospital		MS-DRG 215 (prorated-See Medicare payment for hospital transfers)

*The Centrimag™ Blood Pump is listed as a Short term external heart assist system in the heart and great vessels in the 2020 ICD-10 PCS code set under Appendix C: Device Key. It is important to document and code the Centrimag™ Acute Circulatory Support System as an external heart assist device with the appropriate approach, even if other concomitant procedures are performed.

According to the CMS manuals, the transferring hospital receives a per diem, prorated from the expected MS-DRG. The per diem is derived from the MS-DRG's average length of stay when the transferring facility submits a claim to Medicare with the discharge status code of 02, "discharged/transferred to another short term general hospital for inpatient care." The geometric mean length of stay (LOS) and arithmetic mean LOS in FY2020 for MS-DRG 215 are 4.9 and 8.0 days, respectively.

The second hospital can expect full MS-DRG payment, even if the MS-DRG assignment turns out to be different from the transferring hospital. Hospital-specific factors-such as an ownership relations between the transferring and receiving hospital-could affect payment.

Refer to the CMS Hospital Manual language on "Transfers" in Chapter 3 Section 40.2.4 of the [CMS Claims Processing Manual](#).

Effective Dates: October 1, 2019 - September 30, 2020

CODING AND REIMBURSEMENT FOR ACUTE MECHANICAL CIRCULATORY SUPPORT SYSTEM

Hospital Inpatient²

ICD-10 PCS CODE ⁴	DESCRIPTION	TYPICAL MS-DRG ASSIGNMENT	NATIONAL MEDICARE RATE
CHOOSE THE APPROPRIATE ICD-10 PROCEDURE CODE BASED ON CLINICAL TYPE			
02HA0RS*	Insertion of Biventricular Short-term External Heart Assist System into Heart, Open Approach	215 Other heart assist system implant	\$80,653
02HA3RS*	Insertion of Biventricular Short-term External Heart Assist System into Heart, Percutaneous Approach		
CHOOSE THE APPROPRIATE ICD-10 PROCEDURE CODE BASED ON DURATION OR SUPPORT TYPE			
5A02116	Assistance with cardiac output using other pump, intermittent		
5A02216	Assistance with cardiac output using other pump, continuous		

*The Centrimag™ Blood Pump is listed as a Short term external heart assist system in the heart and great vessels in the 2020 ICD-10 PCS code set under Appendix C: Device Key. It is important to document and code the Centrimag™ acute circulatory support system as an external heart assist device with the appropriate approach, even if other concomitant procedures are performed.

Effective Dates: October 1, 2019 - September 30, 2020

CODING AND REIMBURSEMENT FOR ACUTE MECHANICAL CIRCULATORY SUPPORT SYSTEM

Hospital Inpatient²

ICD-10 PCS CODE ⁴	DESCRIPTION	TYPICAL MS-DRG ASSIGNMENT	NATIONAL MEDICARE RATE
CHOOSE THE APPROPRIATE ICD-10 PROCEDURE CODE BASED ON CLINICAL APPROACH			
02WA0RS	Revision of <u>Biventricular</u> Short-term External Heart Assist System in Heart, Open Approach		
02WA0RZ	Revision of Short-term External Heart Assist System in Heart, Open Approach	215 Other heart assist system implant	\$80,653
02WA3RS	Revision of <u>Biventricular</u> Short-term External Heart Assist System in Heart, Percutaneous Approach		
02WA3RZ	Revision of Short-term External Heart Assist System in Heart, Percutaneous Approach		

*The Centrimag™ Blood Pump is listed as a Short term external heart assist system in the heart and great vessels in the 2020 ICD-10 PCS code set under Appendix C: Device Key. It is important to document and code the Centrimag™ acute circulatory support system as an external heart assist device with the appropriate approach, even if other concomitant procedures are performed.

CODING AND REIMBURSEMENT FOR ACUTE MECHANICAL CIRCULATORY SUPPORT SYSTEM

Hospital Inpatient²

ICD-10 PCS CODE ⁴	DESCRIPTION	TYPICAL MS-DRG ASSIGNMENT	NATIONAL MEDICARE RATE
CHOOSE THE APPROPRIATE ICD-10 PROCEDURE CODE BASED ON CLINICAL APPROACH			
02HA0RZ + 02PA0RZ	Insertion of Short-term External Heart Assist System into Heart, Open Approach Removal of Short-term External Heart Assist System from Heart, Open Approach	001 w/MCC	\$172,960
02HA0RZ + 02PA3RZ	Insertion of Short-term External Heart Assist System into Heart, Open Approach Removal of Short-term External Heart Assist System from Heart, Percutaneous Approach	002 w/out MCC	\$87,711
02WA3RZ + 02PA3RZ	Revision of Short-term External Heart Assist System in Heart, Percutaneous Approach Removal of Short-term External Heart Assist System from Heart, Percutaneous Approach		

*The Centrimag™ Blood Pump is listed as a Short term external heart assist system in the heart and great vessels in the 2020 ICD-10 PCS code set under Appendix C: Device Key. It is important to document and code the Centrimag™ acute circulatory support system as an external heart assist device with the appropriate approach, even if other concomitant procedures are performed.

The presence of Major Complications and/or Co-morbidities (MCCs) diagnosis(es) determine whether the hospital payment maps to MS-DRG 001 or MS-DRG 002

CODING AND REIMBURSEMENT FOR ACUTE MECHANICAL CIRCULATORY SUPPORT SYSTEM

ICD-10CM Diagnosis Codes³

Diagnosis codes are used by both hospitals and physicians to document the medical necessity of the procedure. For Mechanical Circulatory Support patients, there are many possible diagnosis code scenarios and a wide variety of possible combinations. The limited diagnosis list is not meant to be an exhaustive representation of the diagnosis options for the procedure. It is always the responsibility of health care providers to choose the most appropriate diagnosis code(s) representative of the patient's clinical condition. The customer should check with their local carriers or intermediaries and should consult with legal counsel or a financial, coding or reimbursement specialist for coding, reimbursement or billing questions related to ICD-10CM diagnosis codes.

ICD-10CM	DESCRIPTION	ICD-10CM	DESCRIPTION
ICD CODES THAT MAY APPLY		ICD CODES THAT MAY APPLY	
I23.0 - I23.9	Certain current complications following ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction (within the 28 day period)	I97.190	Other postprocedural cardiac functional disturbances following cardiac surgery
I50.1 - I50.9	Heart failure	R57.0	Cardiogenic shock
I97.0	Postcardiotomy syndrome	T82.897	Other specified complication of cardiac prosthetic devices, implants and grafts
I97.110	Postprocedural cardiac insufficiency following cardiac surgery	T86.298	Other complications of heart transplant
I97.120	Postprocedural cardiac arrest following cardiac surgery	Z76.82	Awaiting organ transplant status (awaiting heart transplant)
I97.130	Postprocedural heart failure following cardiac surgery	Z95.811	Presence of heart assist device

References

1. Physician Prospective Payment-Final rule with Comment Period and Final CY2020 Payment Rates. CMS-1715-F: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/PFS-Federal-Regulation-Notices-Items/CMS-1715-F.html?DLPage=1&DLEntries=10&DLSort=2&DLSortDir=descending>
2. Hospital Inpatient Prospective Payment-FY 2020 Final Rule and Correction Notice Data Files CMS-1716-F: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/FY2020-IPPS-Final-Rule-Home-Page-Items/FY2020-IPPS-Final-Rule-Data-Files.html?DLPage=1&DLEntries=10&DLSort=0&DLSortDir=ascending>
3. American Medical Association, *2020 ICD-10-CM: The Complete Official Codebook*. Edition 1; 2020.
4. CMS 2020 ICD-10-PCS Procedure Coding System and Index: <https://www.cms.gov/Medicare/Coding/ICD10/2020-ICD-10-PCS.html>

Rx Only

Important Safety Information

Brief Summary: Prior to using these devices, please review the Instructions for Use for a complete listing of indications, contraindications, warnings, precautions, potential adverse events and directions for use.

CentriMag™ Circulatory Support System Indications [PMA Approval; 30-day use]: Temporary circulatory support for up to 30 days for one or both sides of the heart to treat post-cardiotomy patients who fail to wean from cardiopulmonary bypass, providing a bridge to decision when it is unclear whether the patient's heart will recover or whether the patient will need alternative, longer-term therapy.

CentriMag Circulatory Support System Contraindications [PMA Approval; 30-day use]: The CentriMag Circulatory Support System is contraindicated for use as a cardiomy suction device. The system is also contraindicated for patients who are unable or unwilling to be treated with an appropriate anticoagulant such as Heparin or a comparable alternative.

Humanitarian Device Statement: Caution: Humanitarian Device. The CentriMag™ Circulatory Support System is authorized by Federal Law for temporary circulatory support for up to 30 days for patients in cardiogenic shock due to right ventricular failure. The effectiveness of this device for this use has not been demonstrated.

CentriMag RVAS Indications [Humanitarian Exemption Device (HDE) Approval; 30-day use]: The CentriMag Circulatory Support System is intended to provide temporary circulatory support for up to 30 days for patients in cardiogenic shock due to acute right ventricular failure.

CentriMag RVAS Contraindications [Humanitarian Exemption Device (HDE) Approval; 30-day use]: The CentriMag Circulatory Support System is contraindicated for use as a cardiomy suction device. The system is also contraindicated for patients who are unable or unwilling to be treated with an appropriate anticoagulant such as Heparin or a comparable alternative.

CentriMag Blood Pump Indications [510(k) Clearance; 6-hour use]: The CentriMag Circulatory Support System is indicated to pump blood through the extracorporeal bypass circuit for extracorporeal circulatory support for periods appropriate to cardiopulmonary bypass (up to six hours). It is also indicated for use in extracorporeal support systems (for periods up to six hours) not requiring complete cardiopulmonary bypass (e.g. valvuloplasty, circulatory support during mitral valve reoperation, surgery of the vena cava or aorta, liver transplants etc.).

CentriMag Blood Pump Contraindications [510(k) Clearance; 6-hour use]: The CentriMag Circulatory Support System is contraindicated for use as a cardiomy suction device. The system is also contraindicated for patients who are unable or unwilling to be treated with an appropriate anticoagulant such as Heparin or a comparable alternative.

PediMag™ Blood Pump Indications for Use [510(k) Clearance; 6-hour use]: The PediMag Blood Pump is indicated for use with the CentriMag Circulatory Support System console and motor to pump blood through the extracorporeal bypass circuit for extracorporeal circulatory support for periods appropriate to cardiopulmonary bypass (up to six hours) for surgical procedures such as mitral valve reoperation. It is also indicated for use in extracorporeal support systems (for periods up to six hours) not requiring complete cardiopulmonary bypass (e.g. valvuloplasty, circulatory support during mitral valve reoperation, surgery of the vena cava or aorta, liver transplants etc.).

PediMag Blood Pump Contraindications [510(k) Clearance; 6-hour use]: The PediMag Blood Pump is contraindicated for use as a cardiomy suction device. The CentriMag Circulatory Support System is contraindicated for use as a cardiomy suction device. The system is also contraindicated for patients who are unable or unwilling to be treated with an appropriate anticoagulant such as Heparin or a comparable alternative.

CentriMag™ Drainage (Venous) Cannula Kit Indications for Use [510(k) Clearance; 6-hour use]: The CentriMag Drainage (Venous) Cannula is indicated for use with an extracorporeal bypass circuit for extracorporeal circulatory support for periods up to six hours.

CentriMag Drainage (Venous) Cannula Kit Contraindications [510(k) Clearance; 6-hour use]: The CentriMag Circulatory Support System is contraindicated for use as a cardiomy suction device. The system is also contraindicated for patients who are unable or unwilling to be treated with an appropriate anticoagulant such as Heparin or a comparable alternative. The CentriMag Drainage (Venous) Cannula is not intended for peripheral cannulation.

CentriMag™ Return (Arterial) Cannula Kit Indications for Use [510(k) Clearance; 6-hour use]: The CentriMag Return (Arterial) Cannula is indicated for use as an arterial return cannula with an extracorporeal bypass circuit for extracorporeal circulatory support for periods up to six hours.

CentriMag Return (Arterial) Cannula Kit Contraindications [510(k) Clearance; 6-hour use]: The CentriMag Circulatory Support System is contraindicated for use as a cardiomy suction device. The system is also contraindicated for patients who are unable or unwilling to be treated with an appropriate anticoagulant such as Heparin or a comparable alternative. The CentriMag Return (Arterial) Cannula is not intended for peripheral cannulation.

Prior to using these devices, please review the Instructions for Use for a complete listing of warnings, precautions, potential adverse events and directions for use.

*PMA approval for 30-day use of CentriMag™ System components include: CentriMag™ Pump, CentriMag™ Console, CentriMag™ Motor, Mag Monitor, flow probe, and CentriMag™ Drainage Cannula and CentriMag™ Return Cannula. Optional accessories include: CentriMag™ System Cart, CentriMag™ System Transporter and Pressure Transducer. PMA approval for 30-day use of CentriMag™ System excludes: PediMag™ Blood Pump and any other pediatric components or accessories.

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MAT-1900304 v1.0 | Item approved for U.S. use only.