

Implantable Hemodynamic Monitoring for Heart Failure, Medical 317

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Member-specific benefits take precedence over medical policy and benefits may vary across plans. Refer to the individual's benefit plan for details*.

Purpose:

This policy addresses the medical necessity of Implantable Hemodynamic Monitoring for Heart Failure.

Description & Definitions:

An FDA approved implantable hemodynamic monitoring device for heart failure is used to monitor heart rate and pulmonary artery pressure in patients with heart failure. Wireless technology is used to transmit the information to the healthcare provider. These devices detect rising cardiac filling pressure before symptoms occur.

Criteria:

An implantable hemodynamic monitor with remote monitoring is considered medically necessary with **all of the** following:

- NYHA Class II or Class III heart failure; and
- One heart failure hospitalization in the past 12 months; and/or
- Have elevated natriuretic peptides

There is insufficient scientific evidence to support the medical necessity of an implantable hemodynamic monitor for heart failure for uses other than those listed in the clinical indications for procedure section.

Coding:

Medically necessary with criteria:

Coding	Description
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33289	Transcatheter implantation of wireless pulmonary artery pressure sensor for long-term hemodynamic monitoring, including deployment and calibration of the sensor, right heart catheterization, selective pulmonary catheterization, radiological supervision and interpretation, and pulmonary artery angiography, when performed
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Considered Not Medically Necessary:

Coding	Description
	None

U.S. Food and Drug Administration (FDA) - approved only products only.

Document History:

Revised Dates:

- 2024: August – criteria updated references updated
- 2021: November
- 2020: January

Reviewed Dates:

- 2023: August
- 2022: August
- 2021: October
- 2020: October
- 2019: September

Effective Date:

- October 2017

References:

Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guideline. (2022, May 03). Retrieved Jul 30, 2024, from American Heart Association:
<https://www.ahajournals.org/doi/epdf/10.1161/CIR.0000000000001063>

(2024, Mar 14). Retrieved Jul 24, 2024, from MCG 28th Edition:
<https://careweb.careguidelines.com/ed28/index.html>

(2024). Retrieved Jul 24, 2024, from Centers for Medicare and Medicaid Services: <https://www.cms.gov/medicare-coverage-database/search-results.aspx?keyword=CardioMEMS&keywordType=starts&areald=all&docType=NCA,CAL,NCD,MEDCAC,TA,MC,CD,6,3,5,1,F,P&contractOption=all&sortBy=relevance>

(2024). Retrieved Jul 24, 2024, from Department of Medical Assistance Services - MES Public Portal:
<https://vamedicaid.dmas.virginia.gov/manuals/provider-manuals-library#gsc.tab=0&gsc.q=implantable%20hemodynamic&gsc.sort=>

(2024). Retrieved Jul 24, 2024, from Evolent (formerly NIA) RadMD: www.radmd.com/RadMD/assets/Clinical%20Guidelines//NIA%20Standard%20Guidelines%202024/Pacemaker%202024.pdf

(2024). Retrieved Jul 24, 2024, from Carelon Medical Benefits Management: <https://guidelines.carelonmedicalbenefitsmanagement.com/>

CARDIOMEMS HF PRESSURE MEASUREMENT SYSTEM. (2024, Jun 29). Retrieved Jul 30, 2024, from U.S. Food and Drug Administration: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P100045>

CardioMEMS Implantable Hemodynamic Monitor (Abbott) for Managing Patients With Heart Failure. (2023, Jul 24). Retrieved Jul 24, 2024, from Hayes - a symplr company: <https://evidence.hayesinc.com/report/htb.wireless3228>

D'Amario, D., Meerkin, D., Restivo, A., & Ince, H. (2023, Jun). Safety, usability, and performance of a wireless left atrial pressure monitoring system in patients with heart failure: the VECTOR-HF trial. Retrieved Jul 30, 2024, from PubMed: <https://pubmed.ncbi.nlm.nih.gov/37092287/>

Endotronix Receives FDA Premarket Approval of the Cordella™ PA Sensor System for the Treatment of Heart Failure. (2024, June 24). Retrieved Jul 30, 2024, from Endotronix: <https://endotronix.com/endotronix-receives-fda-premarket-approval-of-the-cordella-pa-sensor-system-for-the-treatment-of-heart-failure/>

Lindenfeld J, Zile MR, Desai AS, et al. Haemodynamic-guided management of heart failure (GUIDE-HF): a randomized controlled trial. *The Lancet*. 2021;398:991-1001.

Abraham, W. T., Adamson, P. B., Bourge, R. C., Aaron, M., Costanzo, M. R., Stevenson, L. W., ...Yadav, J. S., for the CHAMPION Trial Study Group. (2011). Wireless pulmonary artery haemodynamic monitoring in chronic heart failure: A randomised controlled trial. *The Lancet*, 377(9766), 658-666. [https://dx.doi.org/10.1016/S0140-6736\(11\)60101-3](https://dx.doi.org/10.1016/S0140-6736(11)60101-3)

Special Notes: *

This medical policy expresses Sentara Health Plan's determination of medical necessity of services, and they are based upon a review of currently available clinical information. Medical policies are not a substitute for clinical judgment or for any prior authorization requirements of the health plan. These policies are not an explanation of benefits.

Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.

Keywords:

SHP Implantable Hemodynamic Monitoring for Heart Failure, SHP Medical 317, Cardiomeems, New York Heart Association, NYHA, class 3, class III

