Sentara Health Plans

Commercial

Implantable Hemodynamic Monitoring for Heart Failure, Medical 317

Table of Content

Description & Definitions
Criteria
Document History
Coding
Special Notes
References
Keywords

Effective Date	10/1/2026
Next Review Date	6/2027
Coverage Policy	Medical 317
Version	v9

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

Description & Definitions:

Implantable pulmonary artery pressure sensor (IPAPS) for heart failure is used to monitor pulmonary artery pressure in patients with heart failure. Wireless technology is used to transmit information to the healthcare provider. These devices detect rising cardiac filling pressure before symptoms occur.

Criteria:

Implantable pulmonary artery pressure sensor (IPAPS) for Heart Failure Management may be covered for **ALL** of the following:

- Implantable pulmonary artery pressure sensor (IPAPS) furnished according to FDA market-authorized indication for heart failure (HF) management
- Patient criteria met, as indicated by **ALL** of the following:
  - Diagnosis of chronic HF of at least 3 months' duration and in New York Heart Association functional Class II or III within past 30 days, prior to PAPS implantation, regardless of left ventricular ejection fraction
  - History of HF hospitalization or urgent HF visit (emergency room or other outpatient visit requiring IV diuretic therapy) within past 12 months, or elevated natriuretic peptides within past 30 days
  - On guideline-directed medical therapy (GDMT) for at least 3 months with goal of achieving optimal or maximally-tolerated GDMT prior to PAPS implantation
  - Evaluated for, and received if appropriate, ICD, cardiac resynchronization therapy (CRT)-pacemaker, or CRT-defibrillator at least 3 months prior to PAPS implantation
  - No major cardiovascular event (eg, unstable angina, MI, PCI, open heart surgery, or stroke) within last 3 months prior to PAPS implantation
  - Has access to reliable connectivity to ensure daily collection and submission of IPAPS data
  - PAPS implantation **does not** occur during hospital admission for acute HF episode.
- IPAPS item or service performed by appropriately trained provider, as indicated by **1 or more** of the following:
  - Physician referring and managing patient post implantation is cardiologist with training and experience in HF management.

- Physician implanting IPAPS has training and experience in pulmonary arterial catheterization and intervention.

Implantation of Hemodynamic Monitoring for Heart Failure Management is **NOT COVERED** for **ANY** reason other than the criteria noted above.

Document History:

Revised Dates:

- 2025: August - Implementation date of December 1, 2025. Criteria updated to incorporate language from NCD 20.36 Implantable Pulmonary Artery Pressure Sensors for Heart Failure Management.
- 2024: August – criteria updated references updated
- 2021: November
- 2020: January

Reviewed Dates:

- 2026: June – Implementation date of October 1, 2026. Annual review with housekeeping updates only. No change to criteria.
- 2023: August
- 2022: August
- 2021: October
- 2020: October
- 2019: September

Origination Date: October 2017

Coding:

Medically necessary with criteria:

Coding	Description
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

Considered Not Medically Necessary:

Coding	Description
	None

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

The preceding codes are included above for informational purposes only and may not be all inclusive. Additionally, inclusion or exclusion of a treatment, procedure, or device code(s) does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Special Notes: *

- Coverage:
  - See the appropriate benefit document for specific coverage determination. Member specific benefits take precedence over medical policy.
- Application to products:
  - Policy is applicable to Sentara Health Plan Commercial products.
- Authorization requirements:
  - Pre-certification by the Plan is required.
  - **Please refer to Prior Authorization List for most up to date requirement Search PAL List: Sentara Health Plans**
- Special Notes:
  - 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.
  - Services mean both medical and behavioral health (mental health) services and supplies unless We specifically tell You otherwise. We do not cover any services that are not listed in the Covered Services section unless required to be covered under state or federal laws and regulations. We do not cover any services that are not Medically Necessary. We sometimes give examples of specific services that are not covered but that does not mean that other similar services are covered. Some services are covered only if We authorize them. When We say You or Your We mean You and any of Your family members covered under the Plan. Call Member Services if You have questions.

References:

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

Federal Register. Daily Journal of the United States Government. Medical Devices; Cardiovascular Devices; Classification of the Adjunctive Hemodynamic Indicator with Decision Point. PART 870—CARDIOVASCULAR DEVICES. 12.27.2022. Retrieved 3.23.2026. https://www.federalregister.gov/documents/2022/12/27/2022-28131/medical-devices-cardiovascular-devices-classification-of-the-adjunctive-hemodynamic-indicator-with

US Food and Drug Administration. Cardiovascular Program: Research on Cardiovascular Medical Devices. 11.6.2023. Retrieved 3.23.2026. https://www.fda.gov/medical-devices/medical-device-regulatory-science-research-programs-conducted-osel/cardiovascular-program-research-cardiovascular-medical-devices

Symplr Evidence Analysis. Formally Hayes. CardioMEMS Implantable Hemodynamic Monitor (Abbott) for Managing Patients With Heart Failure. 7.23.2025. Retrieved 3.23.2026. https://evidence.hayesinc.com/report/htb.wireless3228

Centers for Medicare and Medicaid Assistance Services. CMS.gov. National Coverage Determination (NCD). Implantable Pulmonary Artery Pressure Sensors for Heart Failure Management. 20.36. 10.6.2025. https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?ncdid=378&ncdver=1

MCG Informed Care Strategies. 29th Edition. 2025. Cardiovascular Surgery or Procedure GRG. GRG: SG-CVS (ISC GRG). Retrieved 3.23.2026. https://careweb.careguidelines.com/ed29/index.html

Commonwealth of Virginia. Department of Medical Assistance Services. Provider Manual Title: Hospital. Chapter IV: Covered Services and Limitations. Revision date 8.28.2024. p.5. Retrieved 3.23.2026. https://vamedicaid.dmas.virginia.gov/sites/default/files/2024-08/Hospital%20Chapter%20IV%20%28updated%208.28.24%29_Final.pdf

American College of Cardiology Foundation. Lindenfeld, J, Costanzo, M, Zile, M. et al. Implantable Hemodynamic Monitors Improve Survival in Patients With Heart Failure and Reduced Ejection Fraction. JACC. 2024 Feb, 83 (6) 682–694. Retrieved 3.23.2026. https://doi.org/10.1016/j.jacc.2023.11.030

JACC Journal. Volume 83, No. 6. 2.5.2024. Implantable Hemodynamic-GUIDE Monitors: A CHAMPION Among Devices for Heart Failure, Fudim, M., Butler, J. , Kittipubul, V. Retrieved 3.23.2026. https://www.jacc.org/doi/10.1016/j.jacc.2023.12.008

Carelon Medical Benefits Management clinical appropriateness guidelines and cancer treatment pathways. Retrieved 3.23.2026. https://guidelines.carelonmedicalbenefitsmanagement.com/current-cardiovascular-guidelines/

Symplr Evidence Analysis. Formally Hayes. Retrieved 3.25.2026. https://evidence.hayesinc.com/search?q=%257B%2522text%2522:%2522Implantable%2520inferior%2520vena%2520cava%2520sensor%2522,%2522title%2522:null,%2522termsource%2522:%2522searchbar%2522,%2522page%2522:%257B%2522page%2522:0,%2522size%2522:50%257D,%2522type%2522:%2522all%2522,%2522sources%2522:%255B%2522*%2522%255D,%2522sorts%2522:%255B%257B%2522field%2522:%2522_score%2522,%2522direction%2522:%2522desc%2522%257D%255D,%2522filters%2522:%255B%255D%257D

American College of Cardiology Foundation. Kalra, P, Gogorishvili, I, Khabeishvili, G. et al. First-in-Human Implantable Inferior Vena Cava Sensor for Remote Care in Heart Failure: FUTURE-HF. J Am Coll Cardiol HF. 2025 Jun, 13 (6) 1000–1010. Retrieved 3.25.2026. https://doi.org/10.1016/j.jchf.2025.01.019

Fudim, M., Mehra, M. R., Damman, K., Uriel, N., Kalra, P. R., Sweeney, F., Carmody, D., Tucker, J., Greene, B. R., Testani, J. M., & Future HF Portfolio Investigators (2025). Derivation of a Personalized Congestion Score Using a Chronic Implantable Inferior Vena Cava Management System in Heart Failure: An Analysis from the FUTURE-HF Trial Portfolio. Journal of cardiac failure, S1071-9164(25)00430-0. September 2025. Retrieved 3.25.2026. https://doi.org/10.1016/j.cardfail.2025.09.018

Keywords:

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