

CMS Manual System	Department of Health & Human Services (DHHS)
Pub 100-04 Medicare Claims Processing	Centers for Medicare & Medicaid Services (CMS)
Transmittal 13282	Date: June 20, 2025
	Change Request 14000

Transmittal 13246 issued May 22, 2025, is being rescinded and replaced by Transmittal 13282, dated June 20, 2025, to add GA modifier language to be applicable for institutional claims, to shift liability by revising IOM chapter 32 section 413 of Pub. 100-04 and by revising business requirements 14000 - 04.4, 14000 - 04.4.1, 14000 - 04.4.3 and 14000 - 04.5.2. This correction does not make any revisions to Pub. 100-03. All other information remains the same.

SUBJECT: National Coverage Determination (NCD) 20.36 Implantable Pulmonary Artery Pressure Sensors for Heart Failure Management

I. SUMMARY OF CHANGES: The purpose of this Change Request (CR) is to inform contractors that effective January 13, 2025, contractors shall pay claims for implantable pulmonary artery sensors for heart failure management as described in Pub. 100-03, Medicare NCD Manual, Chapter 1, section 20.36.

EFFECTIVE DATE: January 13, 2025

**Unless otherwise specified, the effective date is the date of service.*

IMPLEMENTATION DATE: October 6, 2025

Disclaimer for manual changes only: The revision date and transmittal number apply only to red italicized material. Any other material was previously published and remains unchanged. However, if this revision contains a table of contents, you will receive the new/revised information only, and not the entire table of contents.

II. CHANGES IN MANUAL INSTRUCTIONS: (N/A if manual is not updated)

R=REVISED, N=NEW, D=DELETED-Only One Per Row.

R/N/D	CHAPTER / SECTION / SUBSECTION / TITLE
N	32/413/Billing Requirements for Special Services

III. FUNDING:

For Medicare Administrative Contractors (MACs):

The Medicare Administrative Contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS does not construe this as a change to the MAC Statement of Work. The contractor is not obligated to incur costs in excess of the amounts allotted in your contract unless and until specifically authorized by the Contracting Officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the Contracting Officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.

IV. ATTACHMENTS:

**Business Requirements
Manual Instruction**

Attachment - Business Requirements

Pub. 100-04	Transmittal: 13282	Date: June 20, 2025	Change Request: 14000
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SUBJECT: National Coverage Determination (NCD) 20.36 Implantable Pulmonary Artery Pressure Sensors for Heart Failure Management

EFFECTIVE DATE: January 13, 2025

**Unless otherwise specified, the effective date is the date of service.*

IMPLEMENTATION DATE: October 6, 2025

I. SUMMARY OF CHANGES: The purpose of this Change Request (CR) is to inform contractors that effective January 13, 2025, contractors shall pay claims for implantable pulmonary artery sensors for heart failure management as described in Pub. 100-03, Medicare NCD Manual, Chapter 1, section 20.36.

II. GENERAL INFORMATION

A. Background: Heart failure (HF) is a chronic syndrome in which the heart muscle cannot pump enough blood to meet the body's needs. HF patients are prone to fluid retention in the body, including the lungs (pulmonary congestion), which results in shortness of breath, fatigue, and limitations of everyday activities such as walking or climbing stairs. Worsening of these symptoms can lead to acute decompensated HF (ADHF) and hospitalization. A change in blood flow, measured by pulmonary artery (PA) pressure, precedes symptoms of HF. The purpose of an implantable PA pressure sensor (IPAPS) is early detection of the change in blood flow, allowing medical intervention intended to prevent symptom onset, further exacerbation and hospitalization. An IPAPS and external data gathering unit are used in the patient's home to send a patient's PA pressure trends to their physician, allowing better management of medications, lifestyle adjustments, and office visits to prevent or reduce acute HF episodes.

B. Policy: Effective for services performed on or after January 13, 2025, CMS has determined that the evidence is sufficient to cover IPAPS for HF management under Coverage with Evidence Development (CED) and if furnished according to an FDA market-authorized indication and all the following conditions are met:

The patient must meet specific criteria:

a) Diagnosis of chronic HF of at least 3 months duration and in New York Heart Association (NYHA) functional Class II or III within the past 30 days, prior to PAPS implantation, regardless of left ventricular ejection fraction (LVEF).

b) History of HF hospitalization or urgent HF visit (emergency room (ER) or other outpatient (OP) visit requiring intravenous (IV) diuretic therapy) within the past 12 months, or elevated natriuretic peptides within the past 30 days.

c) On guideline-directed medical therapy (GDMT) for at least 3 months with the goal of achieving optimal or maximally-tolerated GDMT prior to PAPS implantation.

d) Evaluated for, and received if appropriate, an implantable cardioverter defibrillator (ICD), cardiac resynchronization therapy (CRT)-Pacemaker (CRT-P), or CRT-Defibrillator (CRT-D). Implantation of the device must occur at least 3 months prior to PAPS implantation.

e) No major cardiovascular event (e.g., unstable angina, myocardial infarction, percutaneous coronary intervention, open heart surgery, or stroke) within the last 3 months prior to PAPS implantation.

f) Have access to reliable connectivity to ensure daily collection and submission of IPAPS data.

g) Must not have PAPS implantation occur during a hospital admission for an acute HF episode.

The IPAPS items and services must be furnished by practitioners who meet specific criteria as noted in the NCD:

The IPAPS items and services must be furnished in the context of a CMS-approved CED study. CMS-approved CED study protocols must: include only those patients who meet specific criteria; furnish items and services only through practitioners who meet specific criteria; and include additional requirements as outlined in the NCD.

CMS-approved CED studies must adhere to the scientific standards that have been identified by the Agency for Healthcare Research and Quality (AHRQ) as set forth in Section VI of CMS' Coverage with Evidence Development Guidance Document, published August 7, 2024, (<https://www.cms.gov/medicare-coverage-database/view/medicare-coverage-document.aspx?mcdid=38>) and described in the NCD.

III. BUSINESS REQUIREMENTS TABLE

"Shall" denotes a mandatory requirement, and "should" denotes an optional requirement.

Number	Requirement	Responsibility								
		A/B MAC			DME MAC	Shared-System Maintainers				Other
		A	B	HHH		FISS	MCS	VMS	CWF	
14000 - 04.1	Effective for claims with dates of service (DOS) on or after January 13, 2025, contractors shall recognize HCPCS code 33289, Implantation of Pulmonary Artery Sensor, as a covered service for heart failure management when provided in the context of an approved Coverage with Evidence Development (CED). NOTE: Refer to Pub. 100-03, Medicare NCD Manual, Chapter 1, Section 20.36 for coverage policy and Pub 100-04, chapter 32 section 413 for claims processing instructions.	X	X			X	X			
14000 - 04.2	Effective for DOS on or after January 13, 2025, contractors	X				X				

Number	Requirement	Responsibility								
		A/B MAC			DME MAC	Shared-System Maintainers				Other
		A	B	HHH		FISS	MCS	VMS	CWF	
	<p>shall process TOBs 12X, 13X, and 85X (when submitted with revenue codes 096X, 097X, and 098X) claims, for HCPCS code 33289 in a clinical research study when billed with the following:</p> <ul style="list-style-type: none"> Condition Code (CC) 30 and Modifier Q0, and Value Code (VC) D4 (indicating the National Clinical Trial (NCT): An 8-digit number identifying the clinical trial) 									
14000 - 04.2.1	<p>Effective for DOS on or after January 13, 2025, contractors shall RTP claims containing HCPCS code 33289 in a clinical research study as follows:</p> <ul style="list-style-type: none"> TOB is not equal to 12X, 13X, or 85X, or Condition Code (CC) 30 and Modifier Q0 is not present, or VC D4 with the (NCT) 8-digit number identifying the clinical trial) is not present. 	X				X				
14000 - 04.3	<p>Effective on or after January 13, 2025, contractors shall process TOB 11X containing ICD-10-PCS codes 02HQ30Z (Insertion of Pressure Sensor Monitoring Device into Right Pulmonary Artery Percutaneous Approach) or 02HR30Z (Insertion of Pressure Sensor Monitoring Device into Left Pulmonary Artery Percutaneous Approach) in a clinical research</p>	X				X				

Number	Requirement	Responsibility								
		A/B MAC			DME MAC	Shared-System Maintainers				Other
		A	B	HHH		FISS	MCS	VMS	CWF	
	study when billed with the following: <ul style="list-style-type: none"> • CC 30, and • VC D4 with the (NCT) 8-digit number identifying the clinical trial), and • ICD-10 diagnosis code Z00.6 									
14000 - 04.3.1	Effective for DOS on or after January 13, 2025, contractors shall RTP claims containing code 02HQ30Z or 02HR30Z in a clinical research study as follows: <ul style="list-style-type: none"> • CC 30 is not present, or • VC D4 with the NCT is not present, or • TOB is not equal to 11X 	X				X				
14000 - 04.4	Effective for outpatient claims (TOB 12x, 13x and 85x with rev codes 096x, 097x, or 098x) with DOS on or after January 13, 2025, contractors shall deny an outpatient claim containing HCPCS code 33289 with modifier Q0 and diagnosis code Z00.6 and one of the diagnosis codes listed below when reported more than once in a lifetime. I50.1 I50.22 I50.23 I50.32	X				X			X	

[illegible]

Number	Requirement	Responsibility								
		A/B MAC			DME MAC	Shared-System Maintainers				Other
		A	B	HHH		FISS	MCS	VMS	CWF	
	one of the diagnosis codes listed in BR.04.5 towards the lifetime limitation.									
14000 - 04.4.2	<p>Effective for physician claims with DOS on or after January 13, 2025, contractors shall deny the Part B claim containing HCPCS code 33289 with modifier Q0 and diagnosis code Z00.6 and one of the diagnosis codes listed below, when reported more than once in a lifetime.</p> <p>I50.1</p> <p>I50.22</p> <p>I50.23</p> <p>I50.32</p> <p>I50.33</p> <p>I50.42</p> <p>I50.43</p> <p>I50.82</p> <p>I50.812</p>		X						X	
14000 - 04.4.3	<p>When denying claims, contractors shall use the following messages:</p> <p>Claim Adjustment Reason Codes (CARC) 119: “Benefit maximum for this time period or occurrence has been reached.”</p> <p>Remittance Advice Remark Codes (RARC) N386: “This decision was based on a National Coverage Determination (NCD). An NCD provides a coverage</p>	X	X							

Number	Requirement	Responsibility								
		A/B MAC			DME MAC	Shared-System Maintainers				Other
		A	B	HHH		FISS	MCS	VMS	CWF	
	<p>determination as to whether a particular item or service is covered. A copy of this policy is available at www.cms.gov/mcd/search.asp. If you do not have web access, you may contact the contractor to request a copy of the NCD.”</p> <p>Group Code: CO (Contractual Obligation) or PR (Patient Responsibility) dependent upon liability. (Use PR when Occurrence Code 32 (Institutional claim) or the GA modifier (Professional and Institutional claim) is appended to the item.</p> <p>MSN 15.20: The following policies were used when we made this decision: NCD 20.36</p> <p>Spanish Version – Las siguientes políticas fueron utilizadas cuando se tomó esta decisión: NCD 20.36</p>									
14000 - 04.4.4	Contractors shall include 11X TOB billed with PCS code 02HQ30Z or 02HR30Z when reported with condition code 30 and value code D4 count towards the lifetime limitation.								X	
14000 - 04.5	<p>Effective for claims with DOS on or after January 13, 2025, contractors shall deny line-item on claims containing HCPCS code 33289 and modifier Q0 when the claim does not contain ICD-10 diagnosis code Z00.6 and one of the ICD-10 diagnosis codes listed below:</p> <p>I50.1</p> <p>I50.22</p>	X	X			X	X			

Number	Requirement	Responsibility								
		A/B MAC			DME MAC	Shared-System Maintainers				Other
		A	B	HHH		FISS	MCS	VMS	CWF	
	I50.23 I50.32 I50.33 I50.42 I50.43 I50.82 I50.812									
14000 - 04.5.1	Effective for claims with DOS on or after January 13, 2025, contractors shall deny TOB 11X claims containing ICD-10-PCS codes 02HQ30Z or 02HR30Z, VC D4 with the clinical trial number and CC 30, when the claim does not also contain ICD-10 diagnosis code Z00.6 and one of the ICD-10 diagnosis codes listed below: I50.1 I50.22 I50.23 I50.32 I50.33 I50.42 I50.43 I50.82 I50.812	X				X				
14000 - 04.5.2	When denying claims contractors shall use the following messages: CARC 167: This (these) diagnosis(es) is (are) not	X	X							

[illegible]

Number	Requirement	Responsibility								
		A/B MAC			DME MAC	Shared-System Maintainers				Other
		A	B	HHH		FISS	MCS	VMS	CWF	
	<p>or 02HR30Z when the following criteria is met.</p> <p>PCS codes 02HQ30Z or 02HR30Z with CC 30 and value code D4 with ICD-10 diagnosis code equal to Z00.6 and one of the diagnosis codes listed in BR 04.5.1.</p> <p>HCPCS 33289 with modifier Q0 and ICD-10 diagnosis code equal to Z00.6 and one of the diagnosis codes listed in BR 04.5</p>									
14000 - 04.7	Effective for DOS on or after January 13, 2025, contractors shall pay line-items on professional claims for HCPCS code 33289 in a clinical research study when billed with Modifier Q0.		X				X			
14000 - 04.7.1	<p>Contractors shall return as unprocessable line-items on claims containing HCPCS code 33289 in a clinical research study when billed without modifier Q0 using the following messages:</p> <p>CARC 4: “The procedure code is inconsistent with the modifier used or a required modifier is missing. Note: Refer to the 835 Healthcare Policy Identification Segment (loop 2110 Service Payment Information REF), if present.”</p> <p>RARC N519: “Invalid combination of HCPCS modifiers”</p> <p>Group Code: CO (Contractual Obligation)</p>		X							
14000 - 04.8	The contractor will create a Multi-Carrier System Desktop Tool Window to display the		X				X			

Number	Requirement	Responsibility								
		A/B MAC			DME MAC	Shared-System Maintainers				Other
		A	B	HHH		FISS	MCS	VMS	CWF	
	information from the HIMR SURG screen, including HCPCS code 33289.									
14000 - 04.9	Contractors shall not search their files for claims for HCPCS code 33289 Implantation of Pulmonary Artery Sensor and ICD-10-PCS codes 02HQ30Z Insertion of Pressure Sensor Monitoring Device into Right Pulmonary Artery Percutaneous Approach or 02HR30Z Insertion of Pressure Sensor Monitoring Device into Left Pulmonary Artery Percutaneous Approach with DOS between January 13, 2025, and the implementation date of this change request. However, MACs shall adjust those claims that are brought to their attention.	X	X							

IV. PROVIDER EDUCATION

Medicare Learning Network® (MLN): CMS will develop and release national provider education content and market it through the MLN Connects® newsletter shortly after we issue the CR. MACs shall link to relevant information on your website and follow IOM Pub. No. 100-09 Chapter 6, Section 50.2.4.1 for distributing the newsletter to providers. When you follow this manual section, you don't need to separately track and report MLN content releases. You may supplement with your local educational content after we release the newsletter.

Impacted Contractors: A/B MAC Part A, A/B MAC Part B

V. SUPPORTING INFORMATION

Section A: Recommendations and supporting information associated with listed requirements: N/A

"Should" denotes a recommendation.

X-Ref Requirement Number	Recommendations or other supporting information:
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Section B: All other recommendations and supporting information: N/A

VI. CONTACTS

Post-Implementation Contact(s): Contact your Contracting Officer's Representative (COR).

VII. FUNDING

Section A: For Medicare Administrative Contractors (MACs):

The Medicare Administrative Contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS does not construe this as a change to the MAC Statement of Work. The contractor is not obligated to incur costs in excess of the amounts allotted in your contract unless and until specifically authorized by the Contracting Officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the Contracting Officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.

ATTACHMENTS:

Medicare Claims Processing Manual

Chapter 32 – Billing Requirements for Special Services

Table of Contents *(Rev. 13282; Issued: 06-20-25)*

413 –Implantable Pulmonary Artery Pressure Sensors for Heart Failure Management

413.1 – Claims Processing Requirements for Implantable Pulmonary Artery Pressure Sensors for Heart Failure Management

413.2 - Messages

413 –Implantable Pulmonary Artery Pressure Sensors for Heart Failure Management (Rev. 13282; Issued: 06-20-25; Effective: 01-13-25; Implementation: 10-06-25)

Heart failure (HF) is a chronic syndrome in which the heart muscle cannot pump enough blood to meet the body's needs. HF patients are prone to fluid retention in the body, including the lungs (pulmonary congestion), which results in shortness of breath, fatigue, and limitations of everyday activities such as walking or climbing stairs. Worsening of these symptoms can lead to acute decompensated HF (ADHF) and hospitalization. A change in blood flow, measured by pulmonary artery (PA) pressure, precedes symptoms of HF. The purpose of an implantable PA pressure sensor (IPAPS) is early detection of the change in blood flow, allowing medical intervention intended to prevent symptom onset, further exacerbation and hospitalization. An IPAPS and external data gathering unit are used in the patient's home to send a patient's PA pressure trends to their physician, allowing better management of medications, lifestyle adjustments, and office visits to prevent or reduce acute HF episodes.

Effective for services performed on or after January 13, 2025, the Centers for Medicare & Medicaid Services (CMS) has determined that the evidence is sufficient to cover implantable pulmonary artery pressure sensor(s) (IPAPS) for HF management under Coverage with Evidence Development (CED) and if furnished according to a Food and Drug Administration (FDA) market-authorized indication and all of the conditions of NCD 20.36 are met. Refer to Pub. 100-03, Medicare NCD Manual, Chapter 1, Section 20.36 for coverage policy.

413.1 – Claims Processing Requirements for IPAPS (Rev. 13282; Issued: 06-20-25; Effective: 01-13-25; Implementation: 10-06-25)

Coding

Effective for claims with dates of service on or after January 13, 2025, the following are the applicable HCPCS and ICD-10-PCS codes and claims modifier for billing IPAPS:

HCPCS code 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 angiograph

ICD-10-PCS code 02HQ30Z - Insertion of Pressure Sensor Monitoring Device into Right Pulmonary Artery Percutaneous Approach

ICD-10-PCS code 02HR30Z - Insertion of Pressure Sensor Monitoring Device into Left Pulmonary Artery Percutaneous Approach

NOTE: ICD-10-PCS codes 02HQ30Z and 02HR30Z are reported on institutional claims only

Modifier Q0 - Investigational clinical service provided in a clinical research study that is in an approved clinical research study.

*Condition Code 30 – Qualified clinical trial (reported on institutional claims TOB 11X only)
Value Code D4- 8 digit clinical trial number*

Diagnosis Coding

Effective for claims with dates of service on or after January 13, 2025, claims containing HCPCS code 33289, 02HQ30Z, or 02HR30Z shall contain ICD-10 diagnosis code Z00.6 and one of the following ICD-10 diagnosis codes:

I50.1
I50.22
I50.23
I50.32
I50.33
I50.42
I50.43
I50.82
I50.812

Types of Bills

Effective for claims with dates of service on or after January 13, 2025, contractors shall pay HCPCS code 33289 on types of bills 12X, 13X and 85X.

Effective for claims with dates of service on or after January 13, 2025, contractors shall pay ICD-10-PCS codes 02HQ30Z and 02HR30Z on type of bill 11X.

Contractors shall RTP claims submitted for codes 33289 when the TOB is not 12X, 13X, or 85X.

Contractors shall RTP claims submitted for codes 02HQ30Z and 02HR30Z when the TOB is not 11X.

Frequency Requirements

Effective for claims with dates of service on or after January 13, 2025, IPAPS implantation is covered once in a beneficiary's lifetime.

413.2 – Messages

(Rev. 13282; Issued: 06-20-25; Effective: 01-13-25; Implementation: 10-06-25)

Effective for claims with dates of service on or after January 13, 2025, contractors shall return as unprocessable claim line items for HCPCS code 33289 in a clinical trial when billed without a Q0 modifier using the following messages:

CARC 4: “The procedure code is inconsistent with the modifier used or a required modifier is missing. Note: Refer to the 835 Healthcare Policy Identification Segment (loop 2110 Service Payment Information REF), if present.”

RARC N519: “Invalid combination of HCPCS modifiers”

Group Code: CO (Contractual Obligation)

Effective for claims with dates of service on or after January 13, 2025, contractors shall deny claims for HCPCS code 33289, 02HQ30Z, or 02HR30Z in a clinical trial when billed without the required diagnosis codes using the following messages:

CARC 167: This (these) diagnosis(es) is (are) not covered. Usage: Refer to the 835 Healthcare Policy Identification Segment (loop 2110 Service Payment Information REF), if present.

RARC N386: “This decision was based on a National Coverage Determination (NCD). An NCD provides a coverage determination as to whether a particular item or service is covered. A copy of this policy is available at www.cms.gov/mcd/search.asp. If you do not have web access, you may contact the contractor to request a copy of the NCD.”

Spanish Version - Usamos una Determinación de Cobertura Local (LCD) para decidir la cobertura de su reclamo. Para apelar, obtenga una copia del LCD en www.cms.gov/medicare-coverage-database (use el código de facturación de MSN para el código "CPT/HCPCS") y envíela con la información de su médico.

MSN 15.20: The following policies were used when we made this decision: NCD 20.36

Spanish Version – Las siguientes políticas fueron utilizadas cuando se tomó esta decisión: NCD 20.36

Group Code: CO or PR dependent upon liability. (Use PR when Occurrence Code 32 (Institutional claim) or the GA modifier (Professional and Institutional claim) is appended to the item.

Effective for claims with dates of service on or after January 13, 2025, claims containing HCPCS code 33289 and ICD-10-PCS codes 02HQ30Z or 02HR30Z billed more than once in a beneficiary's lifetime shall be denied using the following messages:

CARC 119: "Benefit maximum for this time period or occurrence has been reached."

RARC N386: "This decision was based on a National Coverage Determination (NCD). An NCD provides a coverage determination as to whether a particular item or service is covered. A copy of this policy is available at www.cms.gov/mcd/search.asp. If you do not have web access, you may contact the contractor to request a copy of the NCD."

Spanish Version - Usamos una Determinación de Cobertura Local (LCD) para decidir la cobertura de su reclamo. Para apelar, obtenga una copia del LCD en www.cms.gov/medicare-coverage-database (use el código de facturación de MSN para el código "CPT/HCPCS") y envíela con la información de su médico.

MSN 15.20: The following policies were used when we made this decision: NCD 20.36

Spanish Version – Las siguientes políticas fueron utilizadas cuando se tomó esta decisión: NCD 20.36

Group Code: CO (Contractual Obligation) or PR (Patient Responsibility) dependent upon liability. (Use PR when Occurrence Code 32 (Institutional claim) or the GA modifier (Professional and Institutional claim) is appended to the item).