

CMS Manual System	Department of Health & Human Services (DHHS)
Pub 100-04 Medicare Claims Processing	Centers for Medicare & Medicaid Services (CMS)
Transmittal 12396	Date: December 7, 2023
	Change Request 13438

SUBJECT: Update to the Internet Only Manual (IOM) Publication (Pub.) 100-04, Chapter 32 Sections 320.3.3 and 370.1 for Coding Revisions to the National Coverage Determinations (NCDs)-- April 2024 Change Request (CR) 13390

I. SUMMARY OF CHANGES: The purpose of this Change Request (CR) is to make updates to chapter 32, sections 320.3.3 and 370.1 of the Medicare Claims Processing Manual Pub. 100-04 to coincide with the NCD updates in CR 13390, "International Classification of Diseases, 10th Revision (ICD-10) and Other Coding Revisions to National Coverage Determinations (NCDs)-April 2024".

EFFECTIVE DATE: January 9, 2024

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

IMPLEMENTATION DATE: January 9, 2024

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
R	32/320.3/320.3.3/Other
R	32/370/370.1/Coding and Claims Processing for MTWA.

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: 12396	Date: December 7, 2023	Change Request: 13438
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SUBJECT: Update to the Internet Only Manual (IOM) Publication (Pub.) 100-04, Chapter 32 Sections 320.3.3 and 370.1 for Coding Revisions to the National Coverage Determinations (NCDs)-- April 2024 Change Request (CR) 13390

EFFECTIVE DATE: January 9, 2024

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

IMPLEMENTATION DATE: January 9, 2024

I. GENERAL INFORMATION

A. Background: The purpose of this Change Request (CR) is to update Pub. 100-04, Chapter 32, Sections 320.3.3 and 370.1 for the Billing Requirements of the Medicare Claims Processing manual due to NCDs 20.9.1 and 20.30 in CR 13390, International Classification of Diseases, 10th Revision (ICD-10) and Other Coding Revisions to National Coverage Determinations (NCDs)-April 2024.

In CR 13390, the Medicare contractors were advised to end date ICD-10 codes I24.8 and I47.1, effective September 30, 2023; plus, add ICD-10 codes I24.81, I24.89, I47.10, I47.11 and I47.19, effective October 1, 2023. In addition, contractors were instructed to revise the descriptor for ICD -10 code I25.112 effective October 1, 2023 in reference to NCD 20.9.1 Ventricular Assist Devices (VADs).

For NCD 20.30 Microvolt T-Wave Alternans (MTWA) contractors were advised to end date ICD-10 code I24.8 effective September 30, 2023, and add ICD-10 codes I24.81, I24.89, I21.B effective October 1, 2023.

B. Policy: This CR does not involve any changes to policy.

II. 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	
13438.1	The Medicare contractors shall be aware of the manual updates in Pub 100-04, Chapter 32, Sections 320.3.3 and 370.1.	X	X							

III. PROVIDER EDUCATION TABLE

Number	Requirement	Responsibility				
		A/B MAC			DME MAC	CEDI
		A	B	HHH		
	None					

IV. 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:

Section B: All other recommendations and supporting information: N/A

V. CONTACTS

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

VI. 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: 0

Medicare Claims Processing Manual

Chapter 32 – Billing Requirements for Special Services

Table of Contents
(Rev. 12396; Issued: 12-07-23)

320 - Artificial Hearts and Related Devices

320.1 – Coding Requirements for Artificial Hearts Furnished Before May 1, 2008

320.2 – Coding Requirements for Artificial Hearts Furnished After May 1, 2008

320.3 – Ventricular Assist Devices (VADs)

320.3.1 – Postcardiotomy

320.3.2 – Bridge- to-Transplantation (BTT)

320.3.3 – Other

320.3.4 – Replacement Accessories and Supplies for External VADs or Any VAD

320.3.3 – Other

(Rev. 12396; Issued: 12-07-23; Effective: 01-09-24; Implementation: 01-09-24)

All other indications for the use of VADs not otherwise listed remain non-covered, except in the context of Category B investigational device exemption clinical trials (42 CFR 405) or as a routine cost in clinical trials defined under section 310.1 of the NCD Manual.

Claims Coding

Appropriate ICD-10 diagnosis and procedure codes are included below:

ICD-10 Diagnosis Code	Definition
I09.81	Rheumatic heart failure
I11.0	Hypertensive heart disease with heart failure

I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
I13.2	Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
I20.0	Unstable angina
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29	ST elevation (STEMI) myocardial infarction involving other sites

I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
I24.0	Acute coronary thrombosis not resulting in myocardial infarction
I24.1	Dressler's syndrome
<i>I24.81</i>	<i>Acute coronary microvascular dysfunction Effective 10/1/23</i>
<i>I24.89</i>	<i>Other forms of acute ischemic heart disease Effective 10/1/23</i>
I24.9	Acute ischemic heart disease, unspecified
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina pectoris
I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris with documented spasm
<i>I25.112</i>	<i>Atherosclerotic heart disease of native coronary artery with refractory angina pectoris</i>

I25.118	Atherosclerotic heart disease of native coronary artery with other forms of angina pectoris
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified angina pectoris
I25.5	Ischemic cardiomyopathy
I25.6	Silent myocardial ischemia

I25.700	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unstable angina pectoris
I25.701	Atherosclerosis of coronary artery bypass graft(s), unspecified, with angina pectoris with documented spasm
I25.708	Atherosclerosis of coronary artery bypass graft(s), unspecified, with other forms of angina pectoris
I25.709	Atherosclerosis of coronary artery bypass graft(s), unspecified, with unspecified angina pectoris
I25.710	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unstable angina pectoris
I25.711	Atherosclerosis of autologous vein coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.718	Atherosclerosis of autologous vein coronary artery bypass graft(s) with other forms of angina pectoris
I25.719	Atherosclerosis of autologous vein coronary artery bypass graft(s) with unspecified angina pectoris
I25.720	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unstable angina pectoris
I25.721	Atherosclerosis of autologous artery coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.728	Atherosclerosis of autologous artery coronary artery bypass graft(s) with other forms of angina pectoris
I25.729	Atherosclerosis of autologous artery coronary artery bypass graft(s) with unspecified angina pectoris
I25.730	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unstable angina pectoris
I25.731	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.738	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with other forms of angina pectoris
I25.739	Atherosclerosis of nonautologous biological coronary artery bypass graft(s) with unspecified angina pectoris
I25.750	Atherosclerosis of native coronary artery of transplanted heart with unstable angina

I25.751	Atherosclerosis of native coronary artery of transplanted heart with angina pectoris with documented spasm
I25.758	Atherosclerosis of native coronary artery of transplanted heart with other forms of angina pectoris

I25.759	Atherosclerosis of native coronary artery of transplanted heart with unspecified angina pectoris
I25.760	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unstable angina
I25.761	Atherosclerosis of bypass graft of coronary artery of transplanted heart with angina pectoris with documented spasm
I25.768	Atherosclerosis of bypass graft of coronary artery of transplanted heart with other forms of angina pectoris
I25.769	Atherosclerosis of bypass graft of coronary artery of transplanted heart with unspecified angina pectoris
I25.790	Atherosclerosis of other coronary artery bypass graft(s) with unstable angina pectoris
I25.791	Atherosclerosis of other coronary artery bypass graft(s) with angina pectoris with documented spasm
I25.798	Atherosclerosis of other coronary artery bypass graft(s) with other forms of angina pectoris
I25.799	Atherosclerosis of other coronary artery bypass graft(s) with unspecified angina pectoris
I25.810	Atherosclerosis of coronary artery bypass graft(s) without angina pectoris
I25.811	Atherosclerosis of native coronary artery of transplanted heart without angina pectoris
I25.812	Atherosclerosis of bypass graft of coronary artery of transplanted heart without angina pectoris
I25.89	Other forms of chronic ischemic heart disease
I25.9	Chronic ischemic heart disease, unspecified
I34.0	Nonrheumatic mitral (valve) insufficiency
I34.1	Nonrheumatic mitral (valve) prolapse
I34.2	Nonrheumatic mitral (valve) stenosis

I34.8	Other nonrheumatic mitral valve disorders
I34.9	Nonrheumatic mitral valve disorder, unspecified
I35.0	Nonrheumatic aortic (valve) stenosis
I35.1	Nonrheumatic aortic (valve) insufficiency
I35.2	Nonrheumatic aortic (valve) stenosis with insufficiency
I35.8	Other nonrheumatic aortic valve disorders
I35.9	Nonrheumatic aortic valve disorder, unspecified
I36.0	Nonrheumatic tricuspid (valve) stenosis
I36.1	Nonrheumatic tricuspid (valve) insufficiency
I36.2	Nonrheumatic tricuspid (valve) stenosis with insufficiency
I36.8	Other nonrheumatic tricuspid valve disorders
I36.9	Nonrheumatic tricuspid valve disorder, unspecified
I37.0	Nonrheumatic pulmonary valve stenosis
I37.1	Nonrheumatic pulmonary valve insufficiency

I37.2	Nonrheumatic pulmonary valve stenosis with insufficiency
I37.8	Other nonrheumatic pulmonary valve disorders
I37.9	Nonrheumatic pulmonary valve disorder, unspecified
I38	Endocarditis, valve unspecified
I39	Endocarditis and heart valve disorders in diseases classified elsewhere
I42.0	Dilated cardiomyopathy
I42.2	Other hypertrophic cardiomyopathy
I42.3	Endomyocardial (eosinophilic) disease
I42.4	Endocardial fibroelastosis
I42.5	Other restrictive cardiomyopathy
I42.6	Alcoholic cardiomyopathy
I42.7	Cardiomyopathy due to drug and external agent
I42.8	Other cardiomyopathies
I42.9	Cardiomyopathy, unspecified
I43	Cardiomyopathy in diseases classified elsewhere
I46.2	Cardiac arrest due to underlying cardiac condition
I46.8	Cardiac arrest due to other underlying condition

I46.9	Cardiac arrest, cause unspecified
I47.0	Re-entry ventricular arrhythmia
I47.2	Ventricular tachycardia
I47.9	Paroxysmal tachycardia, unspecified
<i>I47.10</i>	<i>Supraventricular tachycardia, unspecified Effective 10/1/23</i>
<i>I47.11</i>	<i>Inappropriate sinus tachycardia, so stated Effective 10/1/23</i>
<i>I47.19</i>	<i>Other supraventricular tachycardia Effective 10/1/23</i>
I48.0	Atrial fibrillation
I48.11	Longstanding persistent atrial fibrillation
I48.19	Other persistent atrial fibrillation
I49.01	Ventricular fibrillation
I49.02	Ventricular flutter
I49.1	Atrial premature depolarization
I49.2	Junctional premature depolarization
I49.3	Ventricular premature depolarization
I49.40	Unspecified premature depolarization
I49.49	Other premature depolarization
I49.5	Sick sinus syndrome
I49.8	Other specified cardiac arrhythmias
I49.9	Cardiac arrhythmia, unspecified
I50.1	Left ventricular failure
I50.20	Unspecified systolic (congestive) heart failure
I50.21	Acute systolic (congestive) heart failure
I50.22	Chronic systolic (congestive) heart failure
I50.23	Acute on chronic systolic (congestive) heart failure
I50.30	Unspecified diastolic (congestive) heart failure
I50.31	Acute diastolic (congestive) heart failure
I50.32	Chronic diastolic (congestive) heart failure
I50.33	Acute on chronic diastolic (congestive) heart failure

I50.40	Unspecified combined systolic (congestive) and diastolic (congestive) heart failure
I50.41	Acute combined systolic (congestive) and diastolic (congestive) heart failure

I50.42	Chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.43	Acute on chronic combined systolic (congestive) and diastolic (congestive) heart failure
I50.84	End-stage heart failure
I50.9	Heart failure, unspecified
I51.4	Myocarditis, unspecified
I51.9	Heart disease, unspecified
I52	Other heart disorders in diseases classified elsewhere
I97.0	Postcardiotomy syndrome
I97.110	Postprocedural cardiac insufficiency following cardiac surgery
I97.111	Postprocedural cardiac insufficiency following other surgery
I97.120	Postprocedural cardiac arrest following cardiac surgery
I97.121	Postprocedural cardiac arrest following other surgery
I97.130	Postprocedural heart failure following cardiac surgery
I97.131	Postprocedural heart failure following other surgery
I97.190	Other postprocedural cardiac functional disturbances following cardiac surgery
I97.191	Other postprocedural cardiac functional disturbances following other surgery
I97.710	Intraoperative cardiac arrest during cardiac surgery
I97.711	Intraoperative cardiac arrest during other surgery
I97.790	Other intraoperative cardiac functional disturbances during cardiac surgery
I97.791	Other intraoperative cardiac functional disturbances during other surgery
I97.88	Other intraoperative complications of the circulatory system, not elsewhere classified
I97.89	Other postprocedural complications and disorders of the circulatory system, not elsewhere classified
M32.11	Endocarditis in systemic lupus erythematosus
R00.1	Bradycardia, unspecified

R57.0	Cardiogenic shock
T82.221A	Breakdown (mechanical) of biological heart valve graft, initial encounter
T82.222A	Displacement of biological heart valve graft, initial encounter
T82.223A	Leakage of biological heart valve graft, initial encounter

T82.228A	Other mechanical complication of biological heart valve graft, initial encounter
T82.512A	Breakdown (mechanical) of artificial heart, initial encounter
T82.514A	Breakdown (mechanical) of infusion catheter, initial encounter
T82.518A	Breakdown (mechanical) of other cardiac and vascular devices and implants, initial encounter
T82.522A	Displacement of artificial heart, initial encounter
T82.528A	Displacement of other cardiac and vascular devices and implants, initial encounter
T82.529A	Displacement of unspecified cardiac and vascular devices and implants, initial encounter
T82.532A	Leakage of artificial heart, initial encounter
T82.538A	Leakage of other cardiac and vascular devices and implants, initial encounter
T82.592A	Other mechanical complication of artificial heart, initial encounter
T82.598A	Other mechanical complication of other cardiac and vascular devices and implants, initial encounter
T86.20	Unspecified complication of heart transplant
T86.21	Heart transplant rejection
T86.22	Heart transplant failure
T86.23	Heart transplant infection
T86.290	Cardiac allograft vasculopathy
T86.298	Other complications of heart transplant
T86.30	Unspecified complication of heart-lung transplant
T86.31	Heart-lung transplant rejection

T86.32	Heart-lung transplant failure
T86.33	Heart-lung transplant infection
T86.39	Other complications of heart-lung transplant
Z48.21	Encounter for aftercare following heart transplant
Z48.280	Encounter for aftercare following heart-lung transplant
Z94.1	Heart transplant status
Z94.3	Heart and lungs transplant status

This policy does not address coverage of VADs for right ventricular support, biventricular support, use in beneficiaries under the age of 18, use in beneficiaries with complex congenital heart disease, or use in beneficiaries with acute heart failure without a history of chronic heart failure. Coverage under section 1862(a) (1) (A) of the Social Security Act for VADs in these situations will be made by local Medicare Administrative Contractors (MACs) within their respective jurisdictions.

370.1 - Coding and Claims Processing for MTWA

(Rev. 12396; Issued: 12-07-23; Effective: 01-09-24; Implementation: 01-09-24)

Effective for claims with dates of service on and after March 21, 2006, MACs shall accept CPT 93025 (MTWA for assessment of ventricular arrhythmias) for MTWA diagnostic testing for the evaluation of patients at risk for SCD with the SA method of analysis only. All other methods of analysis for MTWA are non-covered.

Effective for claims with dates of service on and after January 13, 2015, MACs shall at their discretion determine coverage for CPT 93025 for MTWA diagnostic testing for the evaluation of patients at risk for SCD with methods of analysis other than SA. The –KX modifier shall be used as an attestation by the practitioner and/or provider of the service that documentation is on file verifying the MTWA was performed using a method of analysis other than SA for the evaluation of patients at risk for SCD from ventricular arrhythmias and that all other NCD criteria was met.

NOTE: The –KX modifier is NOT required on MTWA claims for the evaluation of patients at risk for SCD if the SA analysis method is used.

NOTE: This diagnosis code list/translation was approved by CMS/Coverage. It may or may not be a complete list of covered indications/diagnosis codes that are covered but should serve as a finite starting point.

As this policy indicates, individual A/B MACs within their respective jurisdictions have the discretion to make coverage determinations they deem reasonable and necessary under section 1862(a)(1)(A) of the Social Security Act. Therefore, A/B MACs may have additional covered diagnosis codes in their individual policies where contractor discretion is appropriate.

ICD-10-Codes:

ICD-10 CM	ICD-10 DX Description
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I21.A1	Myocardial infarction type 2
<i>I21.B</i>	<i>Myocardial infarction with coronary microvascular dysfunction</i>
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
<i>I24.81</i>	<i>Acute coronary microvascular dysfunction</i>
<i>I24.89</i>	<i>Other forms of acute ischemic heart disease</i>
I24.9	Acute ischemic heart disease, unspecified
I47.0	Re-entry ventricular arrhythmia
I47.2	Ventricular tachycardia

I49.01	Ventricular fibrillation
I49.02	Ventricular flutter
R55	Syncope and collapse