Policy Number	**MED202.006**
Policy Effective Date	**01/01/2026**
Policy End Date	**07/31/2026**

Microvolt T-Wave Alternans (MTWA)

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Related Policies (if applicable)
None

Disclaimer

Carefully check state regulations and/or the member contract.
Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Coverage

This medical policy has become inactive as of the end date above. There is no current active version and is not to be used for current claims adjudication or business purposes.

Microvolt T-wave alternans (MTWA) diagnostic testing **may be considered medically necessary** for the evaluation of individuals at risk for sudden cardiac death (SCD) only when the spectral analysis (SA) method is used.

Microvolt T-Wave alternans (MTWA) diagnostic testing **is considered not medically necessary for all other indications.**

Policy Guidelines

None.

Description

Microvolt T-wave alternans (MTWA) testing is a non-invasive diagnostic test that detects minute electrical activity in a portion of the electrocardiogram (ECG) known as the T-wave. MTWA testing has a role in the stratification of patients who may be at risk for sudden cardiac death (SCD) from ventricular arrhythmias.

Within patient groups that may be considered candidates for implantable cardioverter defibrillator (ICD) therapy, a negative MTWA test may be useful in identifying low-risk patients who are unlikely to benefit from, and who may experience worse outcomes from, ICD placement.

Spectral analysis (SA) is a sensitive mathematical method of measuring and comparing time and the ECG signals. It requires specialized propriety electrodes to calculate minute T-wave voltage changes. Software then analyzes these microvolt changes and produces a report to be interpreted by a physician. The Modified Moving Average (MMA) method uses a temporal domain in which T-wave alternans are assessed as a continuous variable along the complete ECG. The MMA method of MTWA testing is performed using standard ambulatory ECG equipment.

Rationale

This policy is based on a review of coverage guidance from the Centers for Medicare and Medicaid Services (CMS) specific to microvolt T-wave alternans (MTWA). (1)

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	93025
HCPCS Codes	None

*Current Procedural Terminology (CPT®) ©2024 American Medical Association: Chicago, IL.

References

1. Centers for Medicare and Medicaid Services. National Coverage Determination for Microvolt T-Wave Alternans (MTWA). (20.30) (January 13, 2015) (Version 3). Available at <https://www.cms.gov> (accessed December 22, 2025).

Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been changed since this medical policy document was written. See Medicare's National Coverage at <https://www.cms.hhs.gov>.

Policy History/Revision

Date	Description of Change
07/31/2026	Document became inactive.
01/01/2026	Document updated. The following changes were made to Coverage: 1) Revised criteria for microvolt T-wave alternans (MTWA) to be consistent with coverage guidance from the Centers from Medicare and Medicaid Services; and 2) Removed coverage statements for signal-averaged electrocardiography (SAECG). Reference 1 added; all others removed. Title changed from Risk Stratification Tests for Determining Arrhythmias (Signal-Averaged Electrocardiography [SAECG] and Microvolt T-Wave Alternans [MTWA]).
06/15/2025	Reviewed. No changes.
06/15/2024	Document updated with literature review. Coverage unchanged. Reference 13 added; others revised.
06/01/2023	Reviewed. No changes.
01/15/2023	Document updated with literature review. Coverage unchanged. Added references 12 and 30-32.
12/01/2021	Reviewed. No changes.
12/15/2020	Document updated with literature review. Coverage unchanged. Added references 4, 8-11, 18, 27-28; others removed.
11/15/2019	Reviewed. No changes.
11/01/2018	Document updated with literature review. Added the following statement to Coverage: “MTWA testing is considered experimental, investigational, and/or unproven for all other indications.” References modified, with the following new references added: 5-12, 17, 22-26.
10/15/2017	Reviewed. No changes.
10/01/2016	Document updated with literature review. Coverage unchanged.
08/01/2015	Reviewed. No changes.
11/15/2014	Document updated with literature review. Coverage unchanged. CPT/HCPCS code(s) updated

10/15/2013	Literature reviewed. No changes.
02/15/2009	Revised/updated entire document, this policy is no longer scheduled for routine literature review and update.
11/01/2006	Revised/updated entire document
08/15/2003	Revised/updated entire document
03/01/2002	Revised/updated entire document
04/01/1999	Revised/updated entire document
09/01/1998	Revised/updated entire document