



MASSACHUSETTS

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Medical Policy T-Wave Alternans

Table of Contents

- [Policy: Commercial](#)
- [Policy: Medicare](#)
- [Authorization Information](#)
- [Coding Information](#)
- [Description](#)
- [Policy History](#)
- [Information Pertaining to All Policies](#)
- [References](#)

Policy Number: 539

BCBSA Reference Number: 2.02.13

NCD/LCD: National Coverage Determination (NCD) for Microvolt T-Wave Alternans (MTWA) (20.30)

Related Policies

- Signal-Averaged Electrocardiography, #[134](#)

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Microvolt T-wave alternans as a technique of risk stratification for primary or secondary prevention of fatal arrhythmias and sudden cardiac death in patients with a history of myocardial infarction, congestive heart failure, cardiomyopathy, or other cardiac disorders, such as long-QT syndrome (e.g., Brugada syndrome), is [INVESTIGATIONAL](#).

Medicare HMO BlueSM and Medicare PPO BlueSM Members

Nationally Covered Indications

Microvolt T-wave Alternans diagnostic testing is covered for the evaluation of patients at risk for SCD, only when the spectral analysis method is used.

Nationally Non-Covered Indications

Microvolt T-wave Alternans diagnostic test is non-covered for the evaluation of patients at risk for SCD if measurement is not performed employing the spectral analysis.

National Coverage Determination (NCD) for Microvolt T-Wave Alternans (MTWA) (20.30)

<https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=310&ncdver=2&bc=AgAAgAAAAAA&>

Prior Authorization Information

Pre-service approval is required for all inpatient services for all products.

See below for situations where prior authorization may be required or may not be required.

Yes indicates that prior authorization is required.

No indicates that prior authorization is not required.

N/A indicates that this service is primarily performed in an inpatient setting.

Outpatient

Commercial Managed Care (HMO and POS)	This is not a covered service.
Commercial PPO and Indemnity	This is not a covered service.
Medicare HMO BlueSM	No
Medicare PPO BlueSM	No

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code 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 as it applies to an individual member

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The following CPT code is considered investigational for Commercial Members: Managed Care (HMO and POS), PPO and Indemnity:

CPT Codes

CPT codes:	Code Description
93025	Microvolt T-wave alternans for assessment of ventricular arrhythmias

Description

The presence of T-wave alternans has been investigated as a risk factor for fatal arrhythmias and sudden cardiac death in patients with a history of myocardial infarction, congestive heart failure, or cardiomyopathy. Microvolt T-wave alternans refers to a beat-to-beat variability in the T-wave amplitude. Because a routine electrocardiogram cannot detect these small fluctuations, this test requires specialized sensors to detect the fluctuations and computer algorithms to evaluate the results.

T-wave alternans is a provocative test that requires gradual elevation of the heart rate to above 110 beats per minute. The test can be performed in conjunction with an exercise tolerance stress test. Test results are reported as the number of standard deviations by which the peak signal of the T-wave exceeds the background noise. This number is referred to as the "alternans ratio." An alternans ratio of 3 or greater is typically considered a positive result, an absent alternans ratio is considered a negative result, and anything in between is considered indeterminate.

Patient groups are categorized into those who have not experienced a life-threatening arrhythmia (i.e., primary prevention) and those who have (i.e., secondary prevention). Those who have already experienced an arrhythmia are already at high risk and probably do not require testing. T-wave alternans is one of many risk factors that have been investigated for identifying candidates for primary prevention.

T-wave alternans has also been investigated as a diagnostic test for patients with syncope of unknown origin and as a noninvasive test to identify candidates for further invasive electrophysiology testing of the heart.

An example of a T-wave alternans system is the HearTwave® II Cardiac Diagnostic System by Cambridge Heart. All T-wave alternans systems are considered investigational regardless of the commercial name, the manufacturer or FDA approval.

Summary

Results from prospective multicenter studies enrolling various patient populations undergoing ICD placement as part of primary prevention strategies do not support clinical utility from microvolt T-wave alternans used to risk stratify and therefore guide placement. Therefore, this technology is considered investigational.

Policy History

Date	Action
12/2015	Clarified coding information.
7/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
5/2011	New policy effective 5/2011 describing ongoing coverage and non-coverage indications.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

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