Medical Coverage Policies

Microvolt T-Wave Alternans Testing

| EFFECTIVE DATE | 03/21/2006 | LAST UPDATED | 08/17/2010 |

Description:

Microvolt T-wave alternans (MTWA) testing has been investigated as a noninvasive test to identify a patient’s risk for sudden cardiac death. The test measures the beat-to-beat microvolt variation in the amplitude of the electrocardiogram tracing. Some research indicates a positive test has a greater risk of developing ventricular tachyarrhythmias than a negative test.

At this time there is insufficient medical literature to support the efficacy of this treatment. There have been no randomized trials of either implantable cardioverter-defibrillators (ICD) or antiarrhythmic therapy that have relied on the results of T-wave alternans as patient selection criteria. Review of the 2005 and 2007 TEC assessments concludes that evidence does not demonstrate that MTWA testing can improve health outcomes.

Microvolt t-wave alternans diagnostic testing is considered medically necessary BlueCHIP for Medicare members only, and is considered not medically necessary for all other lines of business (or product lines) due to insufficient data in published, peer-reviewed scientific literature to support its use.

Medicare policy is developed separately from BCBSRI policy. Medicare policy incorporates consideration of governmental regulations from CMS (Centers for Medicare and Medicaid Services), such as national coverage determinations or local coverage determinations. In addition to benefit differences, CMS may reach different conclusions regarding the scientific evidence than does BCBSRI. Medicare and BCBSRI policies may differ. However, BlueCHIP for Medicare members must be offered, at least, the same services as Medicare offers.

Medical Criteria:

Not applicable.

Policy:

Microvolt T-wave alternans testing is covered for BlueCHIP for Medicare members. For all other lines of business, microvolt t-wave alternans is considered not medically necessary as its clinical efficacy has not been proven.

Preauthorization is not required or recommended.

Coverage:

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement, Benefit Booklet, or Rite Care Contract for applicable machine test or not medically necessary benefits/coverage.

Coding:

93025

Also Known As:

Not applicable
Related Topics:

Not applicable

Published:

Policy Update, December 2007
Provider Update, September 2008
Provider Update, August 2009
Provider Update, October 2010

References:

BlueCross BlueShield Association (BCBSA), Technology Evaluation Center (TEC). Microvolt T-wave alternans testing to risk-stratify patients being considered for ICD therapy for primary prevention of sudden death. TEC Assessment Program. Chicago, IL: BCBSA; June 2007; 21(14).


Hohnloser SH, Klinghenheben T, Bloomfield D, Dabbous O, Cohen RJ. Usefulness of Microvolt T-Wave Alternans for Prediction of Ventricular Tachyarrhythmic Events in Patients With Dilated Cardiomyopathy: Results From a Prospective Observational Study. Journal of the American College of Cardiology; 2003; 41; 2220-2224. Downloaded from content.onlinejacc.org by on July 31, 2007.

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