SUBJECT: NCD20.30 Microvolt T-wave Alternans (MTWA)

I. SUMMARY OF CHANGES: Effective January 13, 2015, CMS decided that no national coverage determination (NCD) is appropriate at this time for microvolt t-wave alternans (MTWA) testing using the modified moving average (MMA) method for the evaluation of patients at risk for sudden cardiac death (SCD). As a result, national non-coverage of the MMA method was removed, leaving Medicare coverage of MTWA using MMA and methods of analysis other than spectral analysis (SA) for the evaluation of patients at risk for SCD from ventricular arrhythmias to be determined by the local Medicare Administrative Contractors (MACs).

EFFECTIVE DATE: January 13, 2015
*Unless otherwise specified, the effective date is the date of service.
IMPLEMENTATION DATE: June 23, 2015

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.

<table>
<thead>
<tr>
<th>R/N/D</th>
<th>CHAPTER / SECTION / SUBSECTION / TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>32/Table of Contents</td>
</tr>
<tr>
<td>N</td>
<td>32/370/Microvolt T-wave Alternans (MTWA)</td>
</tr>
<tr>
<td>N</td>
<td>32/370.1/Coding and Claims Processing for MTWA</td>
</tr>
<tr>
<td>N</td>
<td>32/370.2/Messaging for MTWA</td>
</tr>
</tbody>
</table>

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
SUBJECT: NCD20.30 Microvolt T-wave Alternans (MTWA)

EFFECTIVE DATE: January 13, 2015
*Unless otherwise specified, the effective date is the date of service.
IMPLEMENTATION DATE: June 23, 2015

I. GENERAL INFORMATION

A. Background: The Centers for Medicare and Medicaid Services (CMS) was asked to reconsider the national coverage determination (NCD) on microvolt t-wave alternans (MTWA) diagnostic testing to extend coverage to the modified moving average (MMA) method of analysis. CMS currently covers MTWA nationally only when it is performed using the spectral analysis (SA) method for the evaluation of patients at risk for sudden cardiac death (SCD) from ventricular arrhythmias, and patients who may be candidates for Medicare coverage of the placement of an implantable cardiac defibrillator (ICD).

B. Policy: Effective January 13, 2015, CMS decided that no NCD is appropriate at this time for MTWA testing using the MMA method for the evaluation of patients at risk for SCD. As a result, national non-coverage of the MMA method was removed, leaving Medicare coverage of MTWA using MMA and methods of analysis other than SA for the evaluation of patients at risk for SCD from ventricular arrhythmias to be determined by the local Medicare Administrative Contractors (MACs).

NOTE: MACs shall accept the inclusion of the -KX modifier on the claim line(s) along with CPT code 93025 (long descriptor: MTWA for assessment of ventricular arrhythmias, short descriptor: microvolt t-wave assess) 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.

Claims for MTWA using the SA method of analysis do not require the –KX modifier and will continue to be processed as they are currently. Refer to the Pub.100-04, Claims Processing Manual Chapter 32, Section 370, for claims processing information.

II. BUSINESS REQUIREMENTS TABLE

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A/B MAC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D M E</td>
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<tr>
<td></td>
<td></td>
<td>Shared-System Maintainers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>9162 - 04.1</td>
<td>Effective for claims with dates of service on and after January 13, 2015, contractors shall determine coverage at their discretion of MTWA</td>
<td>X</td>
</tr>
<tr>
<td>Number</td>
<td>Requirement</td>
<td>Responsibility</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td></td>
<td>diagnostic testing for the evaluation of patients at risk for SCD using analysis methods other than SA.</td>
<td></td>
</tr>
<tr>
<td>9162 - 04.2</td>
<td>Effective for dates of service on and after January 13, 2015, contractors shall process claims for MTWA diagnostic testing for the evaluation of patients at risk for SCD when methods of analysis other than SA are used.</td>
<td>X X</td>
</tr>
<tr>
<td>9162 - 04.2.1</td>
<td>Upon implementation of this instruction, contractors shall require providers to report CPT 93025 with the -KX modifier to identify MTWA diagnostic tests performed with methods of analysis other than SA when all other criteria of the NCD has been met and documented in the medical records.</td>
<td>X X</td>
</tr>
<tr>
<td>9162 - 04.2.2</td>
<td>If contractors have determined that a claim for MTWA with methods of analysis other than SA are billed without the -KX modifier, contractors shall deny the claim using the following messages:</td>
<td>X X</td>
</tr>
<tr>
<td></td>
<td>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.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RARC N657 – This should be billed with the appropriate code for these services.</td>
<td></td>
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<tr>
<td></td>
<td>MSN 15.20 - The following policies [NCD 20.30] were used when we made this decision.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spanish Equivalent - Las siguientes políticas [NCD 20.30] fueron utilizadas cuando se tomó esta decisión.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group Code: CO (Contractual Obligation) assigning financial liability to the provider.</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Requirement</td>
<td>Responsibility</td>
</tr>
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<td>------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>9162-04.3</td>
<td>Contractors shall not search for and adjust any claims for MTWA for the evaluation of patients at risk for SCD when methods of analysis other than SA are used, with dates of service January 13, 2015, through the implementation of this CR. However, contractors shall adjust claims meeting their coverage criteria when brought to their attention by the provider within the timely filing period.</td>
<td>X X X</td>
</tr>
</tbody>
</table>

### III. PROVIDER EDUCATION TABLE

<table>
<thead>
<tr>
<th>Number</th>
<th>Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>9162-04.4</td>
<td>MLN Article: A provider education article related to this instruction will be available at <a href="http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/">http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/</a> shortly after the CR is released. You will receive notification of the article release via the established &quot;MLN Matters&quot; listserv. Contractors shall post this article, or a direct link to this article, on their Web sites and include information about it in a listserv message within 5 business days after receipt of the notification from CMS announcing the availability of the article. In addition, the provider education article shall be included in the contractor's next regularly scheduled bulletin. Contractors are free to supplement MLN Matters articles with localized information that would benefit their provider community in billing and administering the Medicare program correctly.</td>
<td>X X</td>
</tr>
</tbody>
</table>

### IV. SUPPORTING INFORMATION

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

"Should" denotes a recommendation.
Section B: All other recommendations and supporting information: N/A

V. CONTACTS

Pre-Implementation Contact(s): William Ruiz, 410-786-3283 or William.Ruiz@cms.hhs.gov (Institutional Claims Processing), Yvette Cousar, 410-786-2160 or Yvette.Cousar@cms.hhs.gov (Professional Claims Processing), Kimberly Long, 410-786-5702 or Kimberly.Long@cms.hhs.gov (Coverage), Wanda Belle, 410-786-7491 or Wanda.Belle@cms.hhs.gov (Coverage), Patricia Brocato-Simons, 410-786-0261 or patricia.brocatosimons@cms.hhs.gov (Coverage)

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
370 - Microvolt T-wave Alternans (MTWA)
   370.1 - Coding and Claims Processing for MTWA
   370.2 - Messaging for MTWA
On March 21, 2006, the Centers for Medicare & Medicaid Services (CMS) began national coverage of microvolt T-wave Alternans (MTWA) diagnostic testing when it was performed using only the spectral analysis (SA) method for the evaluation of patients at risk for sudden cardiac death (SCD) from ventricular arrhythmias and patients who may be candidates for Medicare coverage of the placement of an implantable cardiac defibrillator (ICD).

Effective for claims with dates of service on and after January 13, 2015, Medicare Administrative Contractors (MACs) may determine coverage of MTWA diagnostic testing when it is performed using methods of analysis other than SA for the evaluation of patients at risk for SCD from ventricular arrhythmias. Further information can be found at Publication 100-03, section 20.30, of the National Coverage Determinations Manual.

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-9 Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Diagnosis Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>410.11</td>
<td>Acute myocardial infarction of other anterior wall, initial episode of care</td>
</tr>
<tr>
<td>410.11</td>
<td>Acute myocardial infarction of other anterior wall, initial episode of care</td>
</tr>
<tr>
<td>410.01</td>
<td>Acute myocardial infarction of anterolateral wall, initial episode of care</td>
</tr>
<tr>
<td>410.11</td>
<td>Acute myocardial infarction of other anterior wall, initial episode of care</td>
</tr>
<tr>
<td>410.31</td>
<td>Acute myocardial infarction of inferoposterior wall, initial episode of care</td>
</tr>
<tr>
<td>410.21</td>
<td>Acute myocardial infarction of inferolateral wall, initial episode of care</td>
</tr>
<tr>
<td>410.41</td>
<td>Acute myocardial infarction of other inferior wall, initial episode of care</td>
</tr>
<tr>
<td>410.81</td>
<td>Acute myocardial infarction of other specified sites, initial episode of care</td>
</tr>
<tr>
<td>410.51</td>
<td>Acute myocardial infarction of other lateral wall, initial episode of care</td>
</tr>
<tr>
<td>410.61</td>
<td>True posterior wall infarction, initial episode of care</td>
</tr>
</tbody>
</table>
410.81 Acute myocardial infarction of other specified sites, initial episode of care
410.91 Acute myocardial infarction of unspecified site, initial episode of care
410.71 Subendocardial infarction, initial episode of care
410.01 Acute myocardial infarction of anterolateral wall, initial episode of care
410.11 Acute myocardial infarction of other anterior wall, initial episode of care
410.21 Acute myocardial infarction of inferolateral wall, initial episode of care
410.41 Acute myocardial infarction of other inferior wall, initial episode of care
410.71 Subendocardial infarction, initial episode of care
410.51 Acute myocardial infarction of other lateral wall, initial episode of care
410.61 True posterior wall infarction, initial episode of care
410.81 Acute myocardial infarction of other specified sites, initial episode of care
410.91 Acute myocardial infarction of unspecified site, initial episode of care
411.89 Other acute and subacute forms of ischemic heart disease, other
411.89 Other acute and subacute forms of ischemic heart disease, other
427.1 Paroxysmal ventricular tachycardia
427.1 Paroxysmal ventricular tachycardia
427.41 Ventricular fibrillation
427.42 Ventricular flutter
780.2 Syncope and collapse
V45.89 Other postprocedural status

ICD-10 Codes
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
I21.09 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
I21.19 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
I21.29 ST elevation (STEMI) myocardial infarction involving other sites
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
I22.0 Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I22.1 Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I22.1 Subsequent ST elevation (STEMI) myocardial infarction of inferior 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
I22.8 Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.8 Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.9 Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
I24.8 Other forms of acute ischemic heart disease
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
Z98.89  Other specified postprocedural states

370.2 - Messaging for MTWA  

Effective for claims with dates of service on and after January 13, 2015, MACs shall deny claims for MTWA CPT 93025 with methods of analysis other than SA without modifier -KX 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 N657 – This should be billed with the appropriate code for these services.

Group Code: CO (Contractual Obligation) assigning financial liability to the provider

MSN 15.20 - The following policies [NCD 20.30] were used when we made this decision