GUIDELINES
This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder contract. Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards. This guideline is solely for explaining correct procedure reporting and does not imply coverage and reimbursement.

DESCRIPTION
Cardiac monitoring devices are monitors used by patients at home in an attempt to detect and/or manage cardiac arrhythmias. This can be accomplished by a number of different devices including, but not limited to, continuous recorders (also known as Holter monitors), external loop monitors/recorders (also known as cardiac event monitors/recorders), implantable loop monitors/recorders and real-time cardiac monitoring (also known as mobile cardiac outpatient telemetry [MCOT]).

POLICY
Continuous Recorder, External Loop Recorder, Implantable Loop Recorder, and Mobile Cardiac Outpatient Telemetry (MCOT) do not require prior authorization for HMO, PPO, Individual Marketplace, Elite, Advantage.

Long-term Continuous 48 hour to 21 day External Unattended Cardiac Monitoring Device, Intracardiac Ischemia Monitoring System, Other Cardiac Event Monitors (as listed below), Omnicardiogram are non-covered.

See below for terms of coverage.

HMO, PPO, Individual Marketplace, Elite, Advantage
Covered
Continuous Recorder/ Holter Monitors
The use of 24 to 48-hour continuous external cardiac monitoring and storage [CPT codes 93224, 93225, 93226, 93227, (e.g., Holter Monitor)], are considered medically necessary when any of the following criteria are met:

1. As a diagnostic tool to evaluate symptoms suggestive of cardiac arrhythmias (e.g., frequent palpitations, unexplained dizziness, or syncope)

2. To assess pacemaker or implantable cardioverter defibrillator (ICD) function for any of the following indications:
   - In patients experiencing frequent symptoms of palpitation, syncope, or near syncope
   - When there is a suspected component failure or malfunction
   - To assess response to drug therapy in patients with an ICD

3. To assess for myocardial ischemia in suspected variant angina or known coronary artery disease when such information will impact management

4. To assess antiarrhythmic drug therapy in individuals with a treated arrhythmia

5. For pediatric patients with ANY of the following indications:
   - Hypertrophic or dilated cardiomyopathies
   - Possible long QT syndromes
   - Congenital heart disease accompanied by significant residual hemodynamic abnormalities when surgery is being considered
   - To assess the adequacy of antiarrhythmic therapy during rapid growth
   - Asymptomatic non-paced congenital complete atrioventricular (AV) block
External Loop Recorder
The external loop recorder (CPT codes 93268, 93270, 93271, and 93272) is a small device that attaches to the chest with electrodes. The patient activates this device to record when a symptom occurs and then data from the device is typically transmitted to a monitoring center for immediate review. This process is repeated whenever symptoms occur over a period of 20–30 days (which is the typical amount of time the device is worn by the patient). This monitor is covered when the following medical indications are met:

1. To document an arrhythmia instead of using a Holter monitor, or if a Holter monitor fails to document a suspected arrhythmia; or
2. To document ST segment depression for suspected ischemia; or
3. To document the benefit after initiating drug therapy for an arrhythmia; or
4. To document recurrence of an arrhythmia after discontinuation of drug therapy; or
5. To document the results after an ablation procedure for arrhythmia; or
6. To evaluate syncope and light-headedness

Implantable Loop Recorder
The use of implantable loop recorder (CPT codes 33282, 33284, 93285, 93291, 93297, 93298, 93299, C1764, E0616) for the evaluation of recurrent unexplained episodes of fainting are also covered services only when ALL of the following criteria are met:

1. Cardiac arrhythmia is suspected to be the cause of fainting
2. Noninvasive ambulatory monitoring failed to establish a definitive diagnosis because the symptoms occur so infrequently and unpredictably that the length of the monitoring period may have been inadequate to capture a diagnostic electrocardiogram (ECG) rhythm disorder
3. Tilt-table testing is negative or non-diagnostic

Real-time Cardiac Monitors/Mobile Cardiac Outpatient Telemetry (MCOT)
Cardiac event monitors are small portable devices worn by a patient during normal activity for up to 30 days (CPT codes 93228 and 93229). The device has a recording system capable of storing several minutes of the individual's electrocardiogram (EKG) record. The patient can initiate EKG recording during a symptomatic period of arrhythmia. Cardiac event monitors have primarily been used to diagnose and evaluate cardiac arrhythmias. These monitors are particularly useful in obtaining a record of arrhythmia that would not be discovered on a routine EKG or an arrhythmia that is so infrequent that it is not detected during a 24-hour period by a Holter monitor.

MCOT is covered for 30 days as medically necessary when ALL of the following criteria are met:

1. Clinical suspicion of a significant arrhythmia
2. Symptoms of syncope, presyncope, or severe palpitations occurring less frequently than once per 24 hours are present
3. Non-diagnostic 24-hour Holter or non-real time monitoring (eg., event monitor, pacemaker telephonic telemetry, post-symptom patient-activated recorder or auto-trigger) within 60 days prior to consideration of the use of a home-based, real-time continuous attended cardiac monitoring system

Documentation Requirements
1. All documentation must be maintained in the patient’s medical record and available to the Plan upon request.
2. Every page of the record must be legible and include appropriate patient identification information (e.g., complete name, dates of service(s)). The record must include the physician or non-physician practitioner responsible for and providing the care of the patient.
3. The submitted medical record should support the use of the selected ICD code(s). The submitted CPT/HCPCS code should describe the service performed.

Noncovered
Long-term Continuous 48 hour to 21 day External Unattended Cardiac Monitoring Device
Paramount does not cover a 48 hour to 21 day external continuous unattended cardiac monitoring device (CPT codes 0295T—0298T) for any indication because it is considered experimental, investigational or unproven.

Intracardiac Ischemia Monitoring System
Paramount does not cover an intracardiac ischemia monitoring system (CPT codes 0302T—0307T) for any indication because it is considered experimental, investigational or unproven.

**Other Cardiac Event Monitors**
Paramount does not cover ANY of the following for any indication because each is considered a convenience item and not medically necessary:
1. a self-monitoring combination device that includes an ECG monitor combined with a cellular telephone or other personal electronic device
2. additional software or hardware required for downloading ECG data to a device such as personal computer, smart phone, or tablet

**Omicardiogram/Cardiointegram (CIG)** is a technique intended to detect abnormalities in the standard 12-lead electrocardiogram (CPT code S9025). This is not identifiable by competent routine interpretation in patients at risk of cardiac ischemia. This procedure is experimental/investigational because there is insufficient evidence to support conclusions regarding its efficacy/sensitivity, and value as a diagnostic tool. If reported, this will be denied.

**CODING/BILLING INFORMATION**
The appearance of a code in this section does not necessarily indicate coverage. Codes that are covered may have selection criteria that must be met. Payment for supplies may be included in payment for other services rendered.

<table>
<thead>
<tr>
<th>CPT CODES</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>33282</td>
<td>Implantation of patient-activated cardiac event recorder</td>
</tr>
<tr>
<td>33284</td>
<td>Removal of an implantable, patient-activated cardiac event recorder</td>
</tr>
<tr>
<td>93224</td>
<td>External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; includes recording, scanning analysis with report, physician review and interpretation</td>
</tr>
<tr>
<td>93225</td>
<td>External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; recording (includes connection, recording, and disconnection)</td>
</tr>
<tr>
<td>93226</td>
<td>External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; scanning analysis with report</td>
</tr>
<tr>
<td>93227</td>
<td>External electrocardiographic recording up to 48 hours by continuous rhythm recording and storage; physician review and interpretation</td>
</tr>
<tr>
<td>93228</td>
<td>External mobile cardiovascular telemetry with electrocardiographic recording, concurrent computerized real time data analysis and greater than 24 hours of accessible ECG data storage (retrievable with query) with ECG triggered and patient selected events transmitted to a remote attended surveillance center for up to 30 days; physician review and interpretation with report</td>
</tr>
<tr>
<td>93229</td>
<td>External mobile cardiovascular telemetry with electrocardiographic recording, concurrent computerized real time data analysis and greater than 24 hours of accessible ECG data storage (retrievable with query) with ECG triggered and patient selected events transmitted to a remote attended surveillance center for up to 30 days; technical support for connection and patient instructions for use, attended surveillance, analysis and physician prescribed transmission of daily and emergent data reports</td>
</tr>
<tr>
<td>93268</td>
<td>External patient and, when performed, auto-activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; includes transmission, physician review and interpretation</td>
</tr>
<tr>
<td>93270</td>
<td>External patient and, when performed, auto-activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; recording (includes connection, recording, and disconnection)</td>
</tr>
<tr>
<td>93271</td>
<td>External patient and, when performed, auto-activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; transmission download and analysis</td>
</tr>
<tr>
<td>93272</td>
<td>External patient and, when performed, auto-activated electrocardiographic rhythm derived event recording with symptom-related memory loop with remote download capability up to 30 days, 24-hour attended monitoring; physician review and interpretation</td>
</tr>
<tr>
<td>93285</td>
<td>Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with physician analysis, review and report; implantable loop recorder system</td>
</tr>
<tr>
<td>93290</td>
<td>Interrogation device evaluation (in person) with physician analysis, review and report, includes connection, recording and disconnection per patient encounter; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors</td>
</tr>
<tr>
<td>93291</td>
<td>Interrogation device evaluation (in person) with physician analysis, review and report, includes connection, recording and disconnection per patient encounter; implantable loop recorder system, including heart rhythm derived data analysis</td>
</tr>
</tbody>
</table>
| 93297              | Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors, physician analysis,
review(s) and report(s)

93298  Interrogation device evaluation(s), (remote) up to 30 days; implantable loop recorder system, including analysis of recorded heart rhythm data, physician analysis, review(s) and report(s)

93299  Interrogation device evaluation(s), (remote) up to 30 days; implantable cardiovascular monitor system or implantable loop recorder system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution of results

0295T  External electrocardiographic recording for more than 48 hours up to 21 days by continuous rhythm recording and storage; includes recording, scanning analysis with report, review and interpretation

0296T  External electrocardiographic recording for more than 48 hours up to 21 days by continuous rhythm recording and storage; recording (includes connection and initial recording)

0297T  External electrocardiographic recording for more than 48 hours up to 21 days by continuous rhythm recording and storage; scanning analysis with report

0298T  External electrocardiographic recording for more than 48 hours up to 21 days by continuous rhythm recording and storage; review and interpretation

0302T  Insertion or removal and replacement of intracardiac ischemia monitoring system including imaging supervision and interpretation when performed and intra-operative interrogation and programming when performed; complete system (includes device and electrodes)

0303T  Insertion or removal and replacement of intracardiac ischemia monitoring system including imaging supervision and interpretation when performed and intra-operative interrogation and programming when performed; electrode only

0304T  Insertion or removal and replacement of intracardiac ischemia monitoring system including imaging supervision and interpretation when performed and intra-operative interrogation and programming when performed; device only

0305T  Programming device evaluation (in person) of intracardiac ischemia monitoring system with iterative adjustment of programmed values, with analysis, review, and report

0306T  Interrogation device evaluation (in person) of intracardiac ischemia monitoring system with analysis, review, and report

0307T  Removal of intracardiac ischemia monitoring device

HCPCS CODES
C1764  Event recorder, cardiac (implantable)
E0616  Implantable cardiac event recorder with memory, activator and programmer
S9025  Omnicardiogram/cardiointegram

TAWG REVIEW DATES: 05/18/2011, 06/15/2011, 08/10/2011, 07/11/2012, 08/14/2013, 07/18/2014

REVISION HISTORY EXPLANATION
07/18/14: Codes removed 93279, 93280, 93281, 93282, 93283, 93284, 93286, 93287, 93288, 93289, 93292, 93293, 93294, 93295, 93296. Added codes 0295T—0298T, 0302T—0307T. TAWG committee determined that Mobile Cardiac Outpatient Telemetry will now be covered without prior authorization for all product lines. Medical Policy Steering Committee will do future reviews for Mobile Cardiac Outpatient Telemetry. Policy reviewed and updated to reflect most current clinical evidence per TAWG.

REFERENCES/RESOURCES
Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services
Ohio Department of Medicaid http://ifs.ohio.gov/
American Medical Association, Current Procedural Terminology (CPT®) and associated publications and services
Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets
Industry Standard Review
Hayes, Inc.