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OVERVIEW

There are a wide variety of devices available for outpatient cardiac rhythm monitoring. The primary purpose of these devices is the evaluation of suspected arrhythmias that have not been detected by office or hospital-based monitoring. These devices differ in the types of monitoring leads used, the duration and continuity of monitoring, the ability to detect arrhythmias without patient intervention, and the mechanism of delivery of the information from patient to clinician. This policy addresses Mobile Cardiac Outpatient Telemetry (MCOT).

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

BlueCHiP for Medicare

MCOT is considered medically necessary.

Blue Cross & Blue Shield of Rhode Island (BCBSRI) must follow Centers for Medicare and Medicaid Services (CMS) guidelines, such as national coverage determinations or local coverage determinations for all BlueCHiP for Medicare policies. Therefore, BlueCHiP for Medicare policies may differ from Commercial products. In some instances, benefits for BlueCHiP for Medicare may be greater than what is allowed by the CMS.

Commercial Products

MCOT is considered not medically necessary as there is insufficient peer-reviewed scientific literature that demonstrates that the service is superior to other available approaches.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for limitations of benefits/coverage when services are not medically necessary.

BACKGROUND

Ambulatory event monitors store the recorded data, which are ultimately transmitted either to a physician's office or to a central recording station. In contrast, outpatient cardiac telemetry provides real-time monitoring and analysis. For example, CardioNet® now owned by BioTelemetry (Malvern, PA), offers mobile cardiac outpatient telemetry. In this system, the patient wears a 3-lead sensor, which constantly communicates with the CardioNet monitor, a lightweight unit that can be carried in a pocket or a purse. When an arrhythmia is detected according to preset parameters, the ECG is automatically transmitted to a central CardioNet service center, where the ECG is immediately interpreted, with results sent to the referring physician. The referring physician can request the level and timing of response, ranging from daily reports to stat results. Other systems for outpatient cardiac telemetry include the HEARTLink II™ system (Cardiac Telecom), the Vital

Signs Transmitter (VST™, Biowatch Medical, Columbia, SC), and the LifeStar™ Ambulatory Cardiac Telemetry (ACT) system (Card Guard Scientific Survival Ltd., Israel) and the SEEQ™ Mobile Cardiac Telemetry System (Medtronic, Minneapolis, MN). The eCardio Verité™ system (eCardio, Houston, TX) is a multifunctional model that can be changed between a patient-activated event monitor and a continuous telemetry monitor. Other manufacturers market devices that provide continuous heart rhythm recording for a longer period of time with continuous data collection and transmission with real-time review include the VectraplexECG™ System, which is a real-time continuous MCOT device to measure ischemic ECG changes that can be indicative of a myocardial infarction. This device uses the Internet to communicate real-time ECG changes to the physician. The patient is hooked up to a mini-tablet by either 5 electrodes, which communicate 15-lead ECG data, or 10 electrodes that communicate 12-lead ECG data. While this system is primarily intended to monitor for ischemia, the continuous ECG monitoring would presumably detect rhythm disturbances, as well as ischemic changes.

Published literature regarding outpatient cardiac telemetry was reviewed, with a specific focus on whether outpatient cardiac telemetry was associated with incremental benefit compared to the use of ambulatory event monitors. Of specific interest was the benefit of real-time monitoring in an ambulatory population, presumably considered to be at a lower level of risk from significant arrhythmia such that an electrophysiologic study or inpatient telemetry was not required.

The available evidence suggests that MCOT is likely at least as good at detecting arrhythmias as ambulatory event monitoring. Compared with ambulatory event monitoring, MCOT is associated with the theoretical advantage of real-time monitoring, allowing for emergent intervention for potentially life-threatening arrhythmias. One study reported that 1% of arrhythmic events detected on MCOT over a 9-month period could be considered potentially emergent. However, no studies were identified that address whether the use of MCOT is associated with differences in the management of or outcomes after these potentially emergent events. The addition of real-time monitoring to outpatient ambulatory monitoring is considered an enhancement to existing technology. There is insufficient evidence to demonstrate a clinically significant incremental benefit of MCOT compared with autotriggered event monitors. Therefore, this service is considered not medically necessary for Commercial products.

CODING

BlueCHIP for Medicare and Commercial Products

The following codes are covered for BlueCHIP for Medicare only and not medically necessary for Commercial products:

93228 **93229**

RELATED POLICIES

None

PUBLISHED

Provider Update, January 2017
Provider Update, October 2015
Provider Update, January 2014
Provider Update, January 2013
Provider Update, January, 2012
Provider Update, January 2011
Provider Update, December 2009
Provider Update, September 2008

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