

UPMC Health Plan POLICY AND PROCEDURE MANUAL

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SUBJECT: Home Based Real Time Cardiac Surveillance Systems
INDEX TITLE: Medical Management
ORIGINAL DATE: October 2006

This policy applies to the following lines of business: (Check those that apply.)

Commercial:			
HMO ()	POS ()	PPO ()	OOA/DOC ()
Fully Insured ()	Self-funded/ASO ()	HSA ()	All (X)
Medicare Select ()	Medicare Supplement ()		
DPW-MA:			
Health Choices ()	Voluntary ()		All (X)
CMS-MA:			
HMO (X)	PPO (X)	Specialty Needs Plan (X)	Part D () PFFS () All ()
PID-CHIP:			
Free ()	Sub ()		All (X)

I. POLICY

It is the policy of UPMC Health Plan to authorize payment for services that are medically necessary and covered under the member’s benefit plan.

UPMC Health Plan recognizes the needs of members with cardiac arrhythmias for which a traditional Holter monitoring or cardiac event recording have either been unrevealing or which are not expected to provide adequate, reliable information. The use of home-based real-time cardiac surveillance systems are therefore considered as appropriate and consistent with good medical practice.

Coverage will be considered, after review on an individual basis, for the specific indications detailed in this policy.

All requests for home-based, real-time cardiac surveillance systems are reviewed by a physician reviewer. In addition to established guidelines for the procedure, the physician reviewer applies his/her clinical knowledge, judgment and expertise to each case, taking into account the specific needs of the member.

All denials are based on medical necessity and appropriateness as determined by a UPMC Health Plan Medical Director (Medical Director).

II. DEFINITIONS

N/A

III. PURPOSE

The purpose of this policy is to define the conditions under which a Real Time Cardiac Surveillance System would be indicated in members with cardiac arrhythmias.

IV. SCOPE

This policy applies to various UPMC Health Plan departments as indicated by the Benefit and Reimbursement Committee. These include but are not limited to: Medical Management, Benefit Configuration and Claims departments.

V. PROCEDURE

A. Medical Description / Background

Ambulatory electrocardiography (AECG) or home based cardiac monitoring refers to diagnostic studies that record the heart rhythm over a prolonged time period. AECG tests are performed in an outpatient setting during usual daily activities and sleep. They are used to recognize record and characterize abnormal electrical activity of the heart.

There are 3 types of AECGs:

1. **Continuous Recorders, Non-activated (Holter Monitor)** - The electrocardiogram (EKG) tracing is recorded continuously over 24-48 hours, using either magnetic tape or digital technology. Typically after 24 hours (occasionally 48 hours), the device is removed, the tape is analyzed and a report of the heart's activity is created.
2. **Intermittent Recorders, Patient or Event-activated (Cardiac Event Monitors)-**
 - Pre-symptom Memory Loop- Loop recorders that capture a predetermined length of recorded cardiac rhythm both before and after activation. These may have an auto-trigger feature that does not require patient activation. Cardiac event monitors are typically left in place for up to 30 days. When cardiac related events are strongly suspected, but symptoms occur too infrequently for capture with a Holter Monitor or event recorder, an implantable or insertable loop recorder may be considered. Implantable loop monitors may be left in place for up to 14 months.
 - Post-symptom (no memory loop) - A post-symptom event recorder does not require electrodes to be attached to the body. When symptoms occur, the patient presses the recording device against the chest and activates it by pressing a button. It does not have a memory loop and the heart rhythm is only recorded subsequent to the onset of symptoms. The data may be transmitted telephonically.
3. **Mobile Outpatient Cardiac Telemetry (Real-time Heart Monitors)** - A home-based, real-time cardiac surveillance system that is an automatically activated device that requires no patient intervention to either capture or transmit an arrhythmia when it

occurs. Upon arrhythmia detection, the device utilizes the standard telephone line and transmits the electrocardiogram (EKG) wave for to the receiving center staffed by certified cardiac technicians 24 hours per day, 7 days per week. The physician can be called and/or the patient notified within minutes of a serious heart rhythm abnormality.

B. Specific Indications

Real time cardiac monitoring is covered when all of the following criteria are met:

1. There is a low likelihood of a potentially life-threatening cardiac event,
AND
2. Other testing and/or monitoring have been unrevealing or is inappropriate for the member,
AND
3. It is anticipated that the results of this service would provide diagnostic and treatment information.

A home-based, real-time cardiac surveillance system may be indicated for the following members who have demonstrated a need for cardiac monitoring AND meet the above 3 requirements:

1. Members who require monitoring for known, non life-threatening arrhythmias, such as atrial fibrillation, other supra-ventricular arrhythmias, evaluation of various brady arrhythmias and intermittent bundle branch block.
2. Members recovering from coronary artery bypass graft surgery or valve replacement surgery who have had documented atrial arrhythmias.
3. Members with symptomatic underlying structural disease.
4. Members with no structural heart disease but who have recurrent severe symptoms (i.e., recurrent syncope), in whom all testing is negative and an implantable event recorder is contemplated.
5. Members with uncontrolled atrial fibrillation post-pneumonectomy.

Note: Mobile Outpatient Cardiac Telemetry (Real time Heart Monitoring) is not indicated in all members with indications for cardiac monitoring. It should be used only in circumstances where traditional Holter monitoring or cardiac event recording is not expected to provide adequate information or has been inconclusive and an event recorder with the automatic trigger function will not suffice in the particular instance.

C. Limitations

Home-Based, Real-Time Cardiac Surveillance is **not indicated** for the following:

1. Members with a history of sustained ventricular tachycardia or a documented occurrence of ventricular fibrillation.
2. Members at risk for ventricular tachycardia or ventricular fibrillation as indicated by the following:
 - Measured left ventricular ejection fraction (LVEF) < 35% and complex ventricular ectopy (≥ 10 premature ventricular contractions (PVCs) per hour or repetitive PVCs).

- Unstable angina defined as chest pain at rest, new onset angina, or a change in existing patterns of angina.
 - Recent (< 3 months) myocardial infarction (MI).
 - Moderate to severe symptoms (e.g., syncope or near syncope) with underlying structural heart disease and a high likelihood of serious arrhythmias.
3. Members who would be more appropriately cared for in a hospital setting.
 4. Members who have a pacemaker or defibrillator.
 5. Use of cardiac surveillance and Holter or event monitoring for the same member on the same day.
 6. Services performed for screening purposes.

D. Information Required for Review

In order for medical necessity to be established, adequate information must be furnished by the treating physician. Necessary information may include:

1. A physician's prescription or letter of medical necessity.
2. Documentation supporting the member's need for real-time cardiac surveillance that includes the member's diagnosis, results of other diagnostic testing that has been inconclusive in identifying member's cardiac condition or documentation of why other testing is inappropriate for the member.
3. Copies of the transmitted EKGs with the provider's response to them should be maintained by the performing provider.

NOTE: Monitoring is not expected to exceed 7 days. In the event more time is needed, requests for longer intervals of monitoring must be accompanied by documentation that clearly supports the medical necessity of the continued surveillance.

E. Review Process

1. The Medical Management staff assigned to review obtains the clinical information to determine if there is adequate clinical information. If the case does not meet the established criteria, it is referred to a UPMC Health Plan Medical Director.
2. If referred, the Medical Director determines if the requested service is medically necessary and appropriate.
3. The Medical Management staff completes the review process and communicates the review decision according to the Timeliness of UM Decisions policy for the member's benefit plan.

4. Variations

N/A

5. References

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12. Medicare Coverage Database: Centers for Medicare & Medicaid Services. Decision Memo for Electrocardiographic Services: CAG-00158N), issued: August 26, 2004.
13. Reiffel JA, R Schwarzberg and M Murry. “Comparison of Autotriggered Memory Loop Recorders Versus Standard Loop Recorders Versus 24-Hour Holter Monitors for Arrhythmia Detection,” *American Journal of Cardiology*, 2005; 95(9):1055-9.
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15. Sivakumaran S et al. "A Prospective Randomized Comparison of Loop Recorders Versus Holter Monitors in Patients With Syncope or Presyncope," American Journal of Medicine, 2003;115(1):1-5.
16. Highmark Medicare Services, Real-Time Outpatient Cardiac Monitoring, LCD No. M-60D. <http://www.highmarkmedicareservices.com/policy/partb/m1/m60d.html>

Disclaimer:

UPMC Health Plan medical payment and prior authorization policies do not constitute medical advice and are not intended to govern or otherwise influence the practice of medicine. The policies constitute only the reimbursement and coverage guidelines of UPMC Health Plan and its affiliated managed care entities. Coverage for services varies for individual members in accordance with the terms and conditions of applicable Certificates of Coverage, Summary Plan Descriptions, or contracts with governing regulatory agencies.

UPMC Health Plan reserves the right to review and update the medical payment and prior authorization guidelines in its sole discretion. Notice of such changes, if necessary, shall be provided in accordance with the terms and conditions of provider agreements and any applicable laws or regulations.

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