

## AMBULATORY BLOOD PRESSURE MONITORING

**Policy number: 200809-0002**

**Original effective date: 08/01/2001**

**Revision date: 12/16/2008**

### **Overview**

The American Heart Association estimates high blood pressure affects approximately one in three adults in the United States. High blood pressure is a silent condition that does not have specific clinical manifestations until target organ damage develops. High blood pressure confers a substantial risk of cardiovascular disease (particularly in the presence of concomitant risk factors), much of which is at least partially reversible with treatment.

Ambulatory blood pressure monitoring (ABPM) involves the use of a non-invasive device to measure blood pressure every 15 to 30 minutes over a 24-hour period (or longer). These devices are attached to the patient by a trained technician. A series of calibrations are taken to ensure the device is giving accurate readings. These 24-hour measurements are stored in the device and are later interpreted by the physician.

Questions remain regarding the optimal use of ABPM in the diagnosis and management of high blood pressure. Research is needed to determine whether ambulatory monitoring reduces the over-prescribing of drugs to patients who seem, in the office setting, to be resistant to therapy. It would be useful to know whether cardiovascular outcomes could be improved by the use of ambulatory monitoring to assess and improve 24-hour blood-pressure control in patients whose office blood pressure appears to be elevated (White 2003). Accurate in-office blood pressure readings, obtained in compliance with the American Heart Association guidelines, remain the gold standard for decision-making in the diagnosis and treatment of hypertension (Marchiando et al. 2003).

### **Definitions**

**High blood pressure** - also referred to as hypertension, high blood pressure is defined as a repeatedly elevated blood pressure exceeding 140 over 90 mmHg, i.e., a systolic pressure above 140 with a diastolic pressure above 90. Untreated, hypertension can cause blood vessel changes in the back of the eye (retina), abnormal thickening of the heart muscle, kidney failure, and brain damage.

### **Covered Services**

Ambulatory blood pressure monitoring (ABPM) is covered for plan members with suspected white coat hypertension. Suspected white coat hypertension is defined as:

1. Clinic/office blood pressure > 140/90 mm Hg on at least three separate clinic/office visits with two separate measurements made at each visit;
2. At least two documented separate blood pressure measurements taken outside of the clinic/office which are < 140/90 mm Hg; and
3. No evidence of end-organ damage.

## Exclusions

1. ABPM for less than 24 hours.
2. ABPM for any condition or diagnosis other than white coat hypertension.
3. ABPM for institutionalized plan members, i.e., plan members in a skilled nursing or long-term care facility.

## Codes

Diagnoses that will support the medical necessity for ambulatory blood pressure monitoring must include: 796.2 (Elevated blood pressure without diagnosis of hypertension). Effective July 1, 2009, claims for any of the following procedure codes submitted without diagnosis code 796.2 will be rejected as not covered for the diagnosis reported, leaving no member balance.

Codes	Number	Description
CPT	93784	Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disc, for 24 hours or longer; including recording, scanning analysis, interpretation and report
	93786	Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disc, for 24 hours or longer; recording only
	93788	Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disc, for 24 hours or longer; scanning analysis with report
	93790	Ambulatory blood pressure monitoring, utilizing a system such as magnetic tape and/or computer disc, for 24 hours or longer; physician review with interpretation and report

## Products to Which This Policy Applies

- ⊕ FCHP Direct & Select Care
- ⊕ Fallon Preferred Care (PPO)
- ⊕ Major Medical
- ⊕ MassHealth
- ⊕ Companion Care
- ⊕ Commonwealth Care
- ⊕ Fallon Senior Plan™

## References

1. Centers for Medicare & Medicaid Services. National Coverage Determination for Ambulatory Blood Pressure Monitoring (20.19).
2. Centers for Medicare & Medicaid Services. Medicare Claims Processing Manual Chapter 32 – Billing Requirements for Special Services, Section 10.1 Ambulatory Blood Pressure Monitoring (ABPM) Billing Requirements.
3. Commonwealth of Massachusetts MassHealth Physician Manual. Subchapter 6. Service Codes. Effective 07/01/08.
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5. Staessen JA, Thijs L, Fagard R, et al. Predicting Cardiovascular Risk Using Conventional vs. Ambulatory Blood Pressure in Older Patients with Systolic Hypertension. *JAMA* 1999 Aug;282(6):539-46.
6. American College of Physicians Position Paper. Automated Ambulatory Blood Pressure and Self-Measured Blood Pressure Monitoring Devices: Their Role in the Diagnosis and Management of Hypertension. *Annals of Internal Medicine* 1993;118:889-92.
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8. Agency for Healthcare Research and Quality. AHRQ Evidence Report Number 63. Utility of Blood Pressure Monitoring Outside of the Clinic Setting. November 2002. Available at: <http://www.ncbi.nlm.nih.gov>.
9. Marchiando RJ, Elston MP. Automated Ambulatory Blood Pressure Monitoring: Clinical Utility in the Family Practice Setting. *American Family Physician* 2003 Jun;67(11):2343-50.
10. Rickerby J. The Role of Home Blood Pressure Measurement in Managing Hypertension: An Evidenced Based Review. *Journal of Human Hypertension* 2002;16:469-72.
11. Staessen JA, Byttebier G, Buntinx F, et al. Antihypertensive Treatment Based on Conventional or Ambulatory Blood Pressure Measurement. A Randomized Controlled Trial. Ambulatory Blood Pressure Monitoring and Treatment of Hypertension Investigators. *JAMA* 1997 Oct;278(13):1065-72.
12. American College of Cardiology Position Statement. Ambulatory Blood Pressure Monitoring. December 1993. Available at: <http://www.acc.org>.
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15. Boggia J, Li Y, Hansen TW et al. Prognostic Accuracy of Day Versus Night Ambulatory Blood Pressure: A Cohort Study. *The Lancet* 2007;370:1219-29.
16. Pickering TG, Shimbo D, Haas D. Ambulatory Blood-Pressure Monitoring. *N Engl J Med* 2006 Jun;354:2368-74.

#### Committee review dates:

Technology Assessment Subcommittee: 09/17/2008, 12/16/08

Technology Assessment Committee: 08/01/2001, 12/29/2003, 10/14/2008, 01/13/09

#### IMPORTANT NOTE:

**Not all services are covered for all products or employer groups.** This medical policy expresses FCHP's determination of whether certain services or supplies are medically necessary, experimental or investigational or cosmetic. FCHP has reached these conclusions based upon the regulatory status of the technology and a review of clinical studies published in peer-reviewed medical literature. Even though this policy may indicate that a particular service or supply is considered covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. Members and their providers need to consult the Evidence of Coverage to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and the plan of benefits, the provisions of the benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, Federal mandates will apply to all plans. With respect to Medicare and Medicaid members, this policy will apply unless Medicare and Medicaid policies extend coverage beyond this medical policy.