

Medical Coverage Policy



Ambulatory Blood Pressure Monitoring

Device/Equipment Drug Medical Surgery Test Other

Effective Date:	6/1/1999	Policy Last Updated:	3/19/2013
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Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.

Prospective review is not required.

Description:

Ambulatory blood pressure monitors (24-hour sphygmomanometers) are portable devices that continually record blood pressure while the patient is involved in daily activities.

Ambulatory blood pressure monitoring (ABPM), typically done over a 24-hour period with a fully automated monitor, provides more detailed blood pressure information than typically obtained during office visits.

There are a number of potential applications of ABPM. One of the most common is evaluating suspected "white-coat hypertension" (WCH), which is defined as an elevated office blood pressure with normal blood pressure readings outside the physician's office. The etiology of WCH is poorly understood but may be related to an "alerting" or anxiety reaction associated with visiting the physician's office.

In evaluating patients having elevated office blood pressure, ABPM is often intended to identify patients with normal ambulatory readings who do not have sustained hypertension. Since this group of patients would otherwise be treated based on office blood pressure readings alone, ABPM could improve outcomes by allowing these patients to avoid unnecessary treatment. However, this assumes patients with WCH are not at increased risk for cardiovascular events and would not benefit from antihypertensive treatment.

Ambulatory blood pressure monitoring performed over a 24-hour period is a more accurate method for evaluating blood pressure compared to office measurements and home blood pressure measurements. Reference values for normal and abnormal ambulatory blood pressure monitoring (ABPM) results have been derived from epidemiologic research. These reference values vary slightly among different sources but are available for clinical use. Data from large prospective cohort studies establish that ABPM correlates more strongly with cardiovascular outcomes compared to other methods of BP measurement. Prospective cohort studies also indicate that white coat hypertension (WCH), as defined by ABPM, is associated with an intermediate risk of cardiovascular outcomes compared to normotensive and hypertensive patients.

Studies comparing home blood pressure monitoring and office monitoring to ABPM as the gold standard report that the sensitivity and specificity of alternative methods of diagnosing hypertension are suboptimal. Substantial percentages of patients with elevated office BP are found to have normal BP on ABPM, and these patients are at risk for overdiagnosis and overtreatment based on office BP measurements alone. Use of ABPM in these patients will improve outcomes by eliminating the inconvenience and morbidity of pharmacologic treatment in patients who are not expected to benefit. There is no scientific literature to support the use of ambulatory blood pressure monitoring for other indications therefore, all other indications would be considered not medically necessary.

The procedure is appropriate for members with suspected "white coat hypertension" who meet the following:

- I. Office blood pressure >140/90 mm Hg on at least three separate clinic/office visits with two separate measurements made at each visit; and
- II. At least two documented separate blood pressure measurements taken outside the office \leq 140/90 mm Hg; and
- III. When there is no evidence of end-organ damage. In some instances ABPM needs to be performed more than once, the qualifying criteria described above must be met for each subsequent ABPM test.

Medical Criteria:

None

Policy:

Ambulatory blood pressure monitor is covered for suspected "white coat hypertension" who meet the indications listed above; all other uses are considered not medically necessary as there is insufficient peer-reviewed scientific literature that demonstrates the procedure/service is effective.

Coverage:

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement, Benefit Booklet, for the applicable machine test coverage/not medically necessary services.

Coding:

The following CPT Codes are covered.

93784, 93786, 93788, 93790

The following code is not covered.

A4670

Also known as:

None

Related topics:

None

Published:

Provider Update, June 2013
Provider Update, Sep 2012
Provider Update, Jul 2011
Provider Update, Jul 2010
Provider Update, Jul 2009
Provider Update, Jul 2008
Policy Update, Jun 2004

References:

- I. Blue and Blue Shield Association Medical Policy Reference Manual 1.01.02 *Automated Ambulatory Blood Pressure Monitor for the Diagnosis of Hypertension in Patients with Elevated Office Blood Pressure*. Retrieved 3/27/09 from:
http://bluweb.bcbs.com/global_assets/special_content/medical_policy/policymanual/policy.html?pnum=10102.
- II. Marchiando RJ, Elston MP. *Automated Ambulatory Blood Pressure Monitoring: Clinical Utility in the Family Practice Setting*. Accessed:
<http://www.aafp.org/afp/20030601/2343.html>. American Academy of Family Physicians; June 1, 2003;67(11).
- III. National High Blood Pressure Education Program Working Group on High Blood Pressure in C, Adolescents. The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. *Pediatrics* 2004; 114(2 Suppl 4th Report):555-76.
- IV. Matsuoka S, Kawamura K, Honda M et al. White coat effect and white coat hypertension in pediatric patients. *Pediatr Nephrol* 2002; 17(11):950-3

History:

February 2013 - Annual review

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