

Policy: MP130

Section: Medical Benefit Policy

Subject: Automated Ambulatory Blood Pressure Monitoring

Applicable Lines of Business

Commercial	X	CHIP	X
Medicare	X	ACA	X
Medicaid	X		

I. Policy: Automated Ambulatory Blood Pressure Monitoring

II. Purpose/Objective:

To provide a policy of coverage regarding Automated Ambulatory Blood Pressure Monitoring

III. Responsibility:

- A. Medical Directors
- B. Medical Management

IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community;
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.
- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
- Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking

into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age

DESCRIPTION:

Automated ambulatory blood pressure monitoring is a non-invasive procedure using fully automated devices to measure blood pressure at frequent intervals over a 24-hour period. The purpose is to determine the variability of a person's blood pressure due to environmentally induced stressors during daily activities.

INDICATIONS:

Automated ambulatory blood pressure monitoring is only covered when used as an adjunct diagnostic tool in members who are unable to obtain accurate measurements of blood pressure with conventional methods and one of the following:

- Suspected "white coat" hypertension when all of the following are met:
 1. Office blood pressure greater than 130/80 mm Hg on at least three separate clinic/office visits with two separate measurements made at each visit; and
 2. Documented evidence of two-blood pressure measurements <130/80 taken outside the clinic/office and the diagnosis of hypertension remains in question; and
 3. No evidence of end-organ damage
- or
- Suspected masked hypertension (defined as average office blood pressure between 120 mm Hg and 129 mm Hg for systolic blood pressure or between 75 mm Hg and 79 mm Hg for diastolic blood pressure on two separate clinic/office visits with at least two separate measurements made at each visit and with at least two blood pressure measurements taken outside the office which are greater than 130/80 mm Hg)
- Symptoms (excessive sweating, palpitations, apprehension) that suggest episodic hypertension and office blood pressure measurements are repeatedly normal; or
- Symptoms consistent with episodic hypotension and/or syncopal events; or
- Nocturnal angina; or
- Hypertension that is refractory to optimized medication therapy.

LIMITATIONS:

Automated ambulatory blood pressure monitoring will be limited to a single evaluation session with a maximum of 3 consecutive days, per calendar year for a device provided from a provider office or clinic practicing within the scope of their expertise.

EXCLUSIONS:

Automated ambulatory blood pressure monitoring will **NOT** be covered for **any** of the following:

- When established criteria are not met
- For routine monitoring to establish the clinical diagnosis of hypertension
- For predicting end-organ damage
- To evaluate responses to pharmacologic antihypertensive therapy
- Monitoring normal or pre-hypertension
- For diagnosing malignant hypertension
- Monitoring blood pressure in members with irregular cardiac rhythm
- Blood pressure monitoring of pregnant members who do not meet the established criteria
- Blood pressure monitoring in children (members less than 18 yrs of age)

Medicaid Business Segment:

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

CODING ASSOCIATED WITH: Automated ambulatory blood pressure monitoring

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

HCPCS Codes:

A4670 automatic blood pressure monitor

CPT Codes:

- 93784 Ambulatory blood pressure monitoring; including recording, scanning analysis, interpretation and report
- 93786 recording only
- 93788 Scanning analysis with report
- 93790 Physician review with interpretation and report
- 99473 SELF-MEASURED BLOOD PRESSURE USING A DEVICE VALIDATED FOR CLINICAL ACCURACY; PATIENT EDUCATION/TRAINING AND DEVICE CALIBRATION
- 99474 SELF-MEASURED BLOOD PRESSURE USING A DEVICE VALIDATED FOR CLINICAL ACCURACY; SEPARATE SELF-MEASUREMENTS OF TWO READINGS ONE MINUTE APART, TWICE DAILY OVER A 30-DAY PERIOD (MINIMUM OF 12 READINGS), COLLECTION OF DATA REPORTED BY THE PATIENT AND/OR CAREGIVER TO THE PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL, WITH REPORT OF AVERAGE SYSTOLIC AND DIASTOLIC PRESSURES AND SUBSEQUENT COMMUNICATION OF A TREATMENT PLAN TO THE PATIENT

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL.

LINE OF BUSINESS:

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supersede this policy. For PA Medicaid Business segment, this policy applies as written.

REFERENCES:

Winifred S. Hayes, Hayes Inc. Online, Ambulatory Blood Pressure Monitoring with Fully Automatic and Semiautomatic Portable Monitors. June 1, 1998. Updated 7/31/02; 4/7/03, 12/4/04

CMS National Coverage Determination, Ambulatory Blood pressure Monitoring. 7/1/03.

http://www.cms.hhs.gov/manuals/pm_trans/R168CIM.pdf

CMS National Coverage Analysis. Ambulatory Blood Pressure Monitoring. CAG-00067R. Jan. 16, 2003.

Palatini P, "Reliability of ambulatory blood pressure monitoring", *Blood Pressure Monitoring*. 6(6):291-295. Dec. 2001.

Lo C, Taylor RS, Gamble G, McCowan L, North RA, "Use of automated home blood pressure monitoring in pregnancy: is it safe?", *American Journal of Obstetrics and Gynecology*. 187(5):1321-1328. Nov 2002.

Clement DL, DeBuyzere ML, DeBacquer DA, et. al., "Prognostic value of ambulatory blood pressure recordings in patients with treated hypertension", *NEJM* 348(24):2407-2415. June 12, 2003.

O'Brien E, "Ambulatory blood pressure monitoring in the management of hypertension", *Heart* 89:571-576. 2003.

Stergiou GS, Efstathiou SP, et. al., "Clinic, home and ambulatory pulse pressure: comparison and reproducibility", *Journal of Hypertension* 20(10):1987-1993. 2002.

Marchiando RJ, Elston MP, "Automated ambulatory blood pressure monitoring: clinical utility in the family practice setting", *American Family Physician*. 67:2345-2350, 2353-2354. 2003.

White W, "Ambulatory Blood pressure monitoring in clinical practice", *NEJM*. 348(24):2377-2378. June 12, 2003.

CMS NCD for Ambulatory Blood Pressure Monitoring (20.19)

US Dept of Health and Human Services, National Institutes of Health, National Heart, Lung and Blood Institute. Prevention, Detection, Evaluation and Treatment of High Blood Pressure. 2004

<http://www.nhlbi.nih.gov/guidelines/hypertension/jnc7full.pdf>

Muxfeldt ES, Fiszman R, de Souza F, et al. Appropriate time interval to repeat ambulatory blood pressure monitoring in patients with white-coat resistant hypertension. *Hypertension*. 2012;59(2):384-389

Piper MA, Evans CV, Burda BU, et al. Diagnostic and predictive accuracy of blood pressure screening methods with consideration of rescreening intervals: a systematic review for the U.S. Preventive Services Task Force. *Ann Intern Med*. Feb 3 2015;162(3):192-204.

Jegatheswaran J, Ruzicka M, Hiremath S, Edwards C. Are automated blood pressure monitors comparable to ambulatory blood pressure monitors? A systematic review and meta-analysis. *Can J Cardiol.* 2017;33(5):644-652

Whelton PK, Carey RM, Aronow WS, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: Executive Summary: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol.* May 15 2018;71(19):2199-2269.

Centers for Medicare & Medicaid Services. Decision Memo for Ambulatory Blood Pressure Monitoring (ABPM) (CAG-00067R2)

Sato M, Maeda T, Hoshida S, Ohkubo T. Is antihypertensive treatment based on home blood pressure recommended rather than that based on office blood pressure in adults with essential hypertension? (meta-analysis). *Hypertens Res.* 2019;42(6):807-816.

Beyhaghi H, Viera AJ. Comparative cost-effectiveness of clinic, home, or ambulatory blood pressure measurement for hypertension diagnosis in U.S. adults. *Hypertension.* 2019;73(1):121-131.

This policy will be revised as necessary and reviewed no less than annually.

Devised: 2/04

Revised: 4/05(Coding); 2/08(wording), 1/13; 1/16 (clarification), 7/16 (Gender Language); 12/19 (add masked HTN)

Reviewed: 2/06; 2/07; 2/09; 2/10, 4/11, 4/12, 1/14, 1/15, 1/17, 12/17, 12/18; 12/20, 12/21, 12/22

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at <https://www.geisinger.org/health-plan/providers/ghp-clinical-policies>

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.