

# BLOOD PRESSURE MONITORS & AMBULATORY BLOOD PRESSURE MONITORING

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Date Of Origin: January 19, 2005 Status: Current

#### I. POLICY/CRITERIA

#### A. HOME BLOOD PRESSURE MONITORS

1. FOR COMMERCIAL MEMBERS:

Home Blood Pressure Monitors (HBPM) are covered for members (fully funded and self-funded) when all of the following are met:

- a. HBPM prescribed by physician.
- b. HBPM provided by participating DME vendor or pharmacy with applicable benefit applied.
- c. Devices must meet the following:
  - i. Arm devices only
  - ii. Correct cuff size must be assessed and provided by vendor
  - iii. One device covered per 5 years
  - iv. Only devices approved by Priority Health will be covered

#### 2. FOR MEDICAID/HEALTHY MICHIGAN PLAN MEMBERS:

Blood pressure monitors (manual or automatic) may be considered medically necessary when the criteria specified in the current Michigan Department of Health and Human Services (MDHHS) <u>Medicaid Provider Manual</u> are met.

## B. AMBULATORY BLOOD PRESSURE MONITORING - 24 HOUR

Ambulatory Blood Pressure Monitoring (ABPM) is medically necessary for the following:

- 1. Assessing patients with suspected white coat hypertension or masked hypertension.
  - a. Suspected white coat hypertension is defined as:
    - i. Office blood pressure  $\geq 130/80$  mm Hg on at least 2 separate clinic/office visits with 2 separate measurements made at each visit;



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- ii. At least two documented blood pressure measurements taken outside the office which are <130/80 mm Hg; and
- iii. No evidence of end-organ damage.
- b. Suspected masked hypertension is defined as:
  - Average office blood pressure between 120 mm Hg 129 mm Hg for systolic blood pressure or between 75 mm Hg -79 mm Hg for diastolic blood pressure on 2 separate clinic/office visits with at least 2 separate measurements made at each visit; and
  - ii. At least 2 blood pressure measurements taken outside the office which are ≥130/80 mm Hg.
- 2. Assessing hypertension resistant to increasing medications
  - a. Monitoring for members who fail to achieve recommended blood pressure target despite concurrent use of 3 anti-hypertensive agents of different classes (e.g., calcium channel blocker, a blocker of the renin-angiotensin system (angiotensin-converting enzyme inhibitor or angiotensin receptor blocker), and a diuretic; or require ≥4 medications to achieve targeted blood pressure.
- 3. Assessing suspected episodic hypertension
  - a. Assessing the presence of nocturnal hypertension
  - b. Monitoring symptomatology suggestive of episodic hypertension secondary to a suspected adrenal tumor (e.g., pheochromocytoma).
- 4. Evaluation of postural, postprandial, and drug-induced hypotension (e.g., assessing hypotensive symptoms while taking antihypertensive medications).
- 5. ABPM is not a covered benefit for any other indications.

Note: ABPM is not covered for Priority Health Medicaid or Healthy Michigan Plan members.

Medicare Advantage members should refer to their Evidence of Coverage (EOC) for benefits details about ABPM.

## II. MEDICAL NECESSITY REVIEW

Prior authorization for certain drug, services, and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service, or procedure is medically necessary. For more information, please refer to the <u>Priority Health Provider Manual</u>.

#### III. APPLICATION TO PRODUCTS



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Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- **❖** HMO/EPO: This policy applies to insured HMO/EPO plans.
- ❖ POS: This policy applies to insured POS plans.
- PPO: This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
- ASO: For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
- \* INDIVIDUAL: For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.
- ❖ MEDICARE: Coverage is determined by the Centers for Medicare and Medicaid Services (CMS) and/or the Evidence of Coverage (EOC); if a coverage determination has not been adopted by CMS, this policy applies.
- ❖ MEDICAID/HEALTHY MICHIGAN PLAN: For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: <a href="http://www.michigan.gov/mdch/0,1607,7-132-2945-42542-42543-42546-42551-159815--,00.html">http://www.michigan.gov/mdch/0,1607,7-132-2945-42542-42543-42546-42551-159815--,00.html</a>. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: <a href="http://www.michigan.gov/mdch/0,1607,7-132-2945-5100-87572--,00.html">http://www.michigan.gov/mdch/0,1607,7-132-2945-5100-87572--,00.html</a>, the Michigan Medicaid Provider Manual will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.

#### IV. DESCRIPTION

In 2017 American College of Cardiology/American Heart Association (ACC/AHA) Guidelines defines hypertension as an office BP reading of at least 130mm Hg systolic and 80mm Hg diastolic, with the corresponding 24 h ambulatory blood pressure (BP) readings being 125 mm Hg systolic and 75 mm Hg diastolic. The guidelines also categorized BP as normal, elevated, and hypertension (stage 1 and stage 2), based on > 2 measurements on > 2 separate occasions (Wheaton, 2018).

White coat hypertension is characterized by elevated office BP but normal readings when measured outside the office with either ambulatory blood pressure monitors (ABPM) or home blood pressure monitors (HBPM). The prevalence of white coat hypertension is higher with increasing age, female versus male sex, nonsmoking versus current smoking status, and routine office measurement of BP by clinician observers versus unattended BP measurements (Franklin, 2016). In contrast, when a patient has a non-elevated BP reading in the office but elevated out-of-office BP reading, he/she is known to have masked hypertension (MH). ABPM and HBPM are better predictors of CVD risk due to elevated BP than are office BP measurement with ABPM being the preferred measurement option (Mancia, 2013;Shimbo, 2020; Shimbo, 2015(b);Stergiou, 2021;Weber, 2014)



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Home blood pressure monitors may include automated oscillometric devices or manual devices. Automated devices compute systolic and diastolic blood pressure values are through a specific algorithm. The validity and accuracy of the measurements may differ by device. Manual devices include a cuff, a bulb, a stethoscope, and a gauge. A manual unit may require assistance from a nurse, aide, or family member with applying the cuff appropriately and listening to the stethoscope to record the measurement. Patients are typically asked to obtain multiple readings over a limited time period, which are then shared with the clinician (Townsend, 2023).

#### AMBULATORY BLOOD PRESSURE MONITORING

Ambulatory blood pressure monitoring (ABPM) involves the use of a non-invasive fully automated device as an outpatient test to measure blood pressure (BP) in 24hour cycles at frequent intervals during the day and night to determine the variability of a patient's BP. These 24-hour measurements are stored in the device and are later interpreted by the physicianABPM can assess white coat hypertension or masked hypertension. Measuring BP with ABPM captures the effects of normal daily activities on blood pressure, provides information on the behavior of blood pressure during sleep, and provides a greater number of readings than can be obtained during a typical office encounter (Townsend, 2023). Evidence supports ABPM as the reference standard for confirming elevated office BP screening results to avoid misdiagnosis and overtreatment of persons with isolated clinic hypertension. A systematic review for the U.S. Preventive Services Task Force found that across 27 studies, 35% - 95% of persons with an elevated BP at screening remained hypertensive after nonoffice confirmatory testing. Cardiovascular outcomes in persons who were normotensive after confirmatory testing (isolated clinic hypertension) were similar to outcomes in those who were normotensive at screening. In 40 studies, hypertension incidence after rescreening varied considerably at each yearly interval up to 6 years. (Piper, 2015).

## V. CODING INFORMATION

#### **BLOOD PRESSURE MONITORS**

**ICD-10 Codes** that may support medical necessity:

I10	Essential (primary) hypertension
I11.0 - I11.9	Hypertensive heart disease
I12.0 - I12.9	Hypertensive chronic kidney disease
I13.0 - I13.2	Hypertensive heart and chronic kidney disease
I15.0 – I15.9	Secondary hypertension
I67.4	Hypertensive encephalopathy
I95.0 - I95.9	Hypotension
I97.3	Post procedural hypertension



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O10.011 - O10.93	Pre-existing essential hypertension complicating pregnancy
O11.1 – O11.9	Pre-existing hypertension with pre-eclampsia
O13.1 – O13.9	Gestational [pregnancy-induced] hypertension without significant proteinuria
O14.00 - O14.03	Mild to moderate pre-eclampsia
O15.00 - O15.9	Eclampsia
O16.1 - O16.9	Unspecified maternal hypertension
O90.89	Other complications of the puerperium, not elsewhere classified
R03.0	Elevated blood-pressure reading, without diagnosis of hypertension
R03.1	Nonspecific low blood-pressure reading
R55	Syncope and collapse

## **CPT/HCPCS Codes**

A4660	Sphygmomanometer/blood pressure apparatus with cuff and stethoscope (covered
	for Medicaid only)
A4663	Blood pressure cuff only (covered for Medicaid only)
A4670	Automatic blood pressure monitor

## AMBULATORY BLOOD PRESSURE MONITORING

Not covered for any dx for Medicaid.

The following procedures are covered for commercial for these diagnoses:

## **ICD-10 Codes**:

I10	Essential (primary) hypertension
I15.2	Hypertension secondary to endocrine disorders
I15.9	Secondary hypertension, unspecified
I95.0	Idiopathic hypotension
I95.1	Orthostatic hypotension
I95.2	Hypotension due to drugs
I95.3	Hypotension of hemodialysis
I95.81	Postprocedural hypotension
I95.89	Other hypotension
I95.9	Hypotension, unspecified
G90.3	Multi-system degeneration of the autonomic nervous system
R03.0	Elevated blood-pressure reading, without diagnosis of hypertension (covered for
Medicare)	

## **CPT/HCPCS Codes:**

93784	Ambulatory blood pressure monitoring, utilizing report-generating software,
	automated, worn continuously for 24 hours or longer; including recording,
	scanning analysis, interpretation and report
93786	Ambulatory blood pressure monitoring, utilizing report-generating software,
	automated, worn continuously for 24 hours or longer; recording only.
93788	Ambulatory blood pressure monitoring, utilizing report-generating software,
	automated, worn continuously for 24 hours or longer; scanning analysis with report

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93790 Ambulatory blood pressure monitoring, utilizing report-generating software, automated, worn continuously for 24 hours or longer; review with interpretation and report

#### VI. REFERENCES

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