



ND

Medical Policies



Policy Number:	M-70		
Policy Name:	Ambulatory Blood Pressure Monitoring		
Policy Type:	Medical	Policy Subtype:	Diagnostic Medical
Effective Date:	09-15-2025	End Date:	11-02-2025

Description

Ambulatory blood pressure monitoring is typically done over a 24-hour period with a fully automated monitor. This provides more detailed blood pressure information than a traditional reading obtained during office visits. The greater number of readings with ABPM ameliorates the variability of single blood pressure measurements and is more representative of the circadian rhythm of blood pressure compared to the limited number obtained during an office measurement.

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of processing, regardless of service date; **and/or**

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of service.

Criteria

Coverage is subject to the specific terms of the member's benefit plan.

Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of service.

Adults

ABPM may be considered medically necessary for **ANY** of the following indications:

- Suspected white coat hypertension (WCH) with no evidence of end-organ damage;
 - The physician has performed at least three (3) blood pressure measurements at least one (1) week apart in the office; **and**
 - Blood pressure measurements by non-physicians (e.g., nurse, technician) in the office have been done and stage one hypertension readings have been obtained but less than 180/110, not requiring immediate treatment with medications; **and**
 - Member has repeated blood pressure measurements at home over at least one (1) month, and the diagnosis of hypertension remains in question: **or**
- Suspected masked hypertension:
 - After a three (3) month trial of lifestyle modification; **and**
 - When two (2) or more separate office visits with two (2) or more, untreated, blood pressure measurements made at each visit measure;
 - Systolic blood pressure readings between 120mm Hg and 129mm Hg; **or**
 - Diastolic blood pressure readings between 75mm Hg and 79mm Hg; **and**
 - When two (2) or more blood pressure measurements taken outside of the office that are greater than 130/80mm Hg.
- Resistant hypertension in individuals who are being treated with three (3) or more medications : **or**
- Hypertensive individuals with hypotensive symptoms thought to be related to antihypertensive medications or neurological symptoms : **or**
- For individuals whose symptomatology (paroxysms of excessive sweating, palpitations, apprehension) suggest episodic hypertension secondary to an adrenal tumor and office blood pressure measurements are repeated normal : **or**
- For evaluation of syncope or near syncope when used in conjunction with a 24 hour Holter monitor to determine whether symptoms are the direct result of an arrhythmia : **or**
- To investigate blood pressure changes in individuals with nocturnal angina.

ABPM not meeting the criteria as indicated in this policy is considered experimental/investigational and therefore, non-covered, because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

Note: See table below

Procedure Codes

93784	93786	93788	93790
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Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of service.

Children/Adolescents

ABPM in children/adolescents greater than or equal to age five (5) may be considered medically necessary in **ANY** of the following settings:

- Confirming the diagnosis of hypertension including differentiating true hypertension from WCH:
 - When office blood pressure measurements are in the elevated blood pressure category for one (1) year or more; **or**

- When blood pressure measurements fall within the Stage 1 HTN category over three (3) clinic visits at least one (1) to two (2) weeks apart; **or**
- When blood pressure measurements fall within the Stage 2 HTN category twice within one (1) week; **or**
- To evaluate for possible masked hypertension:
 - When there is a clinical suspicion of hypertension, but clinic BP readings are normal or in the elevated BP range; **or**
- Assessing symptoms related to suspected drug-related hypotension; **or**
- Drug resistant hypertension; **or**
- To assess effectiveness of hypertensive treatment; **or**
- Children and adolescents with **ANY** of the following:
 - A history of aortic coarctation; **or**
 - A history of low birth weight; **or**
 - Chronic Kidney Disease (CKD) and structural renal abnormalities; **or**
 - Endocrine disorders associated with hypertension (e.g., Congenital adrenal hyperplasia, familial hyperaldosteronism, etc.); **or**
 - Genetic syndromes associated with hypertension (e.g., neurofibromatosis, Turner syndrome, Williams syndrome, sickle cell disease, etc.); **or**
 - Obesity; **or**
 - Obstructive Sleep Apnea; **or**
 - Recipients of Solid-Organ Transplants; **or**
 - Sleep-Disordered Breathing (SDP); **or**
 - Systemic Lupus Erythematosus; **or**
 - Type 1 Diabetes Mellitus (T1DM); **or**
 - Type 2 Diabetes Mellitus (T2DM).

ABPM in children and adolescents should be used by experts in the field of pediatric nephrology and pediatric cardiology who are experienced in its use and interpretation.

ABPM not meeting the criteria as indicated in this policy is considered experimental/investigational and therefore, non-covered, because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

Procedure Codes

93784	93786	93788	93790
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Policy Application

All claims submitted under this policy's section will be processed according to the policy effective date and associated revision effective dates in effect on the date of processing, regardless of service date.

Non-invasive assessment of central blood pressure (e.g., SphygmoCor System) is considered experimental/investigational and therefore non-covered, because the safety and/or effectiveness of this service cannot be established by the available published peer-reviewed literature.

Procedure Code

93050

Professional Statements and Societal Positions Guidelines

American Academy of Pediatrics-2017

The American Academy of Pediatrics published clinical guidelines for the screening and management of high blood pressure (BP) in children and adolescents. Table below lists recommendations made.

Table:

Recommendation	LOE	SOR
'ABPM should be performed for confirmation of HTN in children and adolescents with office BP measurements in the elevated BP category for one (1) year or more or with stage one (1) HTN over three (3) clinic visits.'	C	Moderate
'Routine performance of ABPM should be strongly considered in children and adolescents with high-risk conditions to assess HTN severity and determine if abnormal circadian BP patterns are present, which may indicate increased risk for target organ damage.'	B	Moderate
'ABPM should be performed by using a standardized approach with monitors that have been validated in a pediatric population, and studies should be interpreted by using pediatric normative data.'	C	Moderate
'Children and adolescents with suspected WCH should undergo ABPM.'	B	Strong

American College of Cardiology et al-2017

The American College of Cardiology, with 10 other medical specialty societies, published guidelines on the prevention, detection, evaluation, and management of high BP in adults. Table below lists recommendations made.

Table:

Recommendations	COR	LOE
'In adults with an untreated SBP greater than 130 mm Hg but less than 160 mm Hg or DBP greater than 80 mm Hg but less than 100	Ila	B-NR

mm Hg, it is reasonable to screen for the presence of white coat hypertension by using either daytime ABPM or HBPM before diagnosis of hypertension'		
'In adults with white coat hypertension, periodic monitoring with either ABPM or HBPM is reasonable to detect transition to sustained hypertension'	Ila	C-LD
'In adults being treated for hypertension with office BP readings, not at goal and HBPM readings suggestive of a significant white coat effect, confirmation by ABPM can be useful'	Ila	C-LD
'In adults with untreated office BPs that are consistently between 120 mm Hg and 129 mm Hg for SBP or between 75 mm Hg and 79 mm Hg for DBP, screening for masked hypertension with HBPM (or ABPM) is reasonable'	Ila	B-NR
'In adults on multiple-drug therapies for hypertension and office BPs within 10 mm Hg above goal, it may be reasonable to screen for white coat effect with HBPM (or ABPM)'	IIb	C-LD

American Heart Association 2022

In 2022, the American Heart Association updated its 2014 recommendations on routine ambulatory blood pressure monitoring (ABPM) in children and adolescents, which included the following:

- 'To confirm the diagnosis of hypertension in an individual with hypertension on the basis of clinic BP measurements:
 - Distinguish between ambulatory hypertension and WCH [white coat hypertension].
- To better assess BP in an individual with clinic BP persistently in the elevated but not hypertensive range.
- To evaluate for possible masked hypertension when there is a clinical suspicion of hypertension, but clinic BP readings are normal or in the elevated BP range.
- To assess BP patterns in high-risk individuals:
 - Assess for abnormal circadian variation in BP, such as abnormal dipping, or isolated nocturnal hypertension in individuals with diabetes, CKD [chronic kidney disease], solid-organ transplant, and severe obesity with or without sleep-disordered breathing.
 - Assess the severity and persistence of BP elevation in individuals at high risk for hypertensive TOD [target organ damage].
- To optimize drug therapy for hypertension:
 - Confirm BP control in treated individuals
 - Evaluate for pseudo-resistant hypertension
 - Determine if symptoms suggestive of hypotension can be confirmed as such.
- An ABPM device suitable for use in children should be selected:
 - Only oscillometric or auscultatory ABP devices that have been validated according to American National Standards Institute (ANSI)/Association for the Advancement of Medical Instrumentation (AAMI)/International Organization for Standardization (ISO) should be used. The British

Hypertension standard is acceptable for devices marketed before publication of the ANSI/AAMI/ISO standards.

- Appropriate cuff sizes as recommended in the 2017 CPG [clinical practice guideline] must be available for the device selected.'

U.S. Preventive Services Task Force (USPSTF) 2021

In 2021 the USPSTF commissioned a systematic review and reaffirmed its prior 2015 recommendations on screening for hypertension in adults. The following recommendation was given a grade A rating:

- 'The USPSTF recommends screening for high blood pressure in adults aged 18 years or older. The USPSTF recommends obtaining measurements outside of the clinical setting for diagnostic confirmation before starting treatment.'

The document further elaborated on the choice of office measurements, recommending ABPM as the reference standard for confirming the diagnosis of hypertension.

In 2021, the USPSTF issued updated recommendations for high BP screening in children and adolescents. Based on a systematic review of 42 studies, the USPSTF concluded that the current evidence is insufficient to assess the balance of benefits and harms of screening for high BP in this population.

Diagnosis Codes

Covered diagnosis codes for Procedure Codes: 93784, 93786, 93788 and 93790

C74.00	C74.01	C74.02	D44.7	D57.00	D57.01	D57.02
D57.1	D57.20	D57.211	D57.212	D57.219	D57.3	D57.40
D57.411	D57.412	D57.419	D57.80	D57.811	D57.812	D57.819
E05.00	E05.01	E05.10	E05.11	E05.20	E05.21	E05.30
E05.31	E05.40	E05.41	E05.80	E05.81	E05.90	E05.91
E10.9	E11.9	E21.0	E21.1	E21.2	E21.3	E21.4
E21.5	E24.0	E24.8	E24.9	E26.01	E26.02	E26.09
E66.811	E66.812	E66.813	E66.9	F84.3	G47.30	G47.31
G47.32	G47.33	G47.34	G47.35	G47.36	G47.37	G47.39
I10	I11.9	I15.0	I15.1	I15.2	I15.8	I15.9
I1A.0	I20.81	I20.89	I95.0	I95.1	I95.2	I95.3
I95.81	I95.89	I95.9	M32.10	M32.11	M32.12	M32.13

M32.14	M32.15	M32.19	M32.8	M32.9	N18.1	N18.2
N18.4	N18.5	N18.6	N18.9	N18.30	N18.31	N18.32
N26.2	Q78.1	Q85.00	Q85.01	Q85.02	Q85.03	Q85.09
Q93.52	Q93.82	Q96.0	Q96.1	Q96.2	Q96.3	Q96.4
Q96.8	Q96.9	R03.0	R55	Z00.00	Z00.01	Z01.31
Z94.0	Z94.1	Z94.2	Z94.3	Z94.4	Z94.82	Z94.83

CURRENT CODING

CPT:

93050	ART PRESS WAVEFORM ANALYS CENTRAL ART PRESSURE	Medicaid Expansion
93784	AMBULATORY BP MNTR W/SW 24 HR+ REC SCAN ALYS I&R	Medicaid Expansion
93786	AMBULATORY BP MNTR W/SW 24 HR+ RECORDING ONLY	Medicaid Expansion
93788	AMBULATORY BP MNTR W/SW 24 HR+ SCANNING A/R	Medicaid Expansion
93790	AMBULATORY BP MNTR W/SW 24 HR+ REVIEW W/I&R	Medicaid Expansion
93050	ART PRESS WAVEFORM ANALYS CENTRAL ART PRESSURE	Commercial
93784	AMBULATORY BP MNTR W/SW 24 HR+ REC SCAN ALYS I&R	Commercial
93786	AMBULATORY BP MNTR W/SW 24 HR+ RECORDING ONLY	Commercial
93788	AMBULATORY BP MNTR W/SW 24 HR+ SCANNING A/R	Commercial
93790	AMBULATORY BP MNTR W/SW 24 HR+ REVIEW W/I&R	Commercial

References

1. Centers for Medicare and Medicaid Services (CMS). National Coverage Determination (NCD) for Ambulatory Blood Pressure Monitoring (2019) Accessed May 15, 2023.
2. Whelton PK, Carey RM, Aronow WS, et al. 2017 CC/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*. 2018;71(19):2199-2269.
3. Kupferman J, Batisky D, Samuels J, et al. Ambulatory blood pressure monitoring and neurocognitive function in children with primary hypertension. *Pediatr Nephrol* 2018;33:1765–1771.
4. National Institute for Health and Care Excellence. Hypertension in adults: Diagnosis and management [NG136].2019; <https://www.nice.org.uk/guidance/ng1>
5. Muntner P, Shimbo D, Carey RM, et al. Measurement of Blood Pressure in Humans: A scientific statement from the American Heart Association. 2019;73(5):e35- e66.
6. Yang WY, Melgarejo JD, Thijs L, et al. Association of office and ambulatory blood pressure with mortality and cardiovascular outcomes. 2019;322(5):409- 420.
7. Aung K, Htay T. Relationship between outpatient clinic and ambulatory blood pressure measurements and mortality. *Curr Cardiol Rep*. 2019;21(5):28.
8. Flynn JT, Urbina EM, Brady TM, et al. Ambulatory blood pressure monitoring in children and adolescents: 2022 update: A scientific statement from the American Heart Association. *Hypertension*. 2022;79(7):e114-e124.
9. S. Preventive Services Task Force. Screening for Hypertension in Adults. 2021; <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/hypertension-in-adults-screening>.
10. Krist AH, Davidson KW, Mangione CM, et al. Screening for hypertension in adults: US Preventive Services Task Force reaffirmation recommendation statement. *JAMA*. 2021;325(16): 1650-1656.
11. S. Preventive Services Task Force. High Blood Pressure in Children and Adolescents: Screening.2020; <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/blood-pressure-in-children-and-adolescents-hypertension-screening>.
12. Screening.2020; <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/blood-pressure-in-children-and-adolescents-hypertension-screening>.
13. Krist AH, Davidson KW, Mangione CM, et al. Screening for high blood pressure in children and adolescents: US Preventative Services Task Force recommendation statement. *JAMA*. 2020;324(19): 1878-1883
14. Huang QF, Yang WY, Asayama K, et al. Ambulatory Blood Pressure Monitoring to Diagnose and Manage Hypertension. *Hypertension*. 2021;77(2):254-264.
15. Ahlenius M, Koek W, Yamaguchi I. Ambulatory blood pressure monitoring in children: A retrospective single-center study. *Front Pediatr*. 2023;11:1088857.
16. Cepeda M, Pham P, Shimbo D. Status of ambulatory blood pressure monitoring and home blood pressure monitoring for the diagnosis and management of hypertension in the US: an up-to-date review. *Hypertens Res*. 2023;46(3):620- 629.

ND Committee Review

Internal Medical Policy Committee 9-21-2020 Coding Update

- **Removed** N18.3; and
- **Added** N18.30; N18.31; and N18.32.

Internal Medical Policy Committee 11-19-2020 Revision-

- **Removed** Non-covered Diagnosis codes; and
- **Updated** with a few wording changes.

Internal Medical Policy Committee 11-23-2021 Revision

- **Changed** title; and
- **Updated** Professional Statements; and
- **Removed** all (Z-diagnosis codes)
 Z00.00; Z00.01; Z00.110; Z00.111; Z00.121; Z00.129; Z01.31; Z01.411; Z01.411; Z01.419; Z01.83; Z11.2;
 Z11.3; Z11.4; Z11.51; Z11.59; Z12.10; Z12.11; Z12.12; Z12.31; Z12.39; Z12.4; Z12.5; Z12.73; Z13.1; Z13.21;
 Z13.21; Z13.220; Z13.228; Z13.30; Z13.30; Z13.31; Z13.32; Z13.39; Z13.40; Z13.41; Z13.42; Z13.49; Z13.5;
 Z13.6; Z13.79; Z13.811; Z13.811; Z13.820; Z13.83; Z29.3; Z29.3; Z30.011; Z30.012; Z30.013; Z30.014;
 Z30.015; Z30.016; Z30.017; Z30.018; Z30.02; Z30.09; Z30.40; Z30.41; Z30.42; Z30.430; Z30.431; Z30.432;
 Z30.433; Z30.44; Z30.45; Z30.46; Z30.49; Z30.9; Z31.7; Z33.3; Z70.0; Z70.1; Z70.3; Z70.8; Z70.9; Z71.83;
 Z87.74. .

Internal Medical Policy Committee 11-29-2022 Annual Review-no changes in criteria

Internal Medical Policy Committee 5-23-2023 Revision - **Effective July 03, 2023**

- **Added** criteria for Suspected masked hypertension.

Internal Medical Policy Committee 9-12-2023 Revision - **Effective November 06, 2023**

- **Added** American heart Association 2022 & U.S. Preventative Services Task Force (USPSTF) 2021 to Professional Statements and Societal Positions
- **Updated** criteria
- **Added** diagnosis codes M32.10; M32.11; M32.12; M32.13; M32.14; M32.15;; M32.19; M32.8; M32.9; Z94.0; Z94.1; Z94.2; Z94.3; Z94.4; Z94.82; Z4.8.
- **Added** table for Blood Pressure Levels for Boys and Girls by Age and Height Percentile

Internal Medical Policy Committee 11-15-2023 Revision - **Effective October 01, 2023**

- **Removed** diagnosis code I20.8.
- **Added** diagnosis codes I1A.0, I20.81, I20.89, and Q93.52.

Internal Medical Policy Committee 3-19-2024 Coding update - **Effective May 06, 2024**

- **Added** diagnosis codes Z00.00; Z00.01; and Z01.31
- **Updated** references
- **Added** policy applications

Internal Medical Policy Committee 9-17-2024 Coding update - **Effective October 01, 2024**

- **Removed** diagnosis code E66.8; and
- **Added** diagnosis codes E66.811; E66.812; E66.813

Disclaimer

Current medical policy is to be used in determining a Member's contract benefits on the date that services are rendered. Contract language, including definitions and specific inclusions/exclusions, as well as state and federal law, must be considered in determining eligibility for coverage. Members must consult their applicable benefit plans or contact a Member Services representative for specific coverage information. Likewise, medical policy, which addresses the issue(s) in any specific case, should be considered before utilizing medical opinion in adjudication. Medical technology is constantly evolving, and the Company reserves the right to review and update medical policy periodically.

