

Ambulatory Blood Pressure Monitoring (ABPM) For the Clinician

What is it?

ABPM measures blood pressure at regular intervals (every 15-30 minutes is typical) throughout the day and night. It is especially useful for patients in the following groups:

- To evaluate suspected white-coat hypertension in patients with hypertension and no target organ damage.
- Apparent drug resistant hypertension
- Hypotensive symptoms with antihypertensive medications
- Episodic hypertension
- Autonomic dysfunction

Because blood pressure is monitored during sleep, ABPM is useful to determine whether the blood pressure falls at night compared to daytime values. A night time fall is normal. Absence of a night time dip is associated with increased cardiovascular disease risk and other end-organ damage.

How does ABPM work?

Ambulatory BP monitors are fully automatic and can record BP for 24 hours or longer while patients go about their normal daily activities. Monitors measure about 4 by 3 inches and weigh about 4 lbs. They can be worn on a belt or in a pouch and are connected to a sphygmomanometer cuff on the upper arm by a plastic tube. Patients are asked to keep their arm still while the cuff is inflating and to avoid extreme physical exertion while wearing the monitor.

What clinical information can be determined by ABPM?

- An estimate of the true or mean blood pressure
- The diurnal rhythm of blood pressure
- Blood pressure variability

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Is ABPM a reimbursable procedure?

Yes. Medicare will reimburse an ABPM test for suspected white-coat hypertension, while private insurance carriers may reimburse for additional indications.

Medicare criteria for ABPM reimbursement includes:

- Clinic blood pressure >140/90 mm Hg at 3 separate clinic visits with 2 measurements made at each visit
- At least 2 documented BP measurements taken outside the clinic <140/90 mm Hg
- No evidence of end-organ damage

Private carriers may reimburse additional indications including:

- Evaluation of antihypertensive therapy
- Resistant hypertension
- Nocturnal angina
- Episodic hypertension
- Autonomic dysfunction
- Masked hypertension
- Failed home BP management

What reimbursement codes do I need to know?

CPT code	93784 (recommended global code) – 93790 Ambulatory blood pressure monitoring utilizing a system such a magnetic tape and/or computer disk, for 24 hours or longer; including recording, scanning analysis, interpretation, and report 93786 – recording only 93788 – scanning analysis 93790 – physician review with interpretation and report
ICD-9 code	796.2 – Elevated blood pressure reading without diagnosis of hypertension

How much is reimbursement?

Medicare: \$60- \$120, depending on region

Private insurance carriers: \$75 - \$225

Adapted from:

Chobanian AV, Bakris GL, Black HR, et al. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: the JNC 7 report. *JAMA*. 2003;290.

Pickering TG, Shimbo D, Haas D. Ambulatory Blood Pressure Monitoring, *NEJM*. 2006;354:2368.