

DEVICES FOR BLOOD PRESSURE MONITORING

The blood pressure readings that a patient or other person obtain outside the doctor's office by means of a device for home use have proven to be a useful way to gather information that aids decision-making regarding the treatment of high blood pressure. Outpatient devices for blood pressure monitoring are increasingly used to follow patients with hypertension.

Self-monitoring can be an accurate method for evaluating a patient's usual blood pressure and for evaluating the effect of antihypertensive medications. Self-measured blood pressure readings can be more reliable due to the greater amount of measurements that can be obtained.



Since a large amount of readings can be taken, the overview of the effectiveness with which a patient's blood pressure is being controlled is broadened with information that comes not only from the doctor's office, but also from different surroundings and situations. In addition, day blood pressure rhythm can be evaluated, which tends to be higher than at night.

The circumstances at the time of the measurement can affect blood pressure. If the readings are taken right after a meal or after doing exercise, they may be lower than normal. If they are taken after smoking a cigarette or drinking coffee, they may be higher.

Most patients with hypertension find it useful to use self-monitoring. Exceptions include people who are markedly obese or who have irregular heart rates.

Four of the possible benefits of home monitoring are:

- Distinguishing sustained hypertension from office hypertension (white coat syndrome).
- Evaluating the response to antihypertensive medications.
- Improving patient treatment compliance with active involvement in the treatment.
- Possible cost cutting by optimizing the use of medications.

New blood pressure measuring devices must be checked at the doctor's office before being used at home and then once a year to guarantee their accuracy. Home blood pressure must be checked in the morning and night, both on working days as well as on non-working days. A patient's clinical situation will determine the frequency of the readings. During the initial evaluation it may be appropriate to take blood pressure readings several days a week. When blood pressure remains stable, readings can be taken less frequently.

