

Automated Digital Blood Pressure Devices

A Key Component of Effective Blood Pressure Control Programs

- ✔ Effective blood pressure (BP) control largely happens at the primary care level, where most people seek treatment.
- ✔ Leading health authorities, including the World Health Organization, recommend automated digital BP pressure measurement in primary care settings.
- ✔ Validated automated digital BP devices are both more accurate and easier to operate than manual devices.

VALIDATION

- ⚠ External validation ensures that a device measures a patient's blood pressure correctly, but many devices on the market are not validated.
- ⚠ Only choose devices validated by an independent entity (not affiliated with the manufacturer) using an accepted validation protocol.



An Easy Way to Promote Task Sharing

- ✔ Manual BP devices require significant training, and even experienced health workers can make mistakes.

With an Automated Digital BP Monitor:

- ✔ Health workers can focus on positioning the patient, improving accuracy.
- ✔ Health workers with less experience and training can take accurate measurements.
- ✔ Health workers can be confident in the results.



 MANUAL BP DEVICES Complex measurement process with significant opportunity for human error	 AUTOMATED DIGITAL BP DEVICES Simplified, expedited measurement process
<ul style="list-style-type: none">✘ Incorrect cuff pressure✘ Health worker hand fatigue from pumping up the cuff repeatedly✘ Incorrect deflation rate✘ Difficulty hearing Korotkoff sounds in a busy, noisy clinic✘ Misreading or misremembering BP measurement value on the meter or column✘ Rounding the observed values (terminal digit preference)✘ Miscalibration	<ul style="list-style-type: none">✔ Cuff automatically inflates to correct pressure✔ No health worker hand fatigue✔ Cuff automatically deflates at the correct rate✔ Listening is not required✔ Digital display of values on an easy-to-read screen eliminates misinterpretation✔ Values stay on the screen until the device is reset or turned off; no need to rely on health worker memory✔ Does not require calibration