



**BEST
PRACTICES
IN BLOOD
PRESSURE**



HillromTM

Confidently assess, diagnose
and manage hypertension



ACCURATE BLOOD PRESSURE READINGS ARE NON-NEGOTIABLE WHEN DIAGNOSING HYPERTENSION.

High blood pressure—or hypertension—is the #1 risk factor for heart attack, stroke and kidney disease.^{1,2} The American Heart Association (AHA) now defines high blood pressure as 130/80 mm HG or higher.³ With these guidelines, nearly half of American adults (46%) have high blood pressure—and many may not know it.⁴

Feel Confident in Your Blood Pressure Readings

We understand that accurate blood pressure readings are critical to support a diagnosis and treatment plan you can feel confident in. Hillrom offers the Welch Allyn® line of digital blood pressure devices, enabling you to:



IDENTIFY
In the Office



CONFIRM
Outside the Office



MANAGE
At Home

New Recommendations for Measuring Blood Pressure

The American Heart Association's latest scientific statement explores the best methods for obtaining accurate blood pressure readings.⁵ Because precise measurements are critical for hypertension diagnosis and monitoring, the AHA discusses the benefits of in-office and out-of-office devices.

Oscillometric devices provide an automated office blood pressure reading that can reduce common user errors—like improper technique, rounding and transcription mistakes—associated with auscultatory measurements.⁵ Automated devices that can average a series of blood pressure readings may also provide a more accurate in-office blood pressure measurement.⁵ Evidence suggests that ambulatory blood pressure monitoring is a valuable tool and recommended to confirm hypertension diagnoses.⁶ Home blood pressure devices can monitor blood pressure levels over time, measure medication efficacy and help identify hard-to-detect hypertension.⁷

It's more important than ever to assess your patients with accurate blood pressure readings inside and outside the office. That's where we come in.

IDENTIFYING HYPERTENSION

The first opportunity to identify hypertension is right in your office.

The Challenge

Evidence suggests that manual single-reading blood pressure methods may not be enough to identify and diagnose hypertension.⁸ For many people, the first measurement taken during an office visit is higher than subsequent measurements.⁹ In fact, a study of U.S. adults estimates that 35% of people with a blood pressure reading of 140-159/90-99 mmHg on their first measurement had a reading of <140/90 mmHg when three measurements were recorded and averaged.⁹

The Impact

Because white-coat effect and inconsistent clinical technique can contribute to inaccurate blood pressure readings,⁸ you need a solution that can help mitigate these challenges. Studies show automated blood pressure averaging can provide additional decision support to improve the accuracy of hypertension diagnoses.¹⁰

IDENTIFY
In the Office



Automated blood pressure and vital signs devices can support attended and unattended automated in-office blood pressure readings.



The Solution

Hillrom provides a wide range of blood pressure and vital signs devices developed with your needs in mind. Whether you want to upgrade your blood pressure devices, or need a fully connected vital signs workflow, we've got you covered.

THE WELCH ALLYN® PROBP™ 2400

Designed specifically for smaller clinics who want to upgrade from manual blood pressure devices to an automated solution.

- Professional-grade device with blood pressure averaging
- Simple, cost-effective solution without additional vital signs or connectivity options



THE WELCH ALLYN SPOT VITAL SIGNS® 4400 DEVICE

Built to fit smoothly into your daily routine with simple, easy-to-use, all-in-one vitals capture.

- Blood pressure averaging available in one tap via the home screen
- Send vital signs to your EMR with basic USB connectivity



THE WELCH ALLYN CONNEX® SPOT MONITOR

Delivering multi-parameter vital signs in one configurable device for IDNs and clinics that want a fully automated workflow.

- Easy-to-use touchscreen with blood pressure averaging, spot checking and more
- Wired and wireless connectivity to your EMR



Automated office blood pressure devices can be programmed to record and average multiple blood pressure readings—with or without a clinician present—and can provide a more accurate blood pressure measurement than auscultation.⁵

CONFIRMING HYPERTENSION DIAGNOSES

Once you detect high blood pressure, make sure you're seeing the whole picture.

The Challenge

Patients with elevated in-office blood pressure readings often require additional monitoring outside the office during normal state conditions to be properly diagnosed.¹¹

The Impact

Ambulatory blood pressure monitoring is an important step in confirming a hypertension diagnosis. This method collects multiple measurements for a comprehensive picture and can help identify patterns—like sustained, white-coat, masked or nocturnal hypertension—that cannot be detected with blood pressure readings in the office.⁶

CONFIRM
Outside the Office



Confirm your hypertension diagnoses with ambulatory blood pressure monitoring.

The Solution

THE WELCH ALLYN® ABPM 7100 AMBULATORY BLOOD PRESSURE MONITOR

Designed to bring comprehensive blood pressure monitoring to the comfort of your patient's home

- Lightweight, compact and quiet 24-hour monitoring
- Comprehensive reporting and analysis tools
- Identify and confirm hypertension; can also be used to monitor the impact of hypertension treatment



The U.S. Preventative Services Task Force calls ambulatory blood pressure monitoring “the best method for diagnosing hypertension.”¹²

MANAGING HYPERTENSION

Set your patients up for long-term success with a comprehensive monitoring solution.

The Challenge

Home blood pressure monitoring solutions often lack clinical accuracy and rely on patients to correctly communicate their readings to physicians.

The Impact

Clinician-connected remote patient monitoring has been proven to help get patients to their target blood pressure.¹³

MANAGE
At Home



Help your patients effectively manage hypertension with self-management tools.

The Solution

WELCH ALLYN HOME® HYPERTENSION PROGRAM

Designed to help your patients reach their target blood pressure

- Accuracy and critical connectivity—from the home to your office
- Clinically accurate blood pressure monitoring
- Secure and efficient practice workflows



When paired with patient feedback, counseling and other adherence strategies, home blood pressure monitoring is associated with an improvement in blood pressure control.¹⁴

We're here to help you identify, diagnose and manage hypertension across care settings. Learn more at hillrom.com.



Hillrom™

hillrom.com

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References

- ¹ Mayo Clinic. High blood pressure dangers: Hypertension's effects on your body. Mayo Clinic website. <http://www.mayoclinic.org/diseases-conditions/high-blood-pressure/in-depth/high-blood-pressure/art-20045868>. February 18, 2014. Accessed October 17, 2016.
- ² World Heart Federation. Cardiovascular disease: Risk factors. World Heart Federation website. http://www.world-heart-federation.org/fileadmin/user_upload/documents/Fact_sheets/2012/PressBackgrounderApril2012RiskFactors.pdf. Accessed October 17, 2016.
- ³ <http://www.acc.org/latest-in-cardiology/articles/2017/11/08/11/47/mon-5pm-bp-guideline-aha-2017>
- ⁴ http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/GettheFactsAboutHighBloodPressure/The-Facts-About-High-Blood-Pressure_UCM_002050_Article.jsp#.WjgSFVWnGUn
- ⁵ Muntner, Paul et al. "Measurement of Blood Pressure in Humans: A Scientific Statement From the American Heart Association." *Hypertension* 73, no. 5. pg.e35. (May 1, 2019). Doi:10.1161/hyp.0000000000000087.
- ⁶ Muntner, Paul et al. "Measurement of Blood Pressure in Humans: A Scientific Statement From the American Heart Association." *Hypertension* 73, no. 5. pg.e41. (May 1, 2019). Doi:10.1161/hyp.0000000000000087.
- ⁷ Muntner, Paul et al. "Measurement of Blood Pressure in Humans: A Scientific Statement From the American Heart Association." *Hypertension* 73, no. 5. pg.e46. (May 1, 2019). Doi:10.1161/hyp.0000000000000087.
- ⁸ Pickering, Thomas G., MD, DPhil, et. al: Recommendations for Blood Pressure Measurement in Humans and Experimental Animals. *Circulation*. 2005; 111:697-716.
- ⁹ Muntner, Paul et al. "Measurement of Blood Pressure in Humans: A Scientific Statement From the American Heart Association." *Hypertension* 73, no. 5. pg.e40. (May 1, 2019). Doi:10.1161/hyp.0000000000000087.
- ¹⁰ Robert Smith, MD. Blood pressure averaging methodology; Decreasing the risk of misdiagnosing hypertension
- ¹¹ http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/KnowYourNumbers/Monitoring-Your-Blood-Pressure-at-Home_UCM_301874_Article.jsp#.WnDR_q6nGUk
- ¹² Margaret A. Piper, PhD, MPH; Corinne V. Evans, MPP; Brittany U. Burda, MPH; Karen L. Margolis, MD, MPH; Elizabeth O'Connor, PhD; and Evelyn P. Whitlock, MD, MPH: Diagnostic and Predictive Accuracy of Blood Pressure Screening Methods With Consideration of Rescreening Intervals: An Updated Systematic Review for the U.S. Preventive Services Task Force
- ¹³ Green B et al. Effectiveness of Home Blood Pressure Monitoring, Web Communication, and Pharmacist Care on Hypertension Control. *JAMA* 2008;299(24):2857-2867
- ¹⁴ Muntner, Paul et al. "Measurement of Blood Pressure in Humans: A Scientific Statement From the American Heart Association." *Hypertension* 73, no. 5. pg.e47. (May 1, 2019). Doi:10.1161/hyp.0000000000000087.

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