New BP guideline: 5 things physicians should know

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Sara Berg, MS
Senior News Writer

Nearly half of American adults, 46 percent, will be determined to have hypertension under a new clinical guideline on the prevention, detection, evaluation and management of high blood pressure (BP), up from 32 percent under the old benchmark. Previously, high blood pressure was defined as BP readings persistently at or above 140 mm Hg systolic or 90 mm Hg diastolic, but is now defined as persistently at or above 130/80 mm Hg.

This new guideline does not mean these newly classified patients with hypertension will face dramatic new risks or that physicians need to immediately begin medication treatment for most. The guideline is meant to prevent strokes, heart attacks and other cardiac problems through earlier action—a combination of lifestyle changes for all of these patients, and medications for some, depending on the circumstances—to control high BP.

The 2017 hypertension guideline comes from a joint task force formed by the American College of Cardiology (ACC) and the American Heart Association (AHA). The ACC and AHA partnered with many other organizations representing physicians and other health professionals to create the new guideline.

In light of the new guideline, “based on the latest available science,” AMA President David O. Barbe, MD, MHA, renewed the Association’s “call to all American adults to monitor their blood pressure levels and take the necessary steps” to get their high BP under control.

Dr. Barbe highlighted the resources available at Target: BP to help physicians manage their patients’ hypertension.

“High blood pressure can often be managed effectively when patients work with their physician to create a treatment plan that focuses on healthy lifestyle changes such as exercising, eating a healthy diet, reducing salt intake, drinking alcohol in moderation, losing weight if overweight, and using anti-hypertensive medication when needed,” Dr. Barbe added. “We encourage people to take action today to get their blood pressure under control by adopting a treatment plan that can help them prevent the

lasting, negative health impacts of uncontrolled high blood pressure, including heart attack and stroke."

Michael Rakotz, MD, is the AMA's vice president of chronic disease prevention and management. He said the ACC/AHA guideline are the most significant change in hypertension recommendations since 2003, when "The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure," known as the JNC 7, was issued.

"We have not had a comprehensive guideline update for high blood pressure since JNC 7," he said. "We've had additional guideline updates on the measurement of blood pressure in 2005 and different components that answered [various] clinical questions, but none that were as comprehensive as this new guideline."

In collaboration with the AHA and TEDMED, the AMA will be hosting a Facebook Live discussion with two of the lead authors of the new blood pressure guideline and other experts this Wednesday at 4 p.m. CST to ensure physicians have the information they need to treat patients using the new guideline. Beyond the essentials, there are five things physicians should take away from the new guideline.

New categories of BP in adults. The ACC/AHA guideline provides four categories of BP, ranging from normal to stage 2 hypertension, as shown below.

Blood Pressure Category	Systolic mm Hg (upper #)		Diastolic mm Hg (lower #)
Normal	less than 120	and	less than 80
Elevated	120 – 129	and	less than 80
High Blood Pressure (Hypertension) Stage 1	130 – 139	or	80 – 89
High Blood Pressure (Hypertension) Stage 2	140 or higher	or	90 or higher

These four categories are based on average BP measurements in a health care setting. BP classification should be the average of two carefully measured office readings obtained on at least two occasions. And for individuals with a systolic BP (SBP) and diastolic BP (DBP) in two different categories, the designation should go to the higher category. For example, if the measurement is 142/78 mm Hg, the patient has stage 2 hypertension. To confirm a new diagnosis of hypertension, an out-of-office confirmation of elevated BP is recommended.

More patients with hypertension. As discussed above, the guideline lowers cut point for defining high BP, which means more people will be classified as having hypertension. Under this guideline,

the prevalence of hypertension among American adults is 46 percent, compared with 32 percent under the JNC 7 definition.

Yet for many patients—such as those with elevated BP and most who are newly classified as having stage 1 hypertension—lifestyle changes will be all that are needed for treatment. Lifestyle changes, if followed, can be effective in preventing and managing high blood pressure. For example, a 10-pound weight loss can result in a 5 mm Hg reduction in blood pressure in an individual with high blood pressure. Similar changes can occur by increasing physical activity or reducing sodium intake in people with high blood pressure. Most patients with SBP between 130–139 mm Hg or DBP between 80–80 mm Hg will not require anti-hypertensive medication to treat their high BP under the new guideline.

Adjust treatment based on BP category and cardiovascular risk. All patients with high BP should be treated with non-pharmacological interventions, which include weight loss for those who are overweight or obese, a heart-healthy diet such as the dietary approaches to stop hypertension (DASH) eating plan, sodium reduction, potassium supplementation (under the guidance of a physician), increased physical activity with a structured exercise program, and drinking alcohol in moderation.

Use of BP-lowering medications is recommended based on stage of hypertension, a patient's medical history or estimated 10-year CVD risk that is greater than or equal to 10 percent using the ACC/AHA Risk Estimator. This recommendation differs from JNC 7 in that it uses CVD risk to recognize patients—including those who are older—who are likely to benefit from BP-lowering pharmacological treatment in addition to lifestyle changes.

Treatment targets for patients with hypertension. Adults with confirmed hypertension and known CVD or a 10-year ASCVD event risk of 10 percent or higher, the recommended BP target is less than 130/80 mm Hg. For adults with confirmed hypertension, but no additional markers of increased CVD risk, a target of less than 130/80 mm Hg may be reasonable. Considering the totality of the available evidence, a lower BP target is generally better than a higher BP target, the guideline says. The SBP target recommended in the new guideline (lower than 130 mm Hg) is higher than that which was used in the SPRINT trial (lower than 120 mm Hg).

While the SPRINT trial showed the value of the lower than 120/80 mm Hg goal, the ACC/AHA guideline recognizes that the specific inclusion and exclusion criteria of any randomized controlled trial can limit the extrapolation to the real-world population of patients with hypertension. Also, the relevant trials were efficacy studies in which BP measurements were more consistent with guideline recommendations than is typically the case in clinical practice, yielding lower absolute values for SBP.

Have patients self-monitor BP. Because office BP measurements are often higher than ambulatory or at-home BPs, the guideline emphasizes the need for patients to take their own BP measurement

outside of the clinical setting to confirm the diagnosis of hypertension and to help titrate BP-lowering medication. This should be done in conjunction with telehealth counseling or clinical interventions.

For self-measured blood pressure (SMBP) monitoring, it is important to ensure the measurement device being used has been validated using an internationally accepted protocol and the results have been published in a peer-reviewed journal. SMBP can also help differentiate between sustained, white coat and masked hypertension. It can also be used for reassessment of patients, according to guideline recommendations.

The other organizations that partnered with the ACC and the AHA on the new guideline include the American Academy of Physician Assistants, Association of Black Cardiologists, American Geriatrics Society, American College of Preventive Medicine, American Society of Hypertension, American Pharmacists Association, National Medical Association, American Society of Preventive Cardiology, and Preventive Cardiovascular Nurses Association.

The guideline is designed to “provide a cornerstone for quality cardiovascular care,” its authors wrote.

“Although guidelines may be used to inform regulatory or payer decisions, their intent is to improve patients’ quality of care and align with patients’ interests,” they added. “Guidelines are intended to define practices meeting the needs of patients in most, but not all, circumstances and should not replace clinical judgment.”

The Million Hearts Hypertension Control Challenge is a federal competition to identify clinicians, practices and health systems that have achieved a hypertension control rate of 70 percent or greater among their patients with hypertension and award them with recognition for their work.

Target: BP™ is a national initiative co-led by the AHA and the AMA. In addition to direct access to trained field support specialists, a data platform and a suite of evidenced-based tools and resources offered by the AMA and the AHA, Target: BP offers annual, recurring recognition for all participating sites that achieve hypertension control rates of 70 percent or higher among their adult patient population year over year.

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