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Dear provider of pharmaceutical services,

Receive kind greetings from PharmPix. This communication summarizes some recent updates on the American Heart Association (AHA) and the American College of Cardiology (ACC) High Blood Pressure (HBP) Guidelines and their impact on HBP diagnosis.

**Notable updates on AHA/ACC High Blood Pressure Guidelines**

**Lower the threshold for high blood pressure to 130/80 mmHg, rather than 140/90mmHg**

**Emphasis on the importance of using a proper technique to measure blood pressure.**

- Blood pressure levels should be based on an average of 2 to 3 readings on at least 2 different occasions.

**Emphasis on the importance of accurate measurements of blood pressure, getting the average estimate of blood pressure, and out-of-office measurements to confirm the diagnosis of hypertension and recognize "white coat hypertension".**

**Emphasis on lifestyle interventions.**

- DASH (Dietary Approaches to Stop Hypertension) diet: Includes fruits and vegetables, low-fat or non-fat dairy, whole grains, and less than 1500 mg of daily sodium intake.
- Alcohol consumption limitation to no more than 2 drinks a day for men and no more than 1 a day for women.
- Physical activity for at least 30 minutes, 3 times per week.

**Elimination of the category of pre-hypertension (systolic blood pressure between 120-139 mmHg or diastolic blood pressure between 80-89 mmHg).**

- This patients now will be categorized as having either Elevated or Stage I hypertension (See New blood pressure categories).

**New blood pressure categories**

Category	Measure
<b>Normal</b>	Less than 120/80 mmHg
<b>Elevated</b>	Systolic blood pressure between 120- 129 mmHg and diastolic blood pressure less than 80
<b>Stage 1*</b>	Systolic blood pressure between 130-139 or diastolic blood pressure between 80-89 mmHg
<b>Stage 2*</b>	Systolic blood pressure at least 140 mmHg or diastolic blood pressure at least 90 mmHg
<b>Hypertensive crisis</b>	Systolic blood pressure over 180 mmHg and/or diastolic blood pressure over 120 mmHg, with patients needing prompt changes in medication if there are no other indications of problems, or immediate hospitalization if there are signs of organ damage

\* Previous guidelines classified 140/90 mmHg as Stage 1 hypertension. This level is classified as Stage 2 hypertension under the new guidelines.

## Other changes in the new guideline

- Only prescribing medication for Stage I hypertension if a patient has already had a cardiovascular event such as a heart attack or stroke, or is at high risk of heart attack or stroke based on age, the presence of diabetes mellitus, chronic kidney disease or calculation of atherosclerotic risk (using the same risk calculator used in evaluating high cholesterol).
- Recognizing that many people will need two or more types of medications to control their blood pressure, and that people may take their pills more consistently if multiple medications are combined into a single pill.
- Identifying socioeconomic status and psychosocial stress as risk factors for HBP that should be considered in a patient's plan of care.

## Impact of the new guidelines in HBP diagnosis

One of the most notable updates in the new guidelines is the lower definition of HBP. With the previous definition of HBP, 1 in 3 adults in United States (US) were defined as having HBP. According to a publication of the ACC, the new definition of HBP will result in nearly half of the US adult population having HBP. The impact is expected to be greatest among younger people. The prevalence of HBP is expected to triple among men under age 45, and double among women under age 45.

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The 2017 AHA/ACC High Blood Pressure Guidelines were published in the Journal of the American College of Cardiology and Hypertension. You can the complete guidelines in the JACC Website (<http://www.onlinejacc.org/>). Key points to remember from the new guidelines can be found in the following link: <http://www.acc.org/latest-in-cardiology/ten-points-to-remember/2017/11/09/11/41/2017-guideline-for-high-blood-pressure-in-adults>.

It is of note that a Clinical Guideline App have also been develop and is available for download at the following link: <http://www.acc.org/tools-and-practice-support/mobile-resources/features/guideline-clinical-app>.

Medical literature is dynamic and is continuously changing as new scientific knowledge is developed. We exhort the frequent revision of treatment guidelines to assure that our recommendations are consistent with the most actualized information.

On PharmPix we are compromised with the health and wellness of our insured. It is our priority to offer high quality services and to promote practices for health promotion and diseases prevention. If you have any doubt or wish to have more information regarding this document, you can call us to 787-522-5252, extension 138.

Regards,

Pharmacy Department

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