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Washington State Department of Health

At-Home Blood Pressure Monitoring Issue Brief

EXECUTIVE SUMMARY

Nearly one in every two adults in the United States has high blood pressure, but only half of them are able to keep it under control. As a result, cardiovascular-related complications contribute to millions of people dying each year and costing the health care system hundreds of billions of dollars that could be avoided with more effective preventive and management systems in place.

Providing at-home blood pressure monitors is considered a cost-effective way to help patients regularly assess their blood pressure. With this knowledge, patients can work with their health care team to manage their high blood pressure and reduce the likelihood of more serious medical events.

This Issue Brief provides information on the prevalence and effects of high blood pressure, results of an employer survey by the Washington State Department of Health (DOH) on current at-home blood pressure monitor insurance coverage, and recommendations for employers and health plans to help reduce the incidence of high blood pressure in the future.

UNDERSTANDING THE PROBLEM

Almost half of adults in the U.S. have hypertension or high blood pressure, that is a reading of 130/80mm Hg or higher.[1] High blood pressure is a major risk factor for heart failure and stroke, and is the most common risk factor for cardiovascular disease.[1] High blood pressure was linked to 70% of all major cardiovascular events in the U.S.[1] Deaths from high blood pressure are on the increase; between 2009 and 2019, the actual deaths attributed to high blood pressure rose 65%.[1]

High blood pressure takes a significant toll on communities of color, in particular. The rate of high blood pressure for Black and African American adults in the U.S. is among the highest in the world: 57% for males and 55% for females.[1] In 2019, high blood pressure was attributed to 57% of deaths for Black and African American males and 39% of Black and African American females compared to 26% for White males and 20% of White females.[1]

The COVID-19 pandemic has caused substantial increases in high blood pressure rates compared to those before stay-at-home orders and it is unclear how that will contribute to future cardiovascular events.[2] Those increases in blood pressure can result in a significant increase in the risk of death from stroke and heart disease among middle-aged adults in particular.[2] Explanations for the pandemic-related surge in blood pressure among adults include:

- increased emotional stress,
- reduced physical activity,
- increased alcohol consumption, and
- less ongoing medical care, that may have contributed to reduced medication adherence.[2]

Blood Pressure Category	Systolic mm Hg (upper number)		Diastolic mm Hg (lower number)
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
Hypertensive Crisis (consult your doctor immediately)	Higher than 180	and/or	Higher than 120

The economic cost of high blood pressure is significant. There was approximately $79 billion spent on costs related to high blood pressure in 2016, making it the 10th costliest, out of 154 health conditions for that year.[1]

Direct costs from cardiovascular disease have more than doubled from **1997** to **2018**, from **$103.5 billion** to **$226.2 billion**.

Between 2017 and 2018, the direct and indirect cost of heart and stroke-related diseases was an estimated $378 billion in the U.S.[1] Annual medical expenditures for people with high blood pressure are up to $2,500 higher than those without it.[3] Interventions that reinforce the need to reduce high blood pressure to better address cardiovascular disease are more crucial than ever and employers have an important role to play.

Up to 2 million major cardiovascular events could be prevented each year if adults with cardiovascular disease lowered their blood pressure.[1]

SURVEY RESULTS

DOH conducted a survey of employers, including labor and union trusts, education, government, non-profits, and philanthropies. The purpose of the survey was to evaluate awareness of the serious implications of high blood pressure and assess the current access to at-home blood pressure monitors as part of health insurance coverage offered to Washington residents. Respondents collectively cover more than 430,000 lives in Washington state for the 2022 benefit year.

The survey found that among the plans that cover home blood pressure monitors:

- several include it as a pre-deductible benefit including PPOs, PPO with HSAs, HDHPs, HMOs, and ACOs.
- 89% do not cap the cost of at-home blood pressure monitors. Those that do cover a maximum of 50% of the cost.
- 75% provide access to the device via prescription.
- 67% do not require co-payment for at-home blood pressure monitors. For those that do, co-payment is typically 20%.
- 60% of PPO & HMO insurance plans cover at-home blood pressure monitoring devices.
- 33% of policies provide the benefit to all members, the others that provide the benefit require a diagnosis of medical necessity, cardiovascular disease, hypertension or an in-office blood pressure reading of 130/80mm Hg or higher.

Of the employers that responded:

50% are unaware of the prevalence of hypertension in the population they cover;

67% do not consider hypertension a high priority that needs to be addressed in their workplace; and

75% had not provided any blood pressure-focused education to their employees within the last two years.

A SIMPLE SOLUTION

Eliminating high blood pressure could reduce cardiovascular disease-related deaths in the U.S. by more than 30%.[1] One method of diagnosing and managing high blood pressure is the provision of at-home blood pressure monitors.

When patients are empowered to know and share their blood pressure readings, it encourages active engagement in setting and managing their current and future health care goals.[4] To be effective, at-home blood pressure monitors must be paired with appropriate support from a physician or health care professional. Ideal self-measured blood pressure monitoring begins with a clinician helping a patient select an appropriate device, checking its accuracy against an office-based monitor, providing a protocol for the patient to follow, and explaining how to share readings with the clinical team.[4] After a patient sends blood pressure data to a clinician electronically, that health care professional can recommend medication changes or lifestyle advice that, in turn, creates a positive feedback loop that leads to improved patient care.[4] Studies show that at-home blood

pressure monitoring helps manage hypertension, improve medication adherence, and reduce clinical inertia.[4]

Providing at-home blood pressure monitors may result in considerable cost savings in addition to reducing the number of serious cardiovascular events, such as reducing the number of in-office visits when blood pressure is controlled and decreasing the overtreatment of patients whose at-home blood pressure reading is lower than in-office readings — including those with white-coat hypertension.[5]

Organizations around the world recommend at-home blood pressure monitoring for the diagnosis and management of high blood pressure, including the American Heart Association, the United States Preventive Services Task Force, the American Society of Hypertension, Hypertension Canada, National Institute for Health and Care Excellence UK, and Japanese Society of Hypertension.[5]

When patients with known hypertension are able to monitor their blood pressure on a regular basis, it can slow or prevent progression of more serious health issues, such as heart disease and stroke, the two leading causes of death in the U.S.

RECOMMENDATIONS

Washington state employers and insurance plans have the opportunity to dramatically reduce the prevalence and devastating effects of unmanaged high blood pressure on employees, their families, and the healthcare system through these simple steps. Reducing barriers to accessing home blood pressure monitors with clinical support can contribute to better health care for patients and reduce the potential for other serious health care issues.

Employers can:

- understand the impact of hypertension on the health of their employees and families;
- educate employees about the importance of recognizing and managing high blood pressure, so appropriate care can be provided;
- provide support for employees who may be at risk for cardiovascular-associated adverse medical events; and
- find out whether the company's insurance plan covers home blood pressure devices, both monitors (CPT and HCPCS Codes A4670) and cuffs (CPT and HCPCS Code A4663) as well as patient education (CPT and HCPCS Codes 99473) and request this coverage for their employees/members with no cost-sharing.

Insurance plans can:

- include pre-deductible at-home blood pressure monitors as a benefit to Washington-based employers;
- reduce financial hurdles for members to access this benefit, including limiting co-insurance rates to no more than 20% and eliminating co-payments;
- educate health care professionals about the payment codes used to cover at-home blood pressure monitoring devices (CPT and HCPCS Code A4670) and blood pressure cuffs (CPT and HCPCS Code A4663);
- reimburse providers who train patients on how to use at-home blood pressure monitors (CPT and HCPCS Code 99473) and offer this to a wider array of clinicians; and
- compensate providers for receiving and reviewing blood pressure data (CPT and HCPCS Code 99474), to keep them informed of the patient's progress.

Calling high blood pressure a "threat to our health," U.S. Department of Health and Human Services Secretary Alex M. Azar II said, "the time to act is now."[4]

REFERENCES

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