

Cardiovascular Disease Prevention: Interactive Digital Interventions for Blood Pressure Self-Management

Summary of Community Preventive Services Task Force Recommendation

The Community Preventive Services Task Force (CPSTF) recommends interactive digital interventions to improve blood pressure control in patients with high blood pressure.

Major Findings

The CPSTF recommendation is based on evidence from a systematic review published in 2016.¹

- Interactive digital interventions for blood pressure self-management improved patients' blood pressure measurements over intervention periods of 6 weeks to 24 months (median 6 months).
- Results showed significant decreases in both systolic and diastolic blood pressure.



What are Interactive Digital Interventions for Blood Pressure Self-Management?

Patients who have high blood pressure use digital devices such as computers, smartphones, telephones, or other mobile devices, to receive personalized, automated guidance on blood pressure self-management techniques. Patients use their devices to enter personal data or make choices and receive tailored information and interactive feedback, though it does not require direct input from a health professional.

Digital content may be provided as a program or application that can be used on- or offline. Additional activities may be included in the intervention, such as self-measured blood pressure monitoring, counseling, or follow-up from a health professional.

Facts about Cardiovascular Disease and High Blood Pressure

- About 75 million U.S. adults have high blood pressure—a risk factor for heart disease—and only about half have their condition under control.²
- High blood pressure increases risk for heart attack, stroke, chronic heart failure, and kidney disease.³

Learn More

Summary of Evidence and CPSTF Finding

 $\frac{https://www.thecommunityguide.org/findings/cardiovascular-disease-interactive-digital-interventions-blood-pressure-self-management$

CDC, High Blood Pressure Fact Sheet

https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/ fs_bloodpressure.htm

CDC, Division for Heart Disease and Stroke Prevention

https://www.cdc.gov/dhdsp/index.htm

Established in 1996 by the U.S. Department of Health and Human Services, the Community Preventive Services Task Force (CPSTF) is an independent, nonfederal panel of public health and prevention experts whose members are appointed by the director of CDC. The CPSTF provides information for a wide range of decision makers on programs, services, and other interventions aimed at improving population health. Although CDC provides administrative, scientific, and technical support for the CPSTF, the recommendations developed are those of the CPSTF and do not undergo review or approval by CDC. Find more information at www.thecommunityguide.org.



The CPSTF considers recently published systematic reviews to provide public health professionals and decision-makers with effective intervention options. A team of specialists in systematic review methods and in nutrition research, practice, and policy selected and evaluated the following published review: McLean G, Band R, Saunderson K, Hanlon P, Murray E, et al. Digital interventions to promote self-management in adults with hypertension: systematic review and meta-analysis. Journal of Hypertension 2016;34(4):600-12.

² Merai R, Siegel C, Rakotz M, Basch P, Wright J, Wong B; DHSc., Thorpe P. CDC Grand Rounds: A Public Health Approach to Detect and Control Hypertension. MMWR Morb Mortal Wkly Rep. 2016 Nov 18;65(45):1261-1264.

Amozzafarian D, Benjamin EJ, Go AS, et al. Heart Disease and Stroke Statistics-2015 Update: a report from the American Heart Association. Circulation. 2015;e29-322.