

Executive Summary

Heart disease is the leading cause of death in men and women in the United States. Together, heart disease, stroke, and other vascular diseases claim over 800,000 lives each year.^{1,2} An estimated one in every seven US dollars spent on health care goes toward cardiovascular disease (CVD), totaling over \$300 billion in annual health care costs and lost productivity from premature death each year.^{3,4} Several modifiable risk factors for CVD are well known, including hypertension, hyperlipidemia, smoking, being overweight, being inactive, and eating an unhealthy diet. Although treatments for hypertension and hyperlipidemia are very effective and relatively inexpensive, most people with these conditions do not have them under control.

Although individuals can take steps to reduce their own risks of CVD, public health approaches have the potential to reduce risks among entire populations. Changes to policies, practices, and health systems that are designed to lower uncontrolled high blood pressure and cholesterol levels among populations can significantly improve access to health care, quality of care, and patient adherence to treatments.

The Centers for Disease Control and Prevention's Division for Heart Disease and Stroke Prevention (DHDSP) is guided by its mission to provide public health leadership to improve cardiovascular health for all, reduce the burden of CVD, and eliminate disparities associated with heart disease and stroke. DHDSP supports all 50 states and the District of Columbia to work toward achieving this mission, which aligns with the National Center for Chronic Disease Prevention and Health Promotion's (NCCDPHP's) approach to preventing chronic disease through four key domains^{5,6}:

- **Domain 1:** Epidemiology and Surveillance.
- **Domain 2:** Environmental Approaches.
- **Domain 3:** Health Care System Interventions.
- **Domain 4:** Community Programs Linked to Clinical Services.

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Because resources are limited and the need to prevent CVD is widespread, decision makers and public health professionals must choose strategies that are effective and sustainable. The four domains provide a framework for these efforts, and scientific evidence can help guide decisions about which strategies to adopt. In this publication, *Best Practices for Cardiovascular Disease Prevention Programs: A Guide to Effective Health Care System Interventions and Community Programs Linked to Clinical Services* (hereafter called the *Best Practices Guide for CVD Prevention*), we describe and summarize scientific evidence behind effective strategies for lowering high blood pressure and cholesterol levels that can be implemented in health care systems (Domain 3) and that involve community programs linked to clinical services (Domain 4). Following the best practices framework put forth by a CDC work group⁷ and using a translation tool called the Continuum of Evidence of Effectiveness,^{8,9} we have reviewed, identified, and summarized the evidence behind strategies that can be considered best practices for controlling hypertension and hyperlipidemia.

The target audience for this publication includes state and local health departments, decision makers, public health professionals, and other stakeholders interested in using proven strategies to improve cardiovascular health. This publication is not intended as comprehensive guidance, but rather a high-level, supportive resource. Our intention is to present brief, easy-to-follow evidence summaries for effective blood pressure and cholesterol control strategies and to highlight available resources and tools useful for implementing these strategies.

Highlighted strategies include the following:

- Using a team-based care model.
- Elevating pharmacy involvement in patient care.
- Including community health workers on clinical care teams.
- Activating patient involvement through self-management.
- Using clinical decision support systems.
- Reducing out-of-pocket costs for medications.

These strategies were identified through the recommendations of end users, grantees, evaluators, content subject matter experts, and program specialists, and they are based on the priorities of DHDS. Each of the selected strategies was vetted by a DHDS work group, and evidence was reviewed by people with expertise in research methods, program delivery, and the proposed strategies. To be included in the *Best Practices Guide for CVD Prevention*, strategies had to be supported by multiple high-quality research studies that demonstrated evidence of effectiveness in controlling blood pressure or cholesterol levels. In this publication, we describe the strength of evidence behind each strategy and the reported outcomes related to CVD prevention. We also highlight the public health and economic impacts of each strategy, including whether it improves health or reduces health disparities.

In addition, we highlight important issues related to the implementation of each strategy, including settings in which the strategies have been implemented, resources available to support implementation, and policy and law-related considerations. Brief synopses, called Stories from the Field, highlight specific locations where the strategies have been successfully implemented.

This publication also provides several appendices with additional information. [Appendix A](#) provides a summary of the evidence of effectiveness for each strategy. [Appendix B](#) explains the Rapid Synthesis and Translation Process, which was one of the methods used to develop this publication. [Appendix C](#) provides details about the Continuum of Evidence of Effectiveness, which is an interactive, online tool that was used to assess and rate the strength of evidence for each strategy. [Appendix D](#) is a glossary of important terms used in this publication.

References

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