



High Blood Pressure



Team-Based Care to Improve Blood Pressure Control

AT A GLANCE

Team-based care is a strategy implemented at the health system level. Team-based care aims to enhance patient care by having health professionals from different disciplines work collaboratively with the patient and the patient's primary care provider.

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Introduction

The [Community Preventive Services Task Force \(CPSTF\)](#) [recommends team-based care](#) as an effective way to improve blood pressure control, including among patients who are African American, Black, Hispanic, or Latino. [\[1\]](#)

[The Surgeon General's Call to Action to Control Hypertension](#) showed that certain racial and ethnic groups have disproportionately high rates of hypertension, due to inequalities in the distribution of social, economic, and environmental conditions needed for health. Reducing these disparities requires improved access to quality care, as well as addressing a breadth of contributing social factors.

When implemented by health care professionals who serve patients from racial and ethnic minority groups, team-based care interventions are likely to improve health equity by providing patients greater agency in their own care and improving medication adherence. The CPSTF found team-based care interventions to be cost-effective.*

[The Surgeon General's Call to Action to Control Hypertension](#) and the CDC's Best Practices for Cardiovascular Disease Prevention Programs promote team-based care as a part of a comprehensive treatment protocol for hypertension management. [\[2\]](#) [\[3\]](#)

Public health practitioners and state and local health departments can support use of this CPSTF recommendation by highlighting the benefits of team-based care and supporting health systems and organizations with implementation.

*Public health interventions that cost less than \$50,000 per quality-adjusted life year (QALY) are widely considered cost-effective.

Key findings

Strategies that support implementing team-based care to improve blood pressure control

When implementing team-based care, team members can strategically distribute and share responsibilities to support the care plan developed by the patient and the patient's primary care provider.

Strategies that team members can use to implement team-based care to improve blood pressure control include the following:

Patient follow-up. [\[4\]](#) Team members can support patients after their visits with their primary care provider. This could include the following:

- Designing or facilitating the use of a patient self-management plan.
- Using technology to regularly communicate with patients and improve adherence to their self-management plans.

- Regularly confirming appointments and treatment plans.

Medication management. [\[5\]](#) Achieving blood pressure control often requires adjusting the doses of medications to find the right fit for the patient. Qualified team members may support this process by making recommendations to the primary care provider or independently managing medications. Pharmacists may engage in medication management using the Pharmacists' Patient Care Process and Collaborative Practice Agreements to implement collaborative drug therapy management.

Medication adherence support. [\[6\]](#) Patients may face barriers to taking their medications as prescribed. Team members can help patients improve adherence by identifying and working to address these barriers with education and coaching. CPSTF recommends tailored pharmacy-based interventions [\[7\]](#) to improve medication adherence.

Self-management support. [\[8\]](#) Lifestyle changes, including adopting a healthy diet, getting more physical exercise, maintaining a healthy weight, reducing stress, and not smoking, can be difficult to achieve and maintain. Team members can support and empower patients to take an active role in controlling their high blood pressure. Strategies include health behavior counseling, coaching, and education.

Self-measured blood pressure (SMBP). [\[9\]](#) [\[10\]](#) Patients may benefit from regular use of personal blood pressure monitoring devices to assess and record blood pressure, typically at home. CPSTF recommends [SMBP interventions](#) [\[11\]](#) either alone or [in combination with additional support](#) [\[12\]](#) to improve blood pressure control outcomes. Team members can collaborate to educate, train, and support patients' regular use of SMBP devices.

The foundation of team-based care is the intentional and strategic organization of care to create a collaborative multidisciplinary team to meet the needs of the patients.

Four interventions, outlined in the table below, have been shown to facilitate incorporating the strategies listed above into the successful implementation of team-based care. [\[1\]](#)

The Community Guide in Action (CGiA)

Read this CGiA story about the [BuchananCares Program](#) [\[13\]](#), a team-based care pilot in Virginia. Using CPSTF recommendations and CDC resources, the pilot leveraged pharmacists and other clinical health professionals to successfully reduce hospital readmissions and improve patients' medication adherence.

Table 1. The benefits and considerations of four key interventions

Intervention	Benefits	Considerations
Facilitate communication and coordination of care support among team members.	<ul style="list-style-type: none"> • Patients engaged in team-based care receive clear and unified messaging from their primary care providers and other team members.¹ • This supports better patient care and a more balanced team member workload. It may also help reduce clinician burnout.^{1,3,5} 	<ul style="list-style-type: none"> • Clearly defining and agreeing on the roles of each team member and preferred communication methods is important.¹ • Communication may be in person if team members are co-located or conducted through electronic medical records, email, telephone, or other digital formats. • Use of digital technology and telehealth can improve patient access and may allow co-visits with primary care providers and other team members.
Enhance the use of evidence-based guidelines by team members.	<ul style="list-style-type: none"> • Guideline-directed treatment can improve management of high blood pressure.^{3,4,5} 	<ul style="list-style-type: none"> • Treatment guidelines summarize where the evidence base is clear and can

- Applying standardized, evidence-based treatment protocols has been shown to support consistency in care across diverse patient groups.^{3,4,5}
- Teams can use evidence-based guidelines to inform treatment protocols that incorporate a team-based care model with complementary roles to improve patient access and enhance the efficiency of care.³

Establish regular, structured follow-up mechanisms to monitor patients' progress and schedule additional visits as needed.

- Structured and timely follow-up leads to improved adherence to blood pressure self-management plans for patients and increased frequency of patient contact.^{6,7}
- Follow-up can be tailored to the needs of the patient. It can include designing a patient self-management plan and using technology to regularly communicate with patients.⁷
- More frequent follow-ups may help overcome clinical inertia (i.e., resistance to treatment).^{6,8}
- Team-based care providers can use follow-up to assess health status and need for treatment modification, which helps to overcome clinical inertia.⁶
- Applications of team-based care may incorporate health technologies such as registry systems for tracking patient progress and advancing care to reach goals.¹

Actively engage patients in their own care.

- Individuals who are empowered and equipped to engage in their own blood pressure care are more likely to know their blood pressure numbers, take medications as prescribed, and make healthy lifestyle changes.^{8,9}
- Patients actively engaged in [SMBP](#) that includes direct clinician support and management are more successful in achieving BP control. Complementary services, including counseling, telephone support, and telemonitoring, enhance SMBP benefits.¹⁰
- Team members may also provide health behavior counseling, coaching, or education to empower patients and support blood pressure management.¹⁰
- Expanding use of digital health devices and technology could increase patient access to components such as counseling or coaching and may improve communication between patients and their teams.¹⁰

Considering the costs and benefits of implementing team-based care

The CPSTF found that team-based care is a cost-effective intervention to improve blood pressure control.^[1] Uncontrolled high blood pressure is a preventable risk factor for cardiovascular disease and a major driver of health care costs. Health problems caused by uncontrolled blood pressure, such as heart failure, heart attack, kidney disease, and vision loss, can be chronic and affect multiple body systems.

According to *The Surgeon General's Call to Action to Control Hypertension*, total medical costs associated with uncontrolled blood pressure in the United States are estimated to be \$131 billion to \$198 billion each year. For individuals, health care services cost about \$2,500 more per year for people with uncontrolled blood pressure than for people who do not have uncontrolled high blood pressure.

The cost of blood pressure management is lower than the long-term costs associated with hypertension's many complications. The major costs of implementing team-based care were team member labor and communication tools.

Cost savings noted by the CPSTF were due to averted costs of health care through inpatient stays, emergency department visits, outpatient visits, labs, and medications, and improved productivity of patients due to their improved health status.

As state and local health departments consider introducing or expanding these interventions in their communities, an important first step is convening partners involved in implementing the interventions—so that the interventions can be tailored to the communities' needs. Key considerations include the partner organizations' capacity, the health care professionals involved and their roles in patient care, and the mechanisms for reimbursement for team-based care services. [2]

Resources

State and local health departments and public health practitioners play an important role in promoting and supporting evidence-based strategies. The "Identify-Assess-Act" framework can help inform local communities' use of the following tools and resources to improve team-based care. (Note that many of the resources are cross-sectional and can support a range of steps in various interventions.)

Identify

Identify patient populations or communities that face a disproportionate rate of high blood pressure.

Practitioners and health departments can take a number of different steps:

- Map populations with high rates of uncontrolled blood pressure that may benefit from team-based care.
- Map the prevalence of heart disease with social and economic data.
- Identify specific needs in the community, as well as team member roles that may have the greatest impact and accessible locations or settings.

The following resources may assist in identification:

- [Interactive Atlas of Heart Disease and Stroke](#). This online mapping tool allows users to create and customize county-level maps of heart disease and stroke by race and ethnicity, gender, age group, and more.
- [GIS Map Index](#). This is an online forum for sharing maps and resources for chronic disease prevention.

Assess

Assessments often consider the facilitators and the barriers to implementing team-based care interventions, as well as the setting, policies, and regulations. For example, local health departments can take one or more of the following steps to facilitate the assessments:

- Describe existing programs that use innovative or unique team-based care approaches that may be replicated.
- Identify recurring challenges or barriers to implementing team-based care.
- Investigate how to fill the roles needed for the team-based care team (for example, encouraging the fulfillment of those roles through training or incentive programs).
- Assess resources and team member staffing and how they line up with costs and the population's needs.
- Determine which policies exist to support team-based care
- Consider funding opportunities.

The following resources may assist in assessing the facilitators and the barriers to implementing team-based care interventions:

- [The CDC Health Systems Score Card](#) ^{PDF}. This tool can be used regularly to identify areas of primary care practice that might need to be refreshed or enhanced.
- [Community-Clinical Linkages for the Prevention and Control of Chronic Diseases: A Practitioner's Guide](#) ^{PDF}. This document offers guidance to public health practitioners on key strategies to implement community-clinical linkages that focus on adults 18 years old or more.

Act

Implement team-based care interventions with strategies that complement the CPSTF recommendations. For example, local health departments can act by doing the following:

- Sharing information and resources with community and clinical partners and supporting implementation.
- Supporting information sharing, education initiatives, and expansion of effective models.
- Supporting evaluation activities where team-based care has been implemented.

The following resources may assist in acting to implement team-based care interventions:

- [Hypertension Management Program \(HMP\) Toolkit](#). This is an online interactive training for a team-based, patient-centered, integrated care model.
- [Pharmacists' Patient Care Process Approach Guide](#) ^{PDF}. The goal of this implementation guide is to support public health practitioners' engagement of pharmacists in blood pressure management through the Pharmacists' Patient Care Process (PPCP).
- [Creating Patient-Centered Team-Based Primary Care](#) ^{PDF} [↗]. This paper proposes a conceptual framework for the integration of team-based care and patient-centered care in primary care settings and offers practical strategies to support the implementation of patient-centered team-based care.

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REFERENCES

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