

The Hypertension Team

The following is a synopsis of “The Hypertension Team: The Role of the Pharmacist, Nurse, and Teamwork in Hypertension Therapy,” published in the January 2012 issue of the *Journal of Clinical Hypertension*.



What is already known on this topic?

Current data trends indicate that by 2025, more than 1.5 billion individuals worldwide will have high blood pressure, also known as hypertension, which will account for up to 50% of heart disease risk and 75% of stroke risk. Decades of documentation show that individuals can substantially reduce their risk for cardiovascular disease by lowering their blood pressure through lifestyle modifications, medications, or both.

Despite the clear benefits of treatment for hypertension, only half of individuals with hypertension currently have adequate control of their blood pressure. In addition to lifestyle choices, many contributing factors lead to poor blood pressure management, including clinicians' failure to intensify therapy (clinical inertia) and poor patient adherence to medication. Team-based care models, such as patient-centered medical homes or the chronic care model, are proven ways to reduce clinical inertia and improve patient medication adherence.

Previous studies have demonstrated that team-based care models that employ pharmacists or nurses for patient management can significantly improve blood pressure control and reduce systolic blood pressure by an average

of 4–10 mmHg compared to usual care. However, the limitations in the design of many of these studies prompted the need for additional research.

What is added by this document?

This article reviews results from controlled clinical trials, studies involving contemporary technology, and cost-effectiveness analyses to propose a new model focused on improving blood pressure control through team-based care.

Several studies have demonstrated the effectiveness of various team-based care models that employ different methods of patient engagement. The reviewed studies add to the increasing evidence that nurses and pharmacists can significantly improve patient outcomes related to hypertension management. Additionally, recent studies have shown the effectiveness of technology—including interventions using the telephone, social media, patient web portals, and smartphones—to help health care professionals communicate with patients and improve blood pressure control. Furthermore, cost-effectiveness analyses have found that team-based care is an effective and efficient method of care delivery for hypertension management.

What are the applications for these findings?

After analyzing the findings of historical, recent, and ongoing studies of team-based care in hypertension management, the authors proposed a model for a hypertension team that includes:

- ▶ A *primary care physician* to conduct physical diagnostic examinations, assess risk factors, and reevaluate hypertension status throughout treatment.
- ▶ A *nurse* with hypertension expertise to provide education, counsel patients, perform case management, and modify medications and dosages.
- ▶ A *hypertension specialist* to evaluate patients whose high blood pressure levels may not respond to traditional therapies.
- ▶ A *pharmacist* to counsel patients about proper medication use, administration, storage, and adverse reactions that might occur as well as assist with medication management and adjustments in medication for patients not at goal.
- ▶ A *nutritionist* to provide counseling about lifestyle management and diet.
- ▶ *Community health workers* to assist with self-monitoring and electronic communications.
- ▶ An *electronic health record system* to keep accurate and complete medical records to support team communication.

This proposed care model would require extensive communication and collaboration between team members. Protocols, policies, and procedures for communication, triage, and referral back to the physician would be required to ensure information transfers were properly coordinated and completed.

What are the implications for public health practice?

The adoption of team-based care will provide new opportunities for hypertension management to become more patient-centered by providing care that is personalized, timely, and collaborative. Additionally, the increased use of technology—such as smartphones, texting, personal health records, patient portals, and computer games—has the potential to improve self-monitoring and communications between patients and health care teams.

Challenges moving forward include improving access to quality care, rigorously evaluating and updating technology, and developing an effective method for reimbursement for team-based care models.

Resources

Agency for Healthcare Research and Quality
Patient-Centered Medical Home Resource Center
www.pcmh.ahrq.gov/portal/server.pt/community/pcmh__home/1483

American College of Physicians
Patient-Centered Medical Home
www.acponline.org/running_practice/pcmh

American Pharmacists Association
Medication Therapy Management
www.pharmacist.com/AM/Template.cfm?Section=MTM#nogo

Citation

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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