

# Team-based care involving a pharmacist improves blood pressure control

November 23 2009

---

Patients whose hypertension is managed by a physician-pharmacist team have lower blood pressure levels and are more likely to reach goals for blood pressure control than those treated without this collaborative approach, according to a report in the November 23 issue of *Archives of Internal Medicine*.

Previous studies suggest that patients with [hypertension](#) (high blood pressure) that remains uncontrolled often do not receive additional blood pressure medications, according to background information in the article. One strategy to improve [blood pressure control](#) is team-based care, involving the assistance of a clinical pharmacist in patient management.

Barry L. Carter, Pharm.D., of the University of Iowa and Iowa City Veterans Administration, Iowa City, and colleagues conducted a randomized, controlled clinical trial of a team-based approach in 402 patients (average age 58.3) with uncontrolled hypertension receiving care at one of six clinics. All of the clinics already employed pharmacists, but before the study the pharmacists spent more time educating pharmacy students, medical residents and staff physicians about drug therapy than they did in direct patient management.

In three clinics treating 192 patients, physicians and pharmacists underwent team-building exercises. Pharmacists also completed additional training sessions, assessed patients' blood pressure and medications at the beginning of and throughout the study, and made face-

to-face treatment recommendations to physicians that were consistent with national guidelines. In the other three clinics, 210 patients were informed of their blood pressure and the blood pressure goal they should achieve, were given written information about managing blood pressure and were treated by physicians who received educational sessions on strategies to improve blood pressure control.

After six months, 29.9 percent of patients in the control group and 63.9 percent of patients in the intervention group achieved blood pressure control, defined as a blood pressure of less than 130/80 millimeters of mercury for patients with diabetes or kidney disease and 140/90 millimeters of mercury for the other patients. Average blood pressure decreased 6.8/4.5 millimeters of mercury in the control group and 20.7/9.7 millimeters of mercury in the intervention group.

The pharmacists in the intervention group made 771 recommendations; 742 (96.2 percent) were implemented by physicians. Patients in the intervention group had a greater average increase in the number of antihypertensive medications taken and more changes in their medications (including starting new medications, discontinuing current medications or increasing or decreasing dosage).

"A physician and pharmacist collaborative intervention achieved significantly better mean [average] blood pressure and overall blood pressure control rates compared with a control group," the authors conclude. "The results of this study suggest that clinics or health systems with clinical pharmacists should consider reallocation of duties to provide more direct patient management to significantly improve [blood pressure](#) control. Future studies of this model should include more clinics with greater geographic, racial/ethnic and socioeconomic diversity because these populations are likely to respond differently to the intervention."

More information: *Arch Intern Med.* 2009;169[21]:1996-2002.

Source: JAMA and Archives Journals ([news](#) : [web](#))

Citation: Team-based care involving a pharmacist improves blood pressure control (2009, November 23) retrieved 7 May 2024 from <https://medicalxpress.com/news/2009-11-team-based-involving-pharmacist-blood-pressure.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.