

Studies Recommend Multiple Approaches for Hypertension Control

More than 65 million Americans have hypertension. The seventh report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC 7) promotes blood pressure (BP) goals of less than 140/90 mm Hg. However, despite widespread guideline distribution only 31% of those with hypertension have achieved guideline-recommended BP goals. Several factors contribute to poor blood pressure control, including sub-optimal treatment regimens that may be affected by provider and patient education.

Two recent studies on blood pressure control by HSR&D investigators highlight both patient and provider education issues that influence treatment regimens. Dr. Roumie and colleagues conducted a randomized, controlled trial that assessed three interventions: provider education (including a web-based link to the JNC 7 guidelines), provider education and alert (one-time computerized hypertension alert), and patient education. Findings showed that interventions to control blood pressure were more effective if they included both patient and provider education.¹

In another study, Dr. Carter and colleagues used a knowledge survey to assess participating physicians' knowledge of the JNC 7 guidelines and then compared their knowledge of the guidelines to BP control in their patients who had diabetes or chronic kidney disease. Results of the study showed that better knowledge of the JNC 7 guidelines was associated with *poorer* BP control. There was a strong correlation between correct responses to the knowledge survey and a *higher* mean systolic BP for patients, suggesting that provider educational strategies alone are not enough to ensure good blood pressure control.²

Implications

Reducing blood pressure has the potential to significantly reduce heart failure, cerebrovascular morbidity and mortality, and coronary heart disease. Roumie and colleagues concluded that interventions to improve BP control that target both patients and providers achieve optimal results. Both studies suggest that multidisciplinary care models might be more effective than educational strategies alone to achieve blood pressure treatment goals.

1. Roumie C, Elasy T, Greevy R., et al. Improving blood pressure control through provider education, provider alerts, and patient education. *Annals of Internal Medicine* August 2006 145:165-175.
2. Carter B, Hartz A, Bergus G, et al. Relationship between physician knowledge of hypertension and blood pressure control. *The Journal of Clinical Hypertension* July 2006 8(7):481-486.

This Management E-Brief is provided to inform you about recent HSR&D findings that may be of interest. ***The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs.*** If you have any questions or comments about this Brief, please email CIDER at Cider.Boston@med.va.gov.

The Center for Information Dissemination and Education Resources (CIDER) is a VA HSR&D Resource Center charged with disseminating important HSR&D findings and information to policy makers, managers, clinicians, and researchers working to improve the health and care of veterans.