

Improved Blood Pressure Control through a Large-Scale Hypertension Program

The following is a synopsis of “Improved Blood Pressure Control Associated with a Large-Scale Hypertension Program,” published in the August 21, 2013, issue of *JAMA*.



What is already known on this topic?

High blood pressure, also known as hypertension, affects 67 million U.S. adults and is a major risk factor for cardiovascular disease, the leading cause of death in the United States. One in three American adults has high blood pressure. Only about half of these individuals have their blood pressure under control even though effective treatments have been available for more than 50 years.

Although many strategies exist to improve the quality of interventions to increase blood pressure control, researchers have yet to describe any successful, large-scale programs that achieve this objective over an extended period of time.

What is added by this document?

The study describes a large-scale hypertension program implemented by Kaiser Permanente Northern California (KPNC). The authors compared rates of hypertension control in that program with statewide and national estimates. KPNC developed its quality improvement program for control of high blood pressure in 2001 using a multifaceted approach, including:

- ▶ A comprehensive high blood pressure registry that allows providers to prioritize patients with poorly controlled hypertension.
- ▶ Development and sharing of performance feedback to identify successful practices from high-performing medical centers.
- ▶ KPNC-wide adoption, evaluation, and distribution of evidence-based guidelines (e.g., a four-step high blood pressure control algorithm to direct treatment decisions).
- ▶ Medical assistant visits for follow-up blood pressure measurement after medication is adjusted.
- ▶ Single-pill combination therapy to improve adherence to medication and lower patient costs.

High blood pressure control rates within KPNC nearly doubled after program implementation, from 43.6% in 2001 to 80.4% in 2009. In contrast, only modest improvements in blood pressure control were observed statewide (63.4% in 2006 vs. 69.4% in 2009) and nationally (55.4% in 2001 vs. 64.1% in 2009). The control rate among KPNC patients continued to improve even after the study period ended in 2009, from 83.7% in 2010 to 87.1% in 2011.

What are the applications for these findings?

Implementation of a large-scale hypertension program that includes elements such as those described above can improve high blood pressure control rates in a large health care delivery population.

Resources

Centers for Disease Control and Prevention
High Blood Pressure
www.cdc.gov/bloodpressure

National Heart, Lung, and Blood Institute
The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7)
www.nhlbi.nih.gov/guidelines/hypertension

American Heart Association
High Blood Pressure
www.heart.org/HEARTORG/Conditions/HighBloodPressure/High-Blood-Pressure_UCM_002020_SubHomePage.jsp

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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