SCIENCE- IN-BRIEF

TURNING SCIENCE INTO ACTION

Implementation of Strategies to Recognize and Control Hypertension in a Multispecialty Clinic, Montana, 2012-2013

The following is a synopsis of "Implementation of Strategies to Recognize and Control Hypertension in a Multispecialty Clinic, Montana, 2012- 2013," published in July 2015 in the journal *Preventing Chronic Disease*.

What is already known on this topic?

High blood pressure, also known as hypertension (HTN), is a modifiable risk factor for cardiovascular disease, stroke, and kidney disease. One in three American adults has high blood pressure. Despite the availability of medication and lifestyle treatment, only about half of individuals with known high blood pressure have their blood pressure under control. While current treatment methods focus on medication and lifestyle modifications, other effective care options have been shown to improve HTN control. These options include patient registries, decision support systems, health education, and team-based care in combination with protocol-based treatment.

What is added by this article?

The article describes the evidence-based strategies introduced during a 10-month period at Benefis Medical Group (BMG), and the effect they had on improving identification and treatment of HTN. BMG is a nonprofit independent healthcare system based in Great Falls, Montana. Benefis Healthcare System, which uses Next Gen electronic health records (EHR), includes a 516-bed hospital and an extended care and rehabilitation facility in addition to the medical practice known as BMG. The authors note that during the study period (December 2012-September 2013), BMG's providers had an adult patient population of more than 13,000.

BMG introduced evidence-based strategies after receiving funding from Montana's Community Transformation Grant for an HTN quality improvement project. A multidisciplinary team including physicians, administrative staff, information technologists, and a quality improvement team implemented the strategies. The team used the American Medical Group Foundation's Measure Up/Pressure Down blood pressure campaign materials and participated in its online conferences. Providers used the campaign's best practices information to guide their HTN monitoring and management activities.

The authors report that during this project, the BMG providers addressed blood pressure control at each visit and that important improvements were made to information technology (IT) infrastructure to aid in the diagnosis and

tracking of blood pressure. Blood pressure measures and the other vital signs were collected at each visit, and the data entry fields for the blood pressure measure could not be left blank. Later in the project, BMG used automated vital sign monitors which download the blood pressure measures directly into the EHR. BMG developed a HTN registry and used it to track missed follow-up appointments and outreach to patients. BMG also initiated plans for a patient portal.

The authors found that the percentage of BMG patients with a documented blood pressure increased from 67% at baseline to 80% after the 10-month project. Additionally, the percentage of adult patients diagnosed with HTN increased from 16% to 36%, resulting in more than 4,000 adult patients with a diagnosis of HTN. Blood pressure control improved by 23 percentage points, from 41% at baseline to 64% at the end of the project.

What are the implications of these finding?

The authors found that the adoption of evidence-based strategies, supported by IT, allowed the BMG team to effectively identify and control HTN for their patients. Additionally, the authors found that the intervention increased providers' focus on blood pressure control as an issue to be addressed during each visit. The authors attribute the effectiveness of the project to the tools made available to providers. BMG providers obtained the tools to formally diagnose and track patients with elevated blood pressure. The interventions were subsequently expanded to BMG's larger patient population because of their effectiveness. The authors concluded that the seed grant allowed BMG to review, adapt, and adopt the best known practices/evidence-based practices to improve the diagnosis and control of HTN among their patient population. The authors note an important limitation to the study. When patient charts did not show blood pressure readings during the period of measurement, staff may have classified those patients as having uncontrolled HTN. This limitation may have caused the report of overall improvement noted during the study period to be inflated.

Resources

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

Million Hearts®

Hypertension Control: Change Package for Clinicians
http://millionhearts.hhs.gov/Docs/HTN_Change_Package.pdf

The Community Guide

Cardiovascular Disease Prevention and Control: Team-Based Care to Improve Blood Pressure Control
http://www.thecommunityguide.org/cvd/teambasedcare.html

Citation

Wall J, McLaury MM, Gohdes D, Oser CS, Fogle CC, Helgerson SD, et al. Implementation of Strategies to Recognize and Control Hypertension in a Multispecialty Clinic, Montana, 2012–2013. Prev Chronic Dis 2015;12:150116. DOI: http://dx.doi.org/10.5888/pcd12.150116

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.