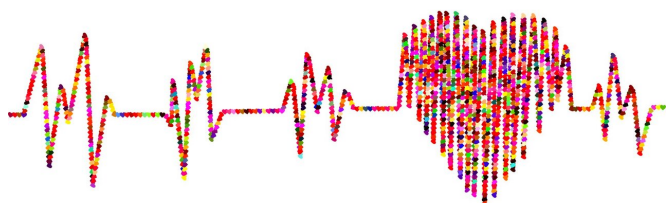


# New 'real world' data reveal potential opportunities for blood pressure improvement

6 March 2020



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Large-scale analysis of electronic health record data from across the country reveals potential opportunities for improvement in how high blood pressure is managed, according to research presented today at the American Heart Association's Epidemiology and Prevention | Lifestyle and Cardiometabolic Health Scientific Sessions 2020. The EPI Scientific Sessions, March 3-6 in Phoenix, is a premier global exchange of the latest advances in population-based cardiovascular science for researchers and clinicians.

The study, along with a description of the Blood Pressure Control Laboratory (BP Control Lab) platform, is publishing simultaneously in the American Heart Association journal *Circulation: Cardiovascular Quality and Outcomes*.

Data from nearly 1.5 million eligible patients who completed 5.8 million clinic visits over one year, from 23 electronic health record datasets, found that 60% of patients had [blood pressure](#) controlled to below 140/90 mmHg. Readings above that level are considered too high and increase risk for [heart attack](#) and stroke.

In addition, only 12% of patients who had a high reading during a clinic visit received an order for a new class of [blood](#) pressure-lowering medication. The 2017 American College of Cardiology/American Heart Association Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults recommended adjusting blood pressure medications and/or doses when readings are high. When the best practice was followed, the average reduction in blood pressure was relatively large at 15 mmHg.

The researchers' analysis also found that only 22% of visits that had a high reading included a second reading to confirm the elevated blood pressure, as recommended by the guidelines.

"Our analysis of real world data from PCORnet indicates marked room for improving blood pressure control and blood pressure medication management for many patients," said Mark J. Pletcher, M.D., M.P.H., BP Control Lab principal investigator and professor of epidemiology and biostatistics at the University of California, San Francisco.

"We were particularly struck by the low rates of medication intensification when blood pressure is found to be high during a clinic visit—if we can improve medication prescribing rates, our data suggest we could make a big difference in blood pressure control," said Rhonda M. Cooper-DeHoff, Pharm.D., M.S., lead author of the abstract and associate professor in the College of Pharmacy at the University of Florida in Gainesville, Florida.

The BP Control Lab includes data from 23 health care organizations. The average age of patients in the system was 62 years; 10% were young adults (less than 45 years old); 18% were African

American; 52% were female; 28% had diabetes;  
15% had heart disease; and 14% had depression.

Provided by American Heart Association

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