

**Community Pharmacist-Initiated
Home Blood Pressure Monitoring.
Barry Carter, PharmD
VA Medical Center, Iowa City; Iowa City, IA**

OBJECTIVE (S):

To evaluate the effectiveness of a community pharmacist-based home blood pressure monitoring program.

METHODS:

This was a randomized, controlled trial conducted in 12 community pharmacies. Six intervention pharmacies provided a pharmacist-based home blood pressure (BP) monitoring program. Six additional pharmacies served as control sites. Patients with uncontrolled BP were eligible to participate. The program comprised 4 face-to-face visits with a trained pharmacist. Pharmacists provided patient specific education about hypertension including: 1) disease process and complications, 2) medication use and adherence, 3) lifestyle modification, and 4) proper home BP monitoring. Following the first and third visits, patients were provided with a home BP monitoring device and instructed to measure their BP at least once daily for the next month. Home BP readings were used by the pharmacists to develop treatment recommendations for the patient's physician. Recommendations were discussed with the physician and, if approved, implemented by the pharmacist. Control pharmacies did not provide patient education, home BP monitoring, or physician recommendations. These patients were referred to their physician for evaluation. The primary outcome measure was the difference in systolic BP (SBP) between the intervention and control patients at program conclusion. BP measurements were performed in the pharmacies using a uniformly dedicated, automatic electronic device. A trained pharmacist recorded the average of two BP readings separated by 5 minutes of rest. Secondary study endpoints include hospitalizations, ER visits, physician office visits, medication adherence and quality of life. Data was submitted via a secured web-based claims processing system, the Outcomes Case Management Program. Analyses of differences in SBP will be performed using t-tests. Chi-squared will be used for analyses of secondary endpoints.

FINDINGS / RESULTS:

120 patients have been enrolled with 64 completing the study. The study population is 64.1 (SD=12.2) years old and 59% female. For patients completing the study, baseline SBP was not significant between the control group (n=37) and the intervention group (n=27) (154 vs. 153.6 mmHg, respectively; $p=0.892$). At study completion, SBP was significantly reduced in the intervention group compared to the control group (133.9 vs. 141.6 mm Hg, $p=0.05$).

STATUS:

This project is completed.

IMPACT:

Preliminary results suggest this model can improve BP control. Final results will be presented.

PUBLICATIONS: None at this time.