Abstract
Utilizing a multidisciplinary approach to management of patients with certain chronic cardiovascular diseases (CVD) has been shown to improve treatment outcomes. The role of clinical pharmacists in comprehensive outpatient CVD management has not been evaluated. Objective: The objective of this pilot study was to evaluate the impact of a clinical pharmacist added to cardiologist care on blood pressure (BP), a key surrogate marker of CVD, in outpatients with CVD compared to cardiologist care alone. Methods: A retrospective, matched-control study was conducted in patients established in a cardiovascular clinic. The intervention was referral to a pharmacist clinic; control was usual care from the cardiologist. The surrogate marker evaluated was the change in BP. Results: Patients in the pharmacist-intervention (n=57) experienced significant reductions in diastolic BP (-2.6 mmHg, p=0.05) and nonsignificant reductions in systolic BP (-4.3 mmHg, p=0.16) compared to baseline, whereas patients in the control group experienced non-significant increases in both systolic and diastolic BP (+1.6/+0.7 mmHg, p=NS). Similarly, there were significant reductions in diastolic BP and nonsignificant reductions in systolic BP for the intervention group when compared to controls (difference 3.3 mmHg, p=0.04 and 5.9 mmHg, p=0.1, respectively). Lastly, the proportion of patients categorized as having Stage 2 BP was significantly reduced in the intervention group (p=0.02), but not in the controls (p=0.5). Conclusions: The multidisciplinary model of care that included a clinical pharmacist reduced BP more than usual care by a cardiologist alone. This benefit was demonstrated in complex patients with CVD who were already receiving specialized care. The impact of this model on clinical outcomes requires further evaluation and should be a high priority given the burden of CVD in the population.

Keywords
Hypertension, Blood Pressure, Pharmacists, Patient Care Team, Cooperative Behavior, United States.