Improving refill adherence and hypertension control in black patients: Wisconsin TEAM trial


Abstract

Objective: To assess the effectiveness and sustainability of a 6-month Team Education and Adherence Monitoring (TEAM) intervention for black patients with hypertension in community chain pharmacies.

Design: Cluster randomized trial.

Setting: 28 chain pharmacies (14 TEAM and 14 control) in five Wisconsin cities from December 2006 to February 2009.

Participants: 576 black patients with hypertension.

Intervention: Trained pharmacist–technician teams implemented a 6-month intervention using scheduled visits, Brief Medication Questionnaires (BMQs), and novel toolkits for facilitating medication adherence and pharmacist feedback to patients and physicians. Control participants received patient information only.

Main outcome measures: Refill adherence (≥80% days covered) and changes in systolic blood pressure (SBP), diastolic blood pressure, and blood pressure control using blinded assessments at 6 and 12 months.

Results: At baseline, all patients had blood pressure of 140/90 mm Hg or more. Of those eligible, 79% activated the intervention (mean 4.25 visits). Compared with control participants at 6 months, TEAM participants achieved greater improvements in refill adherence (60% vs. 34%, P < 0.001), SBP (–12.62 vs. –5.31 mm Hg, P < 0.001), and blood pressure control (50% vs. 36%, P = 0.01). Six months after intervention discontinuation, TEAM participants showed sustained improvements in refill adherence (P < 0.001) and SBP (P = 0.004), though the difference in blood pressure control was not significant (P < 0.05) compared with control participants. Analysis of intervention fidelity showed that patients who received the full intervention during months 1 through 6 achieved significantly greater 6- and 12-month improvements in refill adherence and blood pressure control compared with control participants.

Conclusion: A team-based intervention involving community chain pharmacists, pharmacy technicians, and novel toolkits led to significant and sustained improvements in refill adherence and SBP in black patients with hypertension.

Keywords: Hypertension, medication adherence, pharmacy services, black patients.