

Capsule Commentary on Margolis et al., A Successful Multifaceted Trial to Improve Hypertension Control in Primary Care: Why did it Work?

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Margolis et al.¹ conducted a comparative effectiveness research trial to assess whether blood pressure (BP) telemonitoring improved systolic BP over a 6-month period compared to standard care. Using a two-group cluster randomized trial design (eight sites served as controls and eight as intervention arms), the intervention group received home BP telemonitoring with the aid of a pharmacist, who called patients periodically to ensure they were checking their BP regularly.

The authors hypothesized that greater medication intensification, greater adherence to medication and healthy lifestyle behaviors, and effective patient–pharmacist relationship—consisting of educational counseling sessions about hypertension and the health benefits of adherence and positive lifestyle changes—would yield improved BP, mediated by either: 1) home BP monitor use; 2) number of BP medication classes; 3) patient-reported adherence to BP medications; 4) physical activity; 5) salt intake; 6) alcohol use; or 7) weight change. Findings indicate that home BP telemonitoring and medication intensification, over the 12-month duration of the study, accounted for 42 % of the intervention effect.

Despite the innovativeness of this approach, the lack of clarity as to how adding an educational component to the pharmacist's role can be translated into a scalable intervention calls into question the study's feasibility. In fact, the authors made no mention of why pharmacists were most suited to deliver this behavioral intervention, nor did they identify a theoretical grounding as to how education and frequent home

BP monitoring led to greater BP control. Additionally, the authors did not control for two significant clinical confounders, participants with obstructive sleep apnea² and participants with resistant hypertension requiring a medication regimen beyond intensification.³ Despite these limitations, the current findings are consistent with previous studies which suggest that task-shifting is a viable method of improving BP management.^{4,5} Future work should investigate the effectiveness of this treatment model with patients who have sleep apnea or resistant hypertension.

Conflict of interest: The author has no conflict with regard to any of the material in this manuscript.

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