Self-monitoring and medication intensification are effective tools to improve blood pressure control

Home blood pressure monitoring and medication intensification are highly effective interventions to improve blood pressure control (Margolis KL, Asche SE, Bergdall AR, et al. J Gen Intern Med 2015; May 8). A study in 403 participants investigated the effect of home blood pressure monitor use, number of anti-hypertensive medication classes, adherence to medication, physical activity, salt intake, alcohol consumption and weight on blood pressure control. The study was a pre-planned secondary analysis of data from a cluster-randomised trial involving 450 patients with high blood pressure, half of whom received usual care and the other half a tele-monitoring intervention. Four-hundred and three patients completed the 6-month follow-up. The study found that systolic blood pressure in the patients receiving the intervention declined by 21.6 mm Hg compared to 10.3 mm Hg in the control group, a significant difference of 11.3 mm Hg (p<0.001). Nearly all of this reduction was due to an increase in medication treatment intensity, and increased use of home blood pressure monitoring. The other intervention factors did not have a significant mediating effect on the reduction in systolic blood pressure. These findings demonstrate that combining treatment intensification with greater home-based blood pressure monitoring is a successful management strategy for uncontrolled hypertension.