

# REMOTE PATIENT MONITORING CLINICAL STUDY RESULTS

## STUDY 2: Prospective cohort study of remote patient monitoring with and without care coordination for hypertension in primary care

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**BACKGROUND** Out-of-office blood pressure (BP) measurements contribute valuable information for guiding clinical management of hypertension. Measurements from home devices can be directly transmitted to patients' electronic health record for use in remote monitoring programs.

**OBJECTIVE** To compare, in primary care practice, care coordinator-assisted implementation of remote patient monitoring (RPM) for hypertension to RPM implementation alone and to usual care.



**METHODS** This was a pragmatic, observational cohort study within one health system that included two populations of patients 65 to 85 years old with Medicare insurance: those with uncontrolled hypertension and a general hypertension group seeing primary care physicians (PCPs). Exposures were clinic-level availability of RPM plus care coordination, RPM alone, or usual care. At two clinics (comprising 13 PCPs), nurse care coordinators with PCP approval offered RPM to patients with uncontrolled office BP and assisted with initiation. At two clinics (comprising 39 PCPs), RPM was at PCPs' discretion. Twenty clinics continued usual care. Main measures were Controlling High BP (<140/90 mmHg), last office systolic BP (SBP), and proportion with antihypertensive medication intensification.

**RESULTS** Among the Medicare cohorts with uncontrolled hypertension, 16.7% (39/234) of patients from the care coordination clinics were prescribed RPM versus <1% (4/600) at non-care coordination sites. The RPM-enrolled care coordination group patients had higher baseline SBP than the non-care coordination group (148.8 vs. 140.0 mmHg). In the uncontrolled hypertension cohorts after six months, the prevalence of Controlling High BP were 32.5% (RPM with care coordination), 30.7% (RPM alone), and 27.1% (usual care); multivariable adjusted odds ratios [aOR (95% CI)] were 1.63 (1.12-2.39;  $p=0.011$ ) and 1.29 (0.98-1.69;  $p=0.068$ ) compared with usual care, respectively.

**CONCLUSION** Care coordination facilitated RPM enrollment among poorly controlled hypertension patients and may improve hypertension control in primary care among Medicare patients.



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