



## COMPLETED GRANT SYNOPSIS

### Development and Feasibility of a Community Pharmacy-Driven 24-hour Ambulatory Blood Pressure Monitoring (ABPM) Service

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<b>Objectives</b>	
<ul style="list-style-type: none"> <li>To develop and evaluate the feasibility of a community pharmacy-driven ABPM service.</li> </ul>	
<b>Methods</b>	
Design	<ul style="list-style-type: none"> <li>Single-arm, clinical trial (<a href="https://clinicaltrials.gov/ct2/show/study/NCT03920956">NCT03920956</a>)</li> <li>The appointment-based ABPM service was implemented at two, independent community pharmacies and marketed to nearby medical practices.</li> <li>Each pharmacy had a lead pharmacist and pharmacy technician that received training on ABPM and provided the service.</li> </ul>
Study endpoints	<ul style="list-style-type: none"> <li>Feasibility outcomes included acceptability (patient satisfaction), demand (number of patients referred and enrolled), and implementation (resources necessary for implementation).</li> <li>Characterization of ABPM phenotypes.</li> </ul>
<b>Results</b>	
<ul style="list-style-type: none"> <li>58 patients were referred and 52 of these patients were consented and enrolled. Of the patients that did not enroll, three patients never scheduled an appointment and three patients did not show up for their appointment.</li> <li>On average, patients were 57 years of age, 50% male, and 75% white. Common comorbidities at baseline included hypertension (71%), dyslipidemia (52%), and 20% were cigarette smokers. Only 17% had controlled blood pressure at baseline according to their most recent office visit. Referring providers included nurse practitioners (48%) and physicians (40%), while six patients referred themselves.</li> <li>Of the 52 patients that completed ABPM, 46 had acceptable blood pressure data for interpretation. A large majority (91%) were found to have nocturnal hypertension and over half (52%) exhibited a non-dipping pattern at night, both of which are associated with increased cardiovascular risk. Additionally, sustained (41%) and white coat (19%) hypertension were also common.</li> <li>Overall, patient satisfaction was high as 88% strongly agreed or agreed that they were very satisfied with their experience with the ABPM service. Additionally, 100% strongly agreed or agreed that they were treated professionally by the pharmacy staff and that the pharmacist clearly explained the benefit of ABPM testing.</li> <li>Reimbursement for ABPM services was obtained for three patients with commercial insurance. Of note, the pharmacies were unable to bill for Medicare/Medicaid patients. During the study period, CMS reviewed and expanded coverage for ABPM services, so there may be increased potential for reimbursement as this new coverage guidance is adopted by commercial payers.</li> </ul>	
<b>Conclusion</b>	
<p>This is the first study to describe the development and implementation of an ABPM service in community pharmacies. Furthermore, our results suggest that a community pharmacy-driven ABPM service was accepted by patients, there was demand for the service, and we gained an understanding of the necessary resources for implementation. Further research is warranted to explore this approach as a potential way of increasing access to ABPM and building collaboration between community pharmacies and medical practices. Recent changes in CMS regulations and continued advocacy for provider status may increase opportunities for reimbursement. Additional research is warranted to understand the impact of a community pharmacy-driven ABPM service on clinical outcomes.</p>	