

A Novel Payer-Provider Collaboration to Improve Blood Pressure Control in the Community Pharmacy Setting

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Background

- Uncontrolled blood pressure (BP) is recognized as a major public health concern.¹
- Community pharmacists, because of their clinical expertise and accessibility, have been recommended as one solution to address this concern.²
- Community pharmacists have demonstrated success in improving BP control in controlled trials.³
- However, in typical practice, there is no standardized method to identify patients who are not meeting treatment goals and may benefit from intervention during workflow.

Pilot Objective

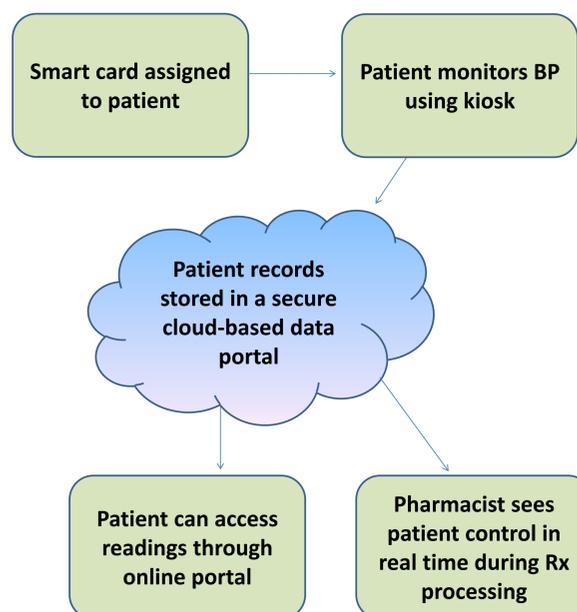
The objective of this quality improvement pilot was to improve BP monitoring and management among members of a Midwestern health plan through an innovative community pharmacy partnership supported by innovative, workflow-integrated BP monitoring and alerting technology.

Approach and Methods

This pilot was carried out through a partnership between a Midwestern health plan, a regional community pharmacy chain, and a biometric screening and health IT company.

Technology

- The intervention was driven by the use of a validated and interoperable BP monitoring technology.
- This technology provides the pharmacist with visibility into patient blood pressure status during workflow, inside the dispensing system.
- Enrolled patients use a patient-specific “smart card” to identify themselves at a validated BP kiosk, and this allows their self-measured BP data to be directed back into their pharmacy patient record.



Approach and Methods, continued

Participants

- Health plan members with a hypertension diagnosis based on medical claims and attributed to the partner community pharmacy chain based on prescription claims in 2014 were invited by letter and face-to-face offer from pharmacists to participate in this service (n=276).
- Sixteen pharmacies and 28 pharmacists participated in the pilot.

Pharmacist Training

Pharmacists were already familiar with the technology as part of their normal practice, but received live training on the purpose of the pilot, identifying and recruiting eligible patients, and in the documentation of program-specific interventions.

Pharmacist Process and Interventions

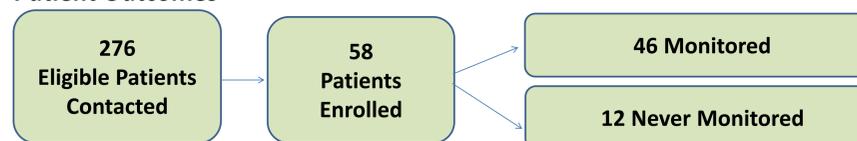
- Interested patients enrolled in the program at their participating pharmacy.
- Pharmacists or technicians assigned a unique “smart card” to patients and trained on how to use the smart card and kiosk.
- Patients were encouraged to monitor their BP frequently and access their readings through the patient portal.
- Pharmacists intervened with patients identified as uncontrolled to address adherence issues and opportunities for adjusting therapy to reach BP goals.
- Pharmacists also contacted prescribers as necessary to make recommendations

Evaluation

- Before and after BP readings were assessed to determine impact of patient self-monitoring and pharmacist intervention.
- Pharmacists were informally asked about their experiences participating in the pilot and opportunities for improvement.

Results

Patient Outcomes



- 14 patients qualified for a pre-/post-assessment, as defined as:
 - Having uncontrolled BP (>140/90) on initial reading, and
 - Having multiple readings throughout the pilot

Pre/Post-Assessment (n=14)			
	Initial Readings (mmHg)	Final Readings (mmHg)	Mean Change
Systolic BP (mean ± SD)	148.6 ± 22.7	136.8 ± 19.9	-11.8
Diastolic BP (mean ± SD)	89.9 ± 11.5	82.4 ± 10.9	-7.5

Results, continued

Process Results

- Nine of sixteen invited pharmacies participated in the pilot, as defined by enrolling at least one eligible patient.
 - Median: 3 patients per site
 - Range: 1-22 per site
- A total of 214 BP tests were collected over the course of the pilot
 - 4.8 tests per patient on average
- Pharmacists reported barriers to enrollment including:
 - Small number of eligible members at their location, making it difficult to incorporate into workflow
 - High utilization of drive through window, discouraging repeated measures
 - High utilization of 90-day supplies, limiting opportunities for patient interaction

Discussion and Limitations

- The goals of this pilot are mutually beneficial to the community pharmacy and health plan:
 - Allowed **community pharmacists** to target patients who were being treated for hypertension, but were uncontrolled with current therapy, to support patient care in their own population
 - Supported **health plan** goals of improving medication adherence and clinical control of chronic conditions
- A limited number of patient records were available to conduct a pre/post-analysis, but available results were positive.
- One of the limitations of this pilot was targeting only patients retrospectively attributed to the pharmacy, which was done to maintain a controlled population for evaluation.
 - In typical practice, pharmacists may use a similar program as a means of encouraging new patients to utilize their pharmacy.
- Other limitations (described in the results) could be addressed at the pharmacy level through more proactive outreach.

Conclusions and Next Steps

- The pilot demonstrated promising early results in a model that has potential to improve hypertension monitoring and management in a community pharmacy setting.
- Opportunities to modify and expand on lessons learned from this community pharmacy-based program are under discussion.

References

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3. Cheema E, Sutcliffe P, Singer DRJ. The Impact of Interventions by Pharmacists in Community Pharmacies on Control of Hypertension: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Br J Clin Pharmacol*. 2014; 78(6): 1238-1247.



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