



COMPLETED GRANT SYNOPSIS

Advancing a Community Pharmacy Enhanced Service Network

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Objectives

The Iowa Pharmacy Association (IPA), The University of Iowa College of Pharmacy, and Drake University College of Pharmacy & Health Sciences collaborated on this project to meet the following objectives during the 2 ½ year project period. IRB approval was obtained through both universities.

1. Provide training and education specific to practice transformation for pharmacies in Iowa pharmacy performance networks
2. Describe the performance of the Value-Based Pharmacy Program (VBPP) pharmacies through effects on quality indicators, total cost of care, and overall performance scores
3. Assess the relationships between pharmacy care activities and pharmacy performance reported for participating VBPP pharmacies
4. Characterize qualitative feedback from patients receiving the advanced pharmacy care at VBPP pharmacies
5. Market the CPESN Iowa to providers (e.g. ACOs, hospitals, clinics, physicians), payers, and pharmacists

Methods

Design

Objective 1: Provide training and education specific to practice transformation for pharmacies in Iowa pharmacy performance networks

IPA coordinated with the CEImpact (CEI), a leader in continuing pharmacy education and development, to offer the Make Every Encounter Count ([video](#) & [flyer](#)) training, an implementation program to guide pharmacists through how to be successful in pharmacy performance networks. The implementation program is ACPE-accredited and include webinars, practice change workbooks and hosted discussions. Educational discounts were made available for VBPP or CPESN Iowa pharmacies to participate in these implementation programs at a reduced cost.

[Virtual training webinars](#) assisted in the early years with supporting the network pharmacists and pharmacies. These virtual trainings highlighted clinical guidelines from industry experts; best practices, lessons learned and obstacles encountered by network pharmacists; as well as stakeholder insights from other provider and payer organizations.

Objective 2: Describe VBPP pharmacy performance

The VBPP launched with a large commercial payer in Iowa in the summer of 2016. The research team conducted an evaluation that focused on the first 12 months of operation of the VBPP program. For the evaluation, we recruited a sample of 74 participating pharmacies. As quality measures have caught the attention of Iowa pharmacists and payers, the VBPP performance was measured on specific metrics tracked by the payer. The metrics included measures for asthma (i.e. use of controller therapy), diabetes (i.e. oral medication adherence, use of ACEI/ARB medications), high cholesterol (i.e. statin medication adherence, use of proper statin potency), depression (i.e. proper duration of therapy), total cost of care, and other utilization measures.

Data for these metrics were collected from the commercial payer: at baseline, end of quarter 1, end of quarter 2, end of quarter 3, and end of quarter 4. Descriptive statistics were used to characterize network

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performance on each measure over time. For each metric the percent of pharmacies that improved from the first time period to the last was calculated. The mean and median performance for the group during the first period and the last period was calculated.

Objective 3: Assess links between VBPP pharmacy care activities and performance

During the study period, the participating pharmacies reported their care activities performed for their patient panel. Reported activities included but were not limited to: enhanced dispensing, resolving drug-related problems, patient counselling/education, communication with a provider, tagging patients for targeted care, comprehensive medication review, medication reconciliation, disease state management, and adherence management.

Data were collected for these variables in three ways: 1) on-line surveys and 2) monthly reports of these activities 3) staff interviews. A baseline survey was administered to collect information about pharmacy plans for changes in care, current services offered, and capacity to provide the services expected for the patients in the VBPP. The Systems Engineering Initiative for Patient Safety (SEIPS) model was used to organize the assessment of pharmacy service capacity in the survey. The SEIPS model states that a pharmacy's work system is comprised of people, tasks, tools & technology, organization, and environment.

A post survey asked about performance of activities, changes made in the practice, challenges faced in providing advanced care to patients in the VBPP, and ways pharmacies were able to overcome obstacles. The items for this survey were developed from the transcripts of personal interviews with pharmacists at 11 participating pharmacies. Hard copy surveys along with stamped return envelopes were mailed to the pharmacist-in-charge (PIC) at each of the participating pharmacies.

The monthly activity reports were collected using either on-line submission or paper forms submitted by each participating pharmacy. For each activity, the pharmacist reported the time spent and/or number of episodes for each activity during the past month. Longitudinal data analyses was planned to assess the correlation between pharmacy practice activities and performance measures over time.

Objective 4: Characterize qualitative feedback from patients receiving care from a VBPP pharmacy

Personal interviews were conducted via telephone with a sample of up to 25 patients from 6 participating pharmacies to gauge patient experience in receiving care at a sample of VBPP pharmacies. The participating pharmacies were asked to identify at least 10 patients who have received care. Interested patients contacted a research team member to schedule an interview. Each telephone interview was digitally audiotaped and then transcribed verbatim. A thematic analysis was conducted on each of the interview transcripts, using a service quality model to frame themes raised by the patients were identified.

Objective 5: Market CPESN Iowa to health care providers, payers and pharmacists

To be successful CPESN Iowa required marketing to health providers and to payers. To support such marketing activities, promotional materials were developed for a provider-related audience and for a payer audience. These materials described the minimum required enhanced services for CPESN Iowa pharmacies (medication reconciliation, clinical medication synchronization, adherence packaging, immunizations, and a 10-step complete medication review with chronic care management). Marketing to providers described these services the network pharmacies provide and highlighted how the providers and their patients can benefit from the CPESN Iowa's activities. For payers, messaging addressed how the pharmacy network can provide care that raises quality while limiting or reduces total cost of care.

Results

- **Objective 1:** Formal evaluations were collected from CEImpact after the Make Every Encounter Count training. These evaluations have been used to further enhance the training for future attendees. Within the most recent

cohort that completed the training, the pharmacists and pharmacy technician attendees rated the course as 'excellent' or 'satisfactory' in every evaluation collected. The evaluations did provide insight to improve the organization of presented materials concepts as well as new mechanisms for further engagement of all attendees.

- **Objective 2:** Throughout the intervention period, the research team was able to compile pharmacy performance and summarize the median measures for VBPP pharmacies from the first and through the fifth performance periods. In summary, most performance metrics improved for the majority of pharmacies in the VBPP throughout the performance periods. The performance metrics that improved for the highest amount of pharmacies, included:
 - CVD: Statin Intensity: Moderate (69.9% of VBPP improved this metric during the period)
 - Diabetes: BP Control (63.5%)
 - CVD: Statin Adherence (62.2%)The performance metrics that improved for the least amount of pharmacies, included:
 - Depression: Outcomes (8.3% of VBPP improved this metric during the period)
 - Depression: PHQ-9 Completion (16.7%)
 - Asthma: Medication Ratio (23.9%)
- **Objective 3:** Baseline survey results and currently collected follow-up survey results were compiled and conducting additional analysis for publication.

At the conclusion of the study period, pharmacies reported 6 activities were, on average, done "often" by the pharmacies responding to the survey. These were:

- Obtain a list of patients to target from corporate analyses of Wellmark dashboard data
- A staff member examines our pharmacy's performance on Wellmark's dashboard monthly
- Counsel Wellmark patients to take their medications as directed to try to improve total cost of care
- Monitor medication adherence for Wellmark patients, and intervene if non-adherent
- Obtain Wellmark patient lab data directly from providers
- Have difficulty targeting patients with depression reflected in Wellmark metrics

These activities were primarily focused on medication adherence and monitoring of performance of patient identified as Wellmark patients. It was also often found to be difficult to identify patient with depression, which was also reflected as perhaps one of the greatest challenges mentioned in the area of the survey where pharmacist could list their greatest challenges in the program.

In addition, 4 activities were noted as not done or rarely done. These included:

- Call a Wellmark patient starting a new anti-depressant 2-4 weeks after initial dispensing
- Pharmacy technicians' triage Wellmark patients for attention by a pharmacist
- Are informed about hospital discharges of your Wellmark patients at the time of discharge
- Utilize a central fill service

These activities again reflected the difficulty in identifying and intervening for patient with depression, and on the difficulty of coordination of care and in using alternative processes to make pharmacist time available for patient care.

Pharmacies set services to improve adherence and working with patients with diabetes patients as high priority activities. As reflected in the comments about the barriers and in comments about changes that pharmacies would suggest in the program, services focusing on depression were given a much lower priority. Considering the metrics around total cost of care, services focusing on this activity were ranked between low and medium priority, on average.

Pharmacies responded that their ability to have time to provide patient care, on average, was "good" although there was a fairly large amount of variation in those responses with about 40% of pharmacies responding that their available time to provide patient care was "fair" or "poor". Time and staffing concerns were also frequently mentioned as the greatest barriers to success in the program.

When asked about their perception of pharmacy's success in the Wellmark Value-Based Pharmacy Program over the past six months, pharmacies responded with an average rating of 57.41 on a scale of 0-100 with 0 being no success and 100 being highest possible success. In addition to the previously mentioned challenges of time and staffing, the lack of perceived cooperation from both prescribers and patients also was mentioned frequently, which may be the basis for this perceived level of performance.

When asked "What changes would you suggest to support improved performance or sustainability of your participating in the VBPP?", the most frequent responses were to either remove the metrics for depression or to improve the ability for collaborative identification of patients with depression. Pharmacies also frequently expressed a desire for greater Wellmark communication and promotion of the program to prescribers and patients.

- **Objective 4:** Interviews were completed by 25 patients. Most of them were female and the average age was 59. More than half of the patients were taking at least five medications for chronic conditions. A majority of the patients received medication synchronization and immunization. A total of 13 themes across the service quality dimensions were identified. Patients thought their pharmacists were reliable, responsive, knowledgeable and trustworthy when they provided services. Pharmacy services were accessible and perceived as high quality. Privacy was not a big concern for most patients. Patients had a somewhat limited view regarding how pharmacists helped them maintain health. The results of this objective were published in [INNOVATIONS 2019,10\(2\)](#).
- **Objective 5:** The developed marketing materials and presentations were utilized in numerous meetings with in-state payers, primarily Medicaid MCOs and enhanced MTM-participating Medicare Part D plans.

Conclusion

Pharmacies utilized a variety of options to succeed in improving the metrics determined within the VBPP. To approach PDCs, over half of the pharmacies used MedSync, which allowed them to communicate more with their patients, while freeing pharmacist time to do more clinical services. Two pharmacies struggled with applying MedSync electronically, mainly because of lack of training on how to use MedSync electronically along with staff shortage and workload. Other pharmacies used auto refill to increase patient's PDC, though this method typically lacks pharmacist-patient communication that may trigger a useful conversation. Most of the pharmacies utilized adherence packaging as an added service to support their patients' adherence. Given the variety of reasons for patients being non-adherent, it makes sense to have multiple approaches in place to help them take their medications as directed.

The results show that pharmacies were more comfortable with cardiovascular and diabetes metrics in comparison to others. Perhaps this is due to these conditions being targeted for over a decade through Medicare Part D Star Rating measures. Most pharmacies were measuring blood pressure in their pharmacies, though some also worked to obtain it from the clinics. For cardiovascular metrics, all pharmacists were willing to recommend a change in patient's medications, based on the guidelines that they are using, the 10-year risk calculation or the Wellmark dashboard. Although they sometimes faced resistance from both physicians and patients, it did not stop them from communicating their intervention. A few pharmacies utilized the approach of involving patients in the intervention before communicating a recommendation to the physician, to create patient awareness of a suggested change in therapy. However, one pharmacy communicated the recommendations to patients only, so they could discuss it in their next provider visit. A concern with this approach is a patient not recalling the information correctly or with not being comfortable asking the provider about a change.

For diabetes metrics, all pharmacies were comfortable collecting HbA1c for their patients, despite the challenges they face from mixed cooperation by physicians. One pharmacy relied on their interns do the data collection and communicating with patients, instead of the pharmacists regularly monitoring their patients. While this approach can be efficient, it does little to support the development of pharmacist-patient relationships, which can be key in engaging patients in their health. Most of the pharmacists talked with local providers about why they wanted the HbA1c levels. Provider responses were variable, with some supportive and others not so. In cases where physicians were not

responsive, the pharmacists contacted patients to get it through their charts or even verbally. A unique approach was using a special form that mimics Medicare forms being sent to physicians to collect HbA1c levels to support dispensing test strips. This approach has had a high success rate in data collection for their Wellmark patients with diabetes. One pharmacy using an EMR had less struggle in collecting HbA1c levels.

Generally, pharmacies were less involved in managing the asthma medication ratio metric. Most of the pharmacies relied on patient education and counseling on controller inhaler use vs. rescue inhaler use. One pharmacist noted that inhalers have evolved over the past five years or so, and it was helpful to make sure patients were using their inhalers properly. In addition, several pharmacies monitored rescue inhaler refill frequency to try to identify patients having some difficulties in managing their asthma. One approach was using objective data through dispensing software to identify those who are refilling rescue inhalers more frequently or who are late in refilling their control medications. With this objective measure physicians may be more responsive to SOAP notes, when provider action is needed.

Depression metrics received the lowest overall involvement across the participating pharmacies, though the gap (adherence) metrics received some attention. Most of the participating pharmacies reported counseling on antidepressants and their importance in improving patient adherence. Pharmacies reported different challenges related to their patients with depression. Probably the most common problem was difficulty in identifying target depression patients, mainly because of the legal restrictions of sharing patient's information. Wellmark does not identify beneficiaries as having depression in their VBPP Dashboard, which makes targeting those patients challenging for the pharmacies. Another frequent challenge was the level of comfort of the pharmacists conducting PHQ9 questionnaires, though patients often were willing to answer when asked to complete a PHQ9. Some pushback from providers was reported about measuring and sharing PHQ9 levels. The providers preferred to rely on their own measurements. One of the pharmacies had some of their pharmacists trained for mental health first-aid, which provided a useful safety net when working with patients with mental illness.

Most of the interviewed pharmacists expressed some uncertainty in how best to try to address total costs of care. One pharmacy reported using a pyramid approach that used the Wellmark dashboard's patient complexity ratings. This approach allowed pharmacies to align their service intensity with the patient needs, such as a CMR for patients in the highest complexity/risk levels. Another approach was applying transition of care by partnering with hospitals to follow up on patients after their discharge, in order to minimize re-admission. This pharmacy had arranged to be notified of their patients' discharges by the local hospitals, which allowed them to act on transition of care in a timely manner. Some pharmacies used preventive care measures to decrease total cost of care, including vaccinations and patient education. A few pharmacies reported educating their patients about proper use of emergency departments. A long-term take on this was that it is important to help patients learn how to stay healthy and to utilize healthcare effectively before they got too old and unhealthy.

In summary, pharmacies are excited about the Value-based Pharmacy Program and they believe that it can support a higher level of care for their patients. Some pharmacies appear further along than others in transforming their practice into one that will free up the pharmacist to deliver the services needed to perform well in a program like the VBPP. It would be helpful to continue to share successful strategies among the pharmacies participating in the VBPP. Also, externally better provider acceptance is needed of pharmacists' roles in a multidisciplinary team in managing patients with several chronic conditions.