

# **Demonstrating the Impact and Feasibility of a Business Model which includes a Community-Based Pharmacist in a Patient Centered Medical Home (PCMH) Practice**

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## **BACKGROUND**

### A Mutually Beneficial Partnership for Patients, Pharmacies, and Providers

The health care industry is undergoing rapid changes as health care professionals and insurers attempt to find models that improve patient and population outcomes in a cost-effective manner. To this end, the Patient Centered Medical Home (PCMH) model is growing in popularity as it unites traditionally siloed services under the auspices of one collaborative, multidisciplinary practice. It is essential that community pharmacists demonstrate the role their unique expertise plays in this health care delivery system as their ability to do so may determine the longevity of their niche within the pharmacy profession.

In a meta-analysis of nearly 300 studies on pharmacist impact, Chisolm-Burns et. al (2010) summarized and reinforced the results of two decades worth of research. Their findings will not be surprising to professionals in today's marketplace: pharmacists' interventions unequivocally contribute to patients' positive therapeutic, safety, and to some extent, humanistic outcomes.<sup>A</sup> Given this observation, it is in patients' best interest that pharmacists be recognized as key members on multidisciplinary teams within PCMH practices.<sup>B,C</sup>

Pharmacy Group Practice Associates (PGPA) pharmacists arrived at this conclusion themselves in early 2012 during conversations with physicians at Cornerstone Family Practice (CFP). While discussion was initially centered on PGPA's growing community education programs, the potential for integration of pharmacists into CFP's PCMH became evident, particularly in light of CFP's involvement in a program focused on involving ancillary providers in patient care. Given that medications are used in 80% of treatments,<sup>D</sup> medication therapy management, such as monitoring for drug-drug interactions and cost-effective alternatives, is crucial to any primary care practice. By including pharmacists on their PCMH teams, medical offices like CFP can expand their resources beyond the knowledge of the providers. Pharmacists, in turn, have the opportunity to build relationships with doctors and patients.

Even as patients, health care professionals, and insurers sort through the implications of imminent legislation reforms, everyone acknowledges that significant changes to health services were needed in some form. The ongoing uncertainty is concurrent with the aging of the population and a shortage of primary care physicians, giving pharmacists an excellent opportunity to prove the value they bring to health care teams.<sup>E-I</sup> It is imperative that community pharmacists seize this chance by adapting and expanding their

practice models. Only by doing so can they ensure that their passion for improving patient health through medication therapy continues to be fully employed and fairly reimbursed.

### Improving Patient Health: PCMH Success & Pharmacists' Contribution to Core Values

The PCMH model has been shown to improve patient outcomes while reducing costs, a notable accomplishment in light of the health care crisis. In 2011, compared to peers receiving traditional care, Michigan patients in PCMHs were 9.9% less likely to visit the emergency room, 22% less likely to be admitted for conditions preventable through ambulatory care, and 3.8% more likely to be given cost efficient, generic medications.<sup>J</sup> Similar trends were reported in New Jersey, where a 10% decrease in per-member-per-month costs was also observed.<sup>K</sup> This phenomenon has not gone unnoticed by insurance company Blue Cross Blue Shield of Michigan (BCBSM) which has designated 994 practices, involving over 3,000 primary care physicians, as PCMHs.<sup>L</sup> This designation is earned by sufficiently demonstrating twelve “domains of function” laid out in BCBSM’s Interpretive Guidelines for 2012-2013.<sup>M</sup> Only one of these includes language for pharmacist involvement, and within the detailed requirements of this domain, a pharmacist is not identified as a possible provider for “comprehensive medication review[s] and management” at every chronic care visit!<sup>M</sup>

The Patient-Centered Primary Care Collaborative Medication Management Task Force published a guide aimed to persuade readers to prioritize the inclusion and reimbursement of comprehensive medication management services within PCMHs.<sup>B</sup> Broadly, the Task Force points to the \$200 billion spent annually on drug related problems. In order to reduce this broad economic burden, individualized services are needed, including a medication review, the development of a care plan, and a reassessment to document patient outcomes.<sup>B,N</sup> While physicians could accomplish these steps alone, utilizing a pharmacist would enhance services while freeing the provider to diagnose and select therapies.<sup>B,O</sup> Beyond consequently *expanding access to care*, pharmacist integration helps meet the principles which are fundamental to a successful PCMH. Working on a *team* focused on the *whole person*, pharmacists *build relationships* with patients and empower them to *use medications safely* towards the achievement of *collaboratively set goals*.<sup>B,E</sup>

The final principle states that the value added by PCMH physicians through improved outcomes ought to be recognized and *fairly reimbursed*.<sup>B</sup> In a study conducted within the context of two federally qualified health centers, pharmacists clearly demonstrated the value they add to a PCMH: 87% of pharmacists’ recommendations led directly to changes in patient care.<sup>N</sup> While the study did not track resulting patient outcomes, it seems safe to extrapolate that the identified problems, most commonly “ineffective drug therapy,” would not have been uncovered without a pharmacist, and that addressing problems with evidence based education, dose changes, and other services would most likely improve patient health.<sup>A</sup> As this trend is reported in other sources,<sup>A,G</sup> pharmacists have grounds to assert that like PCMH physicians, they deserve to be fairly reimbursed for their services. In researching billing models that could sustain collaboration with CFP,

however, PGPA found little evidence to suggest that pharmacists have advocated for their profession in this way. Any progress that individuals have made is kept private, limiting the advancement of community pharmacy as a whole and minimizing opportunities to build the unified voice that will be needed to instigate structural changes.

### Building upon Similar Endeavors to Advance Practice

The research findings of the endeavor most similar to this proposal were not yet published as of April, 2012.<sup>G</sup> This study, known as IMPACT, placed pharmacists in seven practices across Ontario, Canada in order to measure integrated pharmacists' ability to optimize medication use. Given that this program operated within a Canadian PCMH equivalent, any successes that are published will only generalize so far within the constraints of the US health care system. However, the initial evaluation was promising and for the first time, began laying the groundwork for the establishment of best practices.<sup>G</sup> By drawing from this source, as well as from the literature which advises how to smoothly integrate into a PCMH, this demonstration sought to uniquely focus on documenting patient outcomes while overcoming billing hurdles that exist for pharmacists. In doing so, the results of this project will contribute to the advancement of community pharmacy practice within PCMHs by laying the foundation for a business model that could be replicated.

## **METHODS**

The purpose of this project was to demonstrate that the impact a pharmacist makes as an active team member in a PCMH practice can be sustained through a blended billing model. In order to successfully fulfill this purpose, the project sought to meet two distinct, yet interdependent objectives. These objectives are as follows:

1. To document the impact a community pharmacist has on patient outcomes and quality of care when integrated into a PCMH practice
  - 1.1) To successfully integrate into PCMH practice
  - 1.2) To resolve or avoid drug-related interactions
  - 1.3) To identify or avoid adverse drug reactions
  - 1.4) To improve adherence
  - 1.5) To help the PCMH practice attain clinical and therapeutic goals
  - 1.6) To attain patient "self-identified" health living goals
2. To establish a blended billing model through which PCMH pharmacists are compensated for their services and which can be reproduced by other pharmacies
  - 2.1-2.7) To document the feasibility of using a variety of billing options

In published models of pharmacist involvement in PCMHs, pharmacists are often employed by physician practices directly linked to academic entities.<sup>P</sup> This may be one reason that the literature does not speak to the type of billing model this project sought to establish as participants have been guaranteed reimbursement in the form of a salary. In contrast, PGPA sought to advance the practice of community pharmacy by adapting the

roles of these pharmacists to account for the unique strengths and challenges faced in a business, rather than academic, setting.

This demonstration project took place between September 2012 and October 1, 2013. A designated PGPA pharmacist was integrated into CFP sixteen hours per week. This project was developed within the context of CFP, which received its PCMH designation from BCBSM in 2009 and has been enrolled in the Michigan Primary Care Transformation Project (MiPCT) since 2012. MiPCT is a three-year statewide project sponsored by Centers for Medicare and Medicaid (CMS) that seeks to build upon and standardize the existing PCMH model so that it is more financially viable. Insurers currently participating within MiPCT include Medicare, Medicaid, BCBSM, Blue Care Network (BCN), and Priority Health.

One component of the PCMH model of particular interest to MiPCT is chronic care management (CCM). Recognizing the integral role medication therapy management plays in CCM, the providers at CFP prioritized the inclusion of a pharmacist on their chronic care management team (CCMT).

Two payment structures currently exist within MiPCT dependent on the third party. Medicare and Medicaid reimburse for CCMT activities on a per-member-per-month (PMPM) basis. Alternatively, BCBSM, BCN, and Priority Health reimburse for CCMT activities on a fee-for-service (FFS) basis. To date, a clinical pharmacist can reliably bill for services provided to BCBSM, BCN, and Priority Health MiPCT enrolled patients using four available codes (G9002, 98966, 98967, 98968). A fifth code (G9001) cannot be billed directly by a pharmacist; however, a pharmacist can be involved in providing applicable services under this code. Given the formative nature of the MiPCT project, there is no history to demonstrate that resulting reimbursements from billing these codes can justify the cost of service provision by a pharmacist within a PCMH practice. As a result, the collaborative partnership between PGPA and CFP provided the platform to begin to lay the foundation.

## **RESULTS**

A manual Excel tracking system was utilized to categorize pharmacist activities within the PCMH practice. A total of 551 pharmacist activities were documented, 323 of these being the approximate number of unique patients served. All patients within the PCMH practice were served. Therefore, pharmacist activities were not limited to only MiPCT enrolled patients.

### Objective 1

Integration into the PCMH practice went very well. The community pharmacist quickly became a valued and integral member of the healthcare team. The pharmacist was given a dedicated workspace and access to the practice's electronic medical record (EMR) through a secure VPN within the first month of the project. Feedback from all involved remains positive and discussion is underway to continue partnership beyond the terms of

grant. The pharmacist has also successfully completed her Chronic Care Manager certification through the Health Sciences Institute.

Of the 543 activities that could be categorized, 172 (31.7%) were related to medication therapy. A majority (71.5%) of these took the form of recommendations made when patients began new therapies. Other related activities included identifying drug-disease interactions, drug-drug interactions, adverse drug reactions, needs therapy, unnecessary therapy, ineffective therapy, and dose/form change.

While only a few patient interactions were primarily about adherence, 159 (29.3%) of the pharmacist's activities were related to follow-up with patients starting new therapies and transitioning between care settings. These efforts helped identify and resolve problems that might dissuade adherence if not addressed.

260 (47.9%) of the 543 categorized activities led directly to a formal recommendation made by the pharmacist to a provider. This may seem low. However, given the nature of certain patient interactions, there was not always a need for a formal recommendation. 91.9% of the 260 recommendations were accepted. 60 (11.0%) of the 543 categorized activities involved answering specific drug questions posed by providers and patients.

Tracking specific biometric outcomes was determined to be outside of the capacity of this grant. Because patients' visits are spread out within and beyond the time period of this grant, it would have been nearly impossible to gather enough data to make statistically sound conclusions. It should be said, though, that all participating in this project have anecdotally reported positive patient outcomes, and patients were incredibly receptive to pharmacist services. In fact, many patients requested appointments with the pharmacist specifically to discuss their medication therapy. Furthermore, the type of work being done (e.g. addressing drug interactions, improving transitions of care, etc.) has been shown to ultimately have a positive impact.

139 (25.6%) of the pharmacist's logged activities were visits with patients at which "self-identified" healthy living goals were identified. The same challenges existed for tracking ultimate attainment of these long-term goals as are described for the attainment of biometric targets.

## Objective 2

Of particular interest are the results related to a billing model through which a pharmacist practicing in a PCMH practice is compensated for services. The PGPA pharmacist has played an integral role as a member of the CCMT within CFP.

CFP is receiving payments from the aforementioned third parties currently involved in MiPCT. Table 1 summarizes the number of patients enrolled in MiPCT and the reimbursement model used by that third party as of July 2013.

**Table 1. Third Party and MiPCT Enrolled Patients within CFP**

<b>Insurer</b>	<b>Number of Patients Enrolled</b>	<b>Reimbursement Model</b>
Medicaid/McLaren	1	PMPM
Medicaid PHP	71	PMPM
Medicare	498	PMPM
BCBSM	478	FFS
Blue Care Network	429	FFS
BCBSM Medicare Adv.	66	FFS

As of October 1, 2013, the CCMT had billed for \$60,542.00 and \$23,612.17 had been paid. Currently, \$6,541.71 of the \$60,542.00 is still pending and \$12,561.26 has been written off by the practice. Of particular interest, between August 1, 2013 and October 1, 2013, the CCMT billed for \$15,879.00, of which \$6,086.50 has already been paid. Currently, \$6,300.69 of the \$15,879 is still pending and \$792.09 has been written off by the practice. The sum written off by the practice should not be ignored because this constitutes money that in the near future will be revenue for the practice. The written off dollar amount reflects the co-payment amount for codes being submitted for billable services that the third party recognizes; however, the practice decided not to bill the patient (e.g. patients with high deductible plans where had the patient's deductible been met or had the patient been held responsible, the practice would have collected payment). This process has been investigated and a complete resolution is imminent. Moreover, these financial figures do not include reimbursement for services provided to patients whose insurance is paying PMPM (Medicaid/Medicare @ \$2 PMPM) rather than FFS (BCBSM, BCN, and Priority Health). Pharmacist specific billing data follows below. However, given challenges with documentation and tracking, it is not a true and accurate reflection of the financial impact and revenue attributable to the pharmacist's activities.

As of October 1, 2013, 218 (40.1%) of the pharmacist's services were billable under six available codes through MiPCT. Services not billed include those services not provided to a specific patient (e.g. researching drug information for a provider) or those provided to patients whose insurance is paying PMPM (Medicaid/Medicare @ \$2/PMPM) rather than FFS (BCBSM, BCN, and Priority Health). Based on reconciliation data available through October 1, 2013, 73 of the 218 have been paid to date. \$22,387.00 has been billed for services provided by the pharmacist, and \$6,111.94 has been paid to date. \$2,628 of the \$22,387.00 is still pending. Table 2 includes a more detailed breakdown of this money.

At the beginning of this project, several claims were billed with the expectation of denial just to verify that this expectation was correct. Furthermore, for patients with high deductible plans whose insurances recognize these codes but will not pay because the patient's deductible had not been met, CFP was writing off the patients' amount due for the service given up until July/August 2013. While the dollar amount written off by the practice as greatly declined, the medical biller has still written off \$792.09 in the past three months, which warrants further investigation.

**Table 2. Pharmacist Billable Codes and Reimbursement Data**

<b>Code</b>	<b>Codes Billed / Paid</b>	<b>Total Billed / Paid</b>	<b>Usual &amp; Customary</b>
98966	41 / 9	\$738 / \$145.26	\$18/claim billed
98967	22 / 5	\$770 / \$112.78	\$35/claim billed
98968	9 / 2	\$468 / \$74.39	\$52/claim billed
G9001*	125 / 48	\$18,500 / \$5,218.27	\$148/claim billed
G9002	17 / 9	\$1,615 / \$561.24	\$95/claim billed
99487	2 / 0	\$296 / \$0.00	\$148/claim billed

\*Pharmacist involved with PA-C (chronic care manager) in providing applicable services billed under this code.

Another way to consider these same figures is to look at the amount billed and reimbursed by approximate quarters. Because the grant period has extended past one year, note that the time periods are not quite the same across the intervals in Table 3. Even still, it is important to note two trends. After falling significantly after the first quarter, the total amount billed has continued to rise since the beginning of 2013. The dramatic fall after the first quarter resulted from the ending of a “trial period” in which nearly all claims were billed, including those known to be for patients whose third parties were paying PMPM. The second trend to note is that the percentage reimbursed has also steadily increased. The only exception to this pattern is the last interval, likely because all reimbursement information to update records has yet to be received.

**Table 3. Pharmacist Total Billed and Reimbursement by Quarter**

<b>Interval</b>	<b>Total Billed</b>	<b>Reimbursed</b>	<b>% Reimbursed</b>
Sept-Dec 2012	\$7,028.00	\$1,552.15	22%
Jan-Mar 2013	\$4,796.00	\$1,340.10	28%
April- June 2013	\$4,971.00	\$1,843.31	37%
July-Oct 2013	\$5,592.00	\$1,376.38	25%

Significant positive progress towards billing, reimbursement, and sustainability has been made since the beginning of this project. However, it is recognized that based on reimbursement to date, it is not yet enough to sustain the presence of a pharmacist in a PCMH practice setting.

It is important to note reasons the reimbursements may seem low. Those reasons are as follows:

1. Some of the codes being billed are indeed billable services that the third party recognizes; however, the practice decided not to bill the patient (e.g. patients with high deductible plans where had the patient’s deductible been met, the practice would have collected payment).

2. The third party data available that identifies MiPCT enrolled patients is three months behind real time. Therefore, the patient may be thought to be “active” within MiPCT at the time of service, however, the patient is actually “inactive” (e.g. patient changed third party or lost coverage).
3. Although greatly improved, the rate at which reimbursement is received from participating third parties is unpredictable thus leaving a large “pending” balance on financial reports. As noted above, reimbursement data is not yet completely available for the most recent quarter of billing.
4. The system for tracking pharmacist’s interventions and services is manual and dependent on the pharmacist’s recall. Therefore, it is known that not all interventions and services have been captured.
5. There simply is not yet a complete framework for billing for coordinated care services offered within PCMH practices. Even where codes do exist, it has taken and is still taking time for all those involved in billing to appropriately adjudicate every claim.

## CONCLUSIONS

One cannot dispute that the impact an integrated community pharmacist has on patient outcomes and quality of care in a PCMH practice is great. However, we found that a year for this endeavor was realistically not long enough, especially to properly evaluate third party billing, payment, and sustainability of such a position. The first year of this grant project was focused on integrating a community pharmacist into a PCMH practice and on trying different combinations of billing codes. Based on this foundation and the lessons learned, there is considerable evidence to suggest that a longer term trial of similar nature would be of value to furthering the pharmacy profession.

Significant positive progress towards billing, reimbursement, and sustainability was made between July and October 2013. However, it is recognized that the reimbursement at the time of this summary, on its own, is not yet enough to sustain the presence of a community pharmacist in a PCMH practice. That being said, discussion is underway between PGPA and CFP to continue partnership beyond the terms of the grant even though the money strictly from third party reimbursement is not quite enough to singularly sustain this project. In this way, this demonstration project was successful because while not in the manner initially planned, there is talk of ensuring the sustainability of the project through funding streams outside of the grant. It is strongly believed that should the CCMT continue to progress, this will become a reality within the next year.

Now is the time for community pharmacists to make certain that they are included and recognized as equal members in the new model of health care. With large initiatives like MiPCT looking to establish best practices and finalize billing codes, now is the time for pharmacists to be advocating for a secure role in the PCMH practice model. However, during this formative period of time, it is difficult to sustain an integrated community pharmacist’s involvement without additional support and investment.

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