Practice Change in Community Pharmacy: A Case Study of Multiple Stakeholders’ Perspectives

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Abstract

Objective: To obtain a multi-stakeholder perspective of community pharmacy practice change. Design: Qualitative study.

Setting: Community pharmacy in rural Mississippi. Participants: Fourteen key stakeholders of the patient care practice including pharmacists (n=4), support staff (n=2), collaborating providers (n=4), patients (n=3), and a payer (n=1). Intervention: Semi-structured interviews and participant-observation techniques were used. Main outcome measures: Description of the community pharmacy’s practice and business model and identification of practice change facilitators. Results: Change facilitators for this practice included: a positive reputation in the community, forming solid relationships with providers, and convenience of patient services. Communication in and outside of the practice, adequate reimbursement, and resource allocation were identified as challenges.

Conclusions: This case study is a multi-stakeholder examination of community pharmacy practice change and readers are provided with a real-world example of a community pharmacy’s successful establishment of a patient care practice.

Introduction

In recent years, an increasing number of community pharmacists have made efforts to transition from solely providing dispensing services to the addition of patient care practices. While pharmacists providing immunizations are becoming increasingly commonplace, medication and disease management services are limited. Although guidance documents are available, many pharmacists still struggle to make the transition.

Acknowledging these ongoing struggles, researchers worldwide have conducted studies to better understand factors supporting community pharmacy practice change. Australian researchers identified seven facilitators of practice change in community pharmacies including: relationships with physicians, adequate compensation, pharmacy layout, patient expectation, staffing, communication/teamwork, and external support or assistance (e.g. having a mentor). In 2000, Doucette and Koch studied six community pharmacies in the United States to find potential facilitators which influence practice change. They identified 20 facilitators which discriminated between pharmacies that had changed their practice to include patient care services versus those who solely provided dispensing services. Change facilitator categories included environmental variables (e.g. competitiveness, interaction with state pharmacy organization), organizational variables (e.g. employee consensus, openness of communication), owner/manager characteristics (e.g. management experience, risk taking), strategy-making features (e.g. addressing constraints, futurity of decisions), and attributes of changes (e.g. cost and complexity of changes). More recently, Willink and Isetts completed a case series of four community pharmacies to examine the pharmacists’ characteristics necessary to implement innovative patient care services. Characteristics

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identified included a philosophy of practice, patient care process, a management system, and clinical knowledge. This research resulted in a “checklist” of necessary components for development of an innovative practice.\textsuperscript{13}

These published studies have identified facilitators of change, both in and out of the pharmacy, necessary for the success of pharmacy-based patient care practice, yet the perspectives of integral personnel (e.g. providers, payers, patients, support staff) who were also involved in the successful implementation of a patient care practice are not present. This simultaneous exploration of “key stakeholder” perspectives, in addition to pharmacists, involved in the successful implementation of patient care services in a single community pharmacy has yet to be published. The experiences of these stakeholders - patients, other health care practitioners, payers, and pharmacy staff - are crucial to provide pharmacists a more complete depiction of the path to successful implementation of a practice innovation. This case study builds on existing literature by providing a multi-stakeholder perspective of how an independent pharmacy created sustainable patient care practice.

**Methods**

The case study was conducted utilizing participant-observation techniques and a qualitative analysis of interviews with key stakeholders at an independent community pharmacy in Corinth, Mississippi. This pharmacy was identified for in-depth analysis because it was a traditional community pharmacy that underwent transformation prior to initiation of this study to include established patient care services and the Director of Clinical Services (DCS) was willing to assist with and participate in the research study. The study objectives were to describe the pharmacy’s practice and business models and identify factors facilitating the pharmacy’s transformation from a dispensing-only pharmacy to one providing direct patient care services. Key-informant interview questions were adapted from a previously developed interview guide by Roberts et al.\textsuperscript{14} The interview questions focused on uncovering how and why each of the stakeholders began working with the pharmacist-patient care practice, how relationships were established between the stakeholders and the practice, adaptations that occurred within the internal and external pharmacy, how compensation and marketing for the services occurred, and the practice implementation and practice change strategy experiences. The study protocol was approved by the University of Pittsburgh Institutional Review Board.

**Data Collection**

The principal investigator observed the pharmacy over 4 days and interviewed practice stakeholders--pharmacists (n=4), support staff (n=2), patients (n=3), medical providers (n= 4), and a payer (n=1). Support staff included pharmacy technicians and cashiers who provide billing and clerical support for the practice. A semi-structured interview format was used. This format provided a guide for the interviews which helped in maintaining consistency across interviews but allowed for flexibility in the questioning to enhance question relevance to specific participants, probing as needed, and a more “conversational” nature of the discussions.\textsuperscript{15} All interviews were conducted by the principal investigator and were audio-taped in a private room. Responses captured via audiotapes were transcribed for content analysis.

**Data Analysis**

Two investigators were responsible for completing an analysis of interview data. The investigators first read the transcripts for overall understanding and to increase familiarity with the data. Then, a deductive approach was used to develop a conceptual code structure or “start list” of codes for preliminary sorting of the data.\textsuperscript{15} Working independently and resolving discrepancies through discussion, these codes were then applied to the data and an inductive or “ground up” approach was used to refine conceptual codes as needed to ensure the code structure described the data appropriately and to develop subcodes. This process continued until investigators reached consensus on code definitions and final subcode assignments were made. An “audit trail” which included code definitions and a record of how codes emerged, along with a final summary of subcode frequencies was maintained. After the analyses were completed, the DCS was able to review a draft report of findings to allow for the opportunity to provide comments or suggestions to ensure accuracy.

**Results**

**Study Site**

The study pharmacy was founded in Corinth, Mississippi in 1975 and dispenses approximately 250 prescriptions per day. Corinth, in rural northeastern Mississippi, has a population of approximately 14,000.\textsuperscript{16} Staffing for prescription dispensing consists of 2 pharmacist full time equivalents (FTE) and 4 support staff FTE. An additional 3 FTE pharmacists (one of whom is a community pharmacy resident) and 2 FTE of support staff are dedicated to the patient care practice.

**Practice Description**

The practice began to transform into one with additional patient care services in 1998 and now offers two types of patient care services, anticoagulation and diabetes management, both stemming from community pharmacy residency projects. Prior to the establishing these services,
the pharmacy operated as a traditional dispensing pharmacy with patient care limited to medication counseling. A third service, an asthma management program, was closed prior to initiating this study. All patient appointments occur in a semi-private space, out of the flow of dispensing traffic. The anticoagulation monitoring service was established in 1998 with appointments occurring on two half days per week in 15 minute increments and consisting of point-of-care testing, patient education, and dosage adjustments according to a physician-approved protocol. For anticoagulation patients, claims are submitted to third-party payers (e.g. private insurance or Medicare) for reimbursement to the pharmacy, whenever possible, and patients pay a co-pay to cover any costs (e.g. test-strips) not covered by the payer. An American Diabetes Association recognized self-management education program was established in 2004. Classes occur four evenings per month and are taught by pharmacists, a nurse, and a dietician. The payer interviewed for this study provides reimbursement to the pharmacy for individual or group diabetes education classes. Financial incentives (e.g. waived or reduced co-pays for diabetes related medications and supplies) are offered to program enrollees.

Five main themes emerged from the analysis: Success is defined by the ability to be sustainable, the pharmacist must have a passion for patient care to successfully implement a new patient care service, relationship development and maintenance are essential, and consistent marketing is key. The final theme noted the presence of continual challenges for practice transformation and solutions rest in the ability to effectively communicate and be compensated for service.

Definitions of Success: Sustainability
Metrics for determining practice success varied by stakeholder and reflected sometimes divergent goals. Although stakeholders emphasized achievement of clinical outcomes, pharmacists also acknowledged the importance of financial sustainability.

One pharmacist stated: “My opinion has changed a lot over the years because coming out of the gates of pharmacy school you know I just want to make patient’s lives better and that was my only goal. Now I realize that if a program is not financially feasible it’s not going to last long term.”

Pharmacists and support staff also emphasized practice sustainability by considering the number of patient referrals. Several medical providers and pharmacists also received feedback from patients, both directly and indirectly, which they used to measure practice success. When patients measured practice success, they emphasized service convenience, which was echoed by one support staff person.

Practice Implementation: Pharmacist Passion for Patient Care
Medical providers, pharmacists, and the payer discussed how pharmacists show a passion for patient care and that these services are not widely available in the area.

The payer mentioned: “[they have] just gone above and beyond to try to accommodate and to help and to make the program a success.” and “...is the only [pharmacy] ...in this area that I’m aware of that provides that service.”

Pharmacists often discussed practice workflow, which emphasized task delegation, ability to take time away from the dispensing process, and a closer physical proximity to patients. One pharmacist mentioned: “I like to be in contact with that [sic] patient. In fact, I love just to come from behind the counter and sit down...and talk to them about medications.”

Finally, pharmacists mentioned community pharmacy residency projects repeatedly as a way to assist the practice by updating clinic protocols, establishing relationships with medical providers, and training support staff. As discussed above, both of the currently offered patient care services are also a direct result of previous residents’ projects.

Relationship Development and Maintenance: “It’s personal” for patients, practitioners and payers
A key factor described all interviewees for establishing a relationship with the practice was the practice’s reputation, and even more specifically the DCS.

One medical provider mentioned: “There are some doctors that feel like they’re supposed to control everything, but he’s professional, I know he’s intelligent, I know he’s honest, his integrity is beyond question.”

All pharmacists interviewed were attracted to the practice because they perceived numerous professional development opportunities, no matter the stage of their career. All patients emphasized physician referral for anticoagulation management as their primary reason for establishing contact with the practice. Convenience of the anticoagulation service was also popular with patients and medical providers. Several medical providers and the payer mentioned the pharmacists’ medication expertise as motivation for choosing to remain involved with the practice.

One medical provider stated: “Of course they’re so well trained in handling the anticoagulants that the majority of them I leave to the pharmacists after I’ve found out that they knew how to do it.”
The relationship between pharmacists and medical providers was most often discussed by pharmacists themselves, and these comments usually described perceived open communication and trust between the two groups.

**Marketing: Consistency**

Marketing was described as occurring through visits to local primary care clinics. Specifically, the DCS, sometimes with a community pharmacy resident, visited medical providers and invited them to a presentation about services offered by the pharmacy or left marketing materials. Once the relationship with a clinic is established, it is supported through periodic visits from support staff who provide practice updates. Patients and support staff also described word of mouth advertising as another marketing strategy.

**Challenges and Solutions of Practice Transformation: Communication and Compensation**

For medical providers, a key challenge was a desire for greater communication between themselves and practice pharmacists. One medical provider stated: “So far I feel like maybe a little more feedback about the information that’s given in classes to me would probably be helpful.”

However, pharmacists, along with support staff, were primarily challenged by resources and logistics (e.g. time, personnel, and workflow modifications) necessary for practice sustainability and continuity of dispensing workflow. To address this, pharmacists and support staff described how certain tasks are delegated to pharmacy residents or support staff. During the participant observation period of this study, third-party adjudication for services, referral follow-up and patient scheduling were observed to be performed solely by support staff.

A major challenge identified by pharmacists and support staff was reimbursement for the anticoagulation service. They indicated the program could be operating at a loss, but feel it may be increasing revenue in other areas such as new prescription business. Of note, inconsistencies with collecting payment were repeatedly observed by the primary investigator. Difficulties with expansion efforts were also discussed by one medical provider and several pharmacists. An asthma management program was previously established, but was later found to be diverting resources away from the anticoagulation and diabetes management programs. As a result, the DCS has been required to prioritize resource allocation, which resulted in a decision to discontinue the asthma management program as described by multiple practice staff. Finally, a challenge discussed by pharmacists was maintaining consistent communication across all staff as services evolved. To address this, the staff adopted a practice of holding frequent, brief staff meetings.

**Discussion**

Change facilitators found for this community pharmacy that previously transformed to include patient care services in addition to traditional dispensing functions include clinical outcomes, financial sustainability, service convenience, passion for patient care, maintaining and developing relationships, consistent marketing to providers, and the presence of community pharmacy practice residencies. Most of these facilitators of change have been reported previously. Although this practice did not have an explicitly stated philosophy of practice, the staff’s commitment to patient care was a driving force behind practice structure and interactions with the payer and primary care providers. Challenges for this practice include communication (both in and outside of the pharmacy) and adequate revenue.

The importance of service convenience when marketing to patients has been previously identified, and was repeatedly mentioned by patients during this study as a reason for choosing this practice. Pharmacists and support staff recognized this and highlighted convenience of practice services when marketing to providers and patients. Future development and refinement of marketing strategies and service provision should emphasize convenience for patients. Additionally, the importance of word of mouth marketing to patients was unique to this study and is possibly an area for future exploration.

A solid medical provider/pharmacist relationship was repeatedly mentioned by medical providers and pharmacists, however some medical providers saw deficiencies in communication while pharmacists highlighted this as an area of strength between the groups. This finding illustrates the necessity of continuous quality improvement to ensure medical provider expectations are met. Medical providers recognized the pharmacist’s clinical training and expertise in anticoagulation management supporting the concept that medical providers need to be confident in a pharmacists’ training and skill.

One solution identified by this practice to address the challenges of limited resources and logistics was task delegation of technical functions to support staff. This workflow modification may have allowed pharmacists to engage more directly with patients while not disrupting dispensing functions. Recently, Chui et al reported that having pharmacists perform only the functions required by law and delegating remaining tasks to pharmacy technicians.
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has been a successful technique used by other practices to free up time for pharmacists to focus on clinical services.  

The ability to secure adequate revenue has been previously identified by community pharmacists as a barrier to the provision of pharmaceutical care and pharmacists in this practice were no different. Despite having financial success with current programs, pharmacists and support staff expressed concern for the financial sustainability of clinical services due to failure of the asthma management program. Interestingly, the pharmacy continues to offer the anticoagulation management program despite the staff’s assumption that it operates at a net financial loss but generates a net financial gain through increased prescription volume. This concept of a clinical service serving as a “loss leader,” (a service or good being offered at a net financial loss for the purpose of achieving increased revenue in other business areas) may deserve further exploration. A comprehensive analysis of the revenue and expenses of clinical service delivery and the potential increase in business generated from the clinical service offerings has not been completed.

Limitations

Both investigators conducting the data analysis are community residency-trained pharmacists, with one investigator having additional training in research methods, and this may have influenced interpretation of the findings. Discrepancies were resolved between investigators by consensus and reviewing results with research collaborators. Limited financial information was available, making the description of the business model and analysis of practice finances difficult. Only the payer for the diabetes service was able to be interviewed. The perspective of this payer may differ from other payers. Finally, this study was conducted at one patient care practice, potentially limiting transferability of identified change facilitators.

Conclusion

The development of a community pharmacy-based patient care practice is possible and can be sustainable. A passion for patient care, forming solid relationships with providers, and patient convenience of practice services were facilitators to the establishment and sustainability of this pharmacy-based patient care practice in Corinth, MS. Communication and reimbursement are continuing challenges for this practice. The multiple stakeholder viewpoints in this study provide pharmacists considering a practice innovation a real-world example to compare to their own surroundings.

References

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