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Barriers to Providing MTMS

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Medication therapy management services (MTMS) have been shown to improve patient health outcomes through improved control of chronic disease and more careful attention to potential drug-drug interaction. Insurers have found MTMS to be quite effective at both cost and patient risk reduction. Both patients and pharmacists have a generally positive outlook on the MTM process; however, many pharmacists struggle to balance their current clinical responsibilities with the added workload of MTMS. This study was conducted to identify the barriers to MTMS provision encountered by Indiana pharmacists.

LITERATURE REVIEW

MTMS became a required service as part of the Medicare Modernization Act of 2003 (MMA). This piece of legislation requires all Medicare Part D prescription drug plan sponsors (PDPS) to create a medication therapy management program for targeted patients in order to improve overall knowledge of medication usage (American Society of Health System Pharmacists, 2006). According to Medicare, individuals who are "targeted" to receive MTMS are those who have multiple chronic diseases (such as diabetes, asthma, hypertension, etc.), have been prescribed several covered Part D medications, and are

paying at least \$4,000 in out-of-pocket expenses for their medication each year (American Society of Health Systems Pharmacists, 2006).

Insurance companies are eager to implement programs to assist patients in managing their medications because it is a relatively small investment which has been demonstrated to save a significant amount of money. For example, Hahn and Shapiro (2007) point out the cost differential between patients with well-controlled diabetes versus diabetes patients whose condition is not under control. Even though the former patient might require the insurer to pay more for additional prescription drugs to keep the diabetes controlled, the total treatment cost for the controlled patient is between \$8,000 and \$13,000 lower per year than the uncontrolled patient. These savings, largely a result of MTM intervention by pharmacists, are primarily due to the reduction of potentially expensive complications for those with uncontrolled diabetes. Insurance plans have the freedom to establish fees involved in providing MTMS. According to the Center for Medicaid and Medicare Services (2006), Medicare has mandated that potential Part D sponsors provide explanation as to how expended resources and time have been factored into the reimbursement amount requested by MTM providers.

Touchette, Burns, Bough, & Blackburn (2006) suggest that one potential problematic area involves the eligibility restrictions for MTM services. They state: "although an economic incentive may be perceived in some cases...the fiscal impact of...an MTM program may depend less on the condition being treated and more on the potential of the involved medications to result in benefit or cause harm" (p. 688). Thus, to truly be effective, insurance programs may need to restructure their eligibility requirements to include more chronic conditions based upon medication risks, rather than limiting patients' eligibility simply in terms of how "costly" their specific condition may become.

Similarly, Cameron (2005) touches on this same topic of patient "targeting," suggesting that some MTMS may lead to improved patient compliance with drug therapy, thereby creating less profitability for the insurance companies because of increased prescription expenses. To help combat this potential problem of insurance companies becoming too exclusive with patient selection for MTMS, Cameron suggests that physicians and other healthcare professionals be authorized to refer high-risk patients who may not meet the established criteria to receive MTM interventions.

Regarding effectiveness, Touchette et al. (2006) also mention that programs offering a comprehensive list of services may be able to better identify problem areas and subsequently find solutions to those issues via contact with the patient's physician and/or multiple MTM progress visits. The Center for Medicare and Medicaid Services (2006) notes that insurance plans initially will have the opportunity to choose the design of their programs using any means of communication, although they do suggest that future regulations may be implemented if particular methods of performing MTMS prove more effective than others.

There is no doubt that patients are taking advantage of MTM opportunities. While some patients have low expectations regarding pharmacy services and only wish to be assured that they have the correct medication (Summary, 2005), many seem ready and willing to take advantage of these consultation sessions with trusted medical professionals (Lipowski, 2007; Swidan, Mitzryk, & Samuels, 2007).

Pharmacists also believe that MTM programs are beneficial, as they move pharmacies in the direction of giving practitioners official documentation of their consultation time. Breeman (2007) noted that "Managed care pharmacists want a closer, more personal relationship with their patients and to do what they truly love to do" (p. 52). Pharmacist Ernest Dole, explaining the need for a formal recognition of services, notes that "...most pharmacists do not typically bill for the patient care services they provide. And without substantial development of that ability, the profession's survival may be threatened" (Sipkoff, 2007, para. 4). Furthermore, MTM interventions may take longer than expected, but the results are promising: "I think it's rewarding for the patients...They're happy, and they know there is somebody they can go to" (Gowda & Provost, 2005, p. 1646).

Pharmacists with MTMS experience affirm that the services increase patient compliance and confidence because medications are being administered correctly. However, they also note that MTMS also present conflicts of interest in terms of funding and coordinating care with other professionals (Gowda & Provost, 2005). The bottom line is that "the value of pharmacists as providers of patient care services such as MTM is underappreciated" (Swidan, Mitzryk, & Samuels, 2007, p. 677). The authors, all

pharmacists themselves, recognize MTM as a valuable program but insist that pharmacists must "take immediate, decisive steps toward demonstrating their value to employers, insurance companies, and government officials" (p. 677). Paul (2007) underscores the importance of recognition, noting that pharmacies must fairly compensate for the additional time and effort put forth by pharmacists.

Recent research has shown that pharmacists are eager to implement MTMS, but are counting on Medicare Part D Prescription Drug Plans (PDPs) to assist in both implementation and reimbursement logistics (Boyd, Boyd, & Zillich, 2006). Of particular concern is lack of commitment to face-to-face meetings – one study reported that telephone centers and mail campaigns comprised more than half of the PDP provisions (Boyd, Boyd, & Zillich, 2006). For many pharmacists, the motivation is present, but more precise definitions and guidelines regarding their MTMS are needed.

The purposes and benefits of medication therapy management (MTM) have been well documented. Assuming proper implementation, MTMS present myriad benefits for pharmacists, patients, physicians, and the pharmacy profession as a whole. MTMS function to "ensure appropriate use of [Medicare] Part D drugs to optimize therapeutic outcomes through improved medication use and to reduce the risk of adverse events including drug-drug interactions" (Altman, 2007). Additionally, MTMS are designed to "improve care, enhance communication among patients and providers, improve collaboration among providers, and optimize medication use for improved patient outcomes" (APhA/NACDS Foundation, 2005).

Scholars have recently begun to empirically demonstrate the benefits of MTM in terms of improved patient outcomes. Bunting and Cranor (2006) tracked clinical, economic, and humanistic outcomes of a recently implemented MTM program for asthma patients over a five-year period. They discovered that 70 percent of patients had improved breathing rates following the program. As far as economic savings, an average of \$1,230/patient/year savings in indirect costs in terms of workplace absenteeism (physically missing work) and presenteeism (being at work but unable to perform due to health condition) were found. For humanistic outcomes, the categories of shortness of breath, tightness of

chest, chest pains, and coughing/wheezing all showed significant improvement upon follow-up visits.

The pharmaceutical industry as a whole stands to gain from the implementation and execution of MTMS. Pharmacy professionals have had a hard time shedding their "behind-the-counter persona," (Bari & Davis, 2007, p. 2), and MTMS provide for more one-on-one contact with customers, thereby reducing the physical and psychological distance between pharmacists and patients, ultimately resulting in the degree of open communication needed for effective drug therapy. Pharmacies, because they are the most visited health-care setting, are the most appropriate place for MTMS to be rendered; hence, pharmacists are in the best position to administer the one-on-one communication that MTMS warrant (Cranor, Bunting, & Christiansen, 2003).

MTM is an opportunity for pharmacists to demonstrate their in-depth knowledge of the nuances of drug therapy. Most physicians simply do not have the time, and allied health care professionals (i.e., Nurse Practitioners and Physician Assistants) lack the clinical background required for such interventions (Gebhart, 2004). Pharmacists have the responsibility (and opportunity) to "step outside their pharmacy box, educate the public and the medical profession, and market their services" (Schuh, 2008, p. 1).

With all of the benefits and opportunities of MTMS, they are not without their criticisms and drawbacks. Often, the sheer volume of work required of pharmacists may eliminate any extra time for these types of services (Altman, 2007). These situations may lead to the outsourcing of MTMS to other pharmacists outside of the immediate pharmacy setting. This scenario seems to run contrary to the hope that MTMS would bridge the gap between pharmacists and patients in terms of expanding communication and developing relationships. Some of the tremendous opportunities MTMS present can also be viewed as extra pressure on pharmacists. Indeed, pharmacists assume great responsibility that scholars recognize: "the onus of popularizing the development of quality MTMS now falls squarely on the shoulders of the pharmacist" (Bari & Davis, 2007, p. 8).

Furthermore, skeptics fear that MTMS may not be a revenue-generating activity and will ultimately create a divide between pharmacists administering the MTMS and

the prescription drug plan sponsors who design and manage the benefits (Cantwell, 2005). A lack of standardization of what MTMS entail is also a salient concern. This includes an unclear definition of what should be included in MTMS, a lack of understanding about the process of reimbursement, and unclear expectations about which patients should receive the services.

A number of studies have been conducted to identify possible barriers to the provision of MTM services based on the observation that many pharmacists express positive feelings about MTMS but largely fail to provide these interventions. Several factors have been identified that may explain this inconsistency. One study found that many pharmacists reported lack of confidence regarding their ability to successfully complete the patient care involved in MTMS (Odedina, Segal, Hepler, Lipowski, & Kimberlin, 1996). Another study identified the physical layout of stores and space allocated for pharmacy-related services to be a potential barrier to MTMS provision. Pharmacists without access to private consultation rooms may avoid MTMS and other patient interaction due to privacy concerns (Raisch, 1993). This barrier has become even more of an issue as new HIPAA guidelines enforce the confidentiality of patient health information. This study also identified numerous barriers related to dealing with prescribing physicians. Perceived barriers included difficulty making contact due to physician/pharmacist mutual availability and negative physician attitudes toward pharmacists' recommendations. Whether these barriers are real or only perceived, they serve to effectively reduce the amount of pharmaceutical services provided in the pharmacy.

A number of studies have recognized insufficient reimbursement as a barrier. In a comprehensive study of payment structures for MTM sessions, the Lewin Group found \$1.00 to \$2.00 per minute to be an adequate figure to cover pharmacist labor costs involved in providing MTMS. Total costs, according to industry estimates, are higher, at \$2.00 to \$3.00 per minute (Lewin Group, 2005). The amounts that state Medicaid programs pay for MTMS vary. For example, Iowa Medicaid pays \$75.00 for an initial assessment, \$40.00 for a new problem or follow-up assessment, and \$25.00 for any preventative follow-up assessments. In contrast, Mississippi and Wisconsin

Medicaid pay \$20.00 and \$40.11 per visit, respectively. In many cases, these reimbursement amounts do not cover the costs of pharmacists who are providing the services, and thus create a real barrier to the implementation and execution of successful programs.

Another study found that some pharmacists employed by chain pharmacies believed they should receive some of the reimbursement that their stores receive for their interventions (Rochester & Currey, 1999). Pharmacists who hold this opinion are less likely to conduct MTM interventions if they believe it creates additional work with little individual benefit.

METHOD

After reviewing published studies and general descriptions about pharmacy practices and patient care services, a 24-item scale was developed to measure pharmacist attitudes and practices surrounding MTMS as well as to assess the presence and severity of various predicted barriers. In addition to these Likert-scale questions, a pool of demographic and pharmacy characteristic questions were included to assess other characteristics which might be related to MTMS provision. Finally, several open-ended questions were developed to solicit unstructured feedback about pharmacists' perceptions of MTMS. This questionnaire was distributed to Indiana pharmacists via the Indiana Pharmacist Alliance Community Pharmacy Academy e-mail list. A total of 81 responses were collected from practicing pharmacists in the state of Indiana. After evaluating these responses, six in-depth interviews were conducted to further probe the nature of MTMS barriers. From the survey responses and in-depth interviews, nine barriers to MTMS implementation in the state of Indiana emerged.

RESULTS

Barrier #1:

Lack of Management Support

Research suggests that though MTMS present tremendous opportunities for both pharmacists and patients, they can also put extra pressure on pharmacists. When lack of time, training, structural resources, and sufficient reimbursement are compounded by little or no support from management, the motivation and ability to provide MTMS suffer. MTMS in all pharmacy settings "should include structures

supporting the establishment and maintenance of the pharmacist-patient relationship" (MTM in pharmacy practice, 2008), and management is at the core of these structures. Lack of management support is more of a roadblock than a barrier – regardless of pharmacists' attitudes toward MTMS, the feasibility of successful implementation and maintenance rests on continued management support. This claim was supported by our survey: 100 percent of pharmacists reporting lack of management support for MTMS also reported that their pharmacy did not provide MTMS.

Barrier #2:

Lack of Training

Based upon the literature review, we expected to see lack of training as a barrier for pharmacists' provision of MTMS. One salient concern about MTMS was lack of standardization. Many pharmacists believe there is an ambiguous definition about what comprises an MTM, exhibit a lack of understanding about the process of reimbursement, and possess unclear expectations about who should receive services. In short, because there is little standardization of MTMS, pharmacists lack the initial knowledge and clinical practice to successfully perform requested interventions.

From the survey, approximately 30 percent of our respondents reported having no training in providing MTM services. Similarly, 33 percent of respondents reported that they were not well prepared in school to conduct MTM services. These responses demonstrate, in part, the training gap pharmacists experience when beginning to provide MTMS. If pharmacists are not adequately informed, educated, and trained in MTM provision, MTMS are not rendered and patient care suffers. Several interviewees noted that the "training" they had received was informal, and oftentimes "on-the-job." One interviewee stated: "Much of my training has been practical, and hands on, from experience, not so much classroom training." A great number of responses to the open-ended survey questions demonstrate the significant role training plays in the provision of MTMS.

Barrier #3:

Inadequate Patient Education and Awareness

While research has shown that patients generally have a positive attitude toward MTMS and that many are indeed taking

advantages of these services, our survey and interviews indicate room for improvement in patient education. As expected, MTMS are believed to improve the quality of customer care, and only 17 percent of pharmacists surveyed felt their patients were not open to MTMS. However, these results do not necessarily indicate that patients are not experiencing difficulty in understanding the process or benefits of MTMS.

Barrier #4: Lack of Time

Based on the literature review, lack of time was expected to be a barrier to provision of MTMS. Pharmacists have consistently expressed feeling the pressure of time constraints and the added responsibility of MTM provision only adds to the stress.

Our survey revealed that 59 percent of respondents felt they lacked the time to provide requested MTMS. An additional 14 percent remained neutral on the issue of time. Approximately 30 percent of the responses to the open-ended survey question regarding why MTMS were not currently being provided included comments referencing time as a barrier.

Barrier #5: Lack of Private Space

Concerns about patient confidentiality in light of HIPAA requirements are salient concerns for many pharmacists. The physical layout of stores and space allocated for pharmacy-related activity was found by one study to be a perceived barrier by pharmacists due to a lack of privacy. Furthermore, current layouts of most pharmacies are not conducive to the comfortable climate necessary for open dialogue in which the patient can feel free to ask questions. Pharmacists without access to private consultation rooms may avoid MTMS and other patient interaction due to privacy concerns (Raisch, 1993).

Our survey supported the published literature related to this barrier. Of our respondents, 45 percent reported lack of private space for consultation was a barrier to providing MTM services.

Barrier #6: Complexity of Required Documentation

A common mantra in many fields of health care is “if you didn’t document it, you didn’t do it.” Pharmacists have experience maintaining prescription records,

but many lack experience documenting patient care activities. More comprehensive documentation practices are essential when pharmacists implement patient care services, including MTM. Based on our literature review and primary research, the complexity of required MTMS documentation for the service and for reimbursement has been identified as a barrier.

Of survey respondents, 41 percent reported that the documentation requirements for MTMS services are a burden. Similarly indicating a problem with the required documentation, 39 percent of respondents indicated that they often provide requested MTMS services without completing the documentation required for reimbursement.

In the survey, pharmacists expressed that “documentation needs to be automated, perhaps scan a bar code to identify the medication/patient, and then use a touch screen to verify the proper information was covered.” Respondents wished there was “easier paperwork to complete, more time to take care of monthly patient[s].”

Barrier #7: Difficulty Interacting With Physicians

The results of our study were consistent with the investigations conducted by Raisch (1993) in terms of difficulty interacting with primary care physicians. Similar to Raisch’s findings, pharmacists in Indiana reported difficulty making contact with prescribing physicians due to schedule availabilities, and many reported that physicians often have a negative view of pharmacists as part of a patient’s overall healthcare team.

From the survey, nearly 37 percent of respondents reported experiencing difficulty interacting with customers’ primary care physicians. Nearly 23 percent of respondents were unsure when asked about difficulty interacting with physicians, which may indicate that some physicians and practices are easier to contact and collaborate with than others. A number of comments from the open-ended questions provided more insight into the day-to-day difficulties pharmacists may encounter when dealing with primary care physicians.

Based on these comments and additional information received from the interview, two primary areas of concern were identified: communication and collegiality. Pharmacists often have difficulty communicating with primary care physicians. Many respondents reported long

delays in being able to speak to physician, or problems with messages being incorrectly relayed or ignored by nursing staff. This difficulty in connecting with physicians ultimately reduces pharmacists’ willingness to conduct MTM and other clinical pharmacy services that require coordination with other health professional.

In terms of collegiality, many pharmacists reported being treated as “second class citizens” in the healthcare industry. Rather than being treated as an integral part of a healthcare system, pharmacists’ efforts are often rebuffed by physicians. One respondent reported being told by a physician: “You don’t need to do it (MTM) for my patients – they know all they need to do.” Part of this lack of collegiality may be due to physicians feeling threatened by pharmacists’ therapy suggestions. One pharmacist remarked “It’s kind of a ‘turf’ thing; when I start making suggestions, they [physicians] might feel like you’re stepping on toes.”

Barrier #8: Lack of Access to Information

Overall, access to information in the provision of MTMS has been given little attention in the pharmacy literature. However, Raisch (1993) found that pharmacists cite “inadequate patient information” as a barrier to providing MTMS. Another common concern reported is lack of consistent and comprehensive patient information, especially from patients who trade at multiple pharmacies and see multiple physicians. Despite attempts in the literature to identify possible barriers early on, lack of information remains an under-researched, unforeseen problem.

Results from our survey revealed that 60 percent of pharmacists do not believe they have access to the necessary information to provide MTMS. Based on this result and the recommendations from our interview respondents, it is clear that increasing the amount of information available to pharmacists will increase pharmacists’ levels of comfort with recommending drug therapy modifications. Without access to the same information, physicians and pharmacists are unable to provide consistent, quality care.

Barrier #9: Inadequate Reimbursement

Based on the literature review, this barrier was expected, and it did prove to be a significant barrier for the surveyed

pharmacists. Many pharmacists expressed opinions consistent with Rochester & Currey's 1999 observation that pharmacists are unlikely to conduct MTM interventions if they believe it creates additional work with little individual benefit.

From the survey, 14 percent of pharmacists indicated that they did not provide MTMS because compensation was not adequate. A further 45 percent remained unsure of their answer to this question. This may indicate, at least partially, a segment of the population that does conduct MTMS but feels the

compensation is too low, or does not conduct MTMS but is unwilling to admit compensation is a factor. A number of comments to the open-ended questions reinforced the importance of reimbursement for individual pharmacists.

This study sheds light on the numerous barriers to the implementation of MTMS encountered by Indiana pharmacists. However, because of the numerous benefits to pharmacists, patients, and insurance companies alike, steps must be taken to eliminate or reduce the effects of these barriers.

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