

Evaluation of a Consumer-Generated Marketing Plan for Medication Therapy Management Services

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Confidentiality Agreements were used in this project to protect the proprietary rights of each project site and the marketing company.

Abstract

The purpose of this project was to utilize a consumer-directed, care model redesign methodology to develop and evaluate a marketing plan for medication therapy management services (MTMS) provided in community pharmacies. This was accomplished through a six-step process: (1) application of “design thinking” for eliciting consumer input on redesigning MTMS and marketing approaches, (2) exploratory research, (3) focus group analysis, (4) marketing plan development, (5) marketing plan implementation, and (6) marketing plan evaluation.

The findings showed that the application of “design thinking” and focus group analysis was useful for creating a consumer-directed marketing plan for medication therapy management services (MTMS). Implementation and evaluation of the MTMS Marketing Plan revealed that the most successful pharmacies were those that had established business associate agreements with the medical clinics closest to their site of practice, including access to electronic health records. This “virtual electronic presence” of pharmacists in the medical care system was highly consistent with the consumer demand we uncovered for a visible relationship between pharmacists, physicians and other health care providers.

Introduction

Medication Therapy Management Services (MTMS) have been designed to optimize therapeutic outcomes for people taking medications. There is evidence for improvement in clinical, economic, and humanistic outcomes through this service [1-5]. However, a number of barriers to the delivery of MTMS have been documented during its implementation including: pharmacist training, staffing, management, documentation, access to medical records, consumer awareness, marketing, provider recognition, and payment for services [6-8].

As barriers to building practices supporting the delivery of this service are being addressed [9-13], the practice management challenge of marketing MTMS to consumers remains. For example, individuals who receive MTMS overwhelmingly report: (1) a favorable evaluation of pharmacist-provided MTMS, (2) that they would use this service again, and (3) that they would recommend it to a friend or family member. However, these individuals are rare and there is wide variation in how they learned about MTMS in the first place [14]. Only a small proportion of consumers ever experience MTMS, with most people not even being aware that the service is available or what it entails [15-17].

Studies show that the current public perception of a pharmacist still revolves around the dispensing role, and there is very little public knowledge of a pharmacist's clinical role [17-19]. Also, there is evidence of a lack of patient trust in the clinical abilities of the pharmacist [17-20]. Law and colleagues reported that among Medicare Part D patients, only 58% of respondents considered pharmacists to be good candidates for providing MTMS [17]. Of this group, 75% named their physician as the provider they would visit for medication problems [17]. Although there is a general trust in pharmacists' abilities, 70% of those surveyed specified that this trust only extends towards prescription dispensing, with only 45% trusting their pharmacist for providing advice on adverse effects, contraindications, and other "problems" [17].

Another issue is the public's low perceived value of MTMS which creates a gap between how pharmacists and patients view the benefits of this service [17-24]. Research has shown that perceived benefits of MTMS were low even among high prescription users [17] and may be due to lack of exposure and poor understanding of what the service provides [21]. Kuhn and colleagues also found that respondents did not have a clear understanding of the difference between MTMS and prescription counseling [25]. However, after individuals receive MTMS, they appreciate it more than those who have not [25].

Currently, there is little specific information on creating and evaluating a comprehensive MTMS marketing plan. Broad suggestions in the literature entail increasing public awareness of pharmacists' clinical abilities, increasing word of mouth promotion, addressing patient barriers to MTMS, and developing MTMS tailored to patient needs and wants [17, 20-26]. More specific suggestions focus on collaborating with physicians and other health care workers to help them learn about the benefits of MTMS and then rely on these clinicians to identify patients who they believe would benefit the most with a resultant referral to a pharmacist [25]. Another specific strategy is to differentiate MTMS from prescription counseling so that the public would be willing to utilize and pay for MTMS as a "value-added" service [25].

To help create innovative ideas for the marketing of MTMS, we applied "design thinking" to MTMS marketing. Design thinking has been described as a process for the practical and creative resolution of a problem or issue that looks for a specific improved future result [27]. It combines empathy, creativity and rationality from the user's perspective to drive business success. Thus, the **purpose of this project** was to utilize a consumer-directed, care model redesign methodology to develop and evaluate a marketing plan for medication therapy management services provided in

community pharmacies. Design Thinking was the general approach we used as a first step to elicit consumer/patient input on redesigning services and products. With design thinking as the starting point, we conducted our study through a multiple step process:

- Apply design thinking methods to the marketing of MTMS
- Explore existing resources to help design consumer focus groups
- Complete consumer focus groups using design thinking and existing resources as guides
- Develop the MTMS Marketing Plan
- Implement the Marketing Plan
- Evaluate the Marketing Plan

Application of Design Thinking to the Marketing of MTMS

The use of design thinking methods in this project represents a new approach to addressing the MTMS marketing challenge. Application of design thinking methods may be ideal for MTMS marketing through an emphasis on out-of-the-box thinking that rapidly responds to focused client input without fear of judgment or criticism. The creative process is based around the "building up" of ideas where there are no judgments early on in design thinking thereby eliminating the fear of failure and encouraging maximum input and participation in generating as many plausible solutions as possible [27]. Design thinking methods have been applied in healthcare including initiatives supported by the Mayo Clinic [28] the Agency for Healthcare Research and Quality [29] and the Fairview Health System of Minneapolis –St. Paul [30] to name a few.

The design thinking process has seven stages: *define, research, ideate, prototype, choose, implement, and learn*, although steps aren't always linear occurring simultaneously in an iterative manner [27]. Applied to developing a consumer-generated MTMS marketing plan, these stages encompassed:

Define: Agree on the target audience, determine what measures will be used to evaluate success.

Research: Review the history of existing obstacles and talk to end-users to gather the most fruitful ideas for further development.

Ideate: Identify the needs and motivations of end-users and generate as many ideas as possible to serve these identified needs.

Prototype: Expand and refine ideas, create multiple drafts, and seek feedback from a diverse group of end-users.

Choose: Review the objective, set aside emotion and ownership of ideas, avoid consensus thinking, and select the powerful ideas.

Implement: Make task descriptions, determine resources, and execute the plan.

Learn: Gather consumer feedback, discuss improvements, collect data and measure success.

Exploration of existing resources to help design consumer focus groups

Enrollment in MTMS for Minnesota

The first source of information we explored helped us understand the level of MTMS utilization in Minnesota, the state in which the study was being conducted. Existing literature from across the country reveals that consumer uptake of MTMS is typically in the 2-10% range of eligible patients [3-7, 16, 20, 26, 31-33]. At the time of our study, patient enrollment statistics were available for four active MTM plans in Minnesota and showed similar enrollment patterns ranging from 3 to 10%.

Minnesota Medicaid, Medication Therapy Management Care Program

This statutory MTM program is state-sponsored and serves the Medicaid population. State of Minnesota estimates showed that approximately 65,000 recipients were eligible for enrollment in this program when it was launched in 2006 [31]. At the time of our study, there were approximately 160 pharmacists credentialed by the State of Minnesota Department of Human Services who had provided MTMS to slightly more than 2,000 patients (3% of those eligible at program inception).

General Mills MTM Program

This employer-based program witnessed a patient enrollment level of about 3% in the first year. It offered the on-site presence of an MTM practitioner at General Mills (employer) with paid time off for employees to schedule on-site MTM visits.

University of Minnesota UPlan MTM Program

This program was employer-sponsored and was launched in Duluth, Minnesota in 2007 and then throughout the University of Minnesota System in 2009. Data for this program showed that 68 beneficiaries, or 6% of eligible individuals, enrolled in MTMS in the first 18 months. This program offered a value-based beneficiary incentive for enrollment (e.g. waived prescription co-payments) [32].

Minnesota Blue Cross Blue Shield Project

This program was insurer-sponsored and 285 of 2,834 (10%) eligible patients enrolled in MTMS. This program utilized

seven different recruitment techniques, some of which were value-based incentives [5].

This set of information showed that consumer enrollment in MTMS was not significantly different than enrollment patterns reported in the literature. In Minnesota, 3% enrollment was found for two programs that did not have value-based incentives for consumers. A program with one value-based incentive accomplished a 6% enrollment and another program that utilized seven incentives achieved a 10% enrollment. We viewed this as affirmation that Minnesota was typical in that enrollment in MTMS by consumers was relatively low but that consumer-directed incentives could affect participation in MTMS.

Minnesota Pharmacist Perceptions of MTMS

The second source of information we explored was from the responses of 107 pharmacists attending the Minnesota Pharmacists Association (MPhA) – Medication Therapy Management Services Annual Symposium held on October 23, 2009. This information helped us understand the current status of MTMS marketing in Minnesota and the needs of practitioners who were providing MTMS. When asked about having a marketing plan for MTMS, none of the participants reported that they had one.

Discussion at the MPhA meeting showed that marketing plans for MTMS need to convince consumers that this service:

- saves lives
- keeps people in their homes longer
- personalizes / humanizes patient care
- prevents complications
- improves health
- avoids medication misuse
- saves the patient money
- gives the patient an advocate
- saves health care costs at large
- ensures the safe use of medications
- fits medications into the patient's lifestyle

At the MPhA meeting, participants also concurred that there are essential steps in marketing MTMS:

- Creating messages which resonate with the target clientele; published and refreshed to keep them getting noticed. Messages can be posted in the form of business cards, brochures, posters, websites, newsletters, postcards, video testimonials, podcasts, advertising, and results sharing.

- Developing a prospect list. Creating a list of all of the people you can think of who might be your target clients. Then, go through and sort the list prioritizing prospects.
- Meeting with target client prospects.
- Learning about the prospect, their needs, and their obstacles/misperceptions around MTMS.
- Making it easy for them to give you their business. If it is a referral source, give them a 'prescription pad.' If it is a consumer, give them a business card and schedule the first visit.

This information showed that pharmacists who were providing MTMS did not have well-developed marketing plans, had a desire to promote MTMS to consumers, and highlighted the importance of establishing relationships for the marketing of MTMS.

Consumer Focus Groups

With the "design thinking" method serving as a foundation and the Minnesota-specific exploratory inquiry providing context, the next step of this project was to complete six consumer focus groups that would help design the consumer-generated marketing plan for MTMS. For this project, we relied upon community pharmacies that were providing MTMS to assist in developing the consumer-generated MTM marketing messages and in determining resources needed to implement the MTM marketing plan. A project announcement was sent to all community pharmacies participating in the Minnesota Pharmacy Practice-Based Research Network (MN-Pharmacy PBRN). This research network was launched in February of 2008, with the purpose of collecting information using a network of pharmacies to help address societal and community questions related to the medication use process. Such a network serves as a natural laboratory and represents a novel way to address societal needs related to health and wellness.

The Minnesota PBRN is a collaborative among the Minnesota Pharmacists Association, University of Minnesota, and Pharmacist Practitioners (<http://www.mpha.org/associations/9746/files/PBRN/index.html>) and has been designed to serve as a meeting point for sharing and generating new ideas that are relevant to the interface among the practice of pharmacy, health care, health systems, health technologies, communities, and society overall. The list of over 300 MN-Pharmacy PBRN pharmacies was cross-referenced with the list of over 160 MTMS providers recognized in the Minnesota Medicaid Program by the Minnesota Department of Human Services and was used to identify additional pharmacy sites to receive the project announcement. In addition, a general program

announcement was distributed by the Minnesota Pharmacists Association. We sought six pharmacies for this study that included chain, independent and clinic community pharmacies in both rural and urban settings. Site selection criteria included:

- Evidence of documented medication therapy management services delivered within the practice of pharmaceutical care and using the description of MTMS contained in official CPT[®] health reporting nomenclature [34].
- Evidence of an established practice using the Minnesota Department of Human Services (DHS) criteria related to the Minnesota Medicaid MTM Care Law [31].
- Agreement to participate from the pharmacy manager, owner, and pharmacist-in-charge.
- Ability to work with the project team to establish a targeted clientele pool for marketing MTMS (using both insurance-eligible and non-insurance eligible individuals).
- Ability to recruit 8-12 consumers to participate in a focus group session to formulate MTMS marketing messages (using both individuals who have received MTMS and those who have not received MTMS).
- Access to a location to convene the focus group session.

A total of 10 Minnesota pharmacies meeting all of the inclusion criteria indicated a willingness to participate in the project within our stated time frame. From these, six pharmacies were selected for participation in the project based on size, type and geographic distribution. Pharmacies agreeing to participate in this project were expected to benefit from the development of an MTMS marketing plan for use in their pharmacy, and also received a project honorarium of \$500.00 for their participation.

Consumers were recruited to participate in focus group sessions by project pharmacies. Each site was asked to identify a mix of individuals who were both receiving MTM services as well as individuals who had not received MTM services who might be expected to benefit from the service (based on their medication experiences). Each project pharmacy was asked to sign-up 12-15 consumers for a two-hour focus group session, and to contact each participant 1-2 days before the meeting to confirm participation. Consumers participating in the MTMS focus group meeting received a \$25 gift card for household goods. The Minnesota Pharmacists Association, as steward of the MN-Pharmacy PBRN, served as project administrator for distribution of honoraria to pharmacies and incentive gift cards to

consumers. Consumers were selected based upon pharmacists' relationship with each person and their understanding of each person's medication experiences. The goal for focus group composition was to include consumers who: (1) represented diverse opinions about medication use, (2) were open to sharing their opinions in respectful way, (3) had a diversity of medication experiences that would inform our study, and (4) could be counted upon to attend the focus group.

Project pharmacies were asked to find a meeting location and all focus group sessions were conducted in the evening at a variety of community locations. Sites were also asked to provide light refreshments and snacks to the extent possible. Although site pharmacists could greet consumers prior to the focus group meetings, they were not permitted to be present during focus group proceedings. The six focus group sessions were held November 8, 2010 (Albert Lea), December 1, 2010 (Rochester), December 2, 2010 (Anoka), January 18, 2011 (St. Louis Park), January 27, 2011 (St. Paul), and February 10, 2011 (Brainerd).

A skilled focus group moderator from the "markit" marketing company of Rochester, MN was utilized to convene the focus group meetings. One additional project team member was present during each focus group session to assist the moderator. The moderator drafted a discussion guide prior to each focus group session to facilitate discussion based on input from the project team. Participants were welcomed by the moderator who first explained the purpose of the focus group meeting and then reviewed standard informed consent with the group. **Appendix A** contains the Moderator Discussion Guide and **Appendix B** describes the Informed Consent process used in this project. Focus group participants were also informed that the session was being recorded using a digital recorder for transcription purposes and that all transcripts would be destroyed after analysis. The Tybee Types transcription service of Savannah, Georgia was used to transcribe digital recordings.

An important aspect of the focus group session was permitting participants to provide perspectives on their current health care delivery concerns and drug-related needs prior to establishing baseline expectations for a MTMS encounter. The concept of MTMS was then reviewed with the participants after allowing sufficient time for describing their health care concerns and drug-related needs. The centerpiece for establishing MTM service expectations [35, 36] was an 8-minute DVD developed by the Pharmacist Services Technical Advisory Coalition through a previous Community Pharmacy Foundation grant [37]. After viewing the MTMS video, participants were asked to provide general

comments about the service, express ideas of how it could improve their health, and to provide solutions on how to best generate awareness for MTMS.

There were 61 consumers who participated in the six MTM focus group sessions (range = 8 – 13 consumers per focus group session). Approximately 60% of focus group participants were female with an age range of 30-90 years of age.

Development of the MTMS Marketing Plan using Focus Group Findings

Focus group session transcripts were analyzed to discern key marketing messages and to reveal recurring themes and patterns. One of the tools for identifying recurring themes and patterns employed a computational linguistics technique that seeks patterns of semantic relatedness [38-41]. A subcontractor agreement was established with the University of Minnesota – Center for Clinical and Cognitive Neuropharmacology (CCCN) to assist in this task. Faculty with expertise in integrating computational approaches to the assessment of cognition through speech and language use applied computational linguistics [38-41] in their analysis of the focus group transcripts. This analysis produced a hierarchy of MTM service level expectations and key MTM marketing messages.

In addition, a thematic analysis of the focus group transcripts was conducted by the "markit" marketing company of Rochester, MN. Theme extraction was based on convergence and external divergence; that is, identified themes were internally consistent but distinct from one another [42]. The participant statements referring to a particular theme were grouped and further explored and compared with initial key ideas [43]. Once the initial analysis was carried out, the interpretations were discussed among the study investigators who conducted the thematic analysis. Agreement was negotiated as a valid interpretation of the text and this discussion was driven by the study objectives as well as consistency of emergent themes. When the final set of analyses was compared, all investigators agreed upon major themes.

Triangulation, done by using multiple analysts and multiple methods, also provided a quality check on selective perception and blind interpretive bias that could occur through a single person doing all of the analysis or through employment of a single method [44]. For triangulation, findings from the thematic analysis were combined with findings from the computational linguistics analysis. This information was fed back to the project team and to the

project sites for review and to confirm the recurring themes and messages.

The application of computational linguistics resulted in a matrix of content analysis categories. The three most dominant content analysis categories of the focus group transcript analysis were:

- 1.) Team-based care (24% of focus group comments),
- 2.) Quality of information source (15% of focus group comments),
- 3.) Relationship/trust (14% of focus group comments).

These findings were consistent with the thematic analysis. The most dominant message of “team-based care” emerging from focus group participants was manifest in the recurring comment that MTM services need to be “visibly” integrated with care delivered by physicians and other health care providers (team-based content analysis). The content analysis categories of “quality information source” and “relationship/trust,” were manifest in focus group observations in that communications (letters and phone calls) about MTM services were welcome from the pharmacist, physician or other health team members. Although consumers expressed a desire to know whether or not MTMS was a covered benefit in their health plan, communications from the insurance company directing them into MTM were viewed as undesirable and perceived as money-making schemes.

Key messages, or MTMS attributes, that resonated with consumers influencing their health care decisions and behaviors were that MTM services would optimize the safe and effective use of medications, improve treatment outcomes, and improve quality of life. There was overwhelming support for MTM services provided at the level described in the 8-minute CPF MTM video, and all but two participants indicated a willingness to pay for MTM services (range = \$25 - \$125/encounter).

Findings from the six focus group sessions were similar. By the sixth session, saturation had been reached in that no new information was being gleaned from additional sessions. A summary of findings from the focus groups is contained in **Appendix C**. The findings from the focus groups were combined and used to develop a single MTMS Marketing Plan. This plan is presented in **Appendix D**.

Marketing Plan Implementation

Project sites were asked to implement the MTM marketing plan to the fullest extent possible during the six-month study period of March 1, 2011 – September 1, 2011.

Implementation support was provided to project sites by the “markit” company (Rochester, MN) on a regular basis and faculty on the project team contacted sites on a monthly basis to discuss progress. Based on the dominant focus group marketing message (team-based care), a two-page MTM Fact Sheet was developed to assist sites with physician collaboration (see **Appendix E**).

The MTM marketing plan was implemented at five out of the six project pharmacies. One rural site was unable to implement the marketing plan due to the fact one of their pharmacists moved from the community and they were unable to hire another pharmacist during the project period. The five project pharmacies implementing the MTM marketing plan over the six-month study period are listed in alphabetical order below:

- Cub Pharmacy, St. Louis Park, MN
- Goodrich Pharmacy, Anoka, MN
- GuidePoint Pharmacy, Brainerd, MN
- Mayo Clinic-Baldwin Pharmacy, Rochester, MN
- Walgreen’s Pharmacy, St. Paul, MN

No additional project funds above the \$500 honorarium were available for sites to implement the MTM marketing plan. Project sites did receive feedback from the project team in terms of articulating their target market, presenting the MTM service concept to physicians and health team members, recruiting patients, and in developing marketing materials and tools. However, each project site was expected to produce and distribute its own MTM marketing materials.

The target market of prospective MTMS patients at project sites was established by personnel in each pharmacy based on both insurance-eligible MTMS recipients and targeted patients who did not have MTMS as a health insurance benefit. Each pharmacy determined its own target market based upon its own experiences, the marketing plan (Appendix D), and consultation with study personnel. Success in this project was described a-priori as an increase of at least 5-10% in new patient MTMS appointments above each pharmacy’s anticipated baseline new patient appointment rate over a six-month period.

Marketing Plan Evaluation

The two key measurement criteria applied in this project were: (1) the percentage increase in new MTM patient appointments above anticipated six-month baseline and (2) estimated resources needed for full implementation of the MTM marketing plan in each project pharmacy. In addition, pharmacists were asked to provide their insights and reflections regarding implementation of the marketing plan.

Increase in new MTM patient appointments above baseline

A baseline rate of new patient appointments for each pharmacy was calculated by dividing the number of new patient appointments by the length of time that MTM services were being delivered before the implementation period. For instance, if a site had provided MTM services to 165 patients over a two-year period their baseline new patient appointment rate would be 0.226 new patient appointments/day. This baseline appointment rate was then

compared to the rate of new patient appointments after implementing the MTM Marketing Plan over the six-month study period.

The **table below** summarizes new patient appointments per day pre-, and post-implementation of the MTM Marketing Plan arranged according to % change over baseline without identifying individual project sites.

Sites arranged by greatest % change over 6-months	Baseline rate/day ^a and (Total) (pre-period data)	Actual rate/day ^b and (Total) (post-period data)	% Change
Greatest change over baseline	0.175/d (32)	0.617/d (111)	(+) 248%
Second greatest change	0.226/d (41)	0.578/d (104)	(+) 156%
Third greatest change	0.048/d (9)	0.067/d (12)	(+) 40%
Fourth greatest change	0.329/d (60)	0.383/d (69)	(+) 16%
Fifth greatest change	0.138/d (25)	0.106/d (19)	(-) 23%
Totals	0.915/d (167 new patients)	1.751/d (315 new patients)	(+) 91% (152 above baseline)

^a Expected number of new patients based upon baseline rate at start of implementation period.

^b Actual number of new patients and new patient rate during implementation period.

There were 315 new patient appointments (495 total MTM encounters) during the six-month study period in these five sites. This represents a 91% (152 patient) increase in new MTMS patient appointments over the pre-implementation period baseline. A baseline rate of new patient appointments for each pharmacy was calculated by dividing the number of new patient appointments by the length of time that MTM services were being delivered. The baseline new patient appointment rate among the five pharmacies prior to implementation of the MTM marketing plan was 0.915 new patient appointments per day. During the six-month implementation period the new patient appointment rate among the five pharmacies was 1.75 new patient appointments per day.

It should be noted that the “fifth greatest change” pharmacy experienced the departure of their primary MTMS pharmacist and project point-person during the implementation period. This pharmacy was unable to replace that pharmacist and was not able to fully implement the MTMS marketing plan.

Financial Estimates for Full Marketing Plan Implement

Project sites were asked to provide estimates of the resources needed to fully implement the MTM Marketing

Plan at a level that would achieve a desirable level in each pharmacy. Financial estimates were categorized as either personnel or non-personnel expenses. Personnel expenses included salaries and benefits of pharmacists, pharmacy technicians, and supportive personnel needed to contact patients, meet with physicians and other health professionals, develop the marketing strategy, assemble promotional materials, and other tasks related to implementing the marketing plan. Non-personnel expenses included materials, radio and newspaper advertising costs, printing and mailing costs, and other promotional expenses.

The combined estimates of marketing expenses that would be needed to fully implement the MTM Marketing Plan developed in this project at levels determined to be desirable by each pharmacy was \$2,749 per pharmacy (\$13,745 for all five). Most of the project sites estimated personnel costs associated with full implementation of the MTM Marketing Plan slightly higher than non-personnel expenses. The cumulative marketing plan estimates of personnel expenses was \$1,410 per pharmacy (\$7,050 for all five), with non-personnel expenses of \$1,339 per pharmacy (\$6,695 for all five).

There was no discernable association between “% change over baseline” and personnel costs reported. However, estimated non-personnel costs were higher for the top three “change” pharmacies (\$1,500, \$1,395, and \$1,500, respectively) compared with the “fourth greatest change” and “fifth greatest change” pharmacies (\$1,000 and \$1,000).

Pharmacist Reflections on Project Participation

Pharmacists at each pharmacy were asked to provide their reflections on what they liked best about participating in this project, and what they think could have been improved in this project. All of the sites were thankful for the focus group sessions that provided insight and information about what patients valued and their perceptions of MTM services. The opportunity to develop a formal MTM services marketing plan and to establish a target market through the efforts of a marketing company with experience in pharmacy and health care was also viewed as a benefit. The benefits of participating in this project were succinctly summarized by the following comments from one of the project pharmacists:

“The most helpful information we received came from the patient focus groups, which gave us information about what patients thought were the most important things about MTMS.”

“The most success we had in our personal marketing approach was going right to the physicians and getting them to promote our services. Simply by convincing them that MTM is an important part of care.”

Areas of improvement related to the need for more resources to develop physician relationships and to fully implement the marketing plan. Project pharmacists also expressed challenges related to explaining MTM services to patients. Due to the fact that most patients were unaware of their MTMS insurance benefit, pharmacists spent a great deal of time and effort explaining MTM to patients. One project pharmacist summed up this challenge by commenting:

“Because the patient was not informed of MTM and their benefits from their insurance company or from their physician they feel we are solicitors and thus are skeptical of the MTM service.”

Discussion

Limitations

Before the findings are discussed, **study limitations** should be acknowledged. First, all participants volunteered for the focus groups and therefore may have been more knowledgeable than non-participants with respect to the topic. However, the emphasis in focus group research is to select people who are

conversant with a given phenomenon, so this is not necessarily a bias. Second, there may have been some interviewer bias due to experience and training. However, every effort was made to control this by maintaining a neutral position and intervening only to facilitate smooth discussion. Third, statements could be categorized in more than one way. Hence, themes identified cannot be regarded as exclusive or exhaustive. Fourth, the focus groups were held in six geographic areas. Individuals from different regions may not share the perceptions and views identified here. Fifth, the implementation study was conducted in only five communities located within Minnesota. Other geographic regions may not have the same experiences as the ones reported in this study. Sixth, a before-and-after without control group quasi-experimental design was used for evaluation. Without a control group, it is difficult to establish cause-effect for the intervention being studied. However, the before-and-after design typically is most useful for demonstrating the immediate impacts of short-term programs such as the one we investigated. Finally, the five study-pharmacies had varying levels of success in the implementation of the marketing plan developed in this project. The pharmacy with the least success (determined by change in new patient appointments per day pre- and post-implementation of the marketing plan) also was the pharmacy that was least able to implement the marketing plan (determined by the departure of its MTMS point-person and its inability to fully implement the marketing plan). While this provides some credibility for our findings, there may be other factors that are important for marketing MTMS that are beyond the scope of this study.

Study Implications

With these limitations in mind, we suggest that the application of “design thinking” [27] was useful for creating a consumer-directed marketing plan for medication therapy management services (MTMS). The use of patient panels and patient advisory groups is becoming a central component of redesigned health care delivery systems [28-30]. Asking the end-user to provide direct input into the way health care should be delivered is a process that has been successful in many industries [27]. Pharmacists can use the consumer focus group tools developed in this project to gather information and gain support for the delivery of MTM services.

Through the focus groups, we learned that marketing for MTMS should maximize the messages of: (1) what MTM services are and why they are important, (2) MTMS is part of team-based care for which a patient’s physician is considered as the primary authority and the patient’s pharmacist is a trusted expert or advisor on medications, (3) the pharmacist

is the highest quality practitioner for providing MTMS, and (4) relationship / trust among providers, patients, and payers of health care so that MTM services are not viewed as a ruse for making money at the expense of the patient.

Implementation and evaluation of the MTMS Marketing Plan revealed that the plan we developed was successful for increasing new MTM appointments for some, but not all, of the study pharmacies. The most successful pharmacies were those that had a “visible” relationship between the pharmacist and the physician and had integrated MTM services into health care delivery. An important observation is that the two most successful project pharmacies had established business associate agreements with the medical clinics closest to their site of practice, including access to electronic health records. This “virtual electronic presence” of pharmacists in the medical care system is highly consistent with the consumer demand for a visible relationship between pharmacists, physicians and other health care providers.

Findings from the evaluation also provided a glimpse of the resources that may be needed to implement an MTM marketing plan necessary to grow MTM services to desired levels. Our study revealed that project sites increased the number of new patient appointments by an average of 91% above baseline and estimated that they would need an average investment of \$2,749 over a six month period to fully implement the MTM marketing plan. It is beyond the scope of this study to conduct break-even analysis and long-term return-on-investment analysis. However, we propose that our findings are consistent with previously reported research [9-13] and suggest that initial costs would be expected to decrease over time as the practice supporting the delivery of MTM services expands. It is interesting to note that the most successful pharmacies reported higher non-personnel costs for implementing the marketing plan. We propose that this would be a fruitful area for future research. Another area for future research would be to compute the cost per new patient or additional new patient enrolled in order to determine how much it would cost in terms of marketing materials to attract additional patients. The number of new patients might increase without a proportional increase in cost of marketing over time.

The results of this project can have immediate application in national efforts to redesign health care delivery. The appropriate, effective and safe use of medications is essential to achieving the three-part national aim of (1) better care for individuals, (2) improved health for populations, and (3) decreased per capita expenditures. The relevance of this project pertains to engaging consumers as activated patients [45] and in efforts to integrate pharmacists’ work in health

teams [46]. Integrating pharmacists’ MTM services into patient-centered health homes not only helps patients improve their own healthcare, but also is important in defining the value equation, measuring quality, and redesigning care systems [47], accountable care organizations [48], and pay-for-value [49].

It is also important to note that key MTM messages resonating with consumers are closely tied to service level expectations for the delivery of MTMS [35, 36]. Emphasis on descriptions contained in official health reporting nomenclature [34] coupled with the rich narrative description of MTMS provided in the 8-minute MTM DVD video that was used in this study [37] established a clear consumer understanding of what should and will happen during an MTM service encounter. Providing MTM services at a consistent level recognized by society is an essential aspect of consumers’ perceptions of service quality predicting intended behaviors in the dynamic process model of service quality [35, 36]. Pharmacists seeking to build practices that support the delivery of MTM services can expect to benefit from employing a complete and consistent patient care processes [50] and from distributing regular and compatible promotional messages to educate consumers and health professionals [37].

Conclusions

The **purpose of this project** was to utilize a consumer-directed, care model redesign methodology to develop and evaluate a marketing plan for medication therapy management services provided in community pharmacies. The findings showed that the application of “design thinking” was useful for creating a consumer-directed marketing plan for medication therapy management services (MTMS). Implementation and evaluation of the MTMS Marketing Plan revealed that the most successful pharmacies were those that had established business associate agreements with the medical clinics closest to their site of practice, including access to electronic health records. This “virtual electronic presence” of pharmacists in the medical care system was highly consistent with the consumer demand we uncovered for a visible relationship between pharmacists, physicians and other health care providers.

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Appendix A
Medication Therapy Management Discussion Guide

- I. Introduction (10 minutes)
 - a. Format for the evening
 - b. Expectations for participation – go over Participation Consent Information
 - c. Tape recording of the session – speak slowly and articulate
 - d. Housekeeping
 - e. Roundtable introductions – give us 5 words that describe you

- II. Perspective on their current drug therapy program (25 minutes)
 - a. What do you think is the role of the physician?
 - b. What do you think is the role of the pharmacist? Could he/she do more for you? If so, what would that be?
 - c. Issues they have with the current system (how is it working for you?)
 - d. If you could make it better, what would it look like?
 - e. If it doesn't come up...probe for issues with drug interactions and how their issues were resolved. Did they find that acceptable?

- III. Reactions to the concept of MTM (10 minutes)
 - a. When I say the words Medication Therapy Management, what thoughts come into your mind about what that might be?
 - b. Does it sound like something that might address the issues you have with your current program?
 - c. How would you go about learning more about it?

- IV. View the video with discussion (40 minutes)
 - a. I'm going to introduce you to a relatively new concept called Medication Therapy Management. We'll watch this 8 minute video and then discuss your reactions to it. (play video)
 - b. What are your initial reactions to the video?
 - c. After watching the video, what is your understanding of what MTM is? Is that valuable to you?
 - d. What do you think the benefits are of MTM?
 - e. What are some of the key points that stuck with you?
 - f. What are the lingering questions you have about this program?

- V. Reactions to MTM (15 minutes)
 - a. Now that you know something about MTM, what are your reactions to the name? Like it, don't like it? Why?
 - b. Does it adequately describe what this program is? Why do you say that?
 - c. If this service were not covered by insurance, would you pay for it out of your own pocket? Why?

- VI. How to reach our audience (15 minutes)
 - a. What is the best way to get the MTM message across to the people we are trying to reach?
 - b. What is the responsibility of the physician?
 - c. What is the responsibility of the pharmacist?
 - d. If you saw advertising in magazines or the TV would that make it more credible to you?

- VII. Thank participants for their time (5 minutes)
 - a. Fill out demographics sheet
 - b. Give them their debit cards

Appendix B
Participation Consent Information – Medication Therapy Management Focus Group

This document provides information to participate in the project titled, "Evaluation of a Consumer-generated Medication Therapy Management Marketing Plan." The markit® marketing firm of Rochester, MN is facilitating this focus group session through a contract with the University of Minnesota College of Pharmacy. This project is funded by the Community Pharmacy Foundation.

The following key points for participating in this project include:

1. **The reason for the project.** The Community Pharmacy Foundation has awarded funding in the form of a grant to create a medication therapy management marketing plan that will provide guidance to my pharmacists to enhance these services within my pharmacy, or provide helpful information to assist with the implementation of these programs for my pharmacy's customers. The benefit to consumers is greater confidence that medications are being used properly to get the best outcomes possible.
2. **The project procedures are as follows:** Volunteers have been invited by their pharmacist to join a focus group of about 8-12 participants. The focus group session is expected to last two hours. During the focus group, participants will be asked about current awareness and perceptions of Medication Therapy Management Services (MTMS). Potential marketing messages will be tested for their ability to communicate key aspects of the program. The focus group session may be audio recorded, although any audio tapes will be destroyed after they are transcribed.
3. **Participation will be confidential and will not be released in any individually identifiable form.** Your pharmacist has asked you to participate in this focus group session. Individuals at the University of Minnesota College of Pharmacy will not have access to any information that could link individuals to the care they receive or to participation in this focus group session. Any project reports that may be published will only describe the aggregated results of all individuals.

Participation in this project is entirely voluntary. In addition, individuals can withdraw from participation at any time without affecting your relationship with your pharmacist or the University of Minnesota. A small gift card will be provided to you in appreciation of your participation at the conclusion of the focus group session.

It is understood that questions may be asked at any time by contacting my pharmacist or by contacting markit® located at 320 South Broadway, Rochester, MN 55904, or by calling 507-529 9000. Questions can also be directed to personnel at the University of Minnesota by contacting Brian Isetts (at 612-624-2140) or Jon Schommer (at 612-626-9915).

Thank you.

Appendix C Focus Group Findings

Methodology

- Conducted 6 focus groups –
 - Cub Foods, St. Louis Park, MN
 - Goodrich Pharmacy, Anoka, MN
 - Guidepoint Pharmacy, Brainerd, MN
 - Mayo Clinic Pharmacy, Rochester, MN
 - Sterling Drug, Albert Lea, MN
 - Walgreens, St. Paul, MN
- Participants were recruited by the individual pharmacies based on their eligibility for participation.
- Participants attended a 2 hour group discussion on MTM to understand their attitudes, perceptions, beliefs and behaviors concerning MTM.
- A DVD was shown half way through the group time that explained MTMS.

Current Drug Therapy Program

Role of the Physician

- Considered to be the authority on what medications are best for the patient.
 - Understand what the patient is taking.
 - Understand the side effects of medications they prescribe, and how different medications interact with one another.
 - Provide education to the patient on medications.
 - Follow up to insure patient effectiveness.
- This view changes depending on the patient's relationship with their doctor.
 - The more trust there is in the relationship, the more highly regarded the advice.

Current Drug Therapy Program

Role of the Pharmacist

- Viewed as a “coach” or “advisor” on medications.
 - Monitor medications, patient safety.
 - Answer questions patient may have.
 - Tell patient what to expect.
 - Suggest alternatives.
 - Help address cost and insurance issues.
 - Provide recommendations on OTC products.
- Viewed as more available than their doctor, and will spend more time with the patient.
- Viewed as a part of the patient's care team, without the intimate knowledge of the patient that the doctor has.

Current Drug Therapy Program

Issues with their current program

- Multiple concerns exist regarding the use of medications.
 - Timing of administration of various medications, adherence to dispensing of medications.
 - Overdosing on medications.
 - Mail order programs, no pharmacist relationship – no one to talk to when needed.
 - Notification when medications change in size, dosage, shape.
- Most had not experienced a negative drug interaction and were not overly concerned about it. There was a direct correlation between satisfaction with physician and concern over issues with their medications.

Reactions to MTM (prior to viewing video)**Awareness of what MTM is**

- There is general confusion about what MTM is, though not surprising given the newness of this concept to the market.
 - Respondents reported that MTM ranged from a pill box to an integrated system of managing the patient's medication needs.
 - They did feel this was something that a patient would have a greater need for the more medications used.
- Overall concern regarding how to handle information that might be contradictory to their physician.

Reactions to MTM (following the viewing of the video)**Understanding of the concept**

- Participants were able to grasp the concept of what MTM is from the video.
- Attitudes towards MTM were very positive, high value was placed on the pharmacist being a member of the healthcare team.
- Respondents felt insurance companies should cover cost of MTM, the benefit to them is reduced medication costs.
- Service is more accepted with the support of the physician (the physician continues to play the lead role in the healthcare team).

Reactions to MTM (following the viewing of the video)**Participants rank ordered the benefits of MTM, from most important to least important, as follows:**

- Optimizes the safe and effective use of medications.
- Improves my treatment outcomes.
- Improves my quality of life.
- Gives me confidence that I am doing the right things for my best health.
- Promotes collaborations between pharmacists, physicians and patients.
- Allows me to manage my medications, they don't manage me.
- Provides me with a written record of my conditions and medications.

Reactions to MTM (following the viewing of the video)**Insurance related issues**

- Participants felt MTM should be covered by insurance.
- Structure should include an initial visit, with subsequent visits dependent upon changes in medication or health status.
- If insurance did not cover MTM visits, participants felt they would use the service only under more severe circumstances.
- While most had no idea what the service was worth, they were able to put a value on the service (median value of \$50 per hour for the service encounter).
- No one knew that MTM was a benefit of the Medicare Part D Drug Program as a comprehensive medication review for beneficiaries with complex drug-related needs.

Reactions to MTM (following the viewing of the video)**Views on the name – Medication Therapy Management**

- Some participants felt the term "therapy" was confusing and might not be necessary.
- Participants do not think that their medications are a form of therapy, they think of therapy as in "physical therapy."
- Participants liked the term "medication management" better and felt it was more descriptive of the concept.

Reactions to MTM (following the viewing of the video)**How to reach the target audience**

- Participants want to know that their doctor is in support of them participating in an MTM program.
- They need to know that members of their healthcare team are working together for their benefit.
- They would attend an MTM session at their doctor's recommendation, some said though that they thought their doctor would not agree to it.
- Upon doctor's recommendation they would attend if contacted by the pharmacist, either by a face-to-face conversation or a phone call from the pharmacist.
- Letters or calls from anyone other than the physician or pharmacist would not be received as well.

Appendix D
Medication Therapy Management Services (MTMS) Marketing Plan
University of Minnesota – College of Pharmacy
February 15, 2011

What is a marketing plan?

A marketing plan is a document that identifies the goals to be achieved through the marketing plan, the audience that the author desires to reach, the issues getting in the way of achieving the goals, and the strategies and tactics to be implemented that will address the issues to achieve the goals.

Six Month Goals

- Increase enrollment of MTM eligible patients by at least 5-10%.
- Acquire an understanding of the most successful approach to attract new MTM patients.
- Educate physicians on the enhanced role the pharmacist can play in the health of their patient.
- Educate patients on the valuable service that is available to them to optimize the benefits of their medications.

Target Audience – Patricia and John

Patricia and John are a retired couple. He was an electrician and she was a school teacher. John has diabetes and high blood pressure. Patricia has high cholesterol and has had one heart attack. Both take multiple medications for their conditions. They visit their doctors regularly and are proactive in managing their medical conditions.

Patricia and John have a modest income, but do enjoy traveling when they can. They also like to keep active by volunteering, and visiting with friends and family. They view themselves as hard-working, caring, compassionate people who enjoy being around others.

Patricia and John are not familiar with what MTM is, but do have insurance that covers it. They feel the role of their pharmacist is to be an extra set of expert eyes to help manage their medication therapy. The pharmacist is a person they have a relationship with. They trust them and feel they can go to them with questions.

Issues

- Getting physicians on board with the concept is critical to the program's success.
- Physicians may view this program as a threat to their role with patients.
- The roles of the physician and pharmacist need to be clearly defined and understood as a benefit to the physician.
- A system of communication needs to be developed to share pharmacist recommendations that is not driven by the patient.
- Increasing stakeholder awareness of the pharmacists' clinical abilities is needed.
- Differentiating prescription counseling from MTM, people have no concept of what to expect from an MTM session.
- There is a huge educational component to this program.
 - To physicians
 - value of working together with the pharmacist for the benefit of the patient
 - role that the pharmacist is capable of playing
 - To consumers
 - benefits of the program
 - support of physicians
 - coverage by Medicare Part D
 - role that the pharmacist is capable of playing

Key Messages

Key messages are important in the communication of the benefits of the program. Messages have to meet three criteria. They must be relevant, believable and distinctive. The following are the top three messages identified by focus group participants as meeting the criteria. Use of these messages in the verbal and written language you use to describe MTM will resonate with your audience.

Key messages are:

- Optimizes the safe and effective use of medications
- Improves my treatment outcomes
- Improves my quality of life

Strategies and Tactics

Step 1 - Product

One of the aspects of a successful program is a visible relationship between the physician and the pharmacist. The patient has a strong belief that the physician is the leader of the team. The pharmacist plays more of a specialist role.

An MTM meeting includes a review of the medication list and of medical issues, discussion of drug related issues/concerns, and recommendations for change. MTM consists of an initial visit. Subsequent visits occur when the patient has a change in their medical situation or when another medication is added to their list.

“Medication Therapy Management” is not an appealing name. The recommendation is to drop “Therapy.”

1. Determine a name for your program – Medication Therapy Management, Medication Management, Medication Check-up are a few possible names.
2. Establish protocols for the patient meeting and physician follow-up.
 - Document these protocols as they will be valuable in talking with physicians and other interested parties.
3. Establish a tickler system that prompts you when an MTM patient has a new medication (for follow-up MTM sessions)
 - When prompted, contact the patient and suggest a date and time to get together for a review.

Step 2 - Price

Based on the research conducted, it is not very likely that consumers will pay for this service out of their pocket. Therefore, the focus should be on recruiting patients that have insurance coverage for the service. Cost for MTM services should be calculated in accordance with the guidelines provided by the individual companies.

1. Investigate which insurance companies provide reimbursement for MTM consultations.
2. Identify, based on the program, what you will charge for the consultation.

Step 3 - Place

From the consumers point of view, where the MTM session is conducted is not a particular issue. If it makes sense, consultations could be done in the patient’s doctor’s office. Or, it could be done in the pharmacy. What is required is a private, enclosed space.

1. Define a designated space to conduct MTM sessions.
2. Identify patients from your database that would be good candidates for MTM. They are:
 - Taking multiple medications
 - Have insurance coverage for MTM visits
 - Have a good working relationship with your pharmacy
 - Have a physician that you feel is already, or would be, supportive of the program

Step 4 - Promotion

Awareness for what an MTM program is very low. In the initial stages of a program launch, you will need to educate your audience. A critical factor is the visible relationship between pharmacist and physician. Getting the support of the physician with their patients will increase the participation rate.

Tactics for a new MTM program:

1. Create a brochure or information flier as a leave behind piece when talking with physicians about the program. The piece could also be used by physicians to recommend MTM to patients.
 - Benefits of MTM
 - How MTM is different than pharmacist consultation
 - What the process is
2. Work with local physicians to get support for conducting MTM sessions with their patients whom you have identified.
 - Conduct in-service sessions to educate doctors on the benefit of MTM for them, and protocols for patient meetings and physician follow-up
3. Schedule follow-up meetings with physicians that attend the in-service to talk with them about specific patients that could benefit from an MTM consultation.
 - Determine who will contact the patient to schedule a meeting.
 - Face-to-face or phone call contact from either the pharmacist or physician is best. It sends the message that MTM is important
4. If a patient is on your target list, talk to them when they are in the pharmacy to pick up a prescription.

Assuming you have the support of local physicians, the next level of marketing can be focused on enhancing awareness directly with patients.

Tactics to enhance an existing MTM program:

1. Increase awareness of what MTM is with local service clubs, senior centers, or associations whose members fit the target audience profile
 - Create a short 15 minute presentation that talks about what MTM is, the benefits of MTM, what an MTM consultation consists of, and some examples of how it has helped your patients. Utilize the MTM DVD that has been provided with this plan as an additional source of information for your audience.
 - Get a commitment for a date to speak to the group.
 - Talk with the head of the organization and ask to be a speaker at a membership meeting
2. Add information regarding your MTM program to your website.
3. Utilize bag stuffers, buttons, and in-store posters to raise awareness of your MTM program.

Reporting Requirements

From March 1 to September 1 you are participating in this pilot program. You will be in contact with Julie Hedlund and Brian Isetts on a monthly basis to discuss what is working, what's not, what needs more support. In order to facilitate these discussions, we ask that you document your experiences on a weekly basis.

In between our monthly calls, if you feel you have an issue that needs more immediate attention, please feel free to contact us at the numbers below.

Brian Isetts 651-301-1804 (c)
Julie Hedlund 507-424-2802 (o), or 507-254-2056 (c)

Appendix E
MEDICATION THERAPY MANAGEMENT SERVICES (MTMS)
QUICK FACT SHEET

Description of Service:

Medication therapy management describes contemporary models in which drug therapy decisions are coordinated collaboratively by physicians, pharmacists, and other health professionals together with the patient.[1] MTMS, recognized in official CPT® health reporting nomenclature, encompasses a practice in which a pharmacist, working in collaboration with physicians and other care-givers, takes responsibility for all of a patient's medication-related needs and is held accountable for this commitment.[2,3,4] During an initial MTMS encounter, the patient and pharmacist work together to assess all prescription and over-the-counter medications to ensure that the patient is achieving desired goals of therapy while avoiding or minimizing the adverse consequences of medication use.

Societal Need:

The societal problem addressed by MTMS relates to drug-related morbidity and mortality ranging from adverse drug reactions and drug interactions to unsuccessful therapies and treatment failures. [4,5,6] These drug therapy problems cost the United States healthcare system over \$177 billion annually.[7] It has been estimated that approximately 106,000 people die every year in the U.S. from these unfortunate medication consequences.[8]

Causes:

Causes of drug therapy problems are due to system failures, rather than the fault of individuals. [9] Approximately 50-60% of drug therapy problems are preventable when there is a rational and consistent medication use system in place. [5,10,11,12]

Results:

Pharmacists working in collaboration with physicians through redesigned medication use systems reduce drug-related morbidity and mortality. [13,14,15] For every \$1 invested in systems that integrate pharmacists' services into medication therapy management, almost \$17 is saved in total healthcare expenditures.[16] In addition, the overall benefit to cost ratio for clinical pharmacy services and other MTMS has been estimated to be in excess of \$23:1.[17]

References: Appendix E Medication Therapy Management Services

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