Pharmacist-provided medication therapy management (part 2): Payer perspectives in 2007

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Abstract

Objectives: To collect and describe payer perspectives regarding (1) implementation strategies used for providing medication therapy management (MTM) services to patients/clients; (2) specific measures, if any, used to quantify the costs and benefits of MTM; (3) how the value of MTM services was tracked during 2007; and (4) barriers to offering MTM services to patients/clients.

Design: Descriptive, nonexperimental, cross-sectional study.


Participants: Of the 1,898 payers who presumably received an e-mail invitation to participate in the survey, 132 (7%) responded. In addition to the online survey, 20 individuals who reported that they developed or used MTM for their organization participated in a telephone interview consisting of open-ended questions.

Interventions: Self-administered online survey and telephone interview.

Main outcome measures: Implementation and monitoring of MTM.

Results: The results showed that 20% (n = 26) of the e-mail survey respondents offered MTM services to their members as described in the consensus definition of MTM. Payers for MTM services varied widely on how they implemented and monitored their organization’s MTM programs. For 2008, MTM payer organizations plan to expand their use of face-to-face pharmacist–patient interaction.

Conclusion: During 2008, plans may have greater opportunity to measure outcomes in a longitudinal fashion and make adjustments to MTM provision strategies. Some evidence for this was suggested in respondent comments to our survey, but future validation is needed before reaching a firm conclusion.

Keywords: Medication therapy management, cost analysis, pharmacy services, surveys, return on investment.

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Medication therapy management (MTM) has been defined as “a distinct service or group of services that optimize therapeutic outcomes for individual patients.

At a Glance

Synopsis: A total of 132 individuals who, during 2007, were likely to be involved directly with providing payment for medication therapy management (MTM) services or to have responsibility for individuals who provided payment completed a self-administered online survey; another 20 individuals who reported developing or using MTM for their organization participated in a telephone interview consisting of open-ended questions. Using the pharmacy profession’s MTM consensus definition as guidance, 20% (n = 26) of participants indicated they were offering such services to their members. The results confirmed that the MTM services and programs offered by payer organizations varied widely. Payers associated value of MTM programs with cost avoidance/minimization, increased member satisfaction, improved member medication adherence, and quality indicators. In general, these findings indicate that MTM services offered by payer organizations during 2007 are still in the development stages and that organizations are willing to expand their service offerings as they develop more familiarity with these services and programs.

Analysis: The cost of providing MTM services under Medicare Part D guidelines during 2007 stemmed from health plans’ administrative costs, which produced economic pressure to provide minimally acceptable levels of MTM to contain costs. To increase options and intensity for MTM services, the Centers for Medicare & Medicaid Services could consider basing reimbursement for MTM on continuous quality improvement, instead of making these services an administrative cost of the program. Evidence indicates that pharmacist-provided MTM results in better outcomes and return on investment compared with other methods that use impersonal approaches and could emerge as a preferred strategy for payers. Standard-setting organizations such as PQA (a pharmacy quality alliance) and the National Committee for Quality Assurance are actively working to cultivate quality metrics for gauging MTM services and outcomes. Core MTM services (i.e., comprehensive, evidence-based, generalist practices) and prioritized MTM services (i.e., targeted, evidence-based, specialist practices) are expected to emerge as viable models for payers as experience with providing MTM grows. Building consensus models for provision, payment, and pay-for-performance evaluation of pharmacist-provided MTM is one suggestion for moving away from cost avoidance/minimization models to quality improvement models.

MTM services are independent of, but can occur in conjunction with, the provision of a medication product. MTM encompasses a broad range of professional activities and responsibilities within the licensed pharmacist’s, or other qualified health provider’s, scope of practice.1–3 Standards for billing and reimbursement purposes have been developed for these services6–9 that are applicable for all pharmacy practice environments and all patient types.10–16 However, providers and payers who use these standards still determine their own fee structures, rates, and payment guidelines for a diverse array of MTM service types.

For example, during early implementation of MTM services covered by the Medicare Part D program,4 broad definitions were used for MTM that allowed impersonal approaches such as mailings to help suppress costs because the cost of providing MTM service benefits typically arose from a plan’s administrative costs.17,18 Evidence showing that information pamphlets or telephonic interventions are useful for meeting goals of MTM programs is lacking.19–22 Nonetheless, these methods served as the foundation for most Medicare Part D MTM programs during 2006. A national survey of MTM programs showed that such interventions were offered to an estimated three-quarters of all MTM beneficiaries during 2006 and that 90% of the health plans elected to provide some or all of their MTM services in house.17,18 In contrast, however, all but one of the programs involved pharmacists in some aspect of MTM services and 19% of MTM programs reported contracting with pharmacies to provide some or all of their MTM services via face-to-face methods.17,18 The health plans that contracted with pharmacies tended to be relatively large and accounted for approximately 7.5 million lives.

In light of these early findings, questions arise about the evidence supporting the effectiveness of various interventions and about how the value of MTM is assessed and monitored by providers and payers of these services. Without an acceptable return on investment (ROI) for MTM programs, such programs would not be sustainable over the long term.

Objectives

To help understand how providers and payers might be monitoring and assessing the value of pharmacist-provided MTM, an environmental scan was conducted during 2007.23 For this project, we used the professionwide consensus definition of MTM1–3 so that the findings could be applied to a diverse array of patient populations and would not be limited to patients who are eligible for MTM services under the Medicare Part D program. Furthermore, we chose to focus specifically on pharmacist-provided MTM for several reasons. First, pharmacists were the health professional group specifically named as MTM providers in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003.4 Second, by using this focus, we sought to add to reports in the pharmacy literature on pharmacist-provided MTM.1–11,23–27 Finally, this focus would allow the sponsor of the project (American Pharmacists Association [APhA]) to use the
findings in making decisions about how to serve its members and the pharmacy profession.

For the overall project, the opinions of payers for these services and providers of these services were collected and summarized regarding how service implementation was being monitored and value was being assessed during 2007. The specific questions we sought to answer from both payer and provider perspectives were as follows.

- What implementation strategies were used for providing MTM services to patients/clients?
- What specific measures, if any, were used to quantify the costs and benefits of MTM?
- How was the value of MTM services tracked during 2007?
- What were the barriers to providing MTM services to patients/clients?

This article is the second of a two-part series. In part one, provider perspectives of pharmacist-provided MTM services were described. The results from the provider survey showed that 65% of the respondents were involved with providing MTM services as defined in the consensus definition presented in the survey. Of these, 47% reported that they contracted with programs for providing MTM services. Such contracts reportedly provided a positive ROI for 35% of respondents, while 31% reported that they did not provide a positive ROI and 34% said they did not know.

As of 2007, most providers did not use systematic methods for assessing value from providing MTM services to their patients. Rather, they perceived the value from provision of such services as part of their professional role in the health care system and society. For part two of our project, payer perspectives of MTM were studied and are the focus of the remainder of this article.

Methods

Study sample: Payers

The payer sample was selected in a nonrandom purposive manner. The goal was to select sample members who either were likely to have had direct involvement with providing payment for MTM services or had responsibility for individuals who provided payment. Candidates for the self-administered online survey were identified from public Web sites, APhA staff members’ knowledge, and a purchased list of 1,804 e-mail contacts for insured groups covering between 5,000 and 150,000 lives nationally. Sample members worked for group insurers, business coalition groups, state Medicaid programs, Medicare Advantage Prescription Drug plans, private prescription drug plans, pharmacy benefit management organizations, claims administrators, the Centers for Medicare & Medicaid Services (CMS), or MTM contract vendors. After removing any individuals from this list who had requested not to receive e-mails from APhA or who had an undeliverable e-mail address, a total of 1,898 individuals were included in the payer sample.

Another sample for participation in telephone interviews was identified from the complete list described above. Individuals known to be involved with MTM by APhA staff or researchers and assumed to be likely to participate in this project were identified for initial contact. These individuals worked for group insurers, business coalition groups, self-insured payers, state Medicaid programs, Part D plans, pharmacy benefit managers, and MTM vendors. Of 32 individuals contacted, 21 were recruited for participation and their contact information was forwarded to a contract survey company for scheduling and conducting telephone interviews. In addition to these individuals, four others indicated in their online survey that they would be willing to participate in a follow-up interview. Thus, contact information for 25 individuals was forwarded to the contract survey company.

Data collection

Data were collected via a self-administered online survey and telephone interviews. For creating and administering the online survey, FormSite.com was used (www.formsite.com). The invitation to participate in the survey was sent to sample members via e-mail with an open participation period from November 14, 2007, through December 14, 2007.

In addition to the online survey, which served as the primary data collection method, 20 of the 25 individuals contacted for a telephone interview were reached and interviews completed. The telephone interviews consisted of open-ended questions that were similar to the online survey but allowed for more in-depth answers in respondents’ own words. Responses to the telephone interviews helped in interpreting findings, provided validation for responses to the online survey, and gave insights for addressing our research questions. Phone interviews were coordinated and conducted by Strategic Business Research, Inc., between November 21, 2007, and December 21, 2007. To maintain respondent confidentiality, we did not attempt to link data from telephone interviews to online survey data for any individuals who participated in both.

Questions for the survey and interviews were developed by a geographically diverse expert advisory panel convened by APhA staff via a series of conference calls during fall 2007. The resulting survey form and telephone interviews included questions about (1) offering of MTM programs, (2) member participation in MTM programs, (3) investment into MTM programs, (4) value of MTM programs, (5) payment for MTM services, (6) future considerations for providing MTM services, and (7) respondent background information. A copy of the survey form is available upon request from the corresponding author.

For the purposes of this project, we included the following description of MTM in the surveys and interviews.

“MTM is a distinct group of services that optimize therapeutic outcomes for individual patients. MTM services are independent of, but can occur in conjunction with, the provision of a medication product.
MTM encompasses a broad range of professional activities and responsibilities within the licensed pharmacist’s or other qualified health provider’s scope of practice.

“Please note: It is acknowledged that some health plans/organizations use different terms than medication therapy management (MTM) to describe the same services as those in the definition above. Other terms readily used include drug therapy management, medication use management, among others, and for the purposes of this survey are considered synonymous with MTM.

“In this survey, MTM services encompass those services being provided either via face-to-face contact or telephonically by a pharmacist or other qualified health professional, but do not include mailings to members.”

As a result of using this definition, some CMS-defined and -approved MTM services offered to Medicare Part D beneficiaries were not considered in our study.

Data analysis

Data files from the Formsite data repository that contained payer responses were converted to SPSS version 16.0 for analysis (www.spss.com). Descriptive statistics were used to summarize responses, and open-ended responses were selected to help address our research questions. Interview transcripts were converted to PDFs for review. Analysis was exploratory in nature and focused on gaining insights rather than on description or prediction.

Results

Of the 1,898 payers who presumably received an e-mail invitation to participate in the survey, 132 (7%) responded and were included in the analysis. The online survey respondents represented diverse plan types and were distributed throughout the United States. A summary of job titles and organization classifications for the 132 online respondents is presented in Table 1. The number of people covered by each organization varied considerably (median 48,000, range 0–14 million).

For the question, “As described in the consensus definition of MTM, does your organization currently offer medication therapy management (MTM) services to members?” 20% reported “yes,” 7% “no,” and 5% “don’t know,” while 68% did not provide an answer. The relatively high proportion of survey participants who did not answer the question had already discontinued answering the online survey a few questions earlier. Those questions asked about medical plan and pharmacy plan characteristics of respondents’ organizations and presumably did not apply to those who discontinued the survey. Thus, we surmised that the question asking about offering MTM services also did not apply to their situation and/or organization.

For answering our research questions, we used responses from the 26 respondents (20% of the 132 respondents to the online survey) whose organizations reportedly offered pharmacist-provided MTM services to members. In addition, we used responses from the 20 individuals who agreed to participate in a telephone interview. (A total of 25 individuals were contacted for telephone interviews.) The distributions of these respondents’ job titles and organization classifications were similar to those summarized in Table 1. Of note, although these respondents offered pharmacist-provided MTM services and were asked questions related to those services, their responses likely reflected all types of MTM services offered by their organization.

Implementing strategies for MTM services

Results from both the online survey and phone interviews confirmed that payer organizations were providing multiple types of MTM services and programs to their clients. All respondents reported that their MTM services included patient education. Nearly all respondents also reported that patient medication adherence, monitoring of medication-related problems, physician consultations, medication therapy review, and patient monitoring were components of their MTM services. Approximately one-half of respondents reported that their MTM services were developed to target patients with chronic illnesses such as hypertension, diabetes, chronic obstructive pulmonary disease, depression, asthma, and dyslipidemia.

The percentage of total covered members in respondents’ organizations who were eligible for MTM services varied considerably (range 1%–100%). Of those responding to this question in the online survey, 47% reported that 100% of their members were eligible for MTM services, 30% reported 1% to 5% were eligible, and 23% reported 7% to 60% were eligible.

Table 1. Job titles and organization classifications for MTM survey respondents (n = 132)

<table>
<thead>
<tr>
<th>Category</th>
<th>% Reporting</th>
</tr>
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<tbody>
<tr>
<td>Pharmacy director</td>
<td>22</td>
</tr>
<tr>
<td>Corporate executive</td>
<td>13</td>
</tr>
<tr>
<td>Clinical services director</td>
<td>10</td>
</tr>
<tr>
<td>Pharmacy benefits manager/executive</td>
<td>9</td>
</tr>
<tr>
<td>State Medicaid director/administrator</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>38</td>
</tr>
<tr>
<td>Organization classification</td>
<td></td>
</tr>
<tr>
<td>HMO/managed care organization</td>
<td>22</td>
</tr>
<tr>
<td>State Medicaid program</td>
<td>15</td>
</tr>
<tr>
<td>Prescription benefit management company</td>
<td>13</td>
</tr>
<tr>
<td>Self-insured employer</td>
<td>12</td>
</tr>
<tr>
<td>Other single-entity company</td>
<td>27</td>
</tr>
<tr>
<td>Multifaceted organization (combination of at least two of the categories above)</td>
<td>11</td>
</tr>
</tbody>
</table>

Abbreviations used: HMO, health maintenance organization; MTM, medication therapy management.

aOnline survey respondents.

bIncluded titles such as clinical pharmacist, compliance/regulatory, quality management, provider network manager, marketing manager, MTM specialist, pharmacist, project consultant.

cIncluded classifications such as academia, behavior change company, consulting organization, distribution and software development, MTM contract vendor company, program evaluation research company, quality improvement organization.
When asked how members are determined to be eligible for MTM services, 60% of the online respondents were unique in their answers; examples of responses included “all members are eligible” and “varies, depending on program administered.” Factors that were used for determining eligibility included number of medications, specific medication use (e.g., warfarin), number of diseases, specific diseases (e.g., asthma), type of health plan, specific level of drug spend, history of hospitalization, documented adverse drug reaction, and history of nonadherence. Both specific disease types and specific drug types were used to determine eligibility for MTM by 40% of respondents.

Variation among online respondents also was found regarding the percentage of total MTM eligible members who received MTM services by phone (median 10.5%, range 0%–100%; 24% reported 0%, 19% reported 100%), the percentage who received MTM services in person (median 3%, range 0%–100%; 45% reported 0%, 14% reported 100%), and the percentage of members who were eligible for MTM services who participate in them (median 25%, range 0%–100%; 5% reported 0%, 10% reported 100%).

Payer organizations also varied in terms of who identified members for eligibility for MTM services (e.g., health plan, physician, pharmacist, other), how members are enrolled (e.g., opt-in, opt-out, both), and who recruits members to participate in MTM services (e.g., health plan, physician, pharmacist, self-referral). Regarding the most common answers to these questions, 60% of online respondents reported that health plans identified members for eligibility, 64% used opt-out enrollment, and 60% reported that health plans were used for recruitment of members to participate in MTM.

Table 2 summarizes provider types that were used for MTM service delivery by the 21 respondents who answered this online survey question. Contracted pharmacists were used by the majority of plans for MTM service provision. According to responses to the telephone interviews, providers for MTM service provision were selected based on expertise and availability of the providers. Respondents considered licensed pharmacists to have the greatest expertise regarding drug therapy, formularies, and drug interactions, and most payers did not apply specific training standards for determining level of expertise. Regarding availability, pharmacists were considered more accessible than physicians, in-house providers were considered more accessible than others, and providers selected for MTM provision needed to demonstrate that they were able to devote time to the MTM program.

Table 3 summarizes claims processing for MTM services. Internet (Web portal) claims processing was the most commonly used method, followed by processing done through another party such as a pharmacy benefit management organization or an MTM contractor. The X12 837 standard was used most often for electronic claims submission.

In both the online survey and the telephone interviews, approximately one-half of respondents reported using Current
codes that then map to MTM CPT codes within their organization. In the future, these respondents expected to convert to CPT codes.

**Measures used to quantify costs and benefits of MTM**

Nineteen respondents to the online survey reported that it cost their organization between $0 and $300 per member per month to provide MTM services (median $1.92). Of these respondents, 21% reported $0, 37% reported a value between $0.01 and $5.00, 21% reported a value between $5.01 and $40.00, and 21% reported a value greater than $40 per member per month.

For quantifying benefits from provision of MTM services, more than 70% of respondents to both the online survey and phone interviews reported that they measured the following outcomes: (1) drug interactions identified/resolved, (2) improved medication adherence, (3) medication over/underuse, (4) therapeutic duplications resolved, and (5) overall medication costs. Table 4 summarizes the pattern of responses for both the online survey and telephone interview.

Organizations that routinely analyzed medication-related problems used methods such as reports from pharmacy benefit management companies, electronic alerts (e.g., drug use review programs), and claims data analysis. We also learned from one Medicaid program that it used a systems analysis of aggregated data from both medical and pharmacy claims. This program monitored emergency department visits, hospitalization, and frequency of laboratory tests; it focused on disease and had a stated goal of decreasing total health care costs by 6% to 8% through the use of MTM in its program.

**Tracking value of MTM services during 2007**

Ten of the 26 respondents to the online survey who provided MTM services also reported that their organization attributed a financial return value for their programs. Of these, seven reported that the ratio of return to costs ranged from 2:1 to 12:1 (median 3:1). Those who did not report a ratio of return commented that this analysis was too complex for an evaluation, that participation in MTM programs was too small for conducting the evaluation, or that they were not ready to publicly report their findings.

In both the online survey and telephone interviews, respondents were asked to describe how they would define and assess value. The question was not answered consistently; some respondents used a pre/postanalysis of claims, clinical outcomes, and/or patient satisfaction for defining and assessing value. Others reported using cost avoidance or minimization models. One respondent outlined an “estimated cost avoidance” model in which the pharmacist selects a cost avoidance amount with each claim submission. The claim is then subject to an external quality assurance process before the cost avoidance amount is used for reimbursement purposes. Some respondent comments revealed that they did not assess value for MTM programs during 2007 because their services and programs were quite minimal and relied on mailings or phone interventions.

Some respondents’ comments revealed that their organizations planned to make adjustments during 2008 based on their experiences to date. Most of the adjustments would increase the involvement of pharmacists and face-to-face interventions in MTM programs. For example, one respondent plans to contract with a local vendor for face-to-face interventions that would “provide better outcomes in 2008.” Another respondent commented that benefit design changes will be targeted to best practices and will use medical evidence to target interventions. Another comment revealed that the government entitlements the respondent’s organization services do not require sophisticated MTM programs at this time. However, the organization plans to implement programs using pharmacists and then provide information to the entitlements. One respondent’s comment showed that the organization’s MTM programs were aiming to empower the community pharmacist so that during the encounter, the pharmacist can resolve “green flags” (cost-saving opportunities) and interact with “red flags” (i.e., drug–drug interactions, drug–disease interactions, other adverse events).

**Barriers to providing MTM services**

Respondents to the phone interview reported that the primary barrier they experienced for providing MTM services was lack of a perception of need by patients. Some comments to this question suggested that patients may mistake MTM calls for sales calls. Also, patients might become confused when their pharmacist and physician provide conflicting recommendations. Still others might not understand the importance of MTM for their care.

The next most frequently reported barrier was lack of acceptance by physicians. Some comments revealed that physicians might be skeptical of pharmacists making therapeutic recommendations that could conflict with the physician’s recommendation. Six of 14 respondents who added comments for this question felt that physicians’ skepticism regarding the tangible value of MTM services was a barrier.

In the online survey, four of the respondents who reportedly did not offer MTM services during 2007 provided written comments about the information they would find helpful for making a decision about providing MTM services in the future. All four reported that more information about the cost of providing these services would be helpful for decision making and would overcome some barriers to providing or covering MTM services for clients.

**Discussion**

In general, respondents reported that MTM services offered by their organizations were still in the development stages and that health plans varied widely in their implementation strategies. For example, our findings showed that the percentage of the total covered members in respondents’ organizations that
were eligible for MTM services ranged from 1% to 100%. Furthermore, the percentage of members who were eligible for MTM services who actually participated in them ranged from 0% to 100% across respondents’ plans. Such variation may decrease over time as plans learn from each other or, perhaps, CMS sets tighter standards for MTM services and programs.

Respondents consistently reported that drug interactions, medication adherence, medication use, therapeutic duplications, and costs were monitored for MTM programs (Table 4). Also, respondents consistently reported that the primary barriers to providing MTM services were lack of perception of need by patients and lack of acceptance by physicians. However, methods for measuring MTM outcomes differed across organizations. The results showed various assessment strategies such as pre/postanalysis of claims, clinical outcomes monitoring, patient satisfaction surveys, and/or cost avoidance or minimalization monitoring. The results also showed that plans differed widely in terms of their use of contracted pharmacists for MTM programs, claims processing approaches, and use of CPT codes for claims processing (Tables 2 and 3).

Our interpretation of these findings is that Medicare Part D guidelines likely were used as a standard to follow for many MTM programs and that cost avoidance remained a primary goal for implementation of MTM services during 2007. However, our findings showed that all MTM programs described in our study provided basic services related to patient education and that nearly all provided MTM services related to patient medication adherence, monitoring of medication-related problems, physician consultations, medication therapy review, and patient monitoring. Furthermore, approximately one-half of the respondents developed MTM services targeted to specific treatment areas such as hypertension, diabetes, chronic obstructive pulmonary disease, asthma, and dyslipidemia.

Respondents’ comments suggested that an increase in face-to-face pharmacist–patient interactions may occur in the future. Contract year 2007 for Medicare Part D likely had a greater number of beneficiaries who qualified earlier for MTM, considering that health plans had historical data from 2006 with which to identify beneficiaries for MTM services. Also, beneficiaries who continued to meet the eligibility criteria for program year 2007 could have been offered MTM services on the first of the year to avoid gaps in MTM services. Such experience over time might be a contributing factor for plans to increase the use of face-to-face pharmacist–patient interaction. During 2008, plans will have an even greater opportunity to measure outcomes in a longitudinal fashion and make adjustments to MTM provision strategies. While some evidence for this was suggested in respondent comments to our survey, future validation is needed before reaching a firm conclusion. Findings from the provider survey also revealed that providers were in the early stages of offering MTM services and that they were, for the most part, willing to expand their service offerings as they develop more familiarity with these services and programs.

We suggest that pharmacist intervention could emerge as a preferred MTM strategy for payers. Based on our findings, this may be a result of evidence/experience showing that pharmacist-provided MTM results in better outcomes and ROI than other strategies that use impersonal approaches. In time, CMS expects MTM to drive improvements in quality of care and health outcomes. CMS; the National Quality Forum (NQF); the Agency for Healthcare Research and Quality (AHRQ); PQA, a pharmacy quality alliance; the National Committee for Quality Assurance (NCQA), and other standard-setting organizations are actively working on cultivating the quality measures that will be used to gauge MTM services and outcomes. However, the effect of quality improvement organizations’ efforts may only be seen after years of monitoring and reporting. We propose that our findings (particularly respondent comments and reported use of contracted pharmacists for MTM) are evidence that payers may make adjustments to their MTM programs during 2008 to help improve the likelihood of achieving measurable outcomes from MTM provision.

With more experience over time, we believe that core MTM services (i.e., comprehensive, evidence-based, generalist practices) and prioritized MTM services (i.e., targeted, evidence-based, specialist practices) may both emerge as viable models for payers. In our project, we found evidence that both of these approaches are being used and developed by payers.

Table 4. Types of outcomes measured by payers for measuring benefits from MTM

<table>
<thead>
<tr>
<th>Measure</th>
<th>% Online survey respondents answering yes</th>
<th>% Telephone interview respondents answering yes</th>
</tr>
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<tbody>
<tr>
<td>Drug interactions identified/resolved</td>
<td>91</td>
<td>79</td>
</tr>
<tr>
<td>Improved medication adherence</td>
<td>91</td>
<td>79</td>
</tr>
<tr>
<td>Medication over/underuse</td>
<td>82</td>
<td>79</td>
</tr>
<tr>
<td>Therapeutic duplications resolved</td>
<td>73</td>
<td>79</td>
</tr>
<tr>
<td>Overall medication costs</td>
<td>73</td>
<td>71</td>
</tr>
<tr>
<td>Member satisfaction</td>
<td>45</td>
<td>71</td>
</tr>
<tr>
<td>Nontreated conditions identified and appropriately treated</td>
<td>45</td>
<td>64</td>
</tr>
<tr>
<td>Number of medication-related problems resolved</td>
<td>64</td>
<td>57</td>
</tr>
<tr>
<td>Treatment changes to bring therapy in line with guidelines</td>
<td>64</td>
<td>57</td>
</tr>
<tr>
<td>Overall health care costs</td>
<td>68</td>
<td>50</td>
</tr>
<tr>
<td>Quality measure scores (e.g., HEDIS)</td>
<td>45</td>
<td>43</td>
</tr>
<tr>
<td>Number of high-risk medications</td>
<td>45</td>
<td>29</td>
</tr>
<tr>
<td>Costs associated with adverse drug events</td>
<td>14</td>
<td>29</td>
</tr>
</tbody>
</table>

Abbreviations used: HEDIS, Healthcare Effectiveness Data and Information Set; MTM, medication therapy management.

a Online survey respondents who reported that they developed or used MTM for their organization. Number does not equal 26, as a result of item nonresponse.
b Telephone interview respondents who reported that they developed or used MTM for their organization. Number does not equal 20, as a result of item nonresponse.
We propose that future development of MTM services would be enhanced through developing and applying (1) quality standards and pay-for-performance goals that emerge from evidence-based practice, (2) best practices, (3) data-identified opportunities for improving medication use in defined populations, (4) targeted medication therapy reviews for patients, (5) accessible electronic medical records, (6) referral networks, and (7) continuity-of-care processes. With experience and development of well-defined processes over time, we believe that both comprehensive and targeted MTM approaches would provide value and ROI for payers.

As of 2008, the cost of providing MTM service programs under Medicare Part D guidelines still stems from health plans’ administrative costs, which produce economic pressure to provide minimally acceptable levels of MTM to suppress costs. Such a structure is likely to slow the rate of adoption of a quality improvement approach for MTM program development.28 CMS could consider basing its reimbursement model for MTM on continuous quality improvement (e.g., pay-for-performance) rather than on administrative cost,28,29 in order to expand options and intensity for MTM services as determined by plan and enrollee needs.

To evolve from cost avoidance models to quality improvement models, we have several suggestions for consideration and discussion. First, the pharmacy profession could use its experiences in developing the MTM consensus definition1–3 to collaborate with other stakeholders to build consensus models for provision, payment, and pay-for-performance evaluation of pharmacist-provided MTM. Professionwide models would contribute to a level playing field for practitioners and organizations and serve as a basis for monitoring and evaluating the effects of MTM on desired outcomes. Second, research could be conducted on developing evidentiary and analytical standards for monitoring and assessing MTM services and programs. Such standards are being developed around the world for evaluating the value provided by pharmaceutical products and associated services (e.g., National Institute for Health and Clinical Excellence, www.nice.org.uk/; Oregon Evidence-Based Practice Center, www.ohsu.edu/epc/about/index.htm). Similar approaches for developing consensus standards regarding relevant evidence and analytical methods that should be used for evaluating MTM services could be developed. Third, CMS, NQF, AHRO, PQI, NCQA, and other standard-setting organizations are expected to continue to work on establishing quality measures that will be used to gauge MTM services and outcomes. Investments for research and demonstration projects for these measures will be needed to keep these initiatives moving forward in a credible, valid manner. Finally, to help overcome patient and physician resistance to pharmacist-provided MTM, national campaigns could be initiated to demonstrate pharmacist capabilities with these groups. In addition, MTM marketing toolkits could be developed for both providers and payers of these services and used to promote MTM to patients and physicians at the local level.30,31 Each of these suggestions will take years to develop. However, we believe that such inquiry and work would create incentives for payers to more commonly adopt continuous quality improvement models rather than cost avoidance models when implementing MTM programs for their clients.

Limitations

The findings of this study should be interpreted in light of the study’s limitations. First, we applied a pharmacy profession consensus definition for MTM. Other definitions or perspectives for MTM services could lead to alternate findings. Second, we used a purposive sampling technique in which we sought to survey individuals who either were likely to have had direct involvement with paying for MTM services or to have had responsibility for individuals who paid for MTM services. This approach allowed for “informed opinions” from “engaged key opinion leaders” in our data collection, but the findings cannot be generalized to the overall MTM payer population in the United States. Third, respondents who reportedly offered pharmacist-provided MTM were asked questions specific to those services. However, based on their responses and comments, we believe that their answers provide information about all of their MTM programs and not just pharmacist-provided MTM. Finally, use of an online survey provided both time and cost advantages. However, this survey method suffers from poor response rates. To help overcome this limitation, we also used telephone interviews to gain further insight for interpreting our findings, but our findings are based on relatively small samples and are exploratory in nature. They should not be used for description or prediction in the broader MTM payer population.

Conclusion

The results of this study showed that payers for MTM services varied widely on how they implemented and monitored their organization’s MTM programs. They associated value of these programs with cost avoidance/minimization, improved member satisfaction, improved member medication adherence, and quality indicators (e.g., Healthcare Effectiveness Data and Information Set, NCQA). We uncovered evidence that, for 2008, some MTM payer organizations plan to expand their use of face-to-face pharmacist–patient interaction. During 2008, plans may have greater opportunity to measure outcomes in a longitudinal fashion and make adjustments to MTM provision strategies. Some evidence for this was suggested in respondent comments to our survey, but future validation is needed before reaching a firm conclusion. Based on our findings, we proposed suggestions for future consideration such as (1) further development of professionwide models for MTM, (2) conduct of research regarding evidentiary and analytical standards for monitoring MTM services, (3) establishment of standards and quality measures to gauge MTM services and outcomes, and (4) creation of MTM marketing toolkits to improve patient and physician understanding and acceptance of pharmacist-provided MTM services.
References


