

AMERICAN PHARMACISTS ASSOCIATION

Medication Therapy Management Digest

Perspectives on 2009:
A Year of Changing Opportunities

March 2010



Developed by:



American Pharmacists Association[®]
Improving medication use. Advancing patient care.

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Dear Colleague:

Access and demand for medication therapy management (MTM) services continues to increase, as evidenced by the data in this publication.

The American Pharmacists Association (APhA) remains committed to developing increased access to MTM services provided by pharmacists and to the capacity of pharmacists to deliver these services. In the health care reform debate, we educate policy makers about the benefits to consumers when pharmacists are members of the health care team. We have spearheaded efforts to standardize documentation and billing platforms for MTM and to further develop health information technology (HIT) to provide pharmacists read/write access to the electronic health record. And, as an employer, APhA is making MTM available to our own staff as a new benefit beginning this year.

To measure our progress, and that of our members, we continue to conduct our annual MTM "environmental scan" and publication of the collected data to track national developments and report them to our members, interested stakeholders, and the larger health care community.

As a result, on behalf of APhA, I am pleased to present the third annual *APhA Medication Therapy Management Digest*. Last year was a challenge for our nation's economy, with shifting opportunities for pharmacists as well as for others. The data show that some sectors experienced slowed growth but the trends in other sectors are up. Decision makers were willing to give a fresh look to the value afforded by MTM services provided by pharmacists.

In 2009, society acknowledged the burden of chronic disease on the economy. Concern for problems associated with medication nonadherence led to inclusions of measures to address these issues in health care reform bills passed by the U.S. House of Representatives and the U.S. Senate. Such measures include support for the integration of pharmacists in health care teams and expansion of pharmacist-provided MTM services. These developments indicate recognition of pharmacists' patient care services as improving health outcomes and controlling costs. These trends are predictive of continued growth.

I would like to thank Pfizer for their support of this digest and the surveys it describes, as well as other initiatives that recognize the value that pharmacists provide to the medication use process and ultimately to patient well-being. In addition, I extend my thanks to the researchers involved in the expert advisory panel for their insight and guidance in conducting the surveys, analyzing the results, and developing this report. We hope you will use this digest to frame your own initiatives to advance patient care.

Sincerely,

Thomas E. Menighan, BPharm, MBA
Executive Vice President and Chief Executive Officer
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Executive Summary

This digest presents APhA's third annual environmental scan of providers and payers for MTM services. Data from the surveys used for this scan allow researchers to track progress and developments over time.

The first environmental scan, conducted in 2007, revealed substantial diversity regarding implementation of MTM services, and found that providers and payers were not using specific measures to quantify the costs and benefits of MTM. Providers generally associated value with provision of such services as being part of their professional role in the health care system and society. Payers for MTM services associated value of these programs with cost avoidance/minimization, improved member satisfaction, improved member medication compliance/adherence, and quality indicators such as the Healthcare Effectiveness Data and Information Set (HEDIS) and the National Committee for Quality Assurance.¹

Results from the 2008 environmental scan were similar regarding MTM service structure, assessment of value, financial aspects (e.g., costs, billing, payment), and barriers to service provision.² Notable differences included greater definition of MTM programs and services, revealing maturation among service providers and payers as they experimented with practice and payment models that would produce the greatest value.

In 2009, progression and maturation appear to have leveled off somewhat. Although the reasons for valuing MTM services, as well as the challenges and barriers, remained the same, many payers indicated a reluctance to dedicate resources to MTM services. Whether this finding was a result of a challenging economy, variations in survey respondents, or a true representation of MTM development is difficult to determine. Anecdotal evidence suggests that providers and payers who were not already invested in MTM services may have pursued a more conservative strategy in 2009, electing not to pursue new innovative services in a time of economic uncertainty. On the other hand, in pockets of the country where MTM services were already fairly well established, pharmacist-provided MTM services may have been further embraced as a cost-saving strategy by decision makers familiar with the potential of these services to improve patient outcomes while minimizing overall health care costs.

As this digest reveals, the challenges and barriers associated with MTM have remained almost constant over the past 3 years. APhA has been at the forefront of efforts to understand and address these barriers. Specific initiatives discussed in this report include standardization of documentation and billing platforms, and improvements in patient education and outreach. APhA also has worked closely with standard-setting organizations to support establishment of quality measures that accurately capture the value provided by MTM services.



Survey Methods

APhA, under the direction of an independent advisory board, conducted two distinct surveys in October and November 2009 as part of the third annual environmental scan for monitoring MTM service provision in the United States. Institutional Review Board approval was obtained from the University of Southern California. The primary goals of this year's surveys were to determine:

1. What is the value associated with pharmacist-provided MTM services from the provider and payer perspectives?
2. What specific measures, if any, are providers and payers using to quantify MTM costs and benefits?
3. How are providers and payers monitoring the value of MTM services?
4. What barriers to providing MTM services are providers and payers encountering?
5. What implementation strategies have been employed by providers and payers for providing MTM services to individuals?

In addition, results from surveys conducted in 2009 were compared with those conducted in 2007 and 2008 to assess changes taking place in the market. Unless otherwise noted, a chi-square analysis was used to compare survey results from 2009 with those from previous years, as well as with data from the national Pharmacist Workforce Survey (PWS), which provides estimates of the U.S. pharmacist population.

Provider Survey

- Data were collected via a self-administered online survey e-mailed to participants.
- The survey was distributed to 10,751 providers who were likely to have direct involvement with pharmacist-provided MTM services.
- 2,099 (20%) e-mails were returned as undeliverable; of the 8,652 presumed to be delivered, 5,754 (67%) of the e-mails were never opened, leaving 2,898 (33%) of the e-mails being viewed by the recipient.
- 742 providers (26% of those who viewed the e-mails) submitted the online survey; 739 contained useable data and were included for analysis. The numbers of respondents (n values) reported for individual questions in this digest may be lower due to item nonresponse.

Payer Survey

- Data were collected via a self-administered online survey e-mailed to participants.
- The survey was distributed to 4,194 individuals who were likely to be involved in their organization's payment for MTM services.
- 1,275 (30%) e-mails were returned as undeliverable; of the 2,919 presumed to be delivered, 2,499 (86%) of the e-mails were never opened, leaving 420 (14%) of the e-mails being viewed by the recipient.
- 70 payers (17% of those who viewed the e-mails) submitted the online survey; 69 contained useable data and were included for analysis. The numbers of respondents (n values) reported for individual questions in this digest may be lower due to item nonresponse.
- Small sample sizes should be considered when evaluating payer responses.

Survey Definition of Medication Therapy Management

Both the payer and provider surveys used the pharmacy profession's consensus definition of MTM, agreed to by eleven national pharmacy organizations.³ In this definition, MTM is described as a service or 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 care provider's scope of practice.

It is acknowledged that some health plans/organizations use other terms (e.g., medication use management, drug therapy management) to describe the same services as those in the MTM definition. For the purposes of these surveys, such terms are considered synonymous with MTM.

In these surveys, MTM services encompass those being provided either face-to-face or telephonically by a pharmacist or other qualified health care professional, but do not include mailings to members. MTM services were not required to conform to the core elements model of MTM services, but in many cases they did. The core elements model of MTM services includes five components⁴:

1. A medication therapy review.
2. A personal medication record.
3. A patient medication-related action plan.
4. Intervention (including patient education and/or recommendations to a prescriber) and/or referral.
5. Documentation and follow-up.

Providers Responding to Our Survey

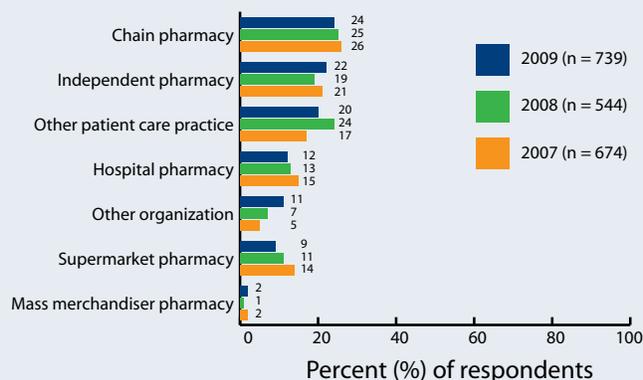
Provider Characteristics

- Provider characteristics in 2009 were similar to those reported in 2007 and 2008.
 - When compared with data from the 2009 PWS, respondents were more likely to work at an independent pharmacy and to be involved with “other patient care practice” ($P < .01$).⁵
- The most common job titles in the environmental scan were clinical pharmacist, staff pharmacist, and pharmacy manager.
- Of the respondents, 47% held a PharmD degree, which was much higher than the 24% seen in the PWS, and 24% had completed a residency, compared with 9% nationally ($P < .01$).
- Respondents were well-distributed geographically.

Provision of Services

- Overall, 72% of respondents reported providing MTM services as defined in the consensus definition.
- Those involved in “other patient care practice” were the most likely to provide MTM services (78%), whereas mass merchandisers were least likely to do so (46%).
- Among those not offering services, 24% reported offering other services that do not fit the definition of MTM used for the survey.
 - These types of services included disease state management, immunizations, health and wellness screenings, educational mailings,

Patient Care Settings Represented in the Provider Survey



Other patient care practice included: ambulatory care clinic, community health center, federal pharmacy, long-term care, assisted living, home health care, home infusion, specialty pharmacy, hospice, mail service pharmacy, nuclear, or other patient care practice setting.

Other organization included: independent consultant, managed care, pharmacy benefits management, academia, association, non-patient care government agency, non-patient care corporation, research, or other non-patient care organization.

nutrition and weight loss counseling, and smoking cessation programs.

- 36% of nonproviders reported that they are likely to begin offering MTM services within the next 12 months.

Capacity to Provide Services

- In 2009, providers were asked to estimate how many patients their practices could provide services to per day.
 - The mean response was 20 patients per day (range 0 to 1,000).

Comparisons With Data From the National Pharmacist Workforce Survey

The third national PWS, which evaluated general demographic and practice characteristics of the pharmacist workforce, including time spent on various activities, also was conducted in 2009.⁵

Although the United States entered the recession with a pharmacist shortage, data from the PWS suggest that the shortage may be easing. This trend may be due to both increasing numbers of pharmacy school graduates and softening demand for pharmacists as more health care entities embrace pharmacy technicians and robotics to address dispensing demands.

Interestingly, the PWS found that in every practice setting, pharmacists would like to spend less time in medication dispensing and business/organization management and more time in patient care services, education, and research activities. As patient care continues to evolve, more of these opportunities may arise for pharmacists.

Factors Affecting the Decision to Offer Services Among Providers (mean rankings)

Very important	Responsibility as a health care provider (4.6) Patient health needs (4.5) Recognized a need to improve health care quality (4.5) Contribution to health care team (4.5)
Important	Professional satisfaction (4.4) Reducing health care system costs (4.2) Primary business mission (3.8) Reducing health insurer costs (3.8)
Neither important nor unimportant	Need for other revenue sources (3.3) Competitive pressure (2.9) Decreased prescription volume (2.7)
Unimportant	(No items ranked in this category)
Very unimportant	(No items ranked in this category)

(Based on a 5-point scale where 1 = very unimportant and 5 = very important; n = 444)

Reflections From an MTM Provider

Being able to offer MTM has allowed us to better our relationships with our patients and has given us a chance to spend more time with them, while at the same time improving outcomes for them and lowering overall health care costs.

Why Did Providers Begin Offering Services?

- As seen in 2007 and 2008, responsibility as a health care provider and patient health needs were the top two reasons in 2009 for providing services, followed by a recognized need to improve health care quality, and contributing to the health care team.
- As in past years, providers' reasons for offering services tended to be more professional and altruistic. Business and economic factors were generally given less weight.

Payers Responding to Our Survey

Payer Characteristics

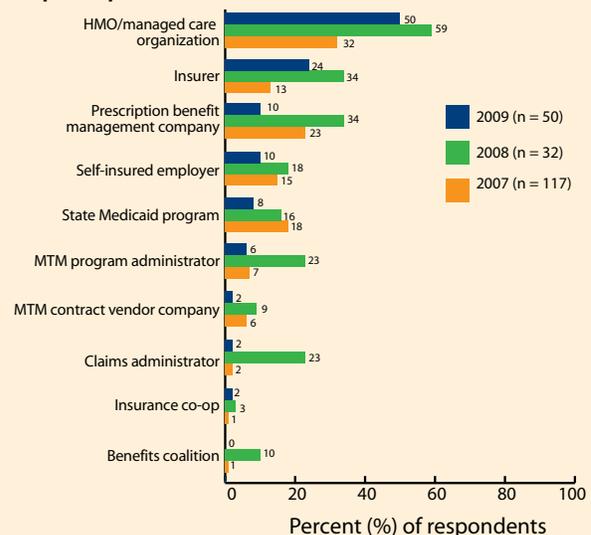
- As in previous years, HMO/managed care organization was the most common type of organization represented in the survey.
- The percent of organizations that identified themselves as prescription benefit management (PBM) companies decreased from 34% in 2008 to 10% in 2009 ($P < .01$).
 - The fluctuation from previous years in the organizations represented by payer respondents, along with small sample sizes, should be considered when comparing findings between years.

Payer Provision of Services

- 84% of payer respondents reported offering MTM services as defined in the consensus definition.
 - This percentage increased from 78% in 2008, and 62% in 2007 ($P < .01$).

Organizations Represented in the Payer Survey

Multiple Responses Allowed



HMO = health maintenance organization.

Who Is Receiving Services?

Eligibility by Insurance Coverage—Providers

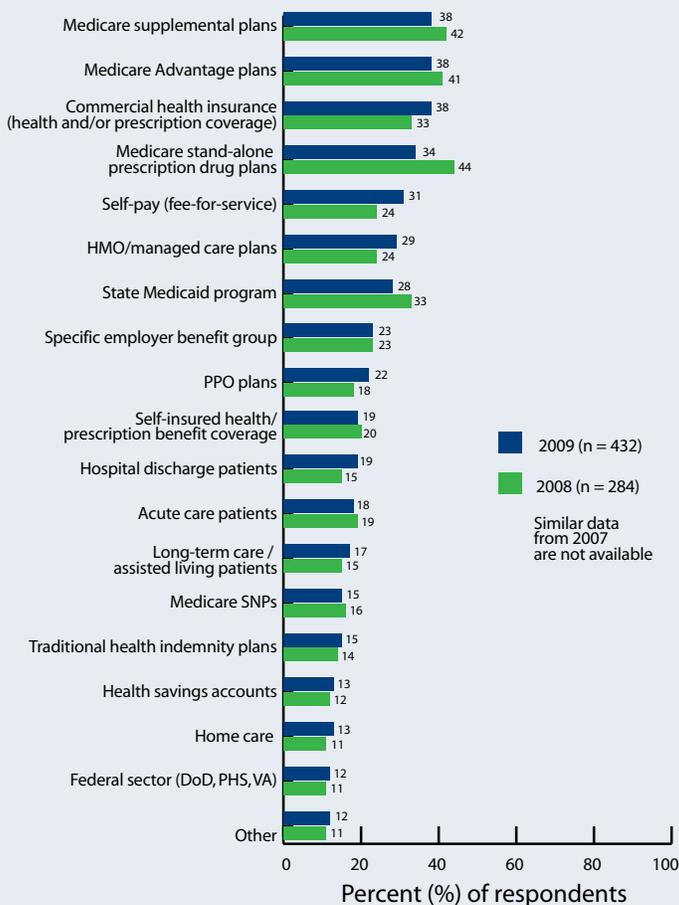
- Providers reported providing MTM services to patients with diverse types of insurance.
- Although there was some fluctuation, patterns were generally similar to those in 2008.

Strategies for Identifying Patients—Providers

- As in 2008, the most common patient characteristics used by providers to identify patients for MTM in 2009 were specific disease states, a specific health plan, or taking a specific number of medications.
- Patterns were generally similar to those in 2008.
- 20% reported “other” as a strategy for identifying patients, indicating a fair amount of diversity in this process.

Insurance Types of Patient Populations Offered MTM Services From Providers

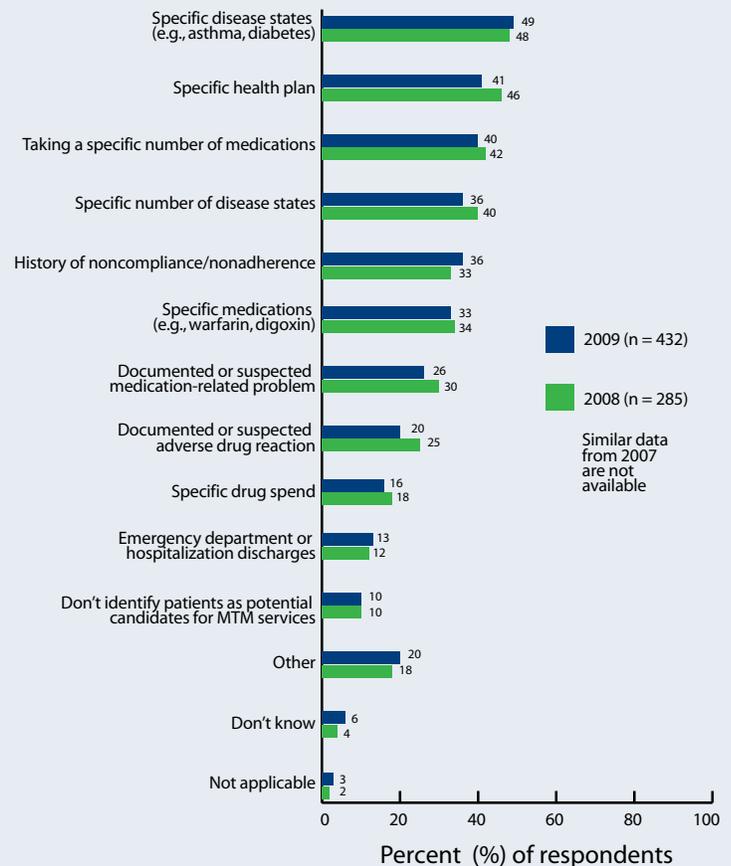
Multiple Responses Allowed



DoD = Department of Defense; HMO = health maintenance organization; PHS = Public Health Service; PPO = preferred provider organization; SNP = special needs plans; VA = Veterans Affairs.

Characteristics Used by Providers to Identify Patients for MTM Services

Multiple Responses Allowed



Eligibility by Insurance Type—Payers

- Similar to 2008, the most frequently reported coverage conferring eligibility for MTM services were Medicare Advantage plans.
- Regarding determination of eligibility by patient characteristics, payers were most likely to report eligibility for members having a specific number of disease states, specific disease states, a specific drug spend, or a specific number of medications.
 - The most commonly reported targeted chronic diseases that would be included in payers' 2010 Medicare Part D MTM programs were diabetes (98%), respiratory disease (77%), hypertension (72%), and heart failure (72%).
- The pattern of responses was similar to past years except that members taking specific medications increased from 10% in 2008 to 26% in 2009.

Reflections From an MTM Provider

Customers have a greater respect and trust in our pharmacists. Patients are more apt because of this to recommend our pharmacy to their physicians, friends, and family.

Determining Patient Eligibility—Payers

- Compared with many other types of health care services, for which health care providers identify appropriate patients, payers reported that patients are identified as eligible for MTM services by the health plan 50% of the time. This was followed by pharmacists (43%), physicians (17%), and PBMs (9%).
- 42% of payers reported that less than one quarter of patients eligible for services actually participated.

Insurance Types of Patient Populations Eligible for Services From Payers

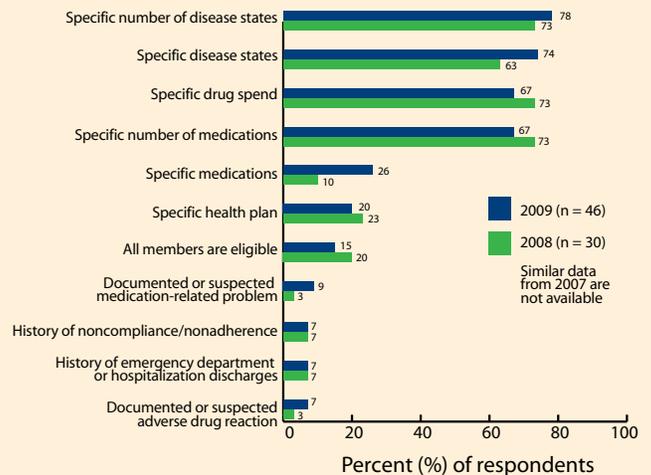
Multiple Responses Allowed



HMO = health maintenance organization; PPO = preferred provider organization.

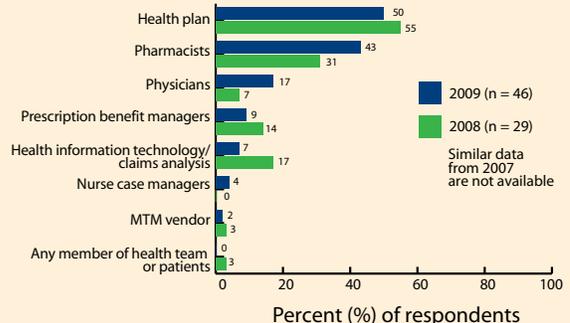
Characteristics of Patients Eligible for Coverage of Services From Payers

Multiple Responses Allowed



Identifier of Patient Eligibility for MTM Services as Reported by MTM Payers

Multiple Responses Allowed



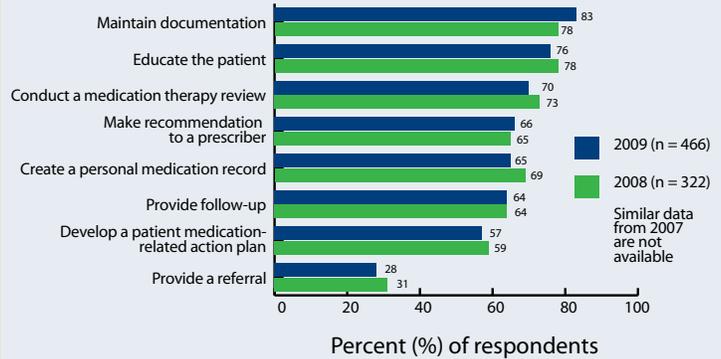
How Are Services Provided?

Use of the Core Elements Model—Providers

- In 2009, as in the previous year, the majority of providers offering MTM services included components of the core elements model of MTM services.⁴
 - “Provide a referral” was the only activity not reported as “often” or “always” by the majority of respondents. (This item was expected to be less common because patients do not necessarily require referrals.)
- When analyzed by practice setting, core elements were generally reported to be provided by similar proportions of respondents.

Core Elements of MTM—Providers Who Provide Services to Eligible Patients “Often” or “Always”

Multiple Responses Allowed

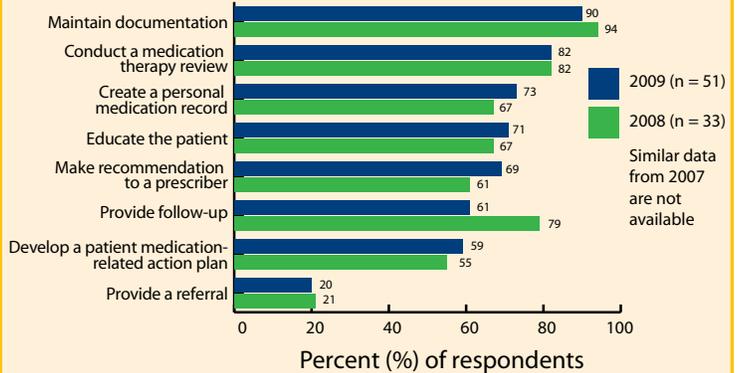


Use of the Core Elements Model—Payers

- In both 2008 and 2009, at least half of the payers reported seven of the eight activities studied were included “often” or “always.”
 - “Provide a referral” was the only activity not reported as “often” or “always” by the majority of respondents.
- Payers reported offering other activities as part of MTM services including:
 - Disease state management (61%).
 - Educational mailings (59%).
 - Smoking cessation programs (29%).
 - Nutrition and weight loss counseling (27%).
 - Immunizations (25%).
 - Health and wellness screenings (22%).

Core Elements of MTM—Payers Who Report Services Provided to Eligible Patients “Often” or “Always”

Multiple Responses Allowed



Reflections From an MTM Payer

[MTM] has provided patients with a sense that they are involved in their health care and have more access to providers.

Reflections From an MTM Provider

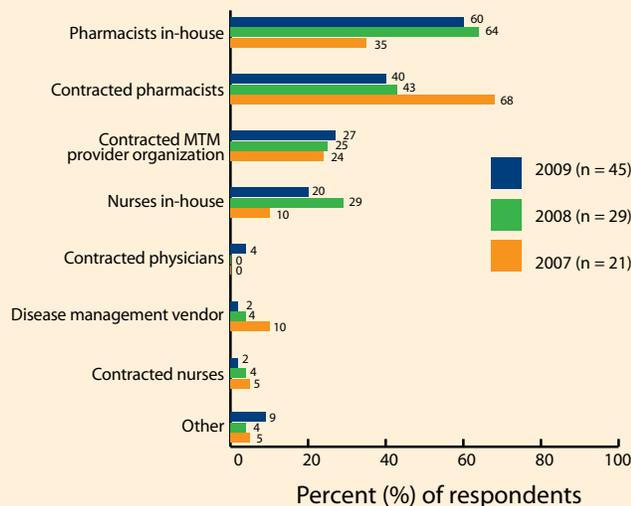
Patients are more aware of what value a pharmacist can provide in suggesting changes in medication that may benefit the patient.

Delivering the Services—Payers

- In 2007, only 35% of payers used in-house pharmacists to provide services. This increased to 64% in 2008, and was 60% in 2009. However, these changes were not statistically significant, which may be due to small sample sizes.
- In contrast, the percentage of payers who used contracted pharmacists was 68% in 2007, 43% in 2008, and 40% in 2009. Again, these changes were not statistically significant.

Providers Utilized by Payers to Deliver MTM Services

Multiple Responses Allowed



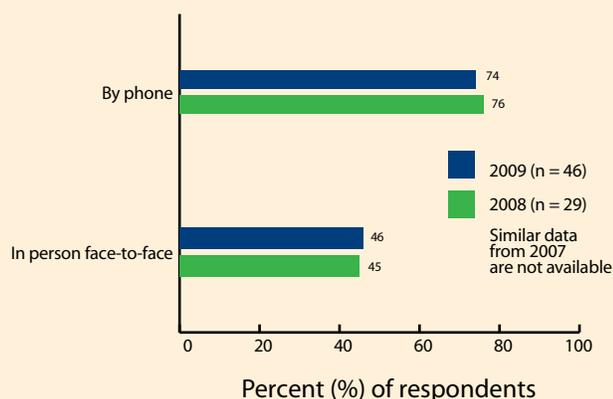
Other included: pharmacy benefits manager, pharmacy technician, physicians in-house, or student pharmacists.

Service Delivery Methods—Payers

- Services were delivered telephonically for approximately three quarters of payers and face-to-face by just under half, indicating that some payers used a combination of approaches.
- Some organizations (18%) used a tiered approach to service provision in which some members received a phone intervention, followed by a face-to-face intervention for a subset of patients.

Methods of MTM Service Delivery Reported by Payers

Multiple Responses Allowed



Reflections From an MTM Provider

Patients who experienced the service are very happy with it. They appreciate the consult even though it is by phone most of the time. Patients call after the MTM service intervention to ask questions, update the pharmacists with new medication or treatment.

Assessing Telephonic MTM Services

Although face-to-face provision of MTM services is recognized as the ideal³, telephonic provision of services is a widely used strategy by many payers, and may be more practical for patients who have transportation and mobility barriers. Emerging evidence suggests that telephonic service provision may play a valuable role in complementing services provided in a face-to-face format. For example, Moczygemba and colleagues have described strategies for effectively providing patient-specific care based on the core elements model of MTM services through telephonic encounters.⁶



The Pinnacle Award-winning “Safe Med” program developed at Novant Health—an integrated health system in North Carolina—provides another example of the positive impact a phone-based service can have. The Safe Med program was created to focus on preventing and finding the causes of adverse drug events leading to hospital readmissions in a targeted population of patients with high risk. A Safe Med pharmacist team reaches patients telephonically at home for a post-discharge medication reconciliation and is available for patients to call with follow-up questions. The program has been shown to reduce rates of readmission, emergency department visits, and adverse drug events.⁷

As health informatics evolves, new technologies may be able to support efficient service provision to a broader population. For example, telemedicine is likely to increase because it is an efficient service delivery method, especially for elderly patients and those in rural areas. There may be a subset of patient care services that can be provided efficiently and effectively over the phone, but other services (e.g., educating a patient to use an inhaler) may be less amenable to this delivery method. The addition of video communication may help address some of these barriers. Additionally, videoconferencing could be used to integrate pharmacist consultations into patient visits with other health care practitioners at remote sites.

Web-based services involving pharmacists also may be used to support patient care. One recent study found that the addition of web-based pharmacist care to home blood pressure monitoring significantly increased the percentage of patients whose blood pressure was controlled, compared with either usual care or the addition of web-based training alone.⁸



What is your opinion?

Can high-quality MTM services be delivered telephonically?

What Are the Greatest Challenges and Barriers for Providers?

Challenges and Barriers for Providers

- Overall rankings of challenges and barriers for providers and nonproviders were similar in 2008 and 2009.
- As in 2008, “billing is difficult” is the number one challenge cited by providers of services.
- The next most important challenges are those that relate to time available to provide the services.
 - These challenges and barriers were cited as being particularly important by providers in chain and supermarket pharmacies.
- An independent samples *t* test was used to compare mean scores between providers and nonproviders of MTM services. Although the rankings were similar, nonproviders generally found the barriers to be more significant than providers.
- 14 of the 17 barriers were significantly different ($P < .05$) between providers and nonproviders.
 - The three barriers that were similar between groups were “patients are not interested/decline to participate,” “local physician resistance expressed,” and “eligible patients do not really need it.”
- A challenge that providers noted in the comments section was patients who do not keep their appointments. (However, it is important to note that patient no-shows are a common issue throughout the health care system.)
- Written comments also revealed that some providers have a perception that documentation and payment rules were driving how MTM services are provided to patients, rather than allowing service provision to be determined by professional judgment.
- Lounsbery and colleagues conducted a survey of MTM providers in an outpatient setting that identified similar barriers. The most common barrier identified in this survey related to compensation, followed by lack of additional staffing and poor access to patient information. Other important issues included the development of interprofessional relationships and documentation.⁹



What is your opinion?

What do you see as the greatest challenges to more widespread implementation of MTM services?

Challenges/Barriers When Providing MTM Services Among Current Providers (mean rankings)

Very significant	(No items ranked in this category)
Significant	Billing is difficult (3.5)
Neither significant nor insignificant	Pharmacists have inadequate time (3.4) Dispensing activities are too heavy (3.3) Staffing levels insufficient (3.3) Documentation for services is difficult (3.2) Payment for MTM services is too low (3.2) Patients are not interested/decline to participate (3.1) Too few MTM patients to justify the cost to maintain the service (2.8) Technology barriers (2.8) Too few MTM patients to justify the start-up cost (2.7) Local physician resistance expressed (2.7) Too difficult to determine patient eligibility (2.7) Inadequate space is available (2.6) Unable to collect needed patient information (2.5) Inadequate training/experience (2.5) Eligible patients do not really need it (2.5)
Insignificant	Management does not support provision of services (2.1)
Very insignificant	(No items ranked in this category)

(Based on 5-point scale where 1 = very insignificant and 5 = very significant; n = 432)

Addressing Barriers to MTM With Health Information Technology

Fully realizing the potential of HIT could both streamline billing and improve clinical care. Increased access to patient information from patients' electronic health records during MTM encounters could improve the value of the services and overcome several barriers. In addition to lack of access to such records, one of the greatest challenges is the diversity of available systems.

To address these issues, APhA adopted a policy in March 2008 to address technology barriers and encourage the use and development of standardized systems for the documentation and billing of MTM services.¹⁰ In October 2008, APhA convened a meeting of more than 70 stakeholders from pharmacy, health information systems, insurers/payers, and quality and standard setting organizations. During this meeting, participants discussed strategic directions for the development of systems to address current needs for MTM documentation and billing interoperability and future needs for MTM integration in electronic health records.¹¹

To implement recommendations emerging from this meeting, APhA is working collaboratively with other national pharmacy organizations on a strategy for the advancement of pharmacy HIT to improve medication use and contribute to the meaningful use of electronic health records. Such improvements will allow pharmacists to fully provide their unique expertise and abilities to improve the medication use process.

Challenges/Barriers to Providing MTM Services Among Providers *Not* Currently Offering MTM Services (mean rankings)

Very significant	(No items ranked in this category)
Significant	Pharmacists have inadequate time (4.0) Staffing levels insufficient (4.0) Billing is difficult (4.0) Dispensing activities are too heavy (3.9) Documentation for services is difficult (3.7) Payment for MTM services is too low (3.5)
Neither significant nor insignificant	Technology barriers (3.4) Inadequate training/experience (3.3) Inadequate space is available (3.2) Too difficult to determine patient eligibility (3.2) Too few MTM patients to justify the start-up cost (3.2) Too few MTM patients to justify the cost to maintain the service (3.1) Management does not support provision of MTM services (3.1) Unable to collect needed patient information (3.0) Patients are not interested/decline to participate (2.9) Local physician resistance expressed (2.8)
Insignificant	Eligible patients do not really need it (2.4)
Very insignificant	(No items ranked in this category)

(Based on 5-point scale where 1 = very insignificant and 5 = very significant; n = 168)

What Are the Greatest Challenges and Barriers for Payers?

Challenges and Barriers for Payers

- When deciding whether to offer services to patients, the primary challenge cited by payers was that “patients are not interested or decline to participate.”
 - This was the highest ranked challenge regardless of whether payers were offering services.
 - “Too few MTM patients to justify the cost” was also cited as an important issue by those *not* offering services.
- None of the other challenges or barriers were ranked above 3.0 (neither significant nor insignificant).
- Interestingly, although patients may not pursue MTM services, payers’ rankings of the item “eligible patients do not really need it” as either insignificant or very insignificant indicate that they believe patients would benefit from the service.

Current Payers’ Challenges When Deciding Whether to Offer MTM Services to Members (mean rankings)

Very significant	(No items ranked in this category)
Significant	Patients are not interested or decline to participate (3.5)
Neither significant nor insignificant	Skeptical that these types of services would produce tangible outcomes (3.0) Providers do not have the training/experience (3.0) Insufficient MTM providers in the market area to meet needs (2.7) Local physician resistance expressed (2.7) Too few MTM patients to justify the cost (2.5)
Insignificant	Eligible patients do not really need it (2.3) Too difficult to determine patient eligibility (2.0)
Very insignificant	(No items ranked in this category)

(Based on 5-point rating scale where 1 = very insignificant and 5 = very significant; n = 47)

Barriers to Offering MTM Services Among Payers *Not* Currently Offering MTM Services (mean rankings)

Very significant	(No items ranked in this category)
Significant	Patients are not interested or decline to participate (4.0) Too few MTM patients to justify the cost (3.6)
Neither significant nor insignificant	Insufficient MTM providers in the market area to meet needs (3.0) Skeptical that these types of services would produce tangible outcomes (2.8) Too difficult to determine patient eligibility (2.7) Local physician resistance expressed (2.6)
Insignificant	Providers do not have the training/experience (2.0)
Very insignificant	Eligible patients do not really need it (1.4)

(Based on 5-point scale where 1 = very insignificant and 5 = very significant; n = 6)

Building Patient Demand for MTM

A lack of patient demand for MTM services was noted as a primary barrier in this environmental scan as well as those from previous years. Because many patients in the United States have not participated in an MTM visit, they are not aware of what it is or the benefits it could provide to them. Several researchers have explored strategies to overcome this barrier.

Garcia and colleagues conducted focus group sessions to explore patients' perceived medication-related needs and desire for MTM provided by pharmacists. Although patients generally regarded pharmacists positively, many had not experienced pharmacist-provided patient care services, such as MTM, and were not aware of the knowledge and skills of pharmacists. Furthermore, many patients did not feel that the service was being effectively marketed to them. Based on patient input, the authors concluded that marketing efforts should emphasize certain aspects of MTM where patients perceive value (e.g., the personal medication record) and use patient-friendly language to describe MTM. The researchers anticipated that as patients gain greater exposure to the concept of pharmacist-provided MTM, they will recognize the value of this service.¹²

Similar conclusions were reached by Truong and colleagues, who administered a patient survey in pharmacies with and without patient care services. The majority of patients surveyed had not previously been aware of MTM services, but many were interested in learning more and believed that MTM services could improve medication use.¹³

Finally, Brooks and colleagues found that older patients who are sicker and have more complex medication regimens are more likely to perceive a benefit of MTM. However, the researchers also found that these patients would require contact with pharmacies that promote MTM services to recognize the value.¹⁴

Because pharmacists need tools to better educate patients about MTM services, APhA has created both a brochure that explains the service and a consumer information page at www.pharmacist.com/mtm/consumer to help support communication. Many employer-based programs have found that offering patients incentives—such as waived copays for a certain period—is effective for supporting patient participation. In other programs, payers call patients directly to inform them of their eligibility for the service and enroll them with a participating provider. For the near future, a variety of such approaches—education, incentives, and proactive outreach—will likely be necessary to increase patients' awareness of and participation in MTM services.

Reflections From an MTM Provider

Our clients/patients become long-term patients. They tell other patients and relatives to come to us. The word-of-mouth extends beyond our community to relatives and tourists who arrange for phone consultations.

Advancing the Science of Measuring Quality

Identifying appropriate indicators of quality and determining how to measure them is a complex task. A growing body of research demonstrates that MTM improves the quality of patient care while reducing overall costs. Developing standardized measures that quantify the quality provided by MTM and other pharmacist-provided services will be important for future health care efforts that focus on quality.

PQA (a pharmacy quality alliance) has been integral to the development of quality measures for pharmacy and MTM services. In 2008, PQA launched five demonstration projects to test "report card" systems designed to monitor the quality of pharmacy performance, including measures that assessed adherence and MTM services.¹⁵ These projects were completed in 2009 and have generated valuable data for guiding the use of quality measures for pharmacy.¹⁶

In addition, PQA has been involved with the National Committee for Quality Assurance and has sought endorsement of measures from the National Quality Forum (NQF). In August 2009, the NQF endorsed 18 quality measures, 5 of which were PQA measures.¹⁷

Physician Expectations of Pharmacist Services

Although pockets of physician resistance to pharmacist provision of patient care services remain, more physicians are coming to recognize the value of services. These findings were reflected in the environmental scan, which revealed that physician resistance was no longer being cited as a major barrier. In addition, a survey of physicians in West Virginia found that the majority of physicians had a favorable opinion of pharmacists providing general drug education associated with Medicare Part D. Physicians were more mixed in their opinions of pharmacist provision of services through collaborative practice agreements. However, it appears that many pharmacist “champions” exist: while 12% of surveyed physicians strongly disagreed with such services, 21% strongly supported them.¹⁸

Other signs of support for pharmacists have appeared in professional journals for physicians, including calls for pharmacist inclusion in medical home models. In a *Journal of the American Medical Association* commentary, a physician recently argued that in a well-designed system, “doctoral-level trained pharmacists would not count pills. They would counsel patients about complex polypharmacy regimens and spearhead interventions to eliminate medication errors, with pharmacy technicians and automated devices handling medication dispensing in retail pharmacies.”¹⁹

In a study reported in the *Archives of Internal Medicine*, researchers found that patients with hypertension achieved better control through physician-pharmacist collaboration than with usual care. Hypertension was controlled in 29.9% of control-group patients and 63.9% of those in the intervention group ($P < .001$).²⁰ In this study, fully 96% of pharmacists’ recommendations were accepted by physicians, indicating a high level of approval of inclusion of the pharmacist on the team.

Commenting on this and another MTM study regarding the impact of pharmacists on a hospital discharge program, Helene Levens Lipton, PhD, of the University of California, San Francisco, called for inclusion of and payments for pharmacists in medical homes: “While most existing medical home teams do not include pharmacists, [Harvard physician-researcher David] Bates calls for their inclusion, and a recent [Institute of Medicine] report includes pharmacists in new practice team-based models for the future. Given the mounting evidence of pharmacists’ contributions in improving patient quality of care in team-based practices, a comprehensive effort should be undertaken, before the medical home is broadened further, to ensure that pharmacists and other appropriate clinicians are included on the team and receive reasonable reimbursement.”²¹

Physicians are increasingly recognizing the contributions of pharmacists to the health care team. According to a statement from the American Association of Family Physicians, “There is a growing body of research indicating that physicians and pharmacy professionals working in a collaborative environment can make positive contributions to patient health.”²² As more data emerge about the value of pharmacists’ patient care services, and as more physicians have positive experiences working with pharmacists, opportunities for collaboration are likely to increase.

Reflections From an MTM Provider

We are an integrated care team where physicians, behavioral health specialists, pharmacists, and dentists work together in the same patient care areas. The pharmacist is another equal member of the team, all focused on the patient.



What is your opinion?

What else can be done to communicate the value of MTM services to patients? physicians? other stakeholders?

Financial Aspects of Services

Costs to Implement MTM

- As in 2008, the greatest cost associated with implementing services was staff training, followed by changes in staffing patterns and increasing the number of pharmacists.

Pharmacist Compensation

- As in the previous year, the overwhelming majority of providers reported in 2009 that they receive payment for providing MTM services as part of their standard salary.

Payment for Services

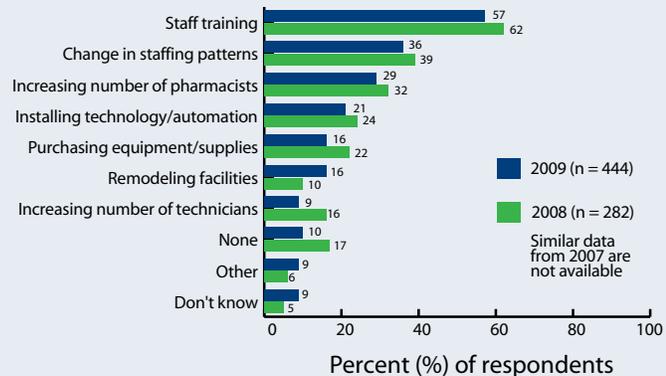
- 67% of providers reported billing for MTM services.
 - Of these, 56% of providers reported using Current Procedural Terminology (CPT) codes for claims processing.
- Among payers, 29% reported using CPT codes for MTM claims processing.
- Providers reported a variety of fee structures for payment of MTM services.
 - 11% used a capitated rate.
 - 51% used a flat rate per service.
 - 51% used a fee-for-service basis.

Return on Investment for Payers

- As in previous years, the overwhelming majority of payers (91%) did not know their return on investment (ROI) for providing MTM services.
- The median ROI was 3:1 for the four payers reporting an ROI.

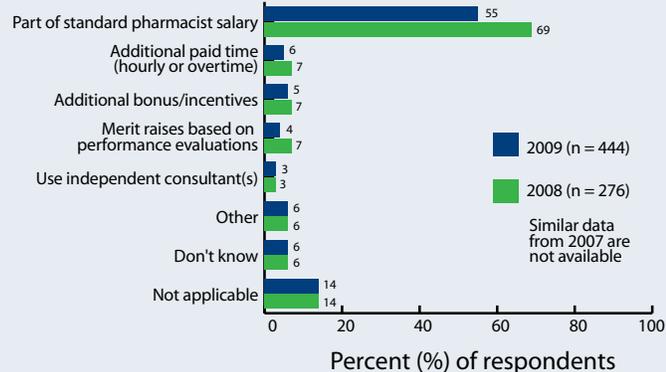
Providers' Investments Required to Begin Offering MTM Services

Multiple Responses Allowed



Other included: pharmacist transportation between locations, developing a residency, affiliation with a college of pharmacy, marketing, change in organizational structure, certification, grant funding, increasing patient acceptance, medical staff approval, or faculty politics.

Methods of Pharmacist Compensation for Provision of MTM Services



Other included: clinic contracts, fee per patient, or profit sharing.

Analyzing the Impact of MTM on Overall Costs

Although a handful of payers did provide an ROI value, the majority did not, suggesting a need for further analysis in this area. A 2008 article by Isetts and colleagues provides guidance for methods that can be used for computing an ROI.²³

- In this report, the researchers found that patients who received MTM services at six ambulatory care clinics in Minnesota had improved outcomes, compared with similar patients who did not receive MTM services.
- A total of 637 drug therapy problems were resolved among 285 intervention patients, and the patients' goals of therapy achieved increased from 76% to 90% during 1 year of MTM services.
- HEDIS measures improved for hypertension and cholesterol management for patients receiving MTM services.
- Total health expenditures for patients enrolled in the MTM service decreased from \$11,965 to \$8,197 ($P < .0001$), resulting in an ROI of 12:1.²³

What Value Has Emerged From Service Provision?

Perceptions of Value—Providers

- Providers consider the improved patient outcomes and quality of care resulting in greater patient satisfaction and greater professional satisfaction to be the greatest values of MTM services.
- Although financial factors are important, they were not rated as highly as the patient care and professional factors.
- These data are similar to the rankings in 2008.

Value From Services—Payers

- All of the factors associated with value were rated as “significant” by payers.
- Payers who were not currently offering MTM services viewed their likely ability to reduce medical costs and total health care costs while improving the quality of care as their greatest potential value.
 - These results should be interpreted with caution because of the low number of respondents (n = 5).

Value to Provider Organizations Resulting From MTM Services (mean rankings)

Very significant	(No items ranked in this category)
Significant	Increased professional satisfaction (4.4) Increased patient satisfaction (4.2) Increased quality of care/outcomes (4.2)
Neither significant nor insignificant	Revenue generated from MTM services (3.3) Increase in patient traffic (3.2) Increase in prescription volume/sales (3.0)
Insignificant	(No items ranked in this category)
Very insignificant	(No items ranked in this category)

(Based on 5-point scale where 1 = very insignificant and 5 = very significant; n = 399)

Reflections From an MTM Provider

By rounding with the medical team and providing MTM, patients have been discharged from the hospital quicker and on better medication regimens.

Reflections From an MTM Provider

Patients have a better appreciation for their medications and a better understanding.

Value to Payer Organizations From Offering MTM Services (mean rankings)

Very significant	(No items ranked in this category)
Significant	Increased patient satisfaction (4.2) Increased quality of care/performance measure outcomes (4.1) Increased professional satisfaction (4.1) Reduced total health care costs (3.9) Reduced cost of medical care (3.8) Reduced cost of prescription benefits (3.6)
Neither significant nor insignificant	(No items ranked in this category)
Insignificant	(No items ranked in this category)
Very insignificant	(No items ranked in this category)

(Based on 5-point scale where 1 = very insignificant and 5 = very significant; n = 39)

Reflections From an MTM Payer

We see value in lower costs, improved clinical outcomes, and higher patient satisfaction.

Potential Value of MTM Services to Payer Organizations *Not* Currently Offering MTM Services (mean rankings)

Very significant	Reduced cost of medical care (4.8) Reduced total health care costs (4.6) Increased quality of care/performance measure outcomes (4.5)
Significant	Reduced cost of prescription benefits (4.0)
Neither significant nor insignificant	Increased patient satisfaction (3.4)
Insignificant	Increased professional satisfaction (2.2)
Very insignificant	(No items ranked in this category)

(Based on 5-point scale where 1 = very insignificant and 5 = very significant; n = 5)



What is your opinion?

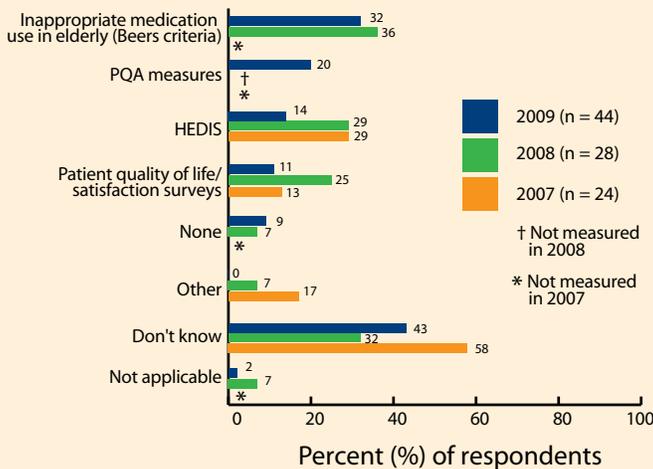
What do you see as the greatest value of MTM services?

Monitoring the Outcomes

- Although the percentages of payers reporting monitoring outcomes and quality measures decreased from those reported in 2008, the changes were not statistically significant.
- Many payer respondents did not know whether outcomes were being monitored or what the results were.

Measurement of MTM's Impact—Reported Improvements in Quality Measures by Payers

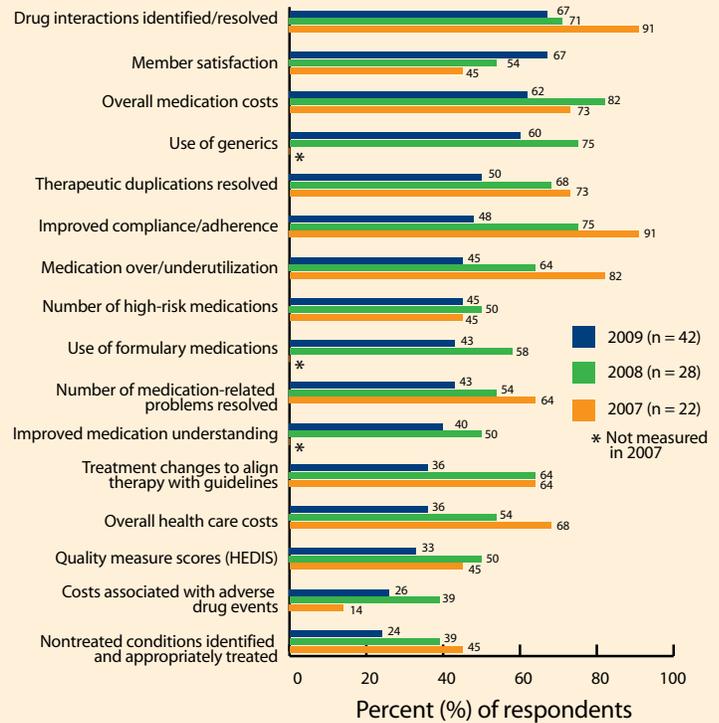
Multiple Responses Allowed



HEDIS = Healthcare Effectiveness Data and Information Set.
PQA is a pharmacy quality alliance.

Measurement of MTM's Impact—Outcomes Measured by Payers

Multiple Responses Allowed



HEDIS = Healthcare Effectiveness Data and Information Set.

Minnesota: A State on the Threshold of Widespread MTM Services

Minnesota has been among the leading states in the development and implementation of MTM services. MTM services are included as a benefit in the state's Medicaid system; the University of Minnesota now offers MTM services as a benefit for its employees; and large employers in the state also are embracing the services.

Provider Profile: Using Innovation to Advance Practice



**Steven Simenson,
BPharm, FAPhA**

Steven Simenson, BPharm, FAPhA, is a managing partner of Goodrich Pharmacies in Minnesota, where he has been involved with a number of innovative practices, including re-engineering his business model and practice sites at six community pharmacies to focus on delivering MTM services. He has access to a health system electronic medical record, which streamlines provision of patient care by allowing him to perform several tasks under protocol, such as

renewing prescriptions and modifying medication regimens.

"Even during the economic downturn, with a flattening of prescription order fulfillment, we have seen increased interest in the clinical services pharmacists provide," remarks Simenson. Goodrich Pharmacies are contracted with multiple payers offering MTM services as a benefit, including the state Medicaid program, General Mills, and the University of Minnesota, as well as other smaller employers. In addition, the pharmacies are contracted to provide on-call MTM services to patients of a local physicians' clinic. "We see MTM services being offered as a benefit more and more, and we take advantage of all possible opportunities to enroll in provider networks for these services."

"We started providing patient care services in the 1990s, but it has really become a major part of our business model in the past few years," notes Simenson. Several hundred patients have used the service.

Pharmacists typically provide two or three comprehensive medication therapy reviews daily, as well as targeted reviews. Simenson notes that advances in documentation and billing practices have led to efficiencies in delivering the services. Because each of the contracted payers has a different specific

billing system that must be used, Simenson has trained a pharmacy technician to be a billing expert to ensure that documentation is recorded in accordance with each payers' requirements.

The pharmacy technician is also responsible for compiling all relevant patient information prior to the appointment so the pharmacist is able to spend appointment time focused on patient needs rather than paperwork issues.

When working with the physicians' clinic, the pharmacists use an innovative electronic health record system that reduces the amount of time required to perform MTM services by approximately one third, compared with their other patients receiving services. The clinic's system allows the pharmacists to work synergistically with physicians by providing access to patient medical records and facilitating communication among providers. Pharmacists are easily able to review recent laboratory monitoring to assess patient progress and, through standing orders, can order additional tests, order medication refills, and prescribe certain medications when appropriate.

"We are moving toward increased integration with other providers as well, however the diversity of HIT systems has been a challenge," observes Simenson. He is hopeful that as more stakeholders become aware of the value provided by pharmacists, they will smooth the integration of systems to facilitate improved care. He continues, "Physicians are increasingly seeing pharmacists as an indispensable resource to manage the ever-increasing number and complexity of medications. Once other health care providers are exposed to our services and see the benefits that we provide, they become more open to allowing us access to additional information and we see increasing levels of cooperation and collaboration."

Simenson sees a very positive future for pharmacist provision of MTM services. "The long-term outlook is extremely positive as patients and providers recognize the skills and ability of pharmacists to contribute to patient care through managing medication therapy," he concludes.

Provider Profile: The University of Minnesota Embraces MTM



**Lowell J. Anderson,
DSc, FAPhA**

"Our pharmacy faculty teach pharmaceutical care and MTM services and are committed to a sustainable practice model that is built on these services. We felt it was important for the university to offer an MTM benefit to its employees, to include any pharmacist who met the standards and wished to participate, and to provide opportunities for our students to see the service being provided," explains Lowell J. Anderson, DSc, FAPhA, a professor and co-director of

the Center for Leading Healthcare Change at the University of Minnesota College of Pharmacy. He is also the manager of the MTM Network for the university's employee health benefit plan, called UPlan.

"We worked closely with the human resources department to educate them about both the financial and health benefits provided by MTM. The faculty were able to rely on published research to demonstrate the cost-effectiveness of such programs," continues Anderson. Human resources was convinced, and after the plan was developed, the program was piloted on the university's Duluth campus for a year. The UPlan's MTM benefit began system-wide implementation of operations in March 2009.

The MTM benefit is loosely modeled on the state's Medicaid MTM program. It follows the core elements model, and pays pharmacists based on a relative value scale that considers time and complexity. Anderson believes that MTM must be delivered face-to-face. "We believe this is the best way to deliver the services because it allows the development of relationships between the pharmacist and patient, and makes use of the clinical skills of our graduates," explains Anderson.

The program was developed with input from pharmacy faculty and is designed to allow any pharmacist who meets credentialing criteria to participate in the program. Currently, practitioners at independent pharmacies, chain pharmacies, and hospital systems are enrolled in the network. Pharmacists may practice at more than one site. As of December 2009, 89 pharmacists and 137 sites were included in the network.

Any plan member who uses four or more chronic medications is eligible and may self-enroll in the program at the pharmacy. Patients who use three or fewer medications chronically may be referred by a physician. Of the 39,000 university employees throughout the state, approximately 10,000 to 13,000 are estimated to be eligible to self-enroll. There are no limits on the number of MTM visits a patient may have with the pharmacist.

In the initial months of the program, the availability of MTM services was described in a benefits newsletter; approximately 500 patients were participating in the program at the end of 2009. To increase employee awareness and enrollment, UPlan has contracted with a call center to reach out to eligible employees and provide additional education and facilitate enrollment. Patients also receive incentives to participate, including a 6-month waiver of the base copay for prescriptions. "The inclusion of these incentives for the program demonstrates the high level of commitment of the university to the program," remarks Anderson.

The university has plans to assess several outcomes associated with the program including total health care costs, medication costs, adherence to formulary, clinical outcomes, and patient satisfaction. "We have not yet completed any comprehensive analyses, but so far the anecdotal reports we have received indicate that patients have a very positive experience with the program and that UPlan is satisfied as well," he explains.

"Meaningful data should be out at the end of 2010," anticipates Anderson. "Based on experience, we expect that the results will be positive and will pave the way for continued expansion of services leading to increased patient enrollment and increasing interest from other payers and benefit consultants."

"Ultimately, we expect the program to be great for the profession and its practitioners. Not only are we promoting the well-being of our employees, but we are serving as a model for others to emulate," continues Anderson. Currently, the University of Minnesota is one of only a few universities with a college of pharmacy that offer these pharmacist services to their employees. "It would be great to see all other pharmacy faculties committed to the advancement of sustainable pharmacist clinical practice working to include MTM in the health-benefit design of their institutions, and including their graduates as providers," concludes Anderson.

Looking to the Future: A Pioneer Provides Some Insights



**Brian Isetts,
PhD, BCPS, FAPhA**

Brian Isetts, PhD, BCPS, FAPhA, a professor in the Department of Pharmaceutical Care and Health Systems at the University of Minnesota College of Pharmacy, has spent the past 16 years focusing on strategies for improving the medication use process and developing pharmacy-based patient care services. His experiences in Minnesota provide unique insights regarding more widespread development of MTM services.

Isetts was instrumental in performing the MTM program evaluation analysis for the Minnesota Medicaid program. This research concluded that patients who received MTM services experienced improvements in HEDIS-type measures while reducing health care expenditures from a value-based purchasing perspective. "Despite budget cutbacks this year, the state has continued investment in this program and is looking at strategies to reach more patients." The state is currently working with physicians to encourage referrals as a strategy to enroll more patients in MTM services.

Almost 7% of pharmacists in Minnesota are currently providers of MTM services. Isetts notes, "We are reaching a critical mass and are near the volume that economists studying the adoption of innovation have identified as the tipping point for widespread adoption of a service."

Isetts regards the continued lack of public awareness about the value of services as a continuing challenge. "Patient perceptions are changing one patient at a time, however additional efforts are necessary to reach the tipping point of

patient awareness of services," he notes. Another important impediment is the need to increase HIT interoperability. "Although this issue remains a challenge, we have come too far and addressed so many barriers already that I expect we will be able to address this too," predicts Isetts.

Isetts anticipates that the data collected to support MTM services will generate enough momentum to keep programs moving forward. "Pharmacy was the first profession that has demonstrated the cost-effectiveness of our services," he remarks. "As a result we have amassed a wealth of information demonstrating that MTM services improve patient care while managing overall health costs. In fact, other segments of the health care system are looking to pharmacy for models when working to measure quality and conducting comparative effectiveness research."

There are plentiful opportunities for practice-based research on the effect of MTM services. "We see more and more progressive physicians integrating pharmacists in medical home models. It will be interesting to compare those entities that incorporate pharmacists with those who do not to determine the impact." Isetts notes that when a pharmacist is involved in the medical home, it allows the physician to work more efficiently and to spend additional time with more complex patients.

Isetts is hopeful that the MTM grant program in the health care reform bills may help to significantly increase the number of practices offering the service, and will help bridge the transition to a patient-centered model of practice on a national basis. Ultimately, the research performed to support MTM services has provided credibility during health care reform negotiations. "During discussions with policy makers surrounding health care reform bills, I have been told that inclusion of MTM services is considered a nonpartisan issue. In Washington, DC, I don't think you can get a higher compliment than that," remarks Isetts.

What's New for 2010?

In July 2008, the final report of an exploratory investigation of MTM commissioned by the Centers for Medicare and Medicaid Services (CMS) was released.²⁴ In March 2009, based in part on the findings of that report, CMS released a final Call Letter describing Medicare Part D plan requirements for 2010.²⁵ The Call Letter, which serves as guidance for prescription drug plans seeking to submit a bid to provide Medicare Part D benefits in 2010, includes many improvements for MTM programs, listed below.

CMS 2010 Requirements for Medicare Part D Plan MTM Programs

MTM programs must:

- Enroll targeted beneficiaries using an opt-out method only (i.e., beneficiaries are automatically enrolled unless they choose not to be).
- Target beneficiaries for enrollment at least quarterly.
- Include the following enrollment criteria for targeted beneficiaries:
 - Does not require more than three chronic disease states.
 - Does not require more than eight medications.
 - In defining multiple chronic diseases, sponsors must target at least four of seven core chronic disease states.
 - Likely to incur annual costs of \$3,000 for covered Part D drugs (a reduction from the previous requirement of \$4,000).

Part D plans' MTM programs must include, at a minimum:

- An annual comprehensive medication review, including a review of medication use, interactive person-to-person consultation (face-to-face or by phone), and a written summary.
- Quarterly targeted medication reviews.
- Active interventions (i.e., not limiting interventions to mailings and refill reminders).

Plans must measure and report the number of:

- Comprehensive MTM visits.
- Targeted MTM visits.
- Provider interventions.
- Changes in therapy as a result of interventions.

Respondents' Preparation for New CMS Requirements

Provider and payer survey respondents to the 2009 environmental scan were asked about their awareness of and preparation for addressing these new requirements.

Of the providers, only 23% (n = 91) were aware of the impending changes. Among these individuals, the majority (75%) expected that they would see an increase in the number of Medicare Part D patients who are eligible for services. Several had made preparations to accommodate the increased number of patients. The most common change was to readjust pharmacist schedules to facilitate MTM service delivery, followed by hiring additional pharmacists and pharmacy technicians.

Among payers (n = 44), the majority of those offering Medicare Part D plans anticipated that the number of eligible patients would increase either moderately (30%) or significantly (36%). Payers reported modifications to accommodate the required changes including enhancing the MTM program offering (23%), increasing in-house provider staff (14%), contracting with an MTM network service provider to administer the program (11%), and increasing contracted providers (5%).



What is your opinion?

What impact will the new CMS requirements have on the development of MTM services?

Looking Forward

As MTM services mature and expand, more information is emerging about various aspects of services and their impact on the health care system. Data from 2009 suggest that the development of MTM services may have been tempered by the recession. Nevertheless, progress was made on a number of fronts including work toward the goal of a standardized interoperable system for documentation and billing, as well as efforts to educate patients, physicians, and health policy decision makers of the value of services. Additional progress on these issues will be instrumental for further mainstreaming of services.

Although overcoming barriers to service delivery remains an important issue for advancing MTM services, several developments in 2009 and early 2010 should bolster service implementation. These developments include the expanded CMS requirements for MTM services within Medicare Part D plans, as well as numerous supportive provisions included in national health care reform bills that have passed both the U.S. House of Representatives and the U.S. Senate.

As all of the factors influencing MTM services continue to evolve, service development will likely gain the momentum needed to overcome barriers and lead to the widespread implementation of standardized MTM services.

MTM in Health Care Reform

As we go to press, both the U.S. House of Representatives and the U.S. Senate have passed health care reform bills, and details of a final bill are still emerging. Although the exact provisions of the final bill or law remains to be seen, both approved bills contain several provisions recognizing pharmacists as important members of health care teams. MTM and medication reconciliation were identified in the bills as strategies that could be used to control costs and improve quality of care. Furthermore, both bills contained language supporting the provision of robust MTM services delivered by pharmacists.

The inclusion of MTM in both versions of the health care reform bills that passed through the House and Senate signifies a high level of national recognition of the value of pharmacist-provided MTM services. Pharmacy associations and other leaders are continuing to work with policy makers and other stakeholders to advance the provision of these services to maximize their value throughout the health care system.

MTM Resources

Internet Resources

American Pharmacists Association's MTM Central

www.pharmacist.com/mtm

National Association of Boards of Pharmacy

www.nabp.net

PQA

www.pqaalliance.org



MTM e-Community

Join APhA's MTM e-Community to share your ideas about the questions raised in this digest as well as other issues surrounding MTM.

To join the MTM e-Community, APhA members can:

- Go to www.pharmacist.com
- Login
- Click on "e-Communities"
- Click on "Groups"
- Click on "Available Groups"
- Click on "Join" Medication Therapy Management e-Community

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