ACCP Commentary

Medication Therapy Management Services: Application of the Core Elements in Ambulatory Settings

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Introduction

The passage of the Medicare Modernization Act (MMA) of 2003 provided a prescription drug benefit under Medicare Part D, which included the provision of Medication Therapy Management (MTM) Services for eligible Medicare beneficiaries. One of the key features of MTM is that it created a mechanism for pharmacists to provide and to be compensated for clinical services. As a result of this legislation, 11 national pharmacy organizations created a consensus definition of MTM published in September 2005. The definition states that "MTM is a distinct service or 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."[1]

In October 2005, the President of the American College of Clinical Pharmacy (ACCP) selected a group of current members to form the 2006 Clinical Practice Affairs Committee and charged the committee with developing an ACCP care model for implementing MTM services in ambulatory settings including community pharmacies. As a first step, the committee reviewed the American Pharmacists Association (APhA)/National Association of Chain Drug Stores (NACDS)

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Foundation Medication Therapy Management in Community Pharmacy Practice – Core Elements of an MTM Service (Version 1.0) Framework[2] to determine whether there was a need for expansion of this community practice-focused model. The purpose of the APhA/NACDS Foundation Framework was to identify core elements of MTM services that enable pharmacists to incorporate MTM into their practices. Having affirmed that the Framework does indeed describe the core activities that should be performed when delivering MTM services, the committee's purpose in developing this commentary is to expand the applicability of the Framework beyond community pharmacy practice and to illustrate how it may be applied in all ambulatory practice settings.

In the process of expanding this framework to include all ambulatory practice settings, the committee determined that it was important not only to maintain the five core elements identified in the APhA/NACDS paper, but also to provide more details on the design and implementation of MTM services. The core elements have been expanded to be more inclusive of all ambulatory settings where patient-centered care is provided and to offer more details on "how to" provide MTM services in these settings. In addition, there is an increased emphasis on the importance of communication between health care professionals across the spectrum of ambulatory care as well as during transitions between institutional and ambulatory settings, emphasizing continuity of care. The goal of this expanded framework is to improve patient care outcomes through communication, collaboration, and coordination of care between various health care professionals in all ambulatory care practice settings. MTM may be provided by any pharmacist practicing in the ambulatory setting, which may include, but is not limited to, community practice, ambulatory care clinics, private physician offices, mobile medical clinics, and home care.

Application and Expansion of the Core Elements

The core elements for providing MTM services in the community practice setting as described in the APhA / NACDS Foundation Framework include:[2]

- Medication therapy review (MTR)
- A personal medication record (PMR)
- A medication action plan (MAP)
- Intervention and referral
- Documentation and follow-up

Although the committee feels that these five core elements are essential when performing MTM services, we also feel there is a need to include additional information and expand on the core elements to allow for wider applicability to all ambulatory settings, including community pharmacy. The committee expanded upon the MTR to include a section about the importance of patient data collection and assessment and evaluation of patient information. We also felt that the PMR and MAP may be effectively used as tools to educate the patient regarding drug therapy and increase and enhance communication among health care providers in order to improve inter-professional collaboration. In addition, more emphasis was placed on patient monitoring and education. These elements need not to be performed in this particular order, and the sequence would depend on the nature of the patient visit, the ambulatory care setting, and the resources available. It is also important to recognize that completion of these elements may require

multiple patient interactions. MTM when applied in all ambulatory settings should include the following expanded core elements:

Medication Therapy Review

Collect Information

The first step in providing comprehensive MTM services is appropriate data collection. It is imperative that pharmacists effectively communicate with patients and appropriately interview them regarding their medication therapy in order to provide quality care. Ideally, pharmacists would have access to the patient's medical and/or pharmacy records and access to the primary and/or specialty care provider(s). Obtaining as much patient information as possible is critical for providing optimal patient care. One of the common barriers to effective MTR is the lack of communication between the pharmacist and provider when seeking to obtain patient specific information. Therefore, it is recommended that barriers to accessing this information be minimized when possible.

One way to create open communication with a patient's provider and to facilitate sharing of information would be to develop a collaborative relationship with the provider. To develop this relationship it is important for the provider to understand the types of services that a pharmacist can provide. Educating providers can be accomplished through multiple mechanisms, including, but not limited to, calling or visiting in person, mailings, or open houses. The use of electronic media such as e-mail or Web sites may also be effective. In addition, satisfied patients can promote pharmacists' services to other patients and providers. More extensive collaborative agreements usually involve written protocols that govern the mechanism by which the patient's provider approves and refers patients for drug therapy management.[3] As individual state laws can vary, pharmacists should consult their state pharmacy practice act for laws on collaborative practice agreements. For example, some states allow pharmacists to change medications according to a protocol without having to consult the physician, while others have awarded pharmacists prescriptive authority.[4] Regardless of the method, breaking down potential barriers between pharmacists and providers will help to facilitate the sharing of information and collaboration regarding therapies, especially as patients transition across care settings, and may lead to improved patient outcomes.

In situations where access to the medical record is not possible, pharmacists may collect as much of the necessary information from the dispensing records as well as rely on the patient (preferably face to face) as their primary source of information. It is also possible to contact the physician office and request the data on behalf of the patient. The pharmacist should collect information about the patient including the following:

Table 1[5,6]

Patient Information
Current medications, including prescription, nonprescription, vitamins, and herbal therapies
Past medications, if applicable to medication planning
Adverse effects the patient may be experiencing or has experienced from any current or past medications
Allergies, including medication, food, and other
Immunization history
Past medical and surgical history
Family history
Social history
Vital signs (trends)
Pertinent laboratory data
Pertinent physical examination and clinical findings during last visit with primary care provider or as assessed in the MTM visit

As part of the initial visit and all follow-up visits, the pharmacist conducts a comprehensive MTR, including prescription and nonprescription medications, vitamins, herbal supplements, and other dietary supplements. Pharmacists may also obtain a nutrition/exercise history and determine whether the patient is properly using medical devices (if applicable). Examples of medical devices may include inhalers, nebulizers, spacers, peak flow meters, blood glucose meters, home oxygen therapy, and injectables.

In situations where comprehensive medical, patient, or pharmacy information is not available, pharmacists make recommendations to the patient's primary health care provider based on the information they have available. The patient's primary care provider may accept the recommendation or provide the pharmacist with an explanation as to why the recommendation may or may not be feasible at this time. At the very least, conducting a comprehensive MTR allows pharmacists to create a PMR for the patient (discussed in more detail in the next section) and educate the patient regarding all medications in terms of indication, dosage, strength, frequency, duration, precautions, potential adverse effects and preventable drug interactions. The pharmacist then informs the patient's care provider(s) on the MAP or updated PMR via phone, fax, or e-mail. In addition, educating patients to bring the PMR to all health care professional visits will help ensure appropriate medication reconciliation across care settings. A 2007 Joint Commission National Patient Safety Goal (NPSG) requires accurate and complete medication reconciliation across the continuum of care. The Joint Commission recognizes the importance of preventing medication errors as patients transition through different levels of care. The MTR and PMR fulfill this Joint Commission NPSG.[7]

Assessment/Evaluation

After the pharmacist collects all of the available and necessary information regarding the patient's medication therapy and medical history, the pharmacist assesses the appropriateness of the medication regimen as it relates to the patient's current medical problems.

Table 2

Assessment
The therapeutic regimen for the correct drug, dose, route of administration, frequency, and duration based on patient-specific information (e.g., indications, precautions, contraindications, financial feasibility, adherence) and drug-specific data (e.g., half-life of medication, adverse effects, drug interactions)
Goals of therapy (safety and effectiveness of therapeutic regimen and, when possible, a well-defined therapeutic end point)
Appropriateness of medication regimen based on evidence-based treatment guidelines and individualized patient factors
Patient adherence with the medication regimen or any factors that may increase the risk for non-adherence such as cultural, language, educational, communication, or financial barriers

Personal Medication Record

The risk for medication errors increases as patients make transitions within and across health care systems. This may be due to miscommunication among health care professionals, perhaps because medication reconciliation does not occur or because patients may not be educated regarding the changes made to their drug therapy. Discrepancies often exist between the medications a patient is actually taking and what their health care providers think they are taking. Therefore, communication among health care professionals as patients' transition within and across the health care system is of primary importance. Educating patients regarding the importance of bringing the PMR to all visits with the pharmacist and with other health care providers as well as when they are admitted to the hospital or emergency department will enable patients to make more informed decisions about their health care and help ensure continuity of care among various health care professionals.[6,8]

The patient should receive an updated PMR before leaving each MTM visit. As adapted from the APhA / NACDS Foundation Framework, the PMR includes the following information:

Table 3[2]

Personal Medication Record
Patient name
Primary care and other health care provider's name(s) and contact information
Pharmacy name, pharmacist's name and contact information
Emergency contact information*
Medication name and strength (if more than one prescriber, the name and contact information of the different prescribers for a particular medication)
Indication for each medication
Directions for use of each medication
Precautions while taking medication
Start and stop date of each medication
Allergies*
Immunizations*
Highlight new medications and/or changes*

* indicates information added by the ACCP Clinical Practice Affairs Committee

The pharmacist updates the PMR in an electronic or paper medical record during each encounter and communicates any changes to other health care providers, including community pharmacists involved in the patient's care. This communication could occur by phone, but should ideally be followed by sending a fax, electronic, or paper copy to the primary care provider's office or community pharmacy.

Educate

The PMR should be used by the pharmacist as an education tool when discussing changes in drug therapy to improve patients' understanding of their medical conditions, reduce medication discrepancies, and enhance adherence to the medication regimen. Patients are particularly vulnerable to medication errors during care transitions, and the PMR may be used to enhance communication during this process. One care transitions intervention study demonstrated that patients who more actively participate in their care, including medication self-management, were less likely to be rehospitalized following their initial hospitalization.[9]

The education session should be patient focused rather than product focused. Patient education includes the following:

Table. 4

Criteria for Patient Education
Proper name of the medication, dosage, route, frequency, duration, and proper administration technique (if applicable) of the medication
Indication for the medication
Brief overview of the medical condition that the medication is prescribed for and why it is important for the patient to adhere to the therapy
Potential consequences if the patient is non-adherent with the medication
What to do in case of missed doses
Expected response to therapy (therapy goals) both subjectively (e.g., improvement in rash, reduction in pain) and objectively (e.g., decrease in BP, HR)
Potential adverse effects and strategies for prevention, identification, and/or management of adverse effects
Strategies to prevent drug-drug or drug-food interactions (e.g., separate fluoroquinolone antibiotic from daily products by taking the antibiotic 1 hour before or 2 hours after daily product)

Patient education also includes disseminating appropriate information regarding nonprescription medications, dietary supplements, and nonpharmacologic therapy such as lifestyle modifications. Educating patients about lifestyle modifications may include providing the patient with appropriate dietary information based on their disease states (e.g., low sodium for heart failure and hypertension) and an exercise regimen. Intense exercise regimens should not be recommended without approval from the patient's health care provider as many patients will need to be medically cleared (e.g., stress test) before actively participating in a regimen. Verbal patient education sessions should be supplemented with relevant printed patient education materials. It is important not to overwhelm the patient with excess reading material as this may be counterproductive and cause the patient to disregard relevant information. Repetition of information and demonstration of how to use devices is critical to improving long-term

adherence to therapeutic recommendations. Instructions on how to appropriately take the medications need to be very specific. Medical jargon should not be used, and the patients should repeat back what they have been told to verify their understanding of the directions.[10-12] In addition, patient education may be provided to special needs patients. Every effort should be made to obtain information on local health care resources, support groups, and counseling centers to assist patients when making referrals beyond the pharmacy.

Medication Action Plan

The MAP is a useful communication tool. The MAP may include recommendations regarding changes in therapy and should be given to the patient to share with his or her provider. In all instances, patients receive a copy of the MAP for their own use and are instructed to carry it with them to present health information to each provider for review. This will ensure further documentation of any change in therapy and facilitate communication among health care professionals. Because the MAP is designed to be created in collaboration with the patient, pharmacist, physician and any other health care provider, it may include other action plans such as sick day management for patients with diabetes, an asthma action plan, and reminders about immunizations.

According to the APhA/NACDS Foundation Framework, the MAP includes all of the following:

Table. 5[2]

Medication Action Plan
Patient Name
Physician(s) name(s) and contact information (patients may have more than one physician when taking into account specialists. Educate patients about the importance of having only one primary care provider)
Pharmacist's name(s) and contact information
Pharmacy name (educate patients about the importance of having only one pharmacy)
Date MAP created
Medication-related issues and/or problems identified
Proposed actions for each problem identified
Individual responsible for action(s)
Result of the action (when known) and date

Intervention and/or Referral

Intervention: Therapeutic Recommendations and Monitoring

Based on information collected during the MTM visit, the pharmacist provides therapeutic recommendations to enhance patient care. Recommendations are based on individual patient needs as determined in the assessment/evaluation, are evidence-based, and may encompass a variety of interventions. Pharmacist recommendations may be verbal via phone, or written via fax, e-mail, or entry into the patient's permanent medical record. Recommendations may also be delivered in person directly to the health care provider's office. Collaborative practice agreements allow pharmacists to make drug therapy adjustments independently; however, the

pharmacist still needs to ensure adequate communication among health care providers by any of the methods mentioned above. All recommendations are aimed at improving the overall medication use process by decreasing medication misuse, overuse or underuse; improving effectiveness and safety of the regimen; and increasing the cost-effectiveness of therapy. Throughout the course of the evaluation, it is important that the pharmacist have access to a variety of drug information resources to provide the most accurate recommendations. Pharmacists may also use other pharmacists and health care providers as resources in evaluating a patient's medication regimen. Potential pharmacist recommendations include:

Table 6

Potential Pharmacist Recommendations
Initiation, discontinuation, or adjustment of nonpharmacologic or pharmacologic therapy
Laboratory and other drug monitoring
Referral to a specialist or other health care provider as needed
Obtaining medications through patient assistance programs whenever possible or referral to a social worker for social service needs

The pharmacist justifies all recommendations to the primary care provider based on evidence, patient-specific data (e.g., severity of infection, renal/hepatic function, age, weight), and drug-specific data (e.g., pharmacokinetics, drug interactions), and ensures that any changes in drug therapy are communicated to the patient's primary care provider. It is also essential to document all recommendations in the patient's medical record or pharmacy record, and on the patient's MAP and PMR as necessary. This is further detailed in the documentation section below.

Following a patient's visit, the pharmacist monitors the result of the recommendation/intervention. Monitoring the patient for effectiveness of the recommendation/intervention includes subjective and objective goals of therapy in assessing therapeutic outcomes and establishing intervals and frequencies of monitoring. Monitoring patients for safety of the recommendation/intervention includes subjective and objective parameters in anticipation of adverse effects as well as establishing intervals and frequencies of monitoring.

Pharmacists in many ambulatory settings, in collaboration with the primary care provider, may have the ability to order appropriate laboratory tests to determine the safety and effectiveness of medication therapy. However, if objective measurements or laboratory values are not available, pharmacists may continue to make recommendations regarding changes in therapy to the patient's health care provider based on subjective patient parameters. In addition, individual state pharmacy practice laws may allow pharmacists to perform point of care testing.

Referral

A referral is defined as the recommendation for the patient to see another medical professional. A written referral is usually needed when a problem requires the expertise of a specialist. When making a referral, the primary care provider is transferring the responsibility for managing a specific problem to another health care provider. Activities associated with referring a patient to another provider are documented in the patient's medical record. In a similar model, pharmacists work in collaboration with other health care professionals to resolve or solve medication-related

issues. Once pharmacists are recognized as providers by prescription drug plans (PDPs), referrals to and from pharmacists will become a standard means of providing MTM services and sending patients to an appropriate consultant. In the event that a pharmacist does not provide MTM services, or the patient's medical condition is too complicated or complex such that a higher level of service is required, the pharmacist refers the patient either to a pharmacist who provides a specialized MTM service or to another health care provider, with the consentof the patient. Patients may self-refer to a pharmacist who provides MTM services. Patients must also be appropriately referred back to their primary care provider or to an emergency department if an acute problem is revealed during the pharmacist's visit with the patient. A dietitian may be consulted for more comprehensive lifestyle and dietary counseling, or a social worker may be asked for help obtaining medications through manufacturer-sponsored patient assistance programs. In essence, patients may be referred to any member of the health care team after initial evaluation by the pharmacist. Pharmacists providing MTM services arrange follow-up visits with their patients to ensure continuity of care and may also arrange for a more focused, disease-specific visit as deemed appropriate.

Referrals to other health care professionals may be made via phone or fax. Using a referral form for appropriate documentation of the referral and verbal communication among health care professionals is important. The patient should sign a written authorization statement to release medical information to other health care providers and insurers, as needed.

Documentation and Follow-up

Documentation is essential to the patient care visit. As a health care provider, the pharmacist is responsible for documenting services provided to the patient, whether it is face-to-face or over the phone or Internet, as well as informing the patient's primary care provider of the recommendations. The necessary information should be recorded during the encounter without creating too much distraction during the interview itself. If documentation is not done during the patient interview, it should be completed immediately thereafter. It is not recommended that the pharmacist rely on memory to record events because unintentional omissions of information are likely. Several forms are available to help record the information obtained during the initial and follow-up visits.

Ideally, a standardized documentation form that is universally recognized among all members of the health care team and adaptable to either a computerized information system or a paper-based system should be used. The documentation provides evidence of continuity of care between the patient, the pharmacist, and the primary care provider.

Documentation includes assessment of the patient's drug-related problem, goals of therapy, recommendations, and monitoring of the patient's responses to treatment.
Whenever possible, indicators of quality should be documented to assure an evidence-based approach to patient care. All patients should, if warranted, have a follow-up appointment or phone call after the initial MTM visit.

Documentation is an essential component of quality patient care. It serves as a means to adequately capture the clinical relevance of the patient visit and to continually improve the care provided to the patient. Documentation can be recorded in several formats; however, the SOAP (**S**ubjective, **O**bjective, **A**ssessment, and **P**lan) format or the **P**roblem **O**riented **M**edical **R**ecord

(POMR) are the most common and universally recognized. The POMR format uses a review of systems (ROS) approach that is relevant to the type of patient being interviewed. The level of service provided is reflected in this documentation. Such an approach also yields indicators of the level of patient complexity, an essential component for accurate billing.

As adapted from the APhA/NACDS Foundation Framework, documentation of MTM services may include any or all of the following categories of information:

Table. 7[2]

Documentation of MTM Services
Patient demographics and special needs: name, birth date, gender, marital status, contact information, specify the special need(s)
Chief complaint (CC): state this in the patient's own words, if possible
Problem list: known allergies or adverse drug reactions, diseases, conditions, and dates of occurrence
History of present illness (HPI): describes the current problem, including a description of symptoms in chronological order
Past medical history (PMH): hospitalizations, surgeries, and injuries or illnesses
Medications: current and past medications, immunizations, adherence, non-prescription, herbal, and other dietary supplements and dates of use
Family history (FH): as it relates to the patient's problem list
Social history (SH) / Lifestyle: tobacco use, ethanol use, illicit drug use, and activity level
Review of systems (ROS): physical findings as pertinent to the current problem, including vital signs and laboratory data
Assessment: general problem list and/or a list of each of the medication therapy problems, with accompanying assessment
Plan: for each problem state recommendations/changes to the medication plan and any therapeutic monitoring to be performed; interventions or referrals made; education provided to patient or caregiver and verification of understanding of the education; any specific learning needs; schedule and plan for follow-up appointment; and amount of time spent with the patient

Documentation: Payment for Services

Because what is recorded in the patient's chart is considered a legal document, the pharmacist must ensure that the information is presented concisely, legibly, and accurately. Appropriate documentation is essential to an accurate reimbursement process and will help prevent fraud or abuse.

The difference between fraud and abuse is based upon the person's intent (fraud is intentional and abuse is not clearly intentional). However, they share similar consequences and drain money from Medicare and third party programs. Penalties may be levied for both fraud and abuse, and thus precise and accurate documentation of the services rendered is necessary to avoid penalties for actions that may not have occurred from deceptive intent.

To successfully initiate claims for services, pharmacists must assure that documentation corresponds to the level of services rendered. It is wise to consult a medical billing specialist to

understand what current procedural terminology (CPT) codes should be used. Documentation will demonstrate the complexity of the visit and provide supporting evidence for the level of billing for services. If the pharmacist is practicing with physicians, the pharmacist may bill using incident-to rules but is generally compensated at the lowest level of billing (99211). If the provider is in a hospital-based clinic and is billing via a facility fee, the level of billing is usually based on time and complexity of the visit. The newest option for billing is using the pharmacist's CPT codes for MTM (0115T, 0116T, 0117T) where billing is determined by the amount of time spent with the patient in 15-minute increments. Medical billing specialists will review this documentation, not to challenge the provider but to ensure that the patient's record supports the provider's selected code.[13]

Several state Medicaid plans (IA, MN, MS, MO, NC, OH, and WI) offer reimbursement for pharmacist cognitive services. Although these plans are approved by CMS, they are managed by the individual states and vary in their focus. Reimbursement for these services is also highly variable and requires a pharmacist practitioner in the state to carefully verify whether or not patients should be billed through Medicaid or Medicare Part D, if they are dual-eligible. Pharmacists are required to obtain a Medicaid provider number and complete a national disease state management certification examination; they are then compensated at a flat rate. The states are not currently using the approved pharmacist's CPT codes to bill and be compensated for these services.[14,15]

Documentation: Continuity of Care

Copies of the documentation should be shared with the patient's primary care provider and other healthcare providers. Countersignature on notes may be required in collaborative practice models depending on legal requirements of the provider's state. A plan for patient follow-up with the pharmacist, consultant, or primary care provider should also be documented. Pharmacist follow-up with the patient is essential when the MTR reveals drug-related problems that need to be addressed, when recommendations are made to the provider, and when changes are implemented. This includes follow-up on monitoring parameters identified by the pharmacist.

Identification of Patients Eligible for MTM Services

Developing and providing a successful MTM program requires the pharmacist to identify an appropriate target population. Although the MMA requires PDPs to implement an MTM program for high risk beneficiaries, the legislation provides only a starting point for identifying patients who should receive MTM services. Under the law, patients on multiple prescription drugs, with multiple chronic disease states and with a high annual drug spend (defined by the Secretary as $4000 per year for 2006 and 2007) are considered candidates for MTM Services.[16,17] As adapted from the APhA/NACDS Foundation Framework, patients may be identified for MTM services by the criteria compiled in Table 8 below:

Table 8[16,18,19]

Criteria for Identifying Individuals for MTM Services
Referral from other health care providers
More than one prescriber
Patients on four or more chronic medications
Patients with at least one chronic disease requiring pharmacotherapy
Patients taking a medication with a narrow therapeutic index (e.g., warfarin, phenytoin, theophylline)*
Lab values outside the normal range that could be improved with medication therapy
Non-adherence for more than 3 months
Patients requiring intensive communication due to literacy and / or cultural issues
Total monthly cost of medication in excess of $200
Patients discharged from a hospital or skilled nursing facility within 14 days with new medications
Over-utilization or under-utilization of medications*
Routinely non-adherent with medication regimens*
Lack of understanding regarding medication use*
Patients confronted with financial barriers*

* Indicates criteria added by the ACCP Clinical Practice Affairs Committee

Pharmacists in the ambulatory setting have established relationships with patients and are uniquely positioned to identify actual or potential medication problems. Therefore, it is imperative that pharmacists providing MTM in these settings consider patients who would benefit from the program, regardless of the established eligibility criteria set by the Centers for Medicare & Medicaid Services (CMS).

Eligible patients may be identified through several mechanisms, including the dispensing process, review of the medical record, or referral from another health care professional. Pharmacists working in ambulatory care medical offices or clinics with immediate access to medical records may perform a focused chart review of patients with chronic conditions requiring long-term drug therapy, patients taking certain classes of medications, or patients taking high-risk, low therapeutic index drugs such as warfarin or digoxin. Locating eligible patients may be more efficient in ambulatory settings that use an electronic health record where "reports" can be easily formatted to identify patients with certain characteristics. Patient referrals by other health care professionals would be expected to occur with a higher frequency in those settings where pharmacists work directly with physicians, nurse practitioners, physician assistants, or case managers. However, formal referrals from other health care providers may not be necessary, at this time, to provide and receive compensation for MTM services. Patients aware of the availability and value of the pharmacist's services may also self-refer. It is important to note that although CMS created some direction on how to identify patients eligible to receive MTM services, the services may be offered to non-Medicare patients through contracts with a variety of payer groups, including insurance plans and self-insured employer groups.[20]

Ideally, MTM will be provided face-to-face in a private area, but may also be provided over the phone in situations where the patient does not have access to the pharmacist, where other barriers to direct interaction exist, or where immediate intervention is necessary. In certain situations,

pharmacists may travel to the patient's home to provide MTM. Patients will receive these services primarily by appointment. Walk-ins are also welcome depending upon the pharmacist's schedule and the type of practice. The length of the visit and the number of follow-up visits, in person or by telephone, will be determined based on the complexity of the patient's medication therapy problems, health care coverage, or both.

Table 9

Methods of Identifying MTM Eligible Patients
Review of the medical record
Dispensing process
Referral from another health care professional
Review of the searchable electronic medical record and / or pharmacy records by disease state and/or class of medication
Patient-specific "reports" from searchable electronic medical records and/or pharmacy records
Under-utilization or over-utilization reports from dispensing data and prescription claims data
Patient adherence reports
Patient self-referral

Identifying eligible patients alone will not ensure that pharmacists will perform or be compensated for MTM services. A mechanism must be in place with the PDPs, Medicare Advantage PDPs (MA-PDPs), other payors, or the patients themselves to ensure payment for MTM services. PDP and MA-PDP providers are currently identifying at-risk, high drug utilizers and other good candidates through quality and cost-management utilization processes.[21] At this time, most PDPs are contracting directly with community-based pharmacies using the dispensing systems as billing mechanisms. Some companies are contracting with pharmacists and pharmacies to use Web-based documentation. These types of systems provide opportunities for all pharmacists, in any ambulatory care setting, to be involved with MTM. The majority of payor groups are interested in contracting with networks for pharmacies or pharmacists who can provide these services for their entire covered patient population. Therefore, it is important for pharmacies and pharmacists to work together to negotiate contracts and to use standard documentation methods to bill for the services provided.

Summary

The Medication Therapy Management in Community Pharmacy Practice Framework created by APhA and the NACDS Foundation provides guidance for pharmacists delivering MTM services within community settings. The ACCP Clinical Practice Affairs Committee commentary makes recommendations to enhance this framework and to facilitate its use and applicability to all ambulatory settings. Key recommendations include:

- Changing the framework's title to be more inclusive of all ambulatory care practice settings, including community pharmacy.
- Expanding upon areas within each of the five core elements to include the collection of patient information, assessment and evaluation of patient information, patient monitoring and education, and appropriate documentation of services provided.

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- Outlining additional criteria for identifying patients who may benefit from MTM services.
- Placing additional emphasis on the importance of communication and collaboration among health care professionals with the goal of improving patient outcomes.

It is the committee's hope that this expanded framework will help pharmacists improve patient care in ambulatory care settings beyond community pharmacy, as well as facilitate efforts of APhA and the NACDS Foundation in developing future versions of the MTM Framework. We anticipate that this will be an ongoing process as the profession discovers new and innovative methods for incorporating MTM services into practice.

References

1. Bluml BM. Definition of medication therapy management: development of professionwide consensus. J Am Pharm Assoc 2005;45:566-72.

2. American Pharmacists Association, National Association of Chain Drug Stores Foundation. Medication Therapy Management in community pharmacy practice: core elements of an MTM service (version 1.0). J Am Pharm Assoc 2005;45(5):573-9.

3. Reichert SL. Developing a protocol for collaborative drug therapy management. Am J Health Syst Pharm 1999;56:1715-6.

4. Magill-Lewis J. More states seek prescriptive authority for pharmacists. Drug Topics 2000;144:57.

5. Cipolle RJ, Strand LM, Morely PC. The assessment. In: Pharmaceutical care practice: The clinician's guide. 2nd ed. New York: McGraw-Hill, 2004:118-70.

6. Jones RM. Health and Medication History. Chapter 3. In: Jones RM and Rospond RM, eds. Patient Assessment in Pharmacy Practice. 1st ed. Baltimore: Lippincott Williams & Wilkins, 2003:21-30.

7. JCAHO. 2007 Ambulatory Care/Office-Based Surgery National Patient Safety Goals. Available at: http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/07_amb_obs_npsgs.htm. Accessed May 15, 2007.

8. Woolf SH, Chan ECY, Harris R, Sheridan SL, Braddock CH, Kaplan RM, et al. Promoting informed choice: Transforming health care to dispense knowledge for decision making. Ann Intern Med 2005;143:293-300.

9. Coleman EA, Parry C, Chalmers S, and MinSJ. The care transitions intervention: results of a randomized controlled trial. Arch Intern Med 2006;166:1822-8.

10. Schnipper JL, Kirwin JL, Cotugno MC, Wahlstrom SA, Brown BA, Tarvin E, et al. Role of pharmacist counseling in preventing adverse events after hospitalization. Arch Intern Med 2006;166:565-71.

11. Brown L. Low health literacy: What pharmacists can do to help. J Am Pharm Assoc 2006;46:4-6.

12. Rantucci MJ. Communicating skills in patient counseling. In: Pharmacists talking with patients: A guide to patient counseling. 1st ed. Baltimore: Williams & Wilkins, 1997:131-70.

13. Moisio MA, A Guide to Health Insurance Billing. 2nd ed. Clifton Park, NY: Delmar Publishers; 2006.

14. Chrischilles EA, Carter BA, Lund BC et al. Evaluation of the Iowa Medicaid Pharmaceutical Case Management Program. J Am Pharm Assoc 2004;44:337-49.

15. Ramsey LA, Byrd HJ, Wells BG, et al. Pharmaceutical Care Clinics: An Innovation in Collaborative Medication Therapy Management (abstr). Available at: http://www.ashpadvantage.com/bestpractices/2003_papers/ramsey.htm. Accessed May, 15, 2007.

16. Department of Health and Human Services. Centers for Medicare & Medicaid Services. Center for Beneficiary Choices. Memorandum: Changes to Part D Sponsors' Medication Therapy Management Program (MTMP). Available at: http://www.cms.hhs.gov/PrescriptionDrugCovContra/downloads/MemoMTMChanges_08.29.06.pdf. AccessedMay 15, 2007.

17. Department of Health and Human Services. Centers for Medicare & Medicaid Services. 42 CFR Parts 400, 403, 411, 417, and 423. Medicare Program; Medicare Prescription Drug Benefit; Final Rule. *Federal Register*. 70(18). Friday, January 28, 2005. Available at:http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/pdf/05-1321.pdf. AccessedMay 15, 2007.

18. Medication therapy management services in community pharmacy: planning for successful implementation – a practical guide for community pharmacists. American Pharmacists Association and National Association of Change Drug Stores Foundation, 2005.

19. Consensus Document Workgroup. Sound medication therapy management programs. J Manag Care Pharm 2006;12(3 Suppl):S2-13.

20. Cranor CW, Bunting BA, Christensen DB. The Asheville Project: Long-term clinical and economic outcomes of a community pharmacy diabetes care program. J Am Pharm Assoc 2003:43:173-84.

21. Touchette DR, Burns AL, Bough MA, Blackburn JC. Survey of Medication Therapy Management Programs Under Medicare Part D. J Am Pharm Assoc 2006;46:683-91.

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