

Medication Therapy Management in Community Pharmacy Practice

Core Elements of an MTM Service

Version 1.0



*A joint initiative of the American Pharmacists Association
and
the National Association of Chain Drug Stores Foundation*

April 29, 2005

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APhA and the NACDS Foundation would like to acknowledge those individuals and organizations participating in the review of this document.

Introduction

Eleven national pharmacy organizations achieved consensus on a definition of medication therapy management (MTM) in July 2004 (Appendix A). Building on the consensus definition, the American Pharmacists Association (APhA) and the National Association of Chain Drug Stores (NACDS) Foundation have developed a model framework for implementing effective MTM services in a community pharmacy setting. This model describes core elements of MTM services that can be provided by pharmacists across the spectrum of community pharmacy.

Although adoption of this model is voluntary, it is important to note that it has been developed with the input of an advisory panel of community pharmacy practice leaders (page 10) and is crafted to maximize both effectiveness and efficiency in the community pharmacy practice setting.

The model services are designed to improve care, enhance communication among patients and providers, improve collaboration among providers, and optimize medication use for improved patient outcomes. MTM services are distinct from dispensing. This framework describes core components of MTM service delivery in community pharmacy, but it does not represent all MTM services that could be delivered by the community pharmacist, such as health and wellness services and disease management programs.

Recognition of the pharmacist as a provider of MTM under the Medicare Modernization Act of 2003 (effective January 2006) represents a valuable opportunity for community pharmacists to enhance patient care and address the nationally recognized need to identify and resolve medication therapy problems.¹ The success of MTM services currently contracted through self-insured employers and state Medicaid programs provides additional support for the delivery of MTM services to diverse patient populations in the community setting.²⁻⁴ As new opportunities arise, all pharmacists

in community practice must share a common vision for patient-centered MTM that enhances pharmacists' role in our nation's health care system.

This model is intended for pharmacists to use with all patients in need of MTM services, whether or not they are covered by a private or public health benefit. The model is in agreement with Centers for Medicare and Medicaid Services (CMS) expectations that MTM services will enhance patients' understanding of appropriate drug use, increase compliance with medication therapy, result in collaboration between pharmacists and prescribers, and improve detection of adverse drug events.⁵

CMS, other payers, and many others in health care have recognized the importance of MTM services, but consistently defined parameters are lacking. APhA and the NACDS Foundation believe that a unified vision of the core components of MTM in community pharmacy will enhance the efficiency and efficacy of these services for all patients. Our collective vision is the advancement of sustainable community pharmacy services that are supportive of improved patient outcomes and are recognized by patients, payers, and providers for their value.

Framework for Community Pharmacy-Based MTM Services

The APhA/NACDS Foundation model framework of Medication Therapy Management (MTM) in community pharmacy is designed to improve care, enhance communication among patients and providers, improve collaboration among providers, and optimize medication use that leads to improved patient outcomes. Ideally, patients* or caregivers will receive MTM services at the

**When the term "patient" is used in this document, it refers to the patient, the caregiver, or other persons involved in the care of the patient.*

pharmacy where they have filled their prescriptions and from a pharmacist with whom they have an ongoing relationship.

These services will be provided in a private or semiprivate area, as required by the Health Insurance Portability and Accountability Act, by a pharmacist whose time is devoted to the patient during this service. MTM services typically are provided by appointment but may be provided on a walk-in basis. The pharmacist can initiate MTM services when complex medication therapy problems are identified through the dispensing process.

In this model, the patient meets with the pharmacist for an annual comprehensive medication therapy review and has additional visits with the pharmacist throughout the year to address ongoing medication monitoring issues and event-based medication therapy problems. The number of visits required to successfully manage a patient's therapy will likely be determined by the complexity of the patient's medication therapy problems, the extent of coverage by the patient's health plan, or both. A typical patient might need up to four visits per year, but additional visits would be available when necessitated by individual patient circumstances. During the year, a significant event such as a hospital or emergency room discharge would necessitate an additional comprehensive medication therapy review.

MTM in community pharmacy includes five core components, described on the following pages:

- Medication therapy review,
- A personal medication record,
- A medication action plan,
- Intervention and referral, and
- Documentation and follow-up.

The framework includes these core elements of MTM services, but community pharmacists may offer many other innovative MTM services, such as health and wellness services and disease management programs.

Core Components of Community Pharmacy MTM

Medication Therapy Review:

The pharmacist completes a medication therapy review (MTR) consultation with the patient or caregiver.

MTR is conducted between the patient or caregiver and the pharmacist, preferably in person and face-to-face. The face-to-face interaction establishes or enhances the pharmacist-patient relationship. This interaction allows the pharmacist the optimal ability to observe signs of and visual cues to the patient's health problems, such as adverse reactions to medications, lethargy, alopecia, extrapyramidal symptoms, jaundice, and disorientation. The pharmacist's observations can result in early detection of medication-related problems and thus can reduce emergency room visits, hospitalizations, and medication misadventuring.

Pharmacist-provided MTR and consultation in various settings has resulted in reductions in unscheduled physician visits, emergency room visits, hospital days, and overall costs.^{2,3,6-13} Pharmacists have been shown to obtain more accurate medication-related information from patients.¹⁴

The MTR can be comprehensive or targeted to a specific medication problem. Ideally, in a comprehensive MTR, the patient presents all current medications to the pharmacist, including all prescription and nonprescription medications, herbal products, and other dietary supplements. The pharmacist then assesses the medication therapy for appropriateness and works with the patient, the prescriber, or both, providing education and information to improve patients' self-management of their medications.

Targeted MTRs are used to address new medication problems identified by the pharmacist or for ongoing medication monitoring during follow-up visits. The pharmacist assesses the specific therapy problem, intervenes, and provides education and information to the patient, the prescriber, or both, as appropriate.

The MTR is tailored to the individual needs of the patient at each visit. Depending on its scope, the MTR can include any of the following:

- Assessing, on the basis of all relevant clinical information available to the pharmacist, the patient's physical and overall health status, including current and previous diseases or conditions
- Assessing cultural issues, patient preferences, education level, language barriers, and other characteristics of the patient's communication abilities that could adversely affect outcomes
- Interviewing the patient or caregiver to detect symptoms that could be attributed to adverse events caused by any of the current medications
- Assessing, identifying, and resolving medication therapy problems related to:
 - The clinical appropriateness of each medication being taken by the patient
 - The appropriateness of the dose and dosing regimen of each medication, including consideration of indications, contraindications, potential adverse effects, and potential problems with concomitant medications
 - Therapeutic duplication or other unnecessary medications
 - Adherence to medication therapy (persistence and compliance)
 - Untreated diseases or conditions
 - Medication cost considerations
 - Timely monitoring and feedback of results
- Monitoring and evaluating the patient's response to therapy, including safety and effectiveness
- Interpreting, monitoring, and assessing patient laboratory results, when available
- Providing education and training on the appropriate use of medications and monitoring devices, the importance of medication adherence, and understanding treatment goals
- Communicating appropriate information to the physician or other health care provider, including consultation on the selection of medications

For optimal health outcomes, a patient would receive an annual comprehensive MTR and targeted MTRs

throughout the year to address new medication problems or ongoing medication therapy issues. During the year, a significant event such as a hospital or emergency room discharge would result in the need for an additional comprehensive MTR.

Personal Medication Record: The patient receives a personal medication record (PMR; Appendix B) after a comprehensive MTR.

At the end of a comprehensive MTR, the patient receives a portable record of all his or her medications (prescription and nonprescription medications, herbal products, and other dietary supplements) that contains information such as that reflected in Appendix B. This includes:

- Patient name or identifier
- Medication name and strength
- The intended use, if known, of the medication (e.g., "for high blood pressure")
- Directions for use (e.g., "one tablet twice daily"), including regimen times, if needed (e.g., "8 am and 8 pm")
- Discretionary information, such as precautions (e.g., "avoid exposure to sunlight")
- Start date of currently used medications (if known)
- Stop date of discontinued medications (if known)
- Pharmacist's name and contact information
- Prescriber's name and contact information
- Date of PMR creation and of most recent update

The PMR is intended for patients to use in medication self-management and to voluntarily share with health care providers to enhance continuity of care. The patient is instructed to show the PMR to health care providers at all appointments to help ensure that each practitioner is aware of the patient's current medication regimen. Patients are instructed to take the PMR with them if they are being admitted to a hospital or other institution or if they must visit an emergency room.

Patients are also instructed to bring the PMR to all visits to the pharmacy. Each time the patient receives a new medication, has a current medication discontinued, has an instruction change, begins using

a new nonprescription medication or dietary supplement, or has any other changes to the medication regimen, the PMR should be updated to ensure a complete and accurate record. Ideally, the pharmacist should be an active participant in this process.

The patient's PMR can be generated electronically or manually. Widespread use of the PMR will support uniformity of information, while facilitating flexibility for local variations.

Medication Action Plan: The patient receives a medication action plan (MAP; Appendix C) at the end of an MTM visit.

A care plan is an important component of the patient care process.^{15,16} At the end of the MTM visit, the patient receives a MAP, a patient-centered document containing information such as that reflected in Appendix C. The MAP includes:

- Patient identifier
- Patient date of birth
- Physician identifier
- Pharmacist identifier
- Date of MAP
- Medication-related issues identified
- Proposed actions
- Individual responsible for action
- Result of action, when known, including result date

The MAP, created collaboratively by the patient, pharmacist, physician, and other health care providers as appropriate, contains information the patient can use to improve medication self-management. Patients can be encouraged to voluntarily share the MAP with health care providers to enhance continuity of care and to help ensure that each practitioner is aware of the patient's current medication-related issues and actions being taken to resolve them. Patients can be instructed to take the MAP with them if they are being admitted to a hospital or other institution or if they must visit an emergency room. In addition, the pharmacist can serve as a resource to the patient's physician and other health care providers, communicating

MAP information in a health care provider-specific format.

Patients are instructed to bring the MAP with them to all visits to the pharmacy. Each time a medication-related issue is resolved, the result and date should be recorded on the MAP. Ideally, the pharmacist should be an active participant in this process.

A patient's MAP can be generated electronically or manually. Widespread use of the MAP will support uniformity and consistency in information sharing among members of the health care team, while facilitating flexibility for local variations.

Intervention and/or Referral: The pharmacist provides consultative services and intervenes to address medication-related problems; when necessary, the pharmacist refers the patient to other health care providers.

During the course of an MTM visit, medication therapy problems may be identified that require the pharmacist to intervene on the patient's behalf. Interventions may include working with the patient or caregiver to address specific medication problems or collaborating with physicians or other health care providers to resolve existing or potential medication-related problems.

The positive impact of pharmacist interventions on outcomes related to medication therapy problems has been demonstrated in numerous studies.¹⁷⁻²⁰ Pharmacists can intervene to resolve medication therapy problems as part of any pharmacy service, including dispensing. Resolving medication therapy problems may involve collaboration between the pharmacist and the patient's physician or other health care provider.

Some patients' medical conditions or medication therapy may be highly specialized or complex, and the patients' needs may extend beyond core MTM services. In such cases, pharmacists may provide additional care according to their level of expertise, or they may need to refer the patient to the most appropriate health care provider, such as a physician, a pharmacist with additional qualifications, or another member of the health care team.

Circumstances that may require referral to additional health care providers include the following:

- New problems discovered during MTR may necessitate referral to a physician for evaluation and diagnosis.
- Patients may require disease management education from pharmacists or other health care providers to help them manage chronic diseases such as diabetes.
- Patients who require monitoring for high-risk medications, such as warfarin, may need referrals to pharmacists with advanced experience, training, or credentials.

The intent of intervention or referral is to optimize medication use, enhance continuity of care, and encourage patients to fully utilize available health care services to prevent future adverse outcomes, whether clinical, humanistic, or economic.

Documentation and Follow-up: MTM services are documented in a consistent manner, and a follow-up MTM visit is scheduled with the patient or caregiver.

Documentation is an essential component of patient care.^{21,22} The pharmacist is responsible for documenting services in a manner appropriate for evaluating patient progress and sufficient for billing purposes. The use of core documentation elements will help to create consistency in professional documentation and information sharing among members of the health care team, while facilitating practitioner, organization, or regional variations.

Documentation of MTM services should include the following categories of information:

- Patient demographics
- Known allergies, diseases, or conditions
- A record of all medications, including prescription, nonprescription, herbal, and other dietary supplement products
- Assessment of medication therapy problems and plans for resolution
- Therapeutic monitoring performed

- Interventions or referrals made
- Education received
- Schedule and plan for follow-up appointment
- Amount of time spent with patient
- Feedback to providers or patients

Timely feedback to prescribers and other professionals involved in a patient's care is part of thorough MTM documentation. At the end of an MTM visit, the pharmacist schedules a follow-up appointment with the patient or caregiver according to individual patient requirements. Documentation and consistent follow-up enhance continuity of care.

General Patient Eligibility Considerations

All patients using prescription medications would benefit from the core MTM services outlined in this document, but it is likely that priority will be given to complex patients who would benefit most from these services. Patients should be recruited for MTM services through health plan identification, physician referral, and identification by the pharmacist. Pharmacists may wish to notify area physicians of their MTM services so that the physicians may refer patients for those services. Pharmacists can utilize one or more of the following factors in targeting patients who are likely to benefit most from MTM services in their practice:

- Patient is referred for MTM services by a health care provider.
- Patient is receiving medications from more than one prescriber.
- Patient is on four or more chronic medications.
- Patient has at least one chronic disease (e.g., congestive heart failure, diabetes, hypertension, hyperlipidemia, asthma, osteoporosis, depression, osteoarthritis, chronic obstructive pulmonary disease).
- Patient has laboratory values outside the normal range that could be improved with medication therapy.
- Patient has demonstrated nonadherence to the medication regimen for more than three months.

- Patient has issues of limited health literacy or cultural differences, and intensive communication is needed to maximize care.
- Total monthly cost of medication exceeds \$200.
- Patient has been discharged from a hospital or skilled-nursing facility within 14 days and prescribed a new medication regimen.

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Appendix A: Definition of Medication Therapy Management

Medication Therapy Management is a distinct service or group of services that optimize therapeutic outcomes for individual patients. Medication Therapy Management Services are independent of, but can occur in conjunction with, the provision of a medication product.

Medication Therapy Management encompasses a broad range of professional activities and responsibilities within the licensed pharmacist's, or other qualified health care provider's, scope of practice. These services include but are not limited to the following, according to the individual needs of the patient:

- a. Performing or obtaining necessary assessments of the patient's health status;
- b. Formulating a medication treatment plan;
- c. Selecting, initiating, modifying, or administering medication therapy;
- d. Monitoring and evaluating the patient's response to therapy, including safety and effectiveness;
- e. Performing a comprehensive medication review to identify, resolve, and prevent medication-related problems, including adverse drug events;
- f. Documenting the care delivered and communicating essential information to the patient's other primary care providers;
- g. Providing verbal education and training designed to enhance patient understanding and appropriate use of his/her medications;
- h. Providing information, support services and resources designed to enhance patient adherence with his/her therapeutic regimens;
- i. Coordinating and integrating medication therapy management services within the broader health care-management services being provided to the patient.

A program that provides coverage for Medication Therapy Management services shall include:

- a. Patient-specific and individualized services or sets of services provided directly by a pharmacist to the patient.* These services are distinct from formulary development and use, generalized patient education and information activities, and other population-focused quality assurance measures for medication use.
- b. Face-to-face interaction between the patient* and the pharmacist as the preferred method of delivery. When patient-specific barriers to face-to-face communication exist, patients shall have equal access to appropriate alternative delivery methods. Medication Therapy Management programs shall include structures supporting the establishment and maintenance of the patient*-pharmacist relationship.
- c. Opportunities for pharmacists and other qualified health care providers to identify patients who should receive medication therapy management services.
- d. Payment for medication therapy management services consistent with contemporary provider payment rates that are based on the time, clinical intensity, and resources required to provide services (e.g., Medicare Part A and/or Part B for CPT & RBRVS).
- e. Processes to improve continuity of care, outcomes, and outcome measures.

* In some situations, medication therapy management services may be provided to the caregiver or other persons involved in the care of the patient.

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** Organization policy does not allow NABP to take a position on payment issues.

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MTM Model Advisory Panel members provided expert advice. This document does not necessarily represent all of their opinions or those of their organizations.

