

# Medication Therapy Management Competition

## Nova Southeastern University

### Project Description & Implementation Overview

This is an educational initiative to engage student's interest in becoming healthcare providers through Medication Therapy Management (MTM). The competition is completely online for the purposes of reaching out to multiple Colleges of Pharmacy and to easily disseminate information to competition participants. The program itself is both educational and competitive in nature and requires timely planning of several educational sessions on various aspects of Medication Therapy Management.

### Purpose of the Project

MTM is defined as direct involvement with patient care. Pharmacists providing MTM, help to manage a patient's pharmacotherapy and improve outcomes through education and intervention. Proper execution of MTM requires an extensive clinical pharmacology knowledge base, and the ability to address pharmacotherapy concerns to promote positive outcomes while adjusting therapy in a patient-specific manner. This program is designed to educate student pharmacists on the principles of MTM in order to become active participants in managing a patient's pharmacotherapy.

### Project Budget: Expenses and Revenues

This project requires minimal expenses and generates no revenue. Sponsorships for the event help to defray these minimal expenses. Expenses for our project included speaker honorariums (Nova Southeastern University offered a \$50 speaker honorarium, however our speaker declined to accept this, so there was no cost to the chapter), award recognitions (see below) and travel expenses for competition winners to the AMCP Annual Meeting and Showcase (The trip to AMCP cost us Hotel:\$200 Gas:\$60 Meals:\$50 Registration:\$40).

Awards: Certificates of Participation were donated by the College of Pharmacy, so there was no cost to the chapter. The Award Plaques cost \$250 total.

Total cost to chapter: \$600

### Who and How Many Chapter Members are involved?

Minimum Involvement: 3 Faculty Members and 5 Chapter officers

### Competition Structure

#### *a. Program Development Board*

- i. The board will consist of the AMCP Student Chapter Faculty Advisor, the Program Director, and AMCP Student Chapter Officers. Additional Board Members may be voted in if needed; however, the Board must always consist of an odd number of members. Voting on any issue will be governed by a majority vote. In the event of a tie, the Boards Faculty Advisor will cast the deciding vote. The purpose of this board is to govern the approval of judges, competition monitors, patient actors, educational sessions, competition room selections, and any program development issues that may arise. In addition, the Board must appoint a faculty panel for patient case development. Preliminary approvals and final approvals of the patient case to be used in the competition can only be approved by the Boards Faculty Advisor.

#### *b. Faculty Advisor*

- i. The AMCP Student Chapter Faculty Advisor will serve on the Program Development Board. Duties include casting deciding votes, assisting in

program development, and approving various activities and personnel involved in the competition. In addition, the Faculty Advisor will be the sole governing official in approving the patient case to be used in the competition.

*c. Program Director*

- i. The Program Director must be a 3rd Year Pharmacy Student that is also an officer of the local AMCP Student Chapter. This position is involved in every aspect of the competition. The Program Director is responsible for coordinating the Educational Sessions and overseeing operations on the day of the competition.

*d. Subcommittee Chairs*

- i. Subcommittee Chairs will consist of local AMCP Student Chapter members and the committees will be created on an as needed basis. The official chair positions recognized by Nova Southeastern University's AMCP Chapter are: Publicity Committee, Financial Committee, Awards Committee, and the Educational Development Committee.

*e. Faculty Case Development Panel*

- i. This panel will consist of three faculty members, each with expertise in case development. The members of this panel may also serve on the judging panel as needed. The purpose of this panel is to develop three cases targeted to the difficulty level of each year in pharmacy school, including a maximum of two disease states, and requires only fifteen minutes of time for the student to develop a plan. Additional responsibility includes creating a list of top ten possible drugs that can be given in the competition so that students from every level of pharmacy school can participate.

*f. Judges*

- i. The Program Development Board will appoint a maximum of three judges to serve on the panel for the day of competition. The Faculty Advisor serving on the Program Development Board is eligible to participate on the Judging Panel. The judges are responsible for evaluating each student's performance based on objective and subjective criteria found on the judging form supplied by the AMCP Chapter. The panels' obligation is to evaluate every participant throughout the competition.

**Who Should be Targeted? Audience or Involvement? How Do You Find Them? How Do You Contact?**

This program targets P1 to P4 students. They are recruited at the monthly MTM educational sessions, conducted by faculty members, for involvement in the competition. Regular emails, updates on legislation for MTM, and educational materials help to keep the topic fresh in students' minds.

**What Materials are Needed? Outside Resources, Ordering, etc?**

No outside materials are needed since faculty members help to educate participants about MTM and chapter officers help students navigate through the competition materials and website. Creating or utilizing a website significantly decreases overall cost and streamlines information and materials.

**Timeline for Implementation and Execution**

Educational sessions should be conducted monthly starting in September. The competition is usually set for February so there is no conflict the competitions held by other organizations.

**Follow-up with Faculty Members/Volunteers/Participants**

An awards ceremony helps to highlight each person involved. This program is designed to provide a certificate of participation to each person who participated and an award plaque

for a winner from each class (P1-P4). Nova Southeastern selects one of the four winners to receive the grand prize trip to the AMCP Annual Meeting and Showcase (this is optional).

### **Project Evaluation:**

#### **What Went Well? What Didn't? How Would You Improve for the Next Year?**

Every step of the process went well. Only one student complained that online chatting with the patient took longer than they hoped for. However, most students enjoyed the entire process. With that said, there was one factor that could have made the entire process much easier: a webmaster. Without this person, designing a webpage took us hours of research and understanding. So it is important that a webmaster be a part of the team.

## **List Each "To Do" for Project**

### **Project Checklist:**

- Select faculty members
- Form the program board (faculty and chapter officers)
- Select educational session topics and dates
- Continue to promote the competition at each event (make regular flyers)
- Select educational session monitors (to ensure speaker attendance, PPT handouts printed, and A/V equipment is running well)
- Start working on the website ASAP (the sooner the better)
- Familiarize students and faculty with the website
- Select faculty members to create a patient case
- Ensure that all materials are available to students
- Reserve a computer lab (patient chat)
- Order awards and certificates
- Reserve a room for awards ceremony
- Reserve Hotel/Airfare for grand prize winner

# **MTM Competition Guidelines Version 1.0**

**Written By: Gustavo Llerena, PharmD Candidate 2010**

## **Contributing Faculty**

**Betty J. Harris, BS, PharmD  
Maria Maniscalco, PharmD  
Richard Finkel, BS, PharmD  
Jennifer Faas, PharmD  
Nancy Borja, PharmD  
Goar Alvarez, PharmD, FASCP  
Angela Garcia, PharmD, Drug Information Resident**

## **Contributing Student Pharmacists**

### **PharmD. Candidate 2010**

**Melissa Ortega  
Marlene Lesmes  
Viviana Lee  
David Pino**

### **PharmD. Candidate 2011**

**Natalya Mantsirino  
Faaria Ali  
Elina Kilevskaya**

**Brought to you by:**



**AMCP Student Chapter 2008-2009**

# MTM Competition Guidelines Version 1.0

## I. Purpose

- a. Medication Therapy Management (MTM) is at the forefront of pharmacist direct involvement with patient care. Pharmacists utilizing MTM, function to manage a patient's pharmacotherapy and improve outcomes through intervention. Proper execution of MTM requires an extensive knowledge base, and the ability to address pharmacotherapy concerns to promote positive outcomes while adjusting therapy in a patient-specific manner. This program is designed to educate student pharmacists on the principles of MTM in order to become active participants in managing a patient's pharmacotherapy. The program objective is to educate and encourage student pharmacists to develop themselves as MTM professionals.

## II. Competition Structure

### a. Program Development Board

- i. The board will consist of one AMCP Student Chapter Faculty Advisor, the Program Director, and AMCP Student Chapter Officers. Additional Board Members may be voted in if needed; however, the Board must always consist of an odd number of members. Voting on any issue will be governed by a majority vote. In the event of a tie, the Boards Faculty Advisor will cast the deciding vote. The purpose of this board is to govern the approval of judges, competition monitors, patient actors, educational sessions, competition room selections, and any program development issues that may arise. In addition, the Board must appoint a faculty panel for patient case development. Preliminary approvals and final approvals of the patient case to be used in the competition can only be approved by the Boards Faculty Advisor.

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- i. Subcommittee Chairs will consist of local AMCP Student Chapter members and the committees will be created on an as needed basis. The official chair positions recognized by this guideline are:

Publicity Committee, Financial Committee, Awards Committee, and the Educational Development Committee.

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- i. This panel shall consist of three faculty members, each with expertise in case development. The members of this panel may also serve on the judging panel as is needed. The purpose of this panel is to develop three cases targeted to the difficulty level of each year in pharmacy school, including a maximum of two disease states, and requires only fifteen minutes of time for the student to develop a plan. Additional responsibility includes creating a list of top ten possible drugs that can be given in the competition so that students from every level of pharmacy school can participate.

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*g. Competition Monitors*

- i. Monitors will serve to ensure the autonomy of each students work and to secure that information pertaining to the case presented on the day of the competition is not disclosed to participants that have yet to compete.

*h. Volunteer Actors (Patients)*

- i. Actors include: professional actors, faculty and/or staff of the College of Pharmacy, and/or other persons who are not students of the College of Pharmacy.
- ii. The competition will include actors to be presented as patients. The actors will be given a personality, a patient profile, correlating disease states, and any additional information that will aid in the development of the patients character. The actor is requested to respond to the students questions and keep a consistent record with all participating competitors. A maximum of two actors may be appointed.
- iii. In the case that more actors are needed, the board may appoint two actors per class year of competing student pharmacists. (i.e. two actors for P3 competitors, two actors for P2 competitors, two actors for P1 competitors.)

**III. Competition Design**

*a. Educational Forums*

- i. MTM and Drug Information Resources
- ii. MTM Forms and Patient Counseling Pearls

- iii. How to conduct an MTM Session
- iv. The Value of Pharmacist-lead MTM Services
- b. *MTM Counseling Sessions*
  - i. The MTM Competition will be conducted using two competition rooms, each with its own set of monitors. In the section entitled “Structure of Counseling/Profile Review Rooms” is a synopsis of what each room consists of and what resources must be allocated to each room prior to the competition. Each of the main two competition rooms will run in 15 minute intervals with competitors rotating through each room simultaneously. The first room is for the student to review the entire case for the first time, to utilize pharmacy references to look for information regarding medication therapy, and to develop questions for the patient based on the profile at hand within a 15 minute interval. The second room is the evaluation room where the student engages the patient for the first time and is judged according to performance in patient medication review, counseling, and correctly and completely fills out a Medication Action Plan that appropriately meets the needs of the patient and addresses patient safety concerns during a fifteen minute interval. All paperwork filled out by the student is collected in this final competition room for subsequent judging. Once all students have been evaluated based on performance, judges will be given a chance to evaluate the written materials presented by the student. A winner will then be selected based on overall scoring on both patient counseling performance and written documentation.

#### **IV. Competition Guidelines**

##### *a. Competition Rules*

- i. Mobile phone policy
  - 1. All cell phones must be turned completely off.
  - 2. Texting with other competition participants will not be tolerated and will result in disqualification of any and all involved.
- ii. Cheating Policy
  - 1. Cheating will not be tolerated and will result in immediate disqualification from the competition. The decision to disqualify is ordered and enforced by the Faculty Advisor.
  - 2. For further details concerning the cheating policy please refer to the NSU Student Handbook.
- iii. Judging Policy
  - 1. All decisions made by the judging panel are deemed final and cannot be appealed.
  - 2. Judging results will be revealed at the MTM Competition Awards Ceremony to be held on the same day or no later than one week after the competition.
- iv. Reference Policy

1. Competitors are only allowed to utilize those references that are approved by these guidelines as expressed under the “Approved Reference Material” section. Any combination of these references may be available in the competition. The competition is not meant to carry every one of the references listed in that section. However, sufficient references from the list must be provided to where competitors are not at a disadvantage.
- v. Registration/Attendance Policy
  1. Students must sign into an allotted time slot of their choosing that best accommodates their schedule during the designated competition day. Time slot intervals and competition times are determined by the board at least one month prior to the event.
  2. Once students sign up for a given slot, changes and adjustments may be made at the discretion of the Program Director or the designated board member in charge of registration.

*b. Evaluation Criteria*

*i. Subjective Criteria*

1. Vocal Quality
2. Professionalism
3. Competency
4. Empathy
5. Expressed information at the patients’ level of understanding
6. Empowered the patient with patient education
7. Adequately addressed patient concerns
8. Probing Questions: weak or strong
9. Open-Ended Questions: weak or strong
10. Judge to student feedback

*ii. Objective Criteria*

1. Introduction to patient
2. Questioned the patient about OTC medications
3. Questioned the patient about Rx medications
4. Assessment of Compliance
5. Assessment of Barriers to Compliance
6. History Taking
  - a. Complete Review
  - b. Disease State Management
7. Does the action plan to address patient needs
8. Gave the patient a copy of his PMR and MAP
9. Contacted the Primary Care Physician about concerns with the patients’ permission
10. Final Assessment of Patient understanding
11. Made a follow-up appointment



12. Provided the Five Core Elements of MTM:
  - a. Medication Therapy Review (MTR)
  - b. Personal Medication Record (PMR)
  - c. Medication-Related Action Plan (MAP)
  - d. Intervention and referral
  - e. Documentation and follow-up
13. Student identified financial benefits and alternatives to best suit the patient
14. Student filled out billing forms correctly and completely
15. Student filled out assessment forms correctly and completely

c. *Approved Reference Materials (latest editions)*

- i. Thompsons Micromedex
- ii. Lexi-Comp Drug Information Handbook
- iii. Clinical Pharmacology
- iv. Lexi-Comp Pediatric Handbook
- v. Drugs in Pregnancy and Lactation (Briggs)
- vi. Handbook on Injectable Drugs (Trissel's)
- vii. Geriatric Dosage Handbook
- viii. Drug Facts & Comparisons
- ix. Drug Interactions Analysis & Management (Hansten & Horns)
- x. AHFS Drug Information
- xi. Pharmacotherapy: A Pathophysiologic Approach (DiPiro)
- xii. Handbook of Applied Therapeutics (Koda-Kimble)
- xiii. Drug Prescribing in Renal Failure (Bennet's)
- xiv. Basic Skills in Interpreting Laboratory Data (Lee)
- xv. Natural Standard

d. *Time Restraints*

- i. Each portion of the competition (profile review and patient counseling) will be given a 15 minute interval to complete each task.

e. *Structure of Counseling/Profile Review Rooms*

<i>Room #</i>	<i>Personnel</i>	<i>Resources</i>
<i>1- Profile Review</i>	<i>1 monitor 1 competitor</i>	<i>Patient Full Profile Patient Record Approved Reference Materials Desk /Chair</i>
<i>2- Patient Counseling</i>	<i>3 judges 1 patient actor 1 competitor</i>	<i>Judging table 2 barstools 1 video camera Judging forms</i>

f. *Patient Record Contents*

- i. Patient Demographic Information

- ii. Laboratory Data
- iii. Patient Workup Sheet
- iv. Insurance Formulary Information
- v. Pharmacist Notes
- vi. MTM Forms
- vii. Notes Page

**V. Awards Ceremony**

*a. Sponsorship*

- i. The awards ceremony will be sponsored through AMCP, NSU-COP, and any other grant made available to the local chapter.

*b. Guest Speakers*

- i. Speakers will be selected based upon their involvement in MTM. (i.e. Faculty, MTM Providers, Health Insurance Providers, Legislative Representatives of MTM, AMCP Representatives)

*c. AMCP Headquarters Recognition*

- i. Winners from each chapter receive an Achievement Award signed by the current AMCP and FMCP President.
- ii. In addition, winners will be awarded travel expenses, a one night hotel stay, and registration fees to the national conference.
- iii. Winners will also be showcased in the AMCP Newsletter noting their achievements.

*d. College of Pharmacy (COP) News Website Recognition*

- i. Winners will be showcased in the COP News Website

# AMCP

Academy  
of Managed  
Care Pharmacy

- Presents -

## Medication Therapy Management Forms and Requirements

By: Dr. Richard Finkel

When: October 3<sup>rd</sup>, 2008 at 12-1pm

Where: Jonas Auditorium

**\*\*See AMCP officers for more details\*\***

## MTM Competition Instructions

February 12<sup>th</sup>, 2009  
Gustavo Llerena, President

### What must I do today?

SIGN UP with your Name, NSU Email, Site, and your Year in School

If you are at the distance sites, please email me directly, with all the same information as above, at [glllerena@nova.edu](mailto:glllerena@nova.edu)

TONIGHT YOU WILL RECIEVE AN EMAIL INVITATION TO JOIN THE WEBSITE!

### How to sign up online ?

- Go to [www.google.com](http://www.google.com)
- Click on <Sign-In> (Top Right Corner)
- Click <create an account now>
- Create an account using your NSU email
- Once signed in, go to the webpage directly by clicking on the group web page link sent to your email.

### Why is this competition online?

- Easier access to information 24/7.
- Everyone can participate. (WPB and PR)
- GO GREEN! Saves paper!
- Gives you time to work out the case.
- Makes it more convenient to talk to the patient after school hours.
- Allows for streamlined updates.
- Makes sure everyone has access to the same information.

### How to post messages on the discussion board?

- Click on the Discussion Topic to enter the discussion
- Click <Reply>

\*\*\*DO NOT CLICK <REPLY TO AUTHOR>\*\*\*

### How to Chat with the Patient?

- Under "Pages" click on the topic <Talk with your patient live>
- To chat with the patient click on the support icon

### How to send a message when live chat is disabled?

If you cannot participate in the live chat, please make a list of your questions and submit them to [amcpatient@yahoo.com](mailto:amcpatient@yahoo.com).

**Deadline to turn in questions if not participating in live chat is Tuesday, February 17th by 5pm (Eastern Standard Time)**

### Who am I competing against?

- You will only be competing with members of your own class.
- There will be one winner per year of pharmacy, and one for international students.

### What will I be graded on?

- Greeting
- Open ended questions
- Closed ended questions
- Type and Appropriate Amount of Patient Education (within chat and/or handout)
- Use of the Core Elements of MTM
  - Medication therapy review (MTR)
  - Personal medication record (PMR)
  - Medication-related action plan (MAP)
  - Intervention and/or referral
  - Documentation and follow-up
- Ability to find missing information
- Ability to follow the National Guidelines for Treatment
- Appropriateness and Adaptability of Medications and Recommendations into the patients lifestyle.

### How to Submit?

MTM Forms and Patient Education forms must be sent as attachments from your email to [amcppresident@yahoo.com](mailto:amcppresident@yahoo.com) with the Subject Heading: MTM FINAL SUBMISSION and Your Name.

**Final Submission Deadline is Friday, February 20th at 5pm!**

### What files am I expected to submit?

- Required
  - MTM forms
- Optional
  - Patient Education Handouts

What is the due date for submission?

**Friday, February 20th, 2009 at 5pm!**

(Eastern Standard Time)

*Submissions made after this time will NOT be evaluated!*

# MTM Competition

Perpetual Plaque [big plate]

AMCP Logo (large)

Nova Southeastern University Student Chapter  
Medication Therapy Management Competition  
Achievement Award

Individual Plaques

AMCP Logo (large)

Nova Southeastern University Student Chapter  
Medication Therapy Management Competition  
Achievement Award

Presented to

Name

In recognition of your  
outstanding performance  
in applying pharmacotherapy and  
providing MTM services.

February 20<sup>th</sup>, 2009



# **MTM Competition Patient Case February 12-20<sup>th</sup>, 2009**

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## **- Assignments -**

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**P1's – Hypertension**

**P2's – Hyperlipidemia and Type II Diabetes**

**P3's – All Disease States**

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## ***AMCP MTM Competition Patient Case***

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MB is a 61 year-old post-menopausal female who presents to your MTM clinic today for her diabetes. She was referred to you from her primary care physician. She does not speak English; therefore, her daughter is her caretaker. She can speak Vietnamese solely. Her daughter checks her blood sugar twice daily, before she goes to work in the morning and when she returns from work at 8 pm.

### *Social history:*

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(-) EtOH  
(+) Smoking  
(-) Illicit drugs

### *Family history:*

---

Mother died in her 80s (no known disease history)  
Father died in his 30s (war-related)

### *Medical Conditions:*

---

Alzheimer's  
CVA – Ministroke 2006  
Hyperlipidemia  
Hypertension  
Osteoporosis  
Type 2 Diabetes

### *Medications:*

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Calcium Carbonate 1000 mg 1 daily  
Captopril 25 mg 1 twice daily  
Lantus 10 units SC at night  
Metformin 1000 mg 1 twice daily  
OTC Fish Oil 1 daily  
Razadyne 16 mg 1 daily  
Simvastatin 40 mg 1 daily

### *Supplies:*

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B-D Ultrafine 1/2cc syringes

### *Immunization history:*

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Pneumococcal

### *Vitals:*

---

BP 130/70 HR72  
Height: 4'10

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*Labs (1/4/2009):*

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Random urine creatinine 8 mg/dL  
Random microalbumin 0.4 mg/dL  
Microalbumin/Creatinine ratio 50 mcg/mg

Chem 7:

140	106	13
5	22	0.58

Glucose=165 mg/dL

AST=22 U/L ALT=19 U/L

WBC 8.8 thousand/uL  
RBC 4.47 million/uL  
Hgb 13.9 g/dL  
Hct 39.0%  
Platelet 171 Thousand/uL

HbA1c = 7.8%

Lipid Labs

TC 162 mg/dL  
TG 227 mg/dL  
HDL 40 mg/dL  
LDL 77 mg/dL

DEXA T-score: Hip (-1.82), Lumbar spine (-1.44)

MMSE: 23

*Additional Information:*

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Prescription coverage – Medicaid

# My Medication Record

Print Form

*Always carry your medication record with you and show it to all your doctors, pharmacists and other healthcare providers.*

## Emergency Contact Information

Name

Relationship

Phone Number

## Primary Care Physician

Name

Phone Number

## Allergies

What allergies do I have? (Medications, food, other)

What happened when I had the allergy or reaction?

## Other Medication Problems

Name of medication that caused problem

What was the problem I had with the medicine?

When you are prescribed a new drug, ask your doctor or pharmacist:

What am I taking?

What is it for?

When do I take it?

Are there any side effects?

Are there any special instructions?

What if I miss a dose?

Notes:

Patient's Signature

Healthcare Provider's Signature

Date last updated

Date last reviewed by  
healthcare provider

*"This form is based on forms developed by the American Pharmacists Association and the National Association of Chain Drug Stores Foundation. Reproduced with permission from APhA and NACDS Foundation"*

Student Name \_\_\_\_\_

P1  P2  P3  P4  Davie  WPB  INTL  PR

MY MEDICATION-RELATED ACTION PLAN (MAP)

PATIENT NAME & DATE OF BIRTH	
DOCTOR/HEALTHCARE PROFESSIONAL	
PHARMACY/PHARMACIST	
DATE PREPARED	

WEIGHT \_\_\_\_\_ HEIGHT \_\_\_\_\_ ALLERGIES \_\_\_\_\_

The list below has important Action Steps to help you get the most from your medications. Follow the checklist to help you work with your pharmacist and doctor or healthcare professional to manage your medications AND make notes of your actions next to each item on your list.

Action Steps What I need to do?	Notes What I did and when I did it?

My Next Appointment with me Pharmacist is on: (Date) \_\_\_\_\_ AT (TIME) \_\_\_\_\_

Bring this Medication Action Plan with you to all visits with health care providers and if you are admitted to a hospital. Contact your pharmacist regarding questions or updates.

"This form is based on forms developed by the American Pharmacists Association and the National Association

of Chain Drug Stores Foundation. Reproduced with permissions form APhA and NACDS Foundation"

Student Name \_\_\_\_\_  P1  P2  P3  P4  Davie  WPB  INTL  PR



**AMCP**  
**MTM Patient Case  
Competition**

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Angela S. Garcia, PharmD  
Drug Information Resident  
Nova Southeastern University, College of Pharmacy  
September 18<sup>th</sup>, 2008

**Drug Information & Patient Care**

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- **How do you incorporate drug information into patient care?**
  - Evidence-based medicine & practice guidelines
  - Knowing where to go to get the information you need
  
- **Why do you incorporate drug information into patient care?**
  - Provide for the standards of care for your patient & embracing your duty as a pharmacist

**Drug Information Resources: What is it all about?**

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- Some textbooks or websites have the same information, it's a preference on your use and ability to access the site
  
- Certain textbooks are the Gold Standard and are the resource most trusted or relied on to provide specific types of clinical information

**Drug Information Resources**

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- **Drug Facts & Comparisons**
  - General product information, comparison tables for drugs in the same class,
  - [www.factsandcomparisons.com](http://www.factsandcomparisons.com)
  
- **Drug Interactions Analysis and Management (Hansten & Horn's)**
  - Drug interactions (RX & OTC), methods to resolve drug interactions

**Drug Information Resources**

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- **Drugs in Pregnancy and Lactation (Briggs)**
  - Drug information, pregnancy category and references for classifications
  
- **Pediatric Handbook**
  - Pediatric specific dosing guidelines, side effects, interactions

**Drug Information Resources**

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- **Geriatric Dosage Handbook**
  - PD and PK issues with the elderly, drug therapy, monographs and specific appendices
  
- **Drug Prescribing in Renal failure (Bennet's)**
  - Drug dosing information in renal impairment by drug class, drug tables, PK information

### Drug Information Resources

- Pharmacotherapy (DiPiro's)
  - Therapeutics and drug therapy management, treatment algorithms & guidelines
- Applied Clinical Pharmacokinetics (Bauer)
  - Patient focused approach to drug therapy by class, charts and illustrations, covers drugs, techniques and procedures

### Drug Information Resources

- Handbook of Injectable Drugs (Trissle's)
  - Comprehensive source of drug compatibility, stability, preparation and administration on 297 parenteral drugs and 25 foreign parenteral drugs
- Basic Skills in interpreting Laboratory Data (Lee)
  - Distinguished qualitative from quantitative lab tests, factors that may alter labs, rational for ordering tests, interpreting results

### Drug Information Resources

- AHFS Drug Information
  - General drug monographs, off label uses for drugs, issue with labs, toxicities, dosage forms available
  - [www.ahfsdruginformation.com](http://www.ahfsdruginformation.com)
- Drug Information Handbook
  - Condensed drug monograph information, algorithms, dosing, interactions

### On-Line Drug Resources

- Drug monographs and general information
- Drug-drug interactions & Drug-disease state interactions
- Product identification, clinician links, patient information
- ADR's, doses, diseases, clinical evidence

### On-Line Resources

- Micromedex
  - Therapeutic interface & point of care interface, drug monograph, disease, labs, interactions
  - [www.thomsonhc.com](http://www.thomsonhc.com)
- Up-to-Date
  - Clinical specialty information, evidence-based reviews, drug interactions, patient information, great for quick background on disease states
  - [www.uptodate.com](http://www.uptodate.com)

### On-Line Resources

- Clinical Pharmacology
  - Reports, find/list, patient education, resources
  - [www.clinicalpharmacology.com](http://www.clinicalpharmacology.com)
- Lexi-Comp
  - Drug information, interactions, diagnosis & disease management, formulary services, patient education resources, clinical support tools
  - [www.lexi.com](http://www.lexi.com)

### On-Line Resources

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- Natural Standard
  - Foods, herbs & supplements, interaction checker, symptom checker, grading system
  - [www.naturalstandard.com](http://www.naturalstandard.com)

### Drug Information and MTM

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- Being able to use your knowledge and education along with evidence-based medicine will allow you to provide the best care for optimal patient outcomes.
  
- *You* are the extension of drug information in patient care

# Medication Therapy Management Services (MTMS) Documentation and Billing

**Goar Alvarez, R.Ph., PharmD., FASCP**

Director of Pharmacy Services  
Assistant Professor – Pharmacy Administration

**Nova Southeastern University  
College of Pharmacy**

# Current US Healthcare Model

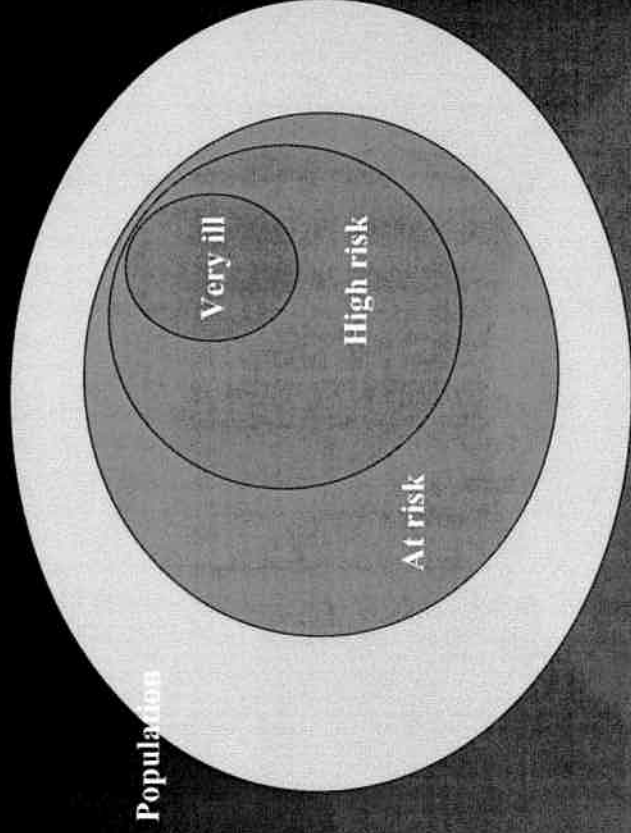
At present, the healthcare system is setup to treat the ill. The system is not setup to identify and reduce risk in our general population. If we could identify people at risk and intervene early we should get better healthcare outcomes



## The Healthcare System in the US is Changing

- “Medicare is changing from a passive program that pays for treatments to a proactive program that assists the pharmacist and other healthcare professionals.....to maintain our beneficiaries healthy. This means a better healthcare system, in which the pharmacist plays a central role.”

Mark McClellan MD.,Ph.D. (previous CMS Administrator)



## What is MTM?

- CMS definition
- The Professions' consensus definition

## Summary of the CMS definition of MTM

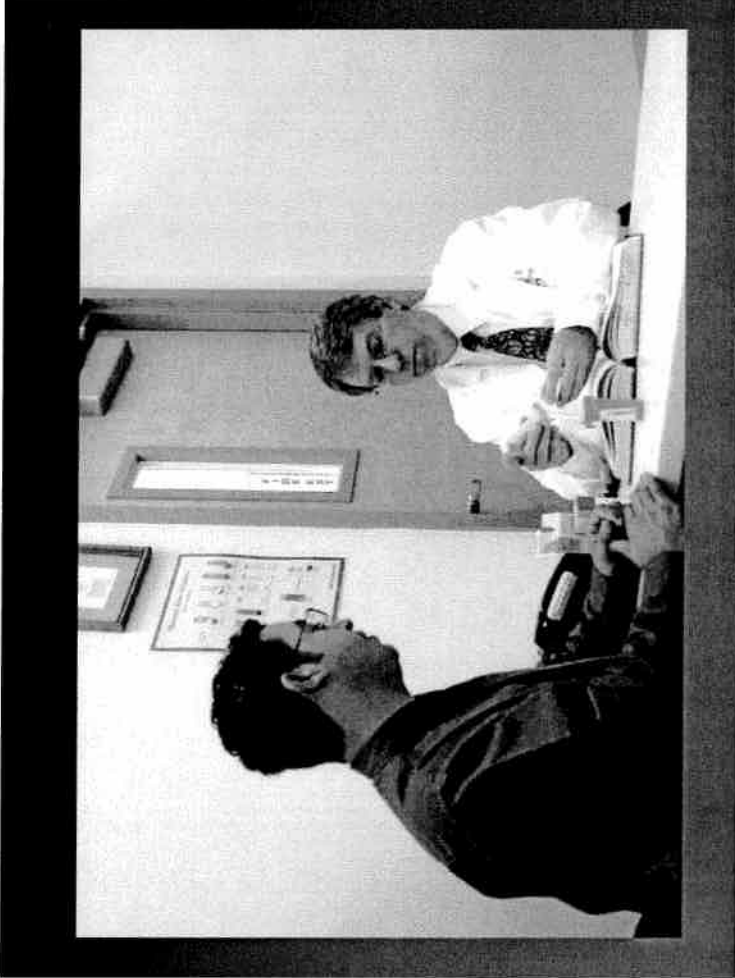
### Part D Plans must:

- Establish MTM programs as part of their Medicare Part D benefit
- Designed to optimize therapeutic outcomes thru improved medication use
- To reduce ADR's including interactions
- Furnished by pharmacists or other qualified provider

Profession of Pharmacy  
CONSENSUS MTM Definition

## MTMS

- Face-to-Face patient assessment and intervention, as appropriate, by a pharmacist
  - to optimize response to a medication or medications or to manage drug related interactions or complications



## What MTMS “Is Not”

- Not “dispensing-related” services
- Not provision of “medication leaflet”
- Not “physician service”
- Not “ambulatory care” testing
- Not “Obra-90” Counseling

## Eligibility for MTM Services

- Medicare Part D
  - Multiple chronic diseases (>1)
  - Multiple part D covered medications (>1)
  - High cost (> \$4,000/yr estimated medications cost)
  - **The specific plans can change their criteria**
    - Ex: they could say > 5 chronic diseases or > 32 meds, etc)
- Commercial and Employer Groups
  - Whatever they want (collectively)
- Patients
  - Whatever they want (individually)

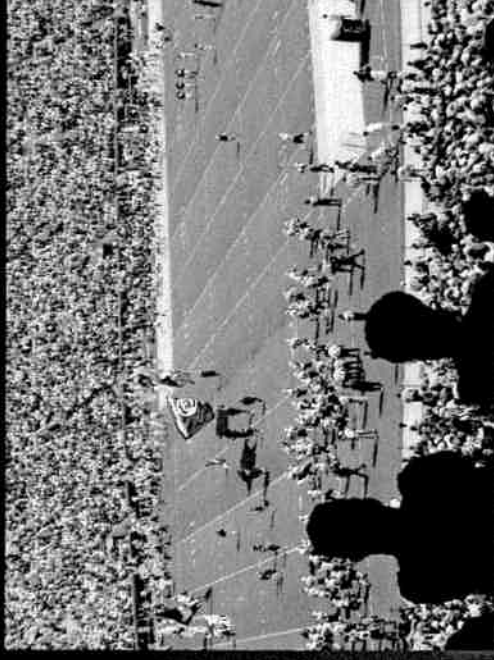
## Who is eligible to receive MTMS?

- Anyone willing to pay for the services.
  - Communicate your services & fees
  - If a third party is paying for your services
    - Assess if compensation is adequate
    - Communicate to patient if there are any co-pays involved

## Community Pharmacy's Timeline

- January 1, 2003
  - Rx drug coverage implemented
- January 1, 2006
  - Implementation of "Medication Therapy Management Programs" (MTMP)
- 2006-2007
  - A variety of MTM plans developed and implemented
    - Some do not use R.Ph.'s (mail, call centers, in-house)
- 2008-2009
  - CMS analyzes the programs
    - CMS starts to communicate "best-practices" data
    - Presidential candidates and politicians will have thoughts on how to "fix" part D
- 2009-2010
  - Medicare is "fixed"
- Where will the Profession of Pharmacy be?

Where will the Profession Be?





## The Need

- 44,000 to 98,000 Americans die yearly from medical errors
- People with chronic conditions is expected to rise by 30% between 2000 & 2030

## The Need

- Bootman Study – 1995
  - \$76.6 billion
- Ernst Study – 2000
  - \$177.4 billion
- Institute of Medicine Report – 2000
  - Identifies the pharmacist as the key member of the health care team to provide medication management

## The Need

- Society has identified the need for Medication Therapy Management
- Society has identified the pharmacist as the key health care professional to provide that care

*There has always been a need, the need is just becoming more evident*

## Crossroads





## CROSSROADS

- “Crumbling Road”
- “Paved Road” (with some pot-holes)

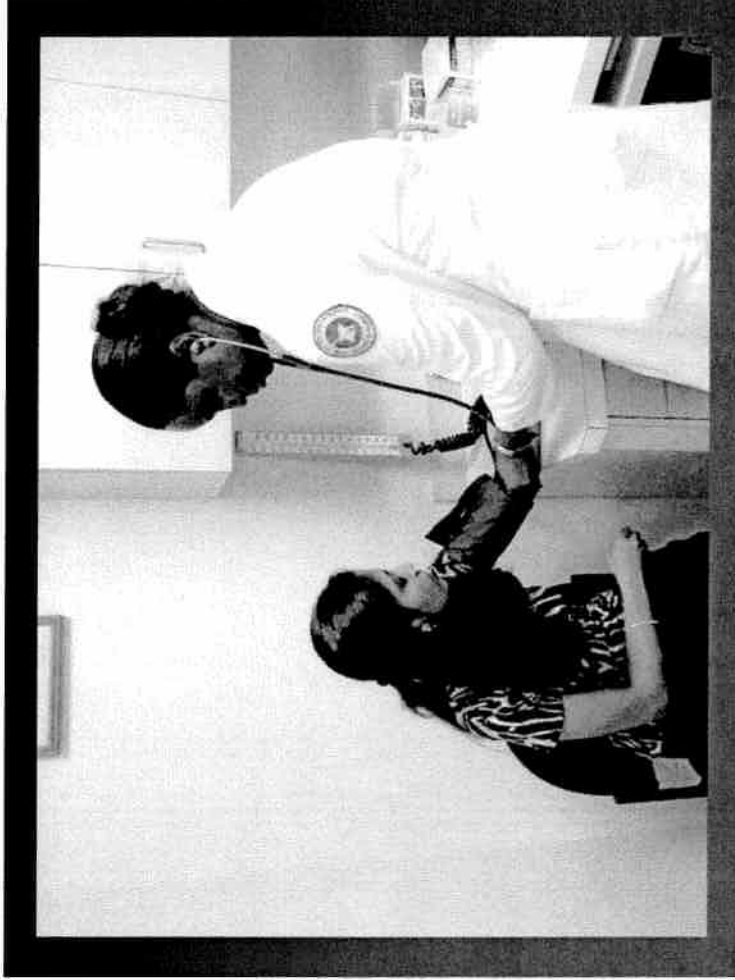
*We are here, we are here NOW and we MUST  
take the “paved road” NOW ...the other  
road is crumbling”*

## Paradigm Shift

- Dispensing – (Order Fulfillment)
- Medication Therapy Management

## Pharmacy Services 2020 Projections

- Conference estimates: Current use and projected need for pharmacists in the U.S. (FTE)



**Table I. Conference estimates: Current use and projected need for pharmacists in the United States (full-time equivalents)**

	Current use of pharmacists 2001	Projected need for pharmacists 2020 <sup>a</sup>
Order fulfillment	136,400	100,000
Primary services	30,000	165,000
Secondary/tertiary services	18,000	130,000
Indirect/Other services	12,300	22,000
Total	196,700	417,000
Total estimated supply		260,000
Shortfall		157,000

<sup>a</sup>These figures are estimates of the need for pharmacists in 2020 and forecasts of market demand or jobs for pharmacists.

## What is the difference between Dispensing, MTM Services, and Disease State Management?

- **Dispensing**
  - Order fulfillment
  - Patient & provider consultation
    - OBRA '90
  - Product focused
  - Not systematic
- **MTMS**
  - Systematic process of identifying and resolving medication related problems
  - Patient centered
  - GENERALIST approach
  - Holistic Approach
- **Disease State Management**
  - SPECIALIST approach

## Payor Types

- Government
- Managed Care Organizations
- Employers
- **Self-Pay**

DISPENSING  
(Rx Focused)

Specific to individual medications

Answer patient questions

MTMS

(Patient Focused)

Review of all of the patients medical conditions and all medications

Interactive dialogue

## Documenting Patient Care

- Why we need comprehensive documentation
  - To show quality of care
  - To show continuity of care
  - To evaluate health outcomes
  - To substantiate decreased healthcare costs
    - Benefit to payor
  - Documentation for billing purposes

## Methods of Documenting Patient Care

- Paper charts
- Electronic documentation systems
  - Web based systems
  - documentation software

## Paper Charts

### Pros

- Relatively easy to implement
- Low cost

### Cons

- Maintaining charts is cumbersome
- Space requirements (filing cabinets, etc)
- Tracking and reporting outcomes is difficult

## Electronic Documentation Systems

### PROS

- Electronic patient record/chart (paperless)
- Web accessible in some cases
- May be programmable or flexible to add/delete “required” documentation of certain data cells
- Makes billing simpler
- Reports such as health outcomes, goals of therapy, revenue, etc. can be generated

## Electronic Documentation Systems

### CONS

- Licensing fees and maintenance fees (hardware and software)
- Training
- Cost of hardware
- May NOT be programmable / flexible
- Need access to computer at point-of-care
- Many times, a "stand-alone" MTM system that does not/may not integrate with dispensing system
- Payor may NOT want the template used by the electronic documentation system

## Web Based Systems

### PROS

- Patient identification/referral mechanism
- Availability of patient information thru pharmacy claims data, medical claims data, formulary information, etc.
- May simplify documentation and billing



## Web Based Systems

### CONS

- Patient identification/referral mechanism
  - PDP or PDMA determines parameters or eligibility and where patient is referred (may not be your pharmacy). Not a patient driven mechanism
- Different payors may be “attached” to specific platforms
  - Different payors may use different platforms
- Training on the different existing platforms
- Documenting care on the web platform may not be comprehensive
  - Although it meets the requirements of the payor, it may be lacking from the providers’ point of view

## Documentation

- Patient demographics (name, DOB, etc.)
- Allergies
- Medical conditions
- Medications list
- Problems identified
- Pharmacist’s plan/recommendations/Interventions
- Prescriber’s response, if applicable



## Billing



## Billing MTM Services

- Web platforms bundle documentation and billing
- Electronic documentation systems software may interface with payer electronically
- Pharmacy computer system (NCPDP 5.1 dispensing system)
- Paper billing (CMS 1500 form – “standard”, other)
  - Fax
  - Mail
- Other

# Pharmacist Services Technical Advisory Coalition (PSTAC)

 **American Pharmacists Association**  
Advancing the Quality of Patient Care

 **ASCP**  
American Society of Consultant Pharmacists

 **AMCP**  
American Society of Clinical Pharmacists

 **NACDS**  
NATIONAL ASSOCIATION OF CHAIN DRUG STORES

 **NCPD**  
National Community Pharmacists Association  
The Power of the Community Pharmacy

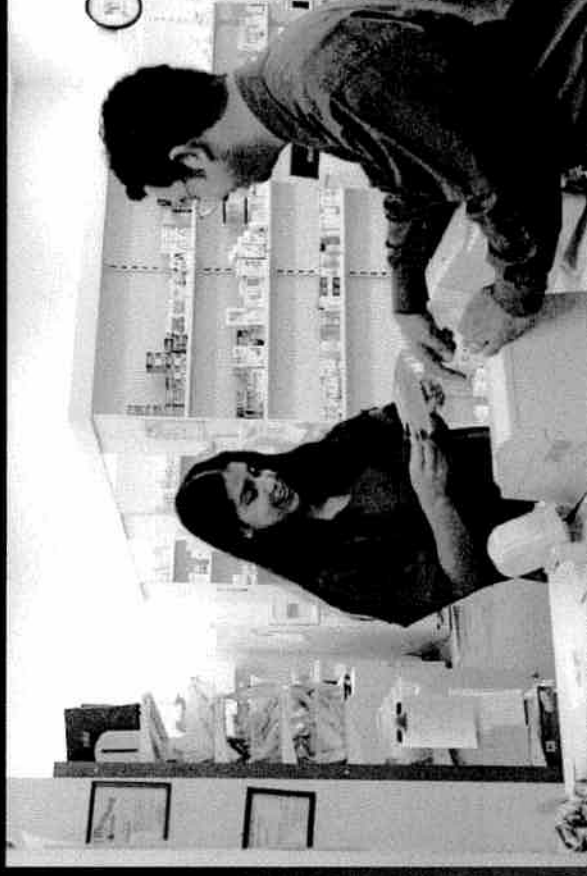


## CPT Codes

- Pharmacist Specific CPT Codes
  - The Pharmacist Services Technical Advisory Coalition (PSTAC) founded 2002 developed CPT codes for RPh's ([www.pstac.org](http://www.pstac.org))
  - AMA approved 3 CPT Codes for pharmacists to use in billing for MTMS
    - Released 7/2005 and became effective 1/2006
- The Use of CPT Codes in MTMS
  - *Must be face-to-face patient assessment and intervention, as appropriate, by a pharmacist to optimize response to a medication or medications or to manage drug related interactions or complications.*

## CPT Codes

- Pharmacist CPT Codes
  - 99605 – Initial 15’
  - 99606 – Subsequent encounter 15’
  - 99607 – each additional 15’



## The Barriers to MTM implementation

- Lack of support from management
- Lack of knowledge
- Lack of adequate help
- Lack of TIME
- **No compensation (\$)**

## Challenges

- Prescriber's perception
- Payor acceptance
- Compensation fees
- Time constraints
- Documentation issues
- Billing documentation standardization
- Practice model development
- Who gets paid? – Pharmacist or Pharmacy

## Our Experience

- “Buy-in” by the College Administration
  - Business Plan
  - SWOT
  - Build out
- Faculty “buy-in”
  - Knowledge assessment
  - Training
  - Work Flow
- Research (MTM)
  - Osteoporosis studies
  - CMS – Diabetes Study
  - FDOH – Heart Failure Study
- Community Service (MTM)
  - ICUBA



# Questions



## *Billing and Reimbursement*

**Q: Is MTM reimbursement different than Medicare Part B reimbursement. Are pharmacists directly paid for services or does payment go to physicians?**

**A:** For Medicare Part D patients, reimbursement for medication therapy management services is paid through Medicare Part D Prescription Drug Plans (PDP) or Medicare Advantage (MA) plans. The mechanisms for payment of MTM services have been left up to the discretion of the PDP and MA plans. It is possible that payers will pay pharmacists directly, while some may decide to pay a corporation, pharmacy, or service provider organization depending on specific contractual agreements.



### *Billing and Reimbursement*

**Q: Who is the payer for Medicare related MTM services. Is it Medicare Part D or the PDP contracted plans?**

**A:** The payment for MTM within Medicare Part D has been left up to the discretion of the Prescription Drug Plans (PDP) and Medicare Advantage (MA) Plans. It is possible that that PDP and MA Plans may elect to utilize the new MTM CPT Codes to compensate pharmacists for MTM services.

**Q: How do you establish contracts with PDPs via Medicare Part D?**

**A:** Contracts should be established directly with the PDP once the name of the PDPs are released for the respective areas. A current listing of the approved PDPs can be found at [Medicare.gov](https://www.medicare.gov). A list of contacts for MTM services is available from [CMS](https://www.cms.gov).

### *Billing and Reimbursement*

**Q: Can payers deny payment for pharmacy services (MTM) provided to patients enrolled in Medicare Part D?**

**A:** Payment for professional pharmacy services will be determined by the individual health plans. We encourage you to contact the plan before providing services to determine if they will recognize claims for these services. If a health plan were to deny payment for services, this does not mean that you should not submit invoices. The next year is one of change as the concept of billing for professional pharmacy services develops. By having the invoices 'on the books' will allow payers the opportunity to see the volume of professional pharmacy services that they can anticipate.

### *Billing and Reimbursement*

**Q: How are pharmacists reimbursed for services that are provided "incident to" physician services?**

A: "Incident to" physician services is a reimbursement strategy in which a physician bills for a non-physician service. There are strict criteria for using the "Incident to" strategy. The Medicare Manual and the CMS web page will have the most up to date criteria for utilizing this billing strategy or by searching the CMS site. Since pharmacists are not recognized as providers by CMS, Medicare patients are normally billed for a level 1 (99211) visit. Other payers may reimburse at higher levels. A number of services are provided in this manner by pharmacists and include anticoagulation monitoring, diabetes management, lipid management, smoking cessation, polypharmacy consults, etc. A comprehensive discussion of billing is beyond the scope of these FAQs, but many resources are available to pharmacists who may be considering such an arrangement.

### *Billing and Reimbursement*

**Q: What professional pharmacist services are currently reimbursable, either with the MTM CPT codes or other available coding systems?**

A: There are many types of services that pharmacists are being paid for and several avenues of reimbursement that can be pursued. For instance, enterprising pharmacists have set up practices where patients will pay directly for services (self-pay). These include, but are not limited to services as simple as blood pressure checks or lab screening tests or as extensive as smoking cessation, weight loss or bioidentical hormone replacement. Some pharmacists or pharmacist networks are currently contracting with health plans and self-insured employers to provide services related to chronic diseases such as diabetes, lipids, asthma or hypertension. In this scenario, the pharmacist negotiates reimbursement rates with the employer, then bills directly for patient visits. Additional information on similar programs can be found on [PSTAC member organization websites](#).



### *Billing and Reimbursement*

**Q: How can pharmacists providing cognitive or consultation services or MTM services get reimbursed (while not dispensing drugs) by Medicare Part B or their state Medicaid Programs?**

**A:** MTM is not a covered (reimbursable) Medicare Part B benefit may be a reimbursable Medicare Part D benefit. Pharmacists will need to check with their individual state Medicaid program to find out if MTM services are a covered benefit.

It is NOT a requirement that pharmacists dispense prescription drugs in order to bill for MTM services. For additional information on billing for MTM services, you may consult [PSTAC member organization websites](#).

**Q: Are there any standard or published payment schedules for use with the CPT codes?**

**A:** No. Payers will be establishing their own fee schedules for the services provided with the CPT codes.