

**An Initial Evaluation of Medication Therapy Management (MTM) Services  
in the Upper Midwest Region**

**Final Report**

by

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## **Introduction**

In 2006, Medicare Part D went into effect. One component of Part D is medication therapy management (MTM) services. While prescription drug plans have used a range of services under the MTM service label, a potentially power approach is to have local pharmacists perform face-to-face delivery of MTM services. Local capacity for MTM service provision can be especially important in rural areas where access issues can limit health services availability.

The upper Midwest region for Medicare Part D offers a unique area in terms of patient needs and pharmacist availability. The region is comprised of seven states: Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, and Wyoming. This area represents almost 17 % of the area of the United States. Some of the pharmacists in this region are ready to deliver MTM services to their patients. The purpose of this project was to make an initial evaluation of MTM service capabilities in a network of pharmacists in the upper Midwest.

## **Objectives**

This project had four objectives:

- 1) Refine a model of MTM services to serve as a robust platform for MTM services across the region that will support future comprehensive evaluation of MTM services,
- 2) Set up a network of pharmacists in the upper Midwest region that will be able to provide MTM services,
- 3) Assess the capabilities of the pharmacist network to provide MTM services to Medicare beneficiaries,

- 4) Establish a partnership with a Medicare Advantage Prescription Drug (MAPD) plan or Prescription Drug Plan (PDP), as well as with pharmacy chains to support MTM model development and future evaluation.

### **Objective 1: Refine a Model of MTM Services**

Two primary issues were addressed in developing a refined model of MTM services for older patients: a clinical component and financial aspects. For the clinical component a group of experts worked together to develop a tool that can guide pharmacists during the drug regimen review portion of MTM services for older adults. The financial aspects were covered by developing two presentations about approaches for dealing with the financial considerations of adding or keeping a new pharmacy service such as MTM services.

The tool has been developed to will guide a pharmacist through a focused evaluation of drug-related problems for older adult patients. It was based on a geriatric approach to health and care. It was developed with input from four regional experts familiar with medication issues of older adults. The experts provided feedback about the strength of evidence for drug-related problems commonly reported for older adults. The tool can lead pharmacists through as assessment of four areas of the patient's medications: 1) cost-effectiveness of medications (e.g. using generics where available), 2) patient's adherence to prescribed drug therapy, 3) safety of medications, and 4) attaining goals of therapy.

Each section of the Tool to Improve Medications in the Elderly via Review (TIMER) includes points for a pharmacist to discuss with patients and suggested actions to address particular drug-related problems. For example, specific questions are provided

for a pharmacist to assess patient adherence with drug therapy. Then, suggestions are provided on how to address non-adherence stemming from different causes (E.g. reminder packaging for memory problems). We have completed initial development and testing of the tool (shown in Appendix). The use of TIMER by pharmacists and pharmacy students resulted in more of the geriatric-related drug problems being identified. This promising finding is being followed up with an ongoing study funded by the Center for Education and research on Therapeutics (CERT) at the University of Iowa, which is federally funded. This ongoing study is working with Kerr Drug and Outcomes, Inc. to compare medication regimen reviews for older patients done with vs. without the use of TIMER. We believe that TIMER can help pharmacists improve the efficiency of the MTM services, which is vital to sustaining them.

Another component of this objective was to develop a presentation about the financial aspects of providing MTM. The intent is to have the presentations used as continuing education programs for pharmacists who need to consider the financial components of adding MTM services to their practices. We have prepared two PowerPoint presentations about financial issues for managing MTM services (see Appendix). One presentation addresses budgeting and break-even analyses for pharmacy services. The second presentation describes and illustrates profitability analysis for ongoing pharmacy services.

## **Objective 2: Establish a Regional Pharmacist Network**

A total of 135 pharmacists agreed to be part of the regional pharmacist network. This includes pharmacists from all of the states, though the largest proportion is from Iowa. The target was 100-150 pharmacists, so that target has been achieved.

The mean age of the pharmacists was 39.2 years, with 60.3% being a woman. Many of the pharmacists provided innovative pharmacy services in their practice. The frequencies of these services were: medication therapy management (111), Diabetes management (82), hypertension management (70), dyslipidemia management (66), asthma/COPD management (63), smoking cessation (51), and diet/weight loss (40). These rates of services are higher than that typically reported in general pharmacy samples. Thus, this group of pharmacists is more progressive than a typical sample of pharmacists.

### **Objective 3: Assessment of MTM Capability in Network**

The draft geriatric-focused tool (i.e. TIMER) was sent to about half of the 135 network pharmacists with a mock case to have them use in a medication regimen review. The other half of the network was asked to perform a regimen review on the same case without using the tool. All participants were asked to write a SOAP note that would communicate a summary of the regimen review to a physician. The case and forms are shown in the Appendix.

We received completed case regimen reviews and SOAP notes from 88 network pharmacists. Our analyses showed that pharmacists using TIMER identified more drug related problems (DRPs) that had a geriatric focus. Also, analyses of the SOAP notes showed that pharmacists using TIMER made more recommendations to physicians,

compared to those not using TIMER. Similarly pharmacy students identified more geriatric-related DRPs when using TIMER for one case. A manuscript reporting these results and the development of TIMER is in review at pharmacy journal.

#### **Objective 4: Establish a partnership with Drug Plan and Pharmacy Chain**

We met with Outcomes, Inc. and Mirixa to discuss field testing of TIMER. Mirixa decided that TIMER did not integrate with their current system very well, and declined to participate. Upon examination of their approach, I agreed with that decision. However, Outcomes, Inc. has agreed to participate in a field test of TIMER, as mentioned previously. However, that assessment will not be done within our upper Midwest pharmacist network. Rather, it will occur in a group of Kerr Drug pharmacists during 2008, funded by the Iowa CERT. Thus, we have connected with a chain and a third party administrator, but not as planned.

Humana will be contacted about partnering to utilize the regional pharmacist network to study MTM services. Dr. David Nau recently was hired by Humana to form an outcomes research group that will study medications and pharmacy services. I will discuss potential Humana's interest in future studies of MTM services provided by local pharmacists (e.g. in the network).

#### **Summary**

This project established a network of over 130 pharmacists who are active in providing new pharmacy services, including MTM services. Though a phase 2 demonstration project has not yet been funded, it is likely that most of these pharmacists

would be interested in participating in a future project. This project helped develop a tool to assist pharmacists in performing MTM services for older adults. That tool, TIMER, has been shown to be helpful for pharmacists, and is undergoing further evaluation. Also, two presentations about the financial aspects of pharmacy services were developed. Efforts will continue to secure funding of studies to advance our understanding of effective and sustainable MTM services.