

Review Article

Volume 10 Issue 3 - November 2022 DOI: 10.19080/GJPPS.2022.10.555786 Glob J Pharmaceu Sci

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# Medication Therapy Management: Predicting the Future?



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Submission: October 18, 2022; Published: November 03, 2022

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#### Abstract

This article discusses medication therapy management programs and how changes have evolved (or lack thereof) since their inception in 2006. In 2017, the Centers for Medicare & Medicaid Services launched a pilot program, called the enhanced medication therapy management program, allowing specifically chosen health plans greater flexibility and enrollment options as compared to their traditional medication therapy management programs. This pilot program also incorporated a standardized coding language system with the hopes of being able to consistently evaluate the various programs and ultimately seeing a cost-savings benefit for the overall healthcare system and the patient. To date, the pilot has fallen short of this goal although another year of data is currently under review. Based on the information from the pilot program evaluation so far, it brings up a good question: what does the future of medication therapy management programs look like or what else can be done to improve outcomes and show value? A few options that could be considered include utilizing advances in technology to enhance patient engagement and/or combining other patient care programs (such as comprehensive medication management and pharmacogenomics) into existing medication therapy management programs to provide individualized patient-centered care and ultimately showing the value of such great clinical care programs led by pharmacists.

Keywords: Medication therapy management; comprehensive medication management; Medication review; Enhanced medication therapy management; Individualized medicine

Abbreviations: CMM: Comprehensive Medication Management; CMR: Comprehensive Medication Review; CMS: Centers for Medicare & Medicaid Services; MTM: Medication Therapy Management

## Introduction

Pharmacists have been providing medication therapy management (MTM) services since 2006; however, there are still patients and healthcare providers that are not familiar with the term or what the services entail, and participant engagement is still not ideal. The Centers for Medicare & Medicaid Services (CMS) oversees MTM programs for Medicare patients and outlines goals for the programs including optimizing outcomes for improved medication use; reducing the risk of adverse events; collaborating between pharmacists, physicians, and patients; and pharmacist or other qualified provider performing the MTM services [1]. As part of the MTM program, pharmacists engage patients in a comprehensive medication review (CMR)-an interactive conversation to systematically review the patient's medication use including all prescription and nonprescription products, what the patient knows about their medications, how the patient takes each of the medications, and work to identify any potential medication or health related problems or concerns, then attempt to resolve these problems. The CMR is offered to the patient on an annual basis as long as the patient remains eligible for enrollment in the MTM program.

Overall, CMS has not changed eligibility requirements of MTM programs or required services provided within the programs significantly from 2010 to today [2]. The only real change since that time is that the annual cost threshold which slowly increases year over year (set at \$4,696 for 2022) and using standardized documentation that is provided to the patient after the CMR is completed [3]. However, patient participant rate has remained relatively low from inception of the MTM programs in 2006 until approximately 2016 [4,5]. As of 2016, a quality performance metric was implemented that specifically tied a star rating to the CMR completion rate forcing health plans to utilize various outreach approaches attempting to improve patient engagement [6]. This performance metric was the first such measure specifically targeting MTM programs.

As another way to help promote increased patient participation in MTM services, CMS launched a pilot program called the Part D Enhanced Medication Therapy Management model. This program was part of CMS' initiative to test innovative payment and service delivery models [7]. The enhanced MTM program sought to determine if providing payment incentives and MTM program flexibilities would lead to improved therapeutic outcomes as well as an overall reduction in healthcare costs for Medicare and Medicare patients. The pilot program selected a few national health plans in specific regions of the United States to participate and was set to run for five years (January 2017 through December 2021). The selected health plans were allowed to experiment with the various types of services offered to patients such as allowing more frequent touchpoints and additional personal conversations with the pharmacist as well as providing patient incentives to increase engagement and participant in the MTM program. As part of the enhanced model, CMS also developed a new data and metric collection process using a standardized coding language for evaluating the programs consistently [7]. Prior to this, interventions were difficult to compare as health plans used different platforms and various forms of data collection so implementing this standardized method allowed for comparison of interventions and services provided among the various health plans. Health plans were also encouraged to provide additional services not currently offered in their traditional MTM program such as adherence assistive devices (reminder tools, pill boxes, mobile device applications); utilizing a wider network of pharmacists for providing the MTM services (in-house pharmacists, community pharmacists, and their pharmacy benefit management company pharmacists) and encouraging physician support and referrals.

In their data assessment through year four, CMS saw an 11% decrease in the overall plan enrollment and determined there were no statistically significant impact on gross or net Medicare expenditures, which is likely concerning. [7] Looking back at the enhanced MTM model summary and evaluation information for year three, the overall results were the same as in year four in that no significant impacts on gross or net Medicare expenditures were realized however, a couple of things should be highlighted from their assessment approximately 29.8% of patients enrolled actually received MTM services; the model showed a net loss for Medicare although it was not considered statistically significant; and patient outcomes were considered improved (cost savings for certain events including hospital readmissions). In the past, enrollment numbers for MTM programs have ranged from less than 0.2 percent to greater than 57 percent depending on the health plan and their specific enrollment criteria however, enrollment numbers do not equate to the number of patients actually receiving the services [4]. The enhanced model showing that almost 30% of patients receiving MTM services is great. Also, thanks to the inclusion of a performance measure tied to the CMR completion rate, since 2016 the number of patients receiving

services continues to increase year over year as health plans strive to achieve high performance measure scores. However, the true quality of the CMR likely varies across health plans, by MTM provider, and the location or environment in which the review is performed. In addition, overall cost savings and health benefits have also been realized throughout the literature though not readily evident in the enhanced model. For example, data from a ten-year survey of a health system showed a positive monetary return on investment, while a systematic review revealed improved clinical outcomes for patients with diabetes, hypertension, or dyslipidemia with pharmacist provided MTM services [8,9].

Another concept that is important to quickly discuss that closely aligns with MTM is comprehensive medication management [10]. CMM is a comprehensive patient care process and similar to MTM in that the patient's medications are individually assessed and evaluated to determine appropriateness of the complete regimen with medication therapy problems identified and addressed [10]. CMM services are also performed by a pharmacist working in collaboration with the patient and the patient's providers. The main difference in the two programs is that most CMM services are conducted in an ambulatory care setting such as a physician's office, and the pharmacist functions as part of the healthcare team often working under a collaborative practice agreement type arrangement with the provider. CMM is often considered a more advanced form of MTM with the pharmacist having a greater ability to make interventions directly when medication therapy problems are identified due to their location in the clinic and relationships with the providers [10].

So, what does the future of medication management (MTM or CMM) look like? That is a great question. If the data for the enhanced MTM pilot program remains the same for the year five evaluation period, it seems plausible that CMS may want to make changes to current MTM program structure overall as they continue to consider ways to realize an overall gross or net cost savings in healthcare expenditures. Using some of the elements outlined in the enhanced model makes sense, such as continuing to use standardized coding language, so pharmacists' interventions are comparable across all practice settings and MTM programs. In addition, the clinical benefits for patients, including cost savings and improved clinical outcomes, should continue to be a focus. What else can be done? Just a few thoughts: 1) incorporating the use of technology and digital health solutions into medication management programs to meet the patient where they are and using their preferred modes of communication rather than just in-person or telephonically. People just simply do not want to talk on the phone these days or are in a hurry so would likely prefer not to spend 30-45 minutes participating in a medication review all at one time. Possibly using technology that would allow for shorter sessions through chatting, messaging, or other electronic means may help increase patient engagement allowing for higher participation rates. 2) leveraging components of CMM to improve clinical and economic outcomes. Collaborative practice style agreements for pharmacists are allowed in most states. As MTM programs stand today, many of the services are completed by community pharmacists. The process entails the pharmacist identifying medication related problems, notifying the provider of the problem and a potential resolution, and then the pharmacist waits, hoping for a response. In many cases the response never comes. Incorporating collaborative practice agreements (or CMM type services) into existing MTM programs, even within the community setting, could possibly provide pharmacists with a greater opportunity for resolving medication related problems they have identified. 3) considering an individualized patient centered model of care using pharmacogenomics. As discussed, CMM is a patient-centered approach at medication management so taking MTM to the next level by combining CMM and pharmacogenomics could help optimize patient care by selecting medications that are best for the patient based on their genetic makeup. In addition, there is data to support improved outcomes by reducing the potential for medication related problems and improving medication safety by using tools that predict the events before they happen based on patient specific genetic factors [11,12]. This is obviously a novel approach and would likely take time to implement although should be considered as a viable option for the future especially if patient-centered care is really the ideal intent of all medication management programs.

## Conclusion

Even though medication therapy management programs have been around for over 15 years now, patient knowledge of and participation in MTM programs has not reached optimum levels, and variability among the various programs has led to issues evaluating true outcomes. The enhanced MTM pilot program incorporated a standardized outcomes evaluation method and hoped to show value through cost savings but so far, the data has not shown such value. So, it leaves one to wonder what this means for the future of MTM programs. Although there have been challenges, using the information gathered during the pilot program and incorporating some new methods or ideas for

providing medication management services, the future of MTM can still be bright!

#### **Conflict of Interest**

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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