Medication Management and Older Adults
Opportunities and Challenges

Older adults are diagnosed with multiple chronic diseases, with more than half of the population having three or more (Anderson, 2010). With such a high percentage affected by multiple chronic medical conditions, the likelihood of increased medication use rises. According to a cross-sectional study on medication prevalence among older adults, 28% of men ages 65 to 74 used five or more prescription medications and 33% of women of this age were involved in polypharmacy with five or more prescriptions. The prevalence of polypharmacy was shown to increase with age; 36% of men ages 75 to 85 used five or more prescriptions, as well as 37% of women in this category (Qato et al., 2008). Additionally, older adults were found to be the largest consumers of over-the-counter (OTC) medications and dietary supplements (Qato et al., 2008).

With a disproportionately higher use of medication among older adults in the United States, it is not surprising that a higher risk of medication-related problems exists. It is estimated within the United States that annually $8 billion is spent on caring for older adults with medication-related problems (Burton, Hope, Murray, Hui, & Overhage, 2007). Worldwide, the misuse of medications contributes to $500 billion in international health care spending (Everly, 2012). To address this preventable and expensive problem, the IMS Institute (Everly, 2012) recommends addressing and managing polypharmacy specifically within the older adult population.

With such considerable medication use, it may be of no surprise that with an increase in age comes an increased risk of adverse drug events (ADEs). A systematic review looking at medication usage in the elderly population found that approximately 36% of identified ADEs involved older adults. Twenty-eight percent of all hospitalizations in this population were medication related, with 11% due to nonadherence and 17% due to ADEs (Rollason & Vogt, 2003). The most common ADEs in older adults causing emergency hospitalizations are gastrointestinal bleeds due to hematologic agents, volume and electrolyte disturbances due to cardiovascular agents, altered mental status due to central nervous system agents, and hypoglycemia due to endocrine agents such as insulin (Bundnitz, Lovegrove, Shehab, & Richards, 2011).

ADEs are not only one of the most prevalent problems in older adults but also one of the most preventable. Within a cohort study examining the incidence of ADEs among older adults, 38% were classified as serious, life threatening, or fatal; and more than 27% of all ADEs were found to be preventable. More than half of these events were attributed to the lack of monitoring medications, indicating that more needs to be done across all settings of care (Gurwitz et al., 2003). Nurses are in a perfect position to help with the ongoing monitoring of medications, but due to medication complexity coupled with numerous comorbidities, this can be a daunting task. That is why emerging models of care incorporate the team approach to improve medication management for older adults.

OPPORTUNITIES: MEDICATION THERAPY MANAGEMENT SERVICES

Currently, Medicare Part D plans offer a covered benefit for eligible beneficiaries called Medication Therapy Management (MTM). This has been developed to combat the problems identified above of medication-related adverse events and increasing medication and health care costs. The aim of these services is to improve patient outcomes while ensuring cost efficacy of medication regimens. A number of entities within the health care industry have undertaken the task of defining MTM,
including the Centers for Medicare & Medicaid Services (CMS, 2010), who have described MTM as a patient-centric, comprehensive approach to improve medication use, reduce the risk of adverse events, and improve medication adherence. Qualified health care providers, whom are often pharmacists, provide these services.

MTM has been brought to the spotlight with the introduction of the Medicare Prescription Drug Improvement, and Modernization Act of 2003. This legislation stipulated that by 2006, Medicare Part D sponsors were required to offer MTM programs to targeted beneficiaries. The general criteria of eligible beneficiaries has been defined as those who (a) have multiple chronic diseases, (b) are taking multiple medications covered by Part D, and (c) are likely to incur annual costs for Part D-covered medications that exceed a predetermined threshold.

The CMS-defined MTM program eligibility requirements for 2013 can be found in the Table. Part D plans can adapt these eligibility requirements to provide for their beneficiaries’ needs. Some Part D plans are more inclusive and offer these services to beneficiaries beyond those required by the CMS mandates. In 2011, 79% of all Part D plans targeted beneficiaries with three or more chronic diseases. In terms of medication usage, approximately 60% of plans identified eligible beneficiaries as those taking at least eight Part D covered medications and approximately 15% used a threshold of seven or more medications. All Medicare Part D plans utilized an opt-out enrollment, with approximately 71% identifying eligible beneficiaries on a quarterly basis (CMS, 2012b).

Beginning in 2010, CMS enhanced the requirements for Part D sponsors’ MTM programs to increase beneficiary access to these programs and ensure quality improvements. These new regulations established a minimum level of MTM services to be offered to eligible beneficiaries. Part D sponsors were required to provide these beneficiaries with an annual comprehensive medication review (CMR), a written summary delivered following the CMR, and

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<tr>
<td>2013 CENTERS FOR MEDICARE &amp; MEDICAID SERVICES MEDICATION THERAPY MANAGEMENT PROGRAM</td>
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<tr>
<td><strong>Eligibility Requirements</strong></td>
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<td>Multiple chronic diseases (minimum threshold at 2 to 3)</td>
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<tr>
<td>Multiple Part D medications (minimum threshold at 2 to 8)</td>
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<td>Likely to incur annual costs for Part D medications ≥ $3,144</td>
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Figure 1. Cover letter portion of the standardized format within the comprehensive medication review.
a quarterly targeted medication review. As defined by CMS (2010), the CMR is “a review of a beneficiary’s medications, including prescription, over-the-counter (OTC) medications, herbal therapies and dietary supplements, that is intended to aid in assessing medication therapy and optimizing patient outcomes” (p. 12). These reviews can be done either face-to-face or by telephone. During the interview, a pharmacist or other qualified provider discusses the beneficiary’s medical and medication history, including medication adherence and medication-related problems, as well as addresses any questions or concerns of the beneficiary.

Starting in January 2013, all eligible beneficiaries, regardless of where they reside, including nursing homes or assisted living facilities, will be offered this comprehensive medication review. The results of the review will be given to the beneficiary and/or authorized representative within 2 weeks of the encounter. Beneficiaries will be encouraged to share this information with their health care team to promote continuity of care. This documentation will contain the standardized format for the written summary. This standardized format has been created to help ensure quality and consistency among all Part D MTM programs. This standardized format consists of a cover letter (CL), medication action plan (MAP), and personal medication list (PML) (CMS, 2012b).

STANDARDIZED FORMAT

The cover letter (Figure 1) is the first document within the standardized format and serves to remind the beneficiary of what occurred during the CMR visit. The letter introduces the MAP and PML and describes how the beneficiary should use these documents. Contact information for the MTM program or MTM provider is also provided in this letter and lets the beneficiary know the best way to reach someone with questions.

The MAP (Figure 2) is the second component of the standardized format. This document is a plan to help the beneficiary resolve any problems with his or her medications and meet treatment goals. The MAP describes specific action items resulting from the CMR as well as the beneficiary’s responsibilities in regard to the action items. It includes space for the beneficiary to record what he or she did about each action item, notes about next steps, and any questions the beneficiary may have for his or her health care provider.

The third and final piece of the standardized format is the PML (Figure 3), which is a comprehensive list of all the medications the beneficiary is taking at the time of the CMR. Beneficiaries are encouraged to keep this document and update it by adding new medications or providing information about discontinued therapy, including the date and reason for discontinuation. The intent of the PML is to help beneficiaries understand their medications, involve beneficiaries in self-management of their medications, and improve coordination of care by providing a way to track all medications and communicate this information to their health care providers. All of these documents as well as additional information on the standard-
Gerontological nurses are in a unique position to help patients every day address and overcome the challenges of medication management. Often though, the complexity of the medication regimen coupled with the mounting information needed to thoroughly assess and evaluate for medication-related problems truly takes a team. The interactive CMR is a covered benefit under Medicare Part D if the beneficiary is deemed eligible. This service can be conducted any time during the year by a MTM provider, often times a pharmacist or other qualified provider. Technically, gerontological nurses may be eligible to become MTM providers and bill Medicare Part D plans; however, variability exists among the plans’ expectations and requirements to become a provider and part of the network.

Additionally, targeted medication reviews (TMRs) are processed throughout the year—but no less often than quarterly—to identify specific or potential medication-related problems. These written summaries may be shared with nurses, or quite possibly nurses may be contacted by the MTM provider if a TMR identifies a potential medication-related problem for a patient. Additional information to help resolve other potential medication-related problems or identify other opportunities to optimize a patient’s medication use may be sent to nurses or other prescribers throughout the year.

**IMPLICATIONS FOR PRACTICE**

Gerontological nurses are in a unique position to help patients every day address and overcome the challenges of medication management. Often though, the complexity of the medication regimen coupled with the mounting information needed to thoroughly assess and evaluate for medication-related problems truly takes a team. The interactive CMR is a covered benefit under Medicare Part D if the beneficiary is deemed eligible. This service can be conducted any time during the year by a MTM provider, often times a pharmacist or other qualified provider. Technically, gerontological nurses may be eligible to become MTM providers and bill Medicare Part D plans; however, variability exists among the plans’ expectations and requirements to become a provider and part of the network.

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**RECOMMENDATIONS FOR DIFFUSION INTO PRACTICE**

As discussed, MTM services are an effective clinical program developed to address the concerns regarding medication management and health care costs; however, not all beneficiaries are eligible. Furthermore, those who are eligible may be unaware of this service. Nurses and other health care professionals are in a position to help this population obtain access to these services as well as provide assistance in understanding the standardized format once they have received a CMR. Nurses should be on the lookout for this completed form and talk with their older adult patients about the value of having this review done and the importance of sharing this information with the health care team.

**CONCLUSION**

Medication complexity and burden—not only on the patient and caregiver, but also the health care system—is a tremendous problem. Programs such as this one offered by Medicare Part D plans are attempting to increase...
communication and goal setting, as well as reduce medication-related problems and health care expenditures. Patients we care for every day are challenged with navigating the health care system, which is why covered benefits such as MTM programs are often underutilized. Nurses continue to be pivotal in advocating on behalf of their patients as well as providing direct care and assisting with accessing services and other resources, making it essential for them to learn more about this program to help their patients.

REFERENCES

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