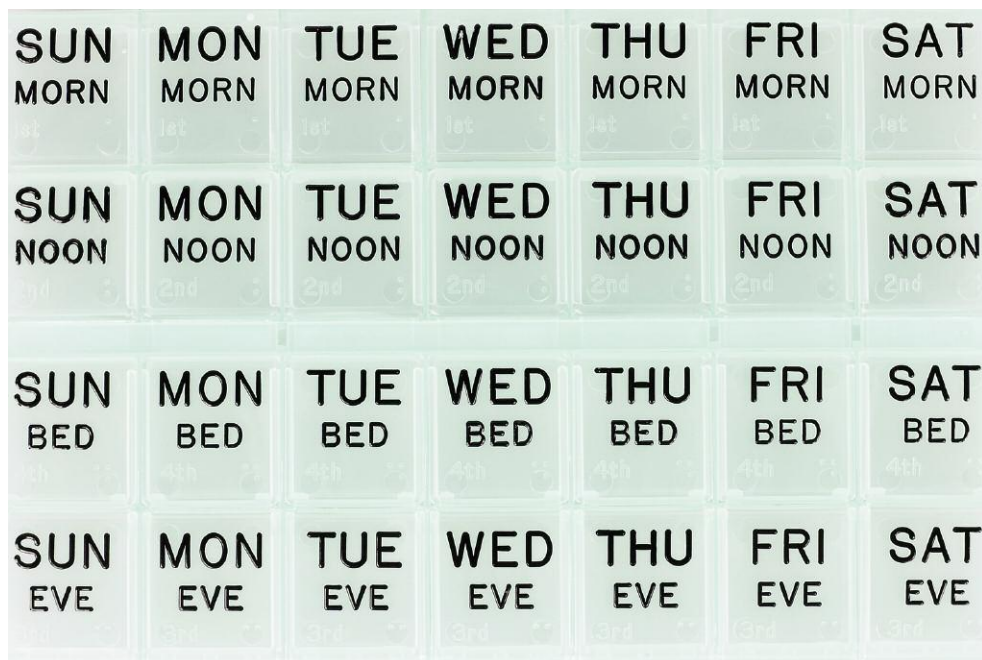


Complex Medication Regimens Call for Help with Medication Management

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Assisted living (AL) originally was intended for individuals requiring assistance with such activities of daily living (ADL) as bathing, toileting, ambulating, and self administration of medications. What we have found, however, is that one of the most prevalent reasons for admission to AL today is the need for assistance with medication management because of the complexity of a resident's medication regimen.

In fact, the use of medications is higher in AL than it is in most nursing homes. Often seniors, including AL residents, receive medications listed as potentially inappropriate for those aged 65 and older as identified by the Beers Criteria, which were adopted into the Centers for Medicare and Medicaid (CMS) Guidelines for Potentially Inappropriate Medications in the elderly.^{1,2} It is not uncommon to see cognitive impairment or increased falls secondary to medications and/or sudden changes in a senior's medication regimen. This is especially true when medications such as benzodiazepines, one of the most widely used class of medication by seniors, have not been tapered slowly.³ Clearly, AL residents are medically frail and have many



chronic diseases that require multiple medications, with many residents receiving more than 8 potent medications daily.⁴

As of December 2005, 27 states mentioned a medication review requirement in their regulations and 22 of the 27 specified that a pharmacist be part of the review process. Since regulations are constantly changing, it is important that state regulations be reviewed regularly. The National Center for Assisted Living (NCAL) provides spe-

cific state regulations, although its summaries may not be entirely up-to-date. See www.ncal.org for additional information.

There is much evidence of the value of pharmacy interventions within the institutional environment, especially in the area of Medication Therapy Management Services (MTMS).^{5,6}

To avoid nursing home type regulations, many AL providers are increasingly focusing their attention on providing medication

management programs. However, this presents a potential dilemma for many AL owners who may not be interested in emulating a long-term care medical model that may result in further governmental regulations. On the other hand, with the increasing attention to the concept of aging in place and the gradual evolution from a social model of care to one resembling a medical model, it may be necessary to rethink the best approach to care for AL residents.

At present, most AL staff members are unlicensed and may be less trained than licensed staff members, but they are responsible for distributing and administering medication. Because of this, pharmacists should be more involved in training them to administer medications. States such as Rhode Island and New York are doing something about this already; pharmacists in those states and others now train unlicensed AL personnel to administer medications. Table 1 shows how states approach medication review in AL.

In order to better position themselves, many AL facilities, with the assistance of institutional pharmacies, offer “pharmacy wellness” programs and/or medication management programs.

A wellness program, similar to what Health Maintenance Organizations (HMOs) offer, attempts to keep individuals well before a major medical problem develops. It often entails screening or monitoring programs, such as blood pressure screenings or programs designed to improve residents’ compliance with their medication regimens, along with educational in-service programming.

A medication management program (MMP) in AL is similar to what is performed by pharmacists in nursing facilities. With an MMP, a consultant pharmacist or senior care pharmacist promotes optimal drug therapy outcomes for residents and assumes responsibility for the entire spectrum of pharmacy services.

**Table 1.
How States Approach Medication Reviews**

Number of states	Medication review timeline	By whom
3	not specified	P
1	change in resident’s condition	P, MD
1	monthly	CP, N
1	monthly	P
1	monthly and quarterly	RN or P, CP
1	quarterly	“pharm review”
2	quarterly	P
1	quarterly	RN, P, MD
1	quarterly	MD, RN
2	quarterly	CP
1	90 days & when change in resident’s condition	N, P, PCP
1	90 days & when change in resident’s condition	N, P, PCP
1	62 days, with new medications, change in resident’s condition	RN
2	every other month, or every 3 months	P, RN, CP
1	6 months	P, MD, RN
1	6 months	HC professional, P
1	at least annually	CP, HC professional
1	at least annually	MD, CP, HC professional
1	periodically	N, P, PCP
1	“encouraged” review	HC professional
2	not specified	P

N-Nurse, P- Pharmacist, CP- Consultant Pharmacist, PCP- Primary care Provider, RN- Registered Nurse, HC – Healthcare, MD- Physician
Special conditions may apply. Refer to specific state regulations.

es. In addition, a dispensing pharmacy provides the drug product and special services, many of which are different than those provided in the community or retail setting.

One such AL MMP program was initiated in 1996 at the Cohen Florence Levine Estates, a 69-unit facility in Chelsea, MA (see Table 2), consisting of residents who are

fully independent as well as those who have daily personal care needs due to a medical condition. This facility was subsequently upgraded with an additional building attached to the existing one comprising 36 “special care” units designed for advanced dementia and special needs residents. On admission, all of the residents are offered the services of a consultant pharmacist who reviews their medication regimens to determine whether there are any potential or current medication-related problems. (See Table 3)

Any medication-related problems or issues noted are then communicated to the resident’s physician and the appropriate facility staff.

Subsequent MMP reviews are performed as needed on an on-going basis. Their frequency is determined by the pharmacists, based on initial findings, the complexity of the medication regimen or potential compliance issues noted. All residents are reviewed at least quarterly.

The pharmacist also is involved with any resident who may be exhibiting a significant change in physical, cognitive, or functional status. The pharmacist also provides recommendations for proper medication storage for residents as well as appropriate packaging options for medications sent to the facility and/or residents.

Why It Is Important to Develop an MMP

The elderly take more medications than younger people and often need special counseling. A large number of elderly who are admitted annually to hospitals have had adverse drug reactions (ADRs) and/or inappropriate treatment of diseases. Many hospital admissions that result from drug related problems are costly and unnecessary. Noted consultant pharmacist Diane Crutchfield demonstrated the cost-saving benefits of changing dosages, discontinuing unnecessary medications, and discontinuing duplicate medications.

Table 2.
Role of the Consultant Pharmacist in the Medication Management Program at Cohen Florence Levine Estates

- Aid in ensuring that residents are taking medications correctly in accordance with physician instructions
- Check to see if all medications have a rational diagnosis or reason for administration
- Check for appropriate dosages and be responsible for timely Drug Regimen Reviews (DRRs) on all residents that become part of the Medication Management Program
- Aid in ensuring that residents understand the medications they are taking, and how and when to take them
- Check for possible drug interactions and allergic reactions
- Keep track of pharmacy-related recommendations and/or concerns and report outcomes to doctors and appropriate facility staff
- Help educate home health care aides regarding medications and how to recognize adverse drug reactions ADRs

The routine availability of a consultant pharmacist to AL residents increases revenue to the AL owner/operator, not to mention enhancing the reputation of the facility.

Such consultant pharmacists are the best equipped to advise facilities on medication management issues and are in a very good position to participate in AL risk management initiatives.

In addition, the routine availability of a consultant pharmacist to AL residents increases revenue to the AL owner/operator, not to mention enhancing the reputation of the facility with prospective residents, referral sources, and regulators.⁷ In essence, within an MMP, the pharmacist is largely involved in education programming for the staff; and

identifying, evaluating, and making recommendations to ensure residents are receiving appropriate medications along with improving medication compliance within a facility.

What to Consider When Developing an MMP

There are many things that need to be addressed when developing an MMP for an AL facility. The administrator needs to appreciate the value of medication review and the positive impact that it can have on the facility (marketing) and the resident (the most expensive bed for the facility is the empty one).

By keeping a more stable population, the facility benefits directly. It largely is the responsibility of pharmacists to provide the evidence to administrators and other key decision-makers that the impact of their medication reviews benefit the facility and its residents.

Meanwhile, owners and administrators must understand the differences between MMP and pharmacy wellness programs. Unique forms and/or systems will need to be developed. Policy and procedures specific to each facility must be developed. In addition, possible resistance to medication monitoring

Table 3.
Possible Medication-related Problems

- Medical conditions possibly needing/requiring new or additional drug therapy
- Medical conditions possibly needing/requiring elimination or dose reductions
- Resident taking unnecessary or inappropriate drugs
- Wrong drug for resident's medical condition
- Correct drug but incorrect dose
- Adverse drug reaction not recognized
- Resident not taking medications correctly
- Compliance issues

from families, residents, and staff who may not understand the value of an MMP performed by a pharmacist will have to be overcome.

Some staff members may not understand the need for pharmacist involvement in their facility. They may feel that existing staff can perform medication review and supervise administration of medications to residents without pharmacist oversight.

There is one unique problem, however, in developing an MMP in AL. Unlike residents of nursing facilities who almost always are in the facility and easily accessible, AL residents frequently are not available when a pharmacist needs to meet with them, and, for the most part, there are no medical records to review. Medication reviews cannot be performed just by reviewing medication profiles; it is very difficult to maintain an up-to-date profile of prescription medications, over-the-counter medications, and herbal products that each resident is taking. To perform an effective medication review, the pharmacist needs to meet personally with residents in their own units in order to assess medication usage and compliance. Unlike in nursing facilities, charts and other information such as progress notes and lab information often are not available or up-to-date in AL facilities.

Payment for MMPs in AL also is

a challenge. A formal method of compensating the pharmacist for his or her cognitive services, separate from the provision of medications, is needed. It is important to realize that at the present time, MMPs in AL are not mandated by

The pharmacist will need to develop a means of communicating with doctors and staff regarding concerns and/or findings that result from the MMP.

the federal government. Assisted living regulations are the responsibility of the respective states.

Possible Strategies for Successful Implementation of an MMP

In spite of the above obstacles, performing MMPs in AL is a viable concept. The following are possible strategies for their successful implementation.

First, a business plan is needed and the pharmacist must make sure

that the facility's administrator and/or owner understand the health benefits of such a program to the residents and marketing benefits to the facility itself, which will be able to inform all new residents that such a medication review program is part of the services offered by the facility.

Explanation letters to family members and residents need to be developed and sent out on the facilities' stationary. Explanation letters to MDs, explaining the program and the pharmacist's role within the program, also are necessary.

Once the MMP has been formalized, ongoing education for staff and residents will be necessary.

It is important to develop a resident referral form for medication review and management. The form should identify residents who have a change in ambulation, continence, mental/memory status, or neurological status (eg, tremors, dexterity). A list of residents who may have become frail and/or have been hospitalized since the last visit of the consultant pharmacist should be obtained. Since typically there is no formal medical chart for AL residents, it will be necessary to develop a means for accessing chart information as well as resident information. In addition, since there is no federal mandate for medication reviews within AL facilities, there is a need to develop and obtain resident consent, which would allow the pharmacist to be in compliance with Health Insurance Portability and Accountability Act (HIPAA) privacy-protection regulations.

The pharmacist also will need to develop a means of communicating with doctors and staff regarding concerns and/or findings that result from the MMP. It is suggested that a letter on the facility's letterhead be sent containing the date of the visit with resident, a reiteration of the goals and purpose of MMP, information regarding the medication issues or concerns noted, and recommendations.

Table 4.
Forms/Records Needed for an MMP
Census/Follow-up Record

- Resident Concerns/Referral Form
- Consent to Obtain Information Form
- Initial Assessment Form
- Pharmacy Progress Record
- Pharmacy Concerns/Intervention
- MMP Appointment Record
- Facility MMP Policy and Procedure Manual

Another way for the consultant pharmacist to become more involved is to become part of an “infection control committee” at a facility. The pharmacist will need to be kept abreast of residents who have developed or are being treated for infections. That way, the pharmacist will have to obtain updates on residents who have, have had, or are currently being treated for any type of infection.

It is important that the pharmacist develop a policy and procedure manual addressing how medications and medication issues will be handled, and to consider the privacy issues of residents. A list of the various forms and records that are utilized within the MMP (see Table 4) could be included, also.

Impact and Outcomes of Developing an MMP

Developing an MMP such as the one initiated at the Cohn Florence Levine Estates may produce many positive outcomes, including fewer medications per resident; improved medication management, a decrease in the cost of medications to residents, increased outcomes in resident and staff education, and a better medication delivery system to residents.

How to Handle the Costs

A big challenge for pharmacists interested in providing an MMP is the issue of payment. Although Medicare does not pay pharmacists for this intervention at present, Medi-

care payment may become a reality in the future.

Of course, private pay is one alternative for patients or their adult children. Some pharmacists who provide medication review have found that many adult children will gladly pay for a service that will

Developing an MMP may produce many positive outcomes, including fewer medications per resident.

keep their parents from experiencing preventable medication-related problems. One barrier that needs to be overcome is the tradition that pharmacists are paid for the medicines they dispense. In an MMP, the pharmacist is providing information and oversight instead of medicines. However, it is important to note that a comprehensive medication review may identify numerous ways for AL residents to save money through the use of generic medicines, and the elimination of duplicate therapies and unnecessary medicines.

In a creative payment model used by at least one consultant pharmacist, the AL facility pays for medica-

tion review services from its marketing budget. The facility realizes that potential residents and their families perceive the advantages of a qualified senior care pharmacist and they highlight the fact that all residents receive medication reviews as part of their contract. In addition, the facility appreciates the fact that the medication reviews provided by the pharmacist will reduce the likelihood of residents experiencing medication-related problems such as falls, which might cause them to leave the facility for a nursing home. In this case, the facility sees a significant financial benefit from the pharmacist's MMP. Another payment model is one that adds a fixed amount of money to the resident's monthly unit cost to provide an MMP. If this approach is utilized, it must be disclosed upfront as one of the benefits and/or amenities of the facility.

ALC

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