



Vicki Meade



Three years ago, a senior care pharmacist envisioned a new practice model to enhance medication management in the assisted living environment. The pilot program he implemented in collaboration with a leading assisted living service provider earned high marks from facility administrators, staff, residents, and families alike—and a major national award.

An estimated one million older Americans live in roughly 30,000 assisted living facilities (ALFs) across the country—numbers that will only grow as the geriatric population swells in the decades ahead. To date, however, only a few states mandate pharmacist-provided medication management services in ALFs.

Recognizing these trends, Stephen Feldman, president and chief executive officer of The ICPS group, a Boston-based national consulting firm specializing in disease management and clinical research, is among the forward-thinking senior care pharmacists exploring ways to optimize medication services for ALF residents. Working in cooperation with Marriott Corporation Senior Living Services, a leading administrator of ALF properties, Feldman conducted a pilot program during the period 1998–99 to determine how best to apply pharmacists' expertise in the assisted living environment.

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A New Comprehensive Model

for Assisted Living
Medication
Management and
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In carrying out the one-year pilot program, Feldman found that all parties involved—from the administrators and staff to the residents and families—were highly receptive to the innovative, comprehensive service model, and highly appreciative of the resultant benefits. Feldman's new practice model also garnered high praise from his professional colleagues in the form of last year's ASCP/Eli Lilly and Company Leadership in Education Award.

DIFFERENT BUT SIMILAR

"Many of the issues and challenges pharmacists face in assisted living are the same as those we face in nursing homes," Feldman points out. But unlike nursing homes, ALFs are residential centers, not medical facilities, and their focus is on wellness rather than sickness. "Assisted living facilities

SOFTWARE RESOURCES

Electronic resources for conducting the assessments referred to in this article are available from ASCP:

- "Patient Hand Chart and Assessment Manager" software, developed by Feldman during the pilot project as a tool to help other consultant pharmacists
- "Senior Health Risk Assessor" software, developed by Feldman and colleagues Dianne Tobias and Mark Sey

For more information, call ASCP Customer Service at 800-355-2727, or visit ASCP's Web site (www.ascp.com).

want people to stay healthy and age in place, not leave and go to nursing homes," he notes. Because many consultant pharmacists try to service ALFs as if they were nursing homes—which Feldman likens to "trying to place a square peg in a round hole"—a key goal of the ICPS/Marriott pilot project was to develop a model to ease pharmacists' transition to the assisted living setting. By the project's close, Feldman, who focused his research on three Marriott facilities, had devised a workable system for helping ALFs in five key areas:

- Education of staff, residents, and families regarding drug therapy and disease management
- Regulatory compliance with applicable state laws and regulations
- Risk assessment to determine which residents need further services
- Medication management assessment to identify and assist residents who have difficulty sticking to their medication regimens
- Disease management and wellness initiatives for ALF residents

Feldman found that residents were highly receptive to his services. They clearly appreciated his efforts to help them stay healthy and active, and families were relieved to know that someone with medication expertise was working with their loved ones. The staff benefited from Feldman's program by gaining new knowledge and seeing residents' often-complex medication issues addressed in a formalized, systematic manner.

CHALLENGES AND OPPORTUNITIES

"Programs like this could and should be spread nationwide," says Evelyn Callahan, general manager of the Gables at Winchester, one of the Marriott properties involved in the pilot. The bulk of the residents live independently in the 125-apartment rental facility, but about 20% contract for assisted living services. Residents who arrive healthy and mobile but start needing additional help can stay in their own apartments and receive visits from the facility's "home aides." Aides assist with dressing, bathing, and other daily activities, and remind people to take their medications, but they are not trained or licensed to perform health care duties. The facility has a "wellness nurse" who identifies, when possible, residents who are having some kind of health issue, notifies the family, and helps ensure that they receive medical attention.

"Residents go to multiple physicians and may not use the same pharmacy, so there may not be one person who has the entire picture," Callahan points out. "There is a tremendous need for someone to have an overview of all the medication profiles" and provide expert guidance on optimization of medication use. After Feldman reviewed the medications of a resident with Parkinson's disease, for example, he initiated key changes. As a result, "the tremors improved and there wasn't as much lethargy," Callahan notes. "That adds up to a better quality of life."

A major challenge for consultant pharmacists in many states is that ALFs do not maintain comprehensive medical records (some facilities keep records in a “wellness department,” but these records are not necessarily complete). Therefore, to get the information they need, pharmacists must improvise and piece together details by interviewing the resident in a “one-to-one” fashion. Talking to the resident’s family and the facility’s wellness nurse, if there is one, can also help fill in the information gaps.

Another challenge for pharmacists in the ALF setting involves resident consent for access to medical information. In nursing homes, patients provide consent at the time of admission so they can be cared for properly. Because ALFs are not medical facilities, staff members cannot gain access to a resident’s health information without express authorization.

Further complicating provision of pharmacy services, drug regimen review is not federally mandated in ALFs, as it is in nursing homes, so assisted living residents have the right to approve or refuse assessment by a consultant pharmacist. Even if such an assessment is authorized and performed, the results cannot be shared with the ALF unless the resident has signed a consent form.

Although consultant pharmacists accustomed to practicing in the nursing home setting may be deterred by these and other challenges, all can be surmounted through creativity,

‘YOU’ RE A WHAT PHARMACIST?’

When calling physicians to discuss concerns about an ALF resident’s medication, keep in mind that they may have no concept of what a consultant pharmacist is—especially if they do not also practice in a nursing home. They may be very surprised to hear from a pharmacist who has clinical questions or opinions. Be sure to preface your initial call to the physician with an explanation that you are a senior care pharmacist hired by the assisted living facility to assess residents for medication-related problems.

clinical and patient care acumen, and professionalism, Feldman says.

ALFs across the country vary in their level of attention to residents’ health. “The consultant pharmacist must determine the ALF’s spectrum of involvement in health issues and where each resident fits into that spectrum,” Feldman says. ALFs provide an exciting new opportunity for consultant pharmacists to apply their clinical skills while working directly with the people whom they benefit. “Many consultant pharmacists today are still too focused on chart reviews,” he says. “They sometimes don’t even see the patient. They look at data, lab results, the diagnosis—the chart becomes the center of the universe. In ALFs, you must get away from the chart and go see the resident. You have to

focus on risk factors and use your assessment skills.”

GETTING STARTED IN ALF PRACTICE

A good approach to an initial foray into the ALF setting, Feldman suggests, is to contract with an ALF to provide basic services, such as risk assessment screenings or wellness programs, then identify residents who need additional care and are willing to pay out of pocket. In the nursing home setting, consultant pharmacists are generally paid directly by the facility, not by the resident. In states without laws or regulations mandating that consultant pharmacists serve ALFs, it is unrealistic to expect direct payment from the facility, Feldman says. “It is realistic to think that an ALF would provide a small amount of compensation for showing up and assessing which residents are at risk and for helping them deal with pharmacy-related issues,” he points out. “Once an assisted living facility lets you in the door, you have to create your own business opportunity directly with the residents or their families.” In other words, doing assessments or screenings is a marketing tool. “Obviously, this marketing strategy needs to be known, understood, and accepted by the facility up front,” Feldman emphasizes. “If the facility doesn’t want you soliciting its residents and only offers you a little direct payment, then your hands are pretty much tied.”

Family involvement is crucial in ALFs, Feldman has found. After he

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FIGURE 1. SAMPLE ALF RESIDENT CONSENT FORM

RESIDENT CONSENT FORM FOR CONSULTANT PHARMACIST SERVICES

Directions: This form must be completed by a resident who would like to be seen by the property's consultant pharmacist. This form should be presented at move-in time. A completed copy must be provided to the consultant pharmacist if the resident requests to be seen.

Resident's Name: _____ Apartment #: _____

Resident's phone number: _____

Note to the Resident/Family: This property utilizes a comprehensive program, which identifies residents who may need some review or assistance with their medications. This program includes the use of a senior care pharmacist who provides expertise in drug therapy assessment. Please answer the following questions so that we can determine your level in this program.

It is the responsibility of the resident or family to keep the facility informed of current prescribed and over-the-counter medications. Thank you.

1. Do you want to be evaluated to determine if you are "at-risk" for drug- or disease-related problems by our wellness staff, your dispensing pharmacy's staff, or their consultant pharmacist?

Yes

No

If no, stop here.

2. If you answered yes to number 1 and are determined to be "at-risk" for drug- or disease-related problems, would you like meet with our consultant pharmacist?

Yes

No

I understand that if I am determined to be "at-risk" for drug- or disease-related problems, I authorize this facility, their consultant pharmacist, my pharmacy's staff, and my physician to discuss and share information between themselves, if done so for my well-being.

Resident / Legal Representative Signature

Date

This document should be filed in the resident's records maintained by the Wellness Department.

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assesses a resident, he always calls the primary family contact to discuss findings and review recommendations. "Ninety percent of the time they are thrilled to hear from you," he says. He has found that if the family doesn't buy in to his suggestions, it is more difficult to put them into effect.

If a family expresses interest in having specific assessments or monitoring carried out, Feldman brings up the issue of reimbursement. If the family agrees to pay for his services, he calls the physician to discuss his recommendations, presenting them in the context of "the family requests . . ."

THE ICPS MODEL

Key components of the ALF practice model Feldman developed are outlined below, but he emphasizes that this is not a comprehensive list of everything consultant pharmacists should do in the assisted living environment; they must develop their own procedures depending on the characteristics of a particular ALF property and its residents, as well as applicable state regulations.

CONSENT

At the time of admission (usually called "move-in") to the ALF, the pharmacy provider should present all residents with a consent form (see Figure 1) allowing residents to express their interest in being evaluated by a pharmacist and authorize the sharing of medical information on their behalf.

KEY STEPS TO FOLLOW DURING AN ALF MEDICATION CONSULT

1. Obtain all the information you can from the resident, family, facility, caregivers, and dispensing pharmacy.
2. Determine the resident's level of compliance with his or her prescription medication regimen and with over-the-counter medications.
3. Determine any drug-related problems.
4. Determine any risk factors.
5. Determine if essential information is missing (such as lab tests or information from past consults) and obtain anything that is critical.
6. Communicate findings and recommendations to the resident and family.
7. Recommend the suggested intervention directly to the physician.
8. Inform the ALF, dispensing pharmacy, resident, and family of the results.
9. Report the outcome of the consult to the ALF (assuming you have obtained authorization from the resident).

LIAISON WITH DISPENSING PHARMACY

The consultant pharmacist should provide the dispensing pharmacy with a list of high-risk, "geriatric-unfriendly" medications, so the pharmacy can tag the respective drugs or therapeutic categories in its dispensing software. The pharmacy should give the ALF and consultant pharmacist the names of residents on medications in the following categories so the consultant pharmacist can arrange an assessment with them:

- Anticholinergic drugs
- Anticonvulsants
- Antipsychotics
- Narcotic analgesics
- Lithium
- Warfarin
- Chlorpropamide
- Digoxin
- Asthma inhalers such as albuterol

(note if drug supply is being used up sooner than it should be)

- Long- or intermediate-acting benzodiazepines
- Sedative/hypnotics

STAFF EDUCATION

The pharmacist must determine the level of training needed by staff and educate them so they have the appropriate knowledge. To do this, pharmacists must be familiar with the laws of their state regarding limitations on ALF medication administration. In some states, ALF staff assistance is limited to reminding patients when it is time to take their medication, reading labels on medication containers, and checking the dosage. Other states allow staff to administer medications if they have completed a state-approved training course. Areas in which staff may need training include correct procedures for administering



medication and strategies for recognizing adverse reactions.

EDUCATION OF RESIDENTS AND FAMILIES
Programs related to drug therapy, disease management, and wellness are always popular with residents and their families. One effective format for such education is to present a videotape on a key health topic (readily available from pharmaceutical manufacturers) and follow it with a question-and-answer session. Osteoporosis, depression, and heart disease are good targets for wellness-oriented presentations. Residents also like “brown bag” programs, in which the pharmacist reviews all prescription and over-the-counter drugs the resident is taking. “If you’re unsure about what the residents want to talk about, just ask,” Feldman advises.

A good way for pharmacists to introduce their services is to hold an educational program at a “residents’ meeting.” During such sessions, the pharmacist can explain why older seniors are at increased risk for drug-related problems and what the pharmacist can do to reduce that risk. This

is a good opportunity to pass out copies of the consent form, so that residents can indicate whether they would like to receive a focused evaluation for drug- and disease-related problems. The form also authorizes information sharing among the facility, consultant pharmacist, dispensing pharmacy, and physician.

REGULATORY COMPLIANCE

It is critical for the pharmacist to keep abreast of current state regulations governing ALFs and ensure compliance through ongoing analysis and consultation with facility staff and administrators.

RISK ASSESSMENT

Because it isn’t practical or cost-effective for consultant pharmacists to assess every ALF resident during every visit, initial assessments can be conducted using a list of risk factors to determine which residents should be assessed further. During one-on-one interviews with residents, the pharmacist can use a structured form to identify residents experiencing one or more “red flag” conditions (see Figure 2).

FIGURE 2. SAMPLE 'TRIGGER QUESTIONS' FORM

**QUICK AT-RISK TRIGGER QUESTIONS
FOR ASSISTED LIVING RESIDENT ASSESSMENT**

This document provides trigger questions, which are to be asked of residents who have requested to be assessed for medication/disease-related problems. These questions are to be asked by the consultant pharmacist, nurse, or resident assistant and will screen residents for medication-related "risk" factors. Residents answering yes to one or more of these trigger questions should be further assessed by the property's consultant pharmacist using the in-depth series of questions for that assessment area. If a resident is determined to be at risk by the wellness nurse's assessment, the consultant pharmacist is to be given a copy of the assessment.

Resident Name: _____ Apartment #: _____

Assessment Date: _____ Performed by: _____

Specific Resident Physical Findings / Characteristics / Complaints

Instructions: Please ask or observe the resident for the following triggers. Document responses by circling the appropriate response. Return completed form to the Wellness Nurse.

ASSESSMENT	TRIGGER QUESTION OR OBSERVATION	RESIDENT RESPONSE
1. Weight loss of 5% in 90 days or 10% in 180 days	Have you had any weight loss in the last six months? If yes, determine if loss is either equal to or more than 5% loss in 90 days or equal to or more than 10% loss in 180 days.	Yes No Unable to Determine
2. New pressure sore or skinbreak-down	Do you have any new skin sores or skin irritation?	Yes No Unable to Determine
3. New presentation of incontinence	Do you have problems controlling your bladder or bowel functions which result in you having an accident?	Yes No Unable to Determine
4. Dizziness, loss of balance	Have you had any episodes of dizziness and/or loss of balance	Yes No Unable to Determine
5. Extreme sedation	Does the resident look sedated (i.e., eyes closed or nodding, slurred speech)?	Yes No Unable to Determine
6. Recent history of overdosage; hospitalizations or visits to the emergency room due to medication-related problems	Have you been brought to the emergency room or been hospitalized in the last few years?	Yes No Unable to Determine
7. Recent change in mental status or a new behavioral symptom	Have you been having any recent problems with your memory? If the resident responds "no" ask the resident to tell you the date and who is the president. If they get either wrong score it "yes."	Yes No Unable to Determine

FIGURE 2. SAMPLE 'TRIGGER QUESTIONS' FORM (CONTINUED)

ASSESSMENT	TRIGGER QUESTION OR OBSERVATION	RESIDENT RESPONSE
8. Depression	Do you feel that life is great?	Yes No Unable to Determine
9. Pain	Are you in pain at any time?	Yes No Unable to Determine
10. Insomnia	Have you had continuous difficulty in sleeping?	Yes No Unable to Determine
11. Visual disturbances	Do you ever see halos or rings around lights, flashes of lights, or curtains over any lights?	Yes No Unable to Determine
12. New muscular rigidity or functional limitations in the resident's range of motion	Do you experience any stiffness or difficulty in moving your arms or legs? Do you feel that you can't move your body and limbs around easily or that your muscles are not working correctly?	Yes No Unable to Determine
13. Advanced age (> 85 years)	If the resident is 85 years of age or older score yes.	Yes No Unable to Determine

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If a trigger question highlights a problem, the consultant pharmacist should proceed with a specific in-depth assessment (e.g., administration of a geriatric depression scale) and make recommendations for medical evaluation. If no problems are uncovered, the initial assessment provides a good baseline for future comparison.

MEDICATION REVIEW

In ALFs, it is unlikely that consultant pharmacists will have the information readily available to perform a traditional drug regimen review. Medication reviews are best conducted in a face-to-face meeting with the resident. If he or she cannot supply critical pieces of information, family members, spouses, or the dispensing pharmacy can often help; the pharma-

cist can also call the resident's physician(s) to fill in the gaps. If lab data is needed to address a particular concern, it usually makes sense to contact the physician, but this is not always necessary. For example, if there is no potassium level available for a resident taking a potassium-depleting diuretic and potassium supplement concurrently, the pharmacist should check for signs of hyper- or hypokalemia and ask how often the resident's physician draws blood. If the patient is asymptomatic, it is reasonable to proceed with potassium supplementation in the absence of lab results.

MEDICATION MANAGEMENT ASSESSMENT

ALF residents' skills and abilities in managing their own medications vary widely. Many residents are self-suffi-

cient and do a fine job; others function fairly well but have declining short-term memory and sometimes forget to take their medications. Still other residents are so advanced in their cognitive decline that it may be unsafe for them to manage their own medications.

Consultant pharmacists can be instrumental in educating staff about medication management issues and techniques through use of in-service training programs and assessment forms to teach staff how to properly evaluate residents' ability to manage their medications. Ideally, assessments should take place during the move-in process. Assessments can be conducted either by properly trained staff or the consultant pharmacist, and should evaluate the resident's ability to:

FIGURE 3. SAMPLE ALF MEDICATION ASSESSMENT FORM

RESIDENT MEDICATION MANAGEMENT ASSESSMENT

Resident Name: _____ Apartment: _____ Date: _____ Assessed by: _____

Single Failing Response Intervention	Special Packaging / Meds on Time	Special Packaging / Meds on Time	Special Packaging / Meds on Time	Special Packaging / Meds on Time	None	Facility Storage	Cueing / Reminders
Residents failing two or more areas should be considered "Fully Dependent"	Able to Identify as a Prescribed Drug	Able to State How Many are Taken	Able to State What Time to Take	Able to State Why Drug is Taken	How Drug is Stored (i.e., refrigerator, secure)	Orientated to Time	
Current Ordered Drugs (Name & Sig)							
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No

Additional assessments

1. Ordering assistance: Does the resident currently order his or her own medication supply and have an adequate supply of medication on hand or on order?

Yes or No Failed response intervention = ordering assistance

2. If the resident is currently using eye / ear / nose drops, inhalers, sublingual tabs, transdermal patches or suppositories, can he or she demonstrate proper administration?

Yes or No Failed response intervention = resident education with follow up or assist resident with this drug (if allowed)

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- Identify each drug prescribed
- State how many doses of each drug are to be taken
 - State what time to take each dose
 - State why each drug is being taken
 - State how the drug is stored (including need for refrigeration)
 - Be properly oriented in time

The medication management assessment should be repeated whenever the resident's cognitive function changes or he or she seems to be having new problems managing medications.

For an additional fee, many ALFs offer medication assistance services, which are designed to ensure that residents take their medications properly if they have trouble remembering on their own. Sometimes when a resident's ability to self-manage medicines declines, ALF staff have difficulty convincing the family to subscribe to the service. Consultant pharmacists can be instrumental in overcoming this reluctance, Feldman notes. "The assessment clearly points out areas where the resident is deficient," he says.

When consultant pharmacists communicate the results of the assessment to the family, they can underscore ways in which the medication assistance program will improve the resident's health and safety. Feldman recalls talking to a son who believed that his Sunday visits, during which he set out his mother's pills for the week, was as much assistance as she needed. "The staff would look in daily to see if she was taking them,

and many days there were pills still sitting there." Feldman overcame the man's resistance by asking, "How many days per week is it okay for your mother *not* to take her medications as she should?"

IMMUNIZATIONS

Given the fast-growing national initiative for pharmacists to provide immunizations to the public, consultant pharmacists have a wonderful opportunity in the assisted living environment to keep seniors up to date on their vaccines. For example, pharmacists who have the proper training in immunization administration can provide influenza immunization clinics for residents, or they might administer vaccines to the facility's employees (if permitted by state law).

IT'S ALL ABOUT THE PATIENT

"This is truly taking care of the patient and being part of the health care team," Feldman says of his work in ALFs. Nursing home beds are emptying, he points out, and the market for ALFs is growing. The opportunities are there, but it takes legwork to identify ALFs that are receptive to consultant pharmacist services.

"ALFs come in lots of flavors, and sometimes it's not readily apparent that a health care facility has an ALF component," Feldman explains. Some are part of what is known as "continuing care retirement communities," which have independent living, assisted living, and skilled nursing facilities on one campus; some are added to

adult communities whose residents are aging in place and starting to need more assistance. "Because these facilities try to attract healthy people, they won't necessarily advertise 'We have residents with Alzheimer's and dementia here,'" Feldman says. Thus, pharmacists must do their own research to discover the characteristics and needs of each facility's population. If a facility isn't initially interested in pharmacy services, the pharmacist should regularly check back with the facility, as its needs will change over time.

To serve ALFs, "You've got to be motivated, willing to develop new skills, and focused on building a clientele," Feldman says, "but there's no question that this is the right direction." ☞

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