There is a well-known association between transitions of care and medication-related problems, notably in the form of adverse drug events. Although we have limited evidence-based information on this topic in assisted living facilities (ALFs), some of what we’ve learned from transitions of older adults to nursing homes provides useful insight into what we can expect.

Adverse Drug Events in Older Adults

In a study looking at the bidirectional transfer of individuals leaving a skilled nursing facility (SNF) to go to the hospital and then coming back to the same SNF, researchers found that medications were changed that should not have been and doses were changed inappropriately ([Arch Intern Med] 2004;164:543–550). Also, because the hospital formularies were different, medications were substituted, resulting in duplication of medication classes. Twenty percent of these changes resulted in adverse drug events.

A study that followed up with older adults in their homes after a hospitalization found that the discharge instructions from the hospital were often incomplete or illegible, the information conflicted between different sources, and duplicative prescribing occurred because of therapeutic interchange during hospitalization ([Arch Intern Med] 2005;165:1842–1847). Of those for whom a medication discrepancy was identified (n = 53), 14.3% were rehospitalized within 30 days compared with the 6% who had no medication discrepancies noted (n = 322, P = 0.04).

In 2014, the Office of the Inspector General reported on adverse events in 653 Medicare beneficiaries who were hospitalized and subsequently discharged to SNFs (“Adverse Events in Skilled Nursing Facilities,” Feb. 2014; http://bit.ly/2IPGeu). This transition in care resulted in an adverse event in 22% of individuals. Of these adverse events, 37% were medication related, with 11% resulting in harm to the patient. A team of physicians, including a nursing home medical director, evaluated each case and determined that 59% were preventable. This remains one of the largest studies conducted on adverse events and medication-related harm during transitions of care and nursing home residents, and the results have had an effect on policies.

Digging deeper into the issue of adverse drug events in older adults, especially those who are the typical age of ALF and nursing home residents (80 years and older on average), reveals some useful information on the targeted efforts to reduce these harmful events. In a Centers for Disease Control and Prevention (CDC) report examining adverse drug events that have contributed to an emergency department (ED) visit and often a subsequent hospital admission, five classes of medications contributed to more than three-fourths of all adverse events: anticoagulants, diabetes agents, antiplatelets, nonsteroidal anti-inflammatory agents, and opioids ([JAMA Intern Med] 2016;316:215–2125).

Like nursing homes residents, individuals living in ALFs take quite a few medications. In a post hoc analysis of clinical trial data collected during an ALF study looking at rehabilitative care, Barbara Resnick, PhD, CRNP, of the University of Maryland School of Nursing and her colleagues noted that 51% of a cohort of 242 individuals, median age 86 and 74% female, were consuming five or more routine medications ([Consult Pharm] 2018;33:321–330). Of note, 54% of their study population were taking an anticoagulant. This is consistent with the observed 22% rate of ED visits or hospitalizations observed in this cohort over the 12-month study and the CDC data on adverse drug events.

ALF Strategies

Pharmacists have several roles in the medication-use process in ALFs, including dispensing medications — usually from the same pharmacies that serve nursing homes — and medication regimen review. The dispensing process for most ALFs is remarkably similar to that of nursing homes, including the technology attributes, although ALFs are lagging a little behind SNFs in implementing electronic health records and electronic medication administration records. Physicians and other prescribers can order medications in a similar fashion because the same pharmacies are used. But because the number of licensed health care personnel is often lower in an ALF than in a nursing home, it is important for prescribers to understand the differences.

There are opportunities in ALFs for more resident-directed medication administration strategies, including simplifying medication regimens to suit the resident’s daily routine and use of devices such as in-room medication cabinets. Collectively, these approaches can lead to decreased medication administration time while enabling an increased staff presence with the residents ([Consult Pharm] 2018;33:533–561). Although the medication regimen review process is similar to that provided monthly in nursing homes, and often it is performed by the same consultant pharmacists, the regulations vary by state. Some states mention other health care professionals, including nurses and physicians, as potential reviewers, but pharmacists are the predominant provider who performs the service, and this is specified by three states: California, Kansas, and Maryland ([National Center for Assisted Living], “Assisted Living State Regulatory Review,” Mar. 2013; https://bit.ly/2lm5xLV). The frequency of medication reviews in ALFs is typically quarterly, although at least one state requires a monthly review.

The reviewing pharmacist and the prescribing clinician should establish how they want to be notified of potential medication issues in order for the process to be efficient and in the resident’s best interest. As in nursing homes, those individuals performing medication regimen reviews should pay particular attention to the residents who have had a transition in care since the last review. Ideally those individuals had a medication reconciliation when they entered the hospital; however, many acute care facilities limit those who qualify for a review based on their rehospitalization risk, so some will not perform this task.

Even on a retrospective assessment, some basic guidelines will help identify the medication discrepancies with the greatest potential to cause harm. In the sidebar, I have summarized the key actions to reduce harm associated with medication discrepancies occurring
He won’t go out, lives in his pajamas, sleeps more and more. Refuses his meals, pees on the couch, falls in a heap at the front door. He was trying to locate his army unit — that’s what he says when she finds him there.

She is beside herself. Life has always been tough — the Great Depression, the loss of his meager business just when they were trying to educate their sons. Then his breakdown. Now this. How did it all come to pass?

And the nights are bad. He calls her ‘Mom’ now, knocks on her door in the darkness, shuffles in with his walker.

Are you asleep, Mom?

What is it, Len? It’s the middle of the night, for God’s sake.

He is sobbing, his face is wet. Please tell me who I am, he pleads. I can’t remember who I am.

She does not hesitate, pulls back the covers.

Lie beside me, she says.

He is reticent, like a first-time lover. Are you sure? he asks.

Come, she says. She moves over to one side. He pushes his walker up to the bed, turns, and sits on the edge. Are you sure? he asks again.

She switches on the light, reaches for him, holds him while he falls back into the pillows, helps him straighten himself, cover himself. She cradles him in her arms.

She keeps the photo albums on her bedside table.

Your name is Leonard, she begins. You were born in Baltimore. The year was 1919, and you have three older sisters and two older brothers. She turns the pages.

Soon every night is like this. She feels him relax into her body. Sometimes he asks if one or another of his siblings is still alive. Yes, she says, though all are long gone.

Frank is living in Florida. Hilda is retired from teaching now… Good, good, he says. The story of his life unfolds page by page. Her voice, his story, spills into the tangled interstices of his mind, every cobwebbed corner. Embraced, he recalls the scent of her perfume on the letters she wrote to him all those years ago. He listens closely, anticipates with subdued breath. Up against her chest her words purr through his body, pour into his emptiness, fill him up. He falls in love all over again.

Now his breathing is deep, regular. His body is still warm. Sixty years they have been together. He is asleep. For the moment, she can stop reciting his story, but she does not. She will see it through.

There is no one else to help her. She knows that now.

This is what love comes down to, she thinks. There is no happily ever after, but perhaps, in the end, this is what it is all about.

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during transitions of care. These, along with the resident-directed medication administration I’ve discussed here, can make a positive difference in your facility.

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