

Helping Seniors Manage Medicines and Costs

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Older people often bring a list, or sometimes a bag, of medicines when they visit their primary care providers. The staff compares the patient's list or medication bottles with the computerized record of their patient's medication profile. As the staff member reconciles the medication lists during the initial assessment, he or she updates the computerized record. The primary care doctor usually asks if the patient needs any new prescriptions or refills.

Why is the medication usage of people over 65 of clinical interest? In the mid-1980s, it was reported that persons age 45 and older increased their drug taking from 52 percent to 75 percent.¹ Today, elderly persons consume one-third of the prescription drugs in the United States. Although persons in long-term care settings are the largest consumers of prescription drugs, ambulatory older patients fill from nine to 13 prescriptions each year.²

The number and type of drug prescriptions vary by care setting. During 2017, 75 percent of physician office visits were related to medication, particularly analgesics, anti-hypertensive drugs and antidepressants. In hospital outpatient departments, providers wrote approximately 73 percent of their orders for analgesics, anti-diabetic agents and anti-hypertensive agents, while in the emergency departments, orders for analgesics, anti-emetics, anti-vertigo drugs and minerals and electrolytes explained 80 percent of the drug therapy.³

Many factors contribute to the increased drug use by older Americans. These include the growth and marketing capacity of the drug industry; the opioid crisis; the ease of obtaining prescription

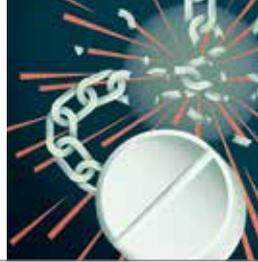
drugs online, via mail and from chain pharmacy stores; the increase of chronic illness among all Americans, but especially among seniors; and longevity itself.

Also, the enactment of Medicare part D, Medicare's prescription drug benefit that became law as part of the Medicare Prescription Drug Improvement and Modernization Act of 2003,⁴ meant more seniors were able to fill their prescriptions.

MARKETING PRESCRIPTION DRUGS

Big Pharma has developed a road map for overcoming common barriers to health care services: access, cost and quality. Not only are there many classes of drugs to treat or manage common chronic diseases, providers usually can choose

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between trade name products and generic drugs within most drug classes.

Pharmaceutical companies also have expanded their marketing campaigns to include not only physicians, but the public as well. Television ads present the newest drugs as benefitting more people and being better than commonly used drugs. The ads note drug side effects, but they rarely discuss drug costs. The settings for the prescription drug campaigns are resorts and mountains. The people featured in the ads are active, attractive and happy.

Pharmaceutical companies with blockbuster drugs can track the success of their marketing throughout the United States and the world. Patients often suggest that their providers order the newest drugs to treat their symptoms or diseases.

Senior citizens are not immune to the opioid epidemic. Chronic pain is very common in the elderly; it is experienced by more than 50 percent of community-dwelling older adults and more than 80 percent of residents in nursing homes.⁵ Like other Americans, senior citizens have received opiates for pain that was unrelated to cancer or end-of-life care.

In most cases, the drug of choice for the elderly was hydrocodone, the most popular drug on the market. In 2011, 136.7 of the 238.1 million narcotic prescriptions were prescriptions for hydrocodone.⁶ Older Americans felt the outcomes of the forces associated with the opioid epidemic: aggressive marketing; increased medical and public sensitivity to the necessity of assessing, documenting and treating pain as a vital sign; and the medical and public belief that hydrocodone and opiates like it were not addictive.⁷ Unfortunately, these forces combined to increase the use and misuse of opioid drugs among the aged.⁸ Although the elderly, especially elderly women, have a lower risk of opioid misuse compared with the general population, the elderly are more vulnerable to such side effects as drowsiness, confusion, falls, constipation, respiratory depression, drug interactions and accidental overdose.⁹

CHRONIC ILLNESS

During the 20th century, chronic and degenerative diseases replaced infectious diseases and

acute illnesses as the leading causes of morbidity and mortality in the United States.¹⁰ This major shift caused some sectors in the American health care system to re-examine where they spent their energy and money. For example, in urban academic health systems, geriatric clinics engage interdisciplinary staffs to focus solely on the health care needs of senior citizens. Advocates for the aging cite the prevalence of 10 chronic diseases experienced by this population: hypertension, high cholesterol, arthritis, ischemic heart disease, diabetes, chronic kidney disease, heart failure, depression, Alzheimer's disease and other demen-

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tias and chronic obstructive pulmonary disease.¹¹ Although this is not an exclusive list, it highlights that chronic diseases disproportionately affect elderly persons. Improved prevention and health care have increased life expectancy, but chronic diseases remain the leading causes of death among older adults.

In 2011, the 10 leading causes of death for U.S. adults age 65 and older were heart disease, cancer, lower respiratory diseases, stroke, Alzheimer's disease, diabetes, influenza and pneumonia, nephritis, unintentional injuries and septicemia.¹² There is a relationship between the common chronic diseases that burden the elderly and the leading causes of death in this population.

LONGEVITY AND PRESCRIBED DRUGS

The aging population is growing. In the U.S., 15.2 percent of the population is over 65 years of age. The number of U.S. residents who are age 65 and over increased from 35 million in 2000 to 49.2 million in 2016.¹³ Unless there are major genetic breakthroughs during their lifetimes, people over age 65 will continue to consume prescription medication to manage their chronic diseases. A 2010 study reported that about 68 percent of Medicare beneficiaries had two chronic diseases, and 36.4 percent had four or more.¹⁴ Women were more likely to have multiple chronic diseases.

Drugs are marketed to treat or lessen the symp-

toms of most of these illnesses. Because prescription medication is such an important modality in the treatment of seniors with chronic disease, it is important to monitor medication use in the elderly. Older people also consume the majority of prescribed drugs; scrutiny of their medication profiles must be accompanied by an analysis of the risks and benefits associated with their prescribed drugs.

Older patients take their medications. They respect their doctors and health care providers, and they trust them. Obviously, drug errors can occur because of poor eyesight, memory failures or personal disorganization. Yet clinicians cannot blame older patients for over-prescribing or inattention to the risk/benefit ratios of their patients' drug profiles. This level of surveillance is time consuming and may cause the primary provider to exceed the 15 minutes allocated for routine primary care visits.

How can the health care ministry help older people, their families and caregivers become more informed about prescription drug management? In the United States, most senior citizens live in communities with nearby primary care centers, home care services and pharmacies. Collaboration is possible. Leadership is needed to achieve agreement around the importance of integrating the medication reconciliation processes in all of these primary care settings.¹⁵

RISK FACTORS FOR ADVERSE DRUG EVENTS

Drug errors can occur in all settings and across all age groups, but they are particularly dangerous for the elderly living in community settings. A medication error is an error of commission or omission along a trajectory that begins with a clinician ordering a drug and ends when the patient receives the medication. Medication errors can be viewed from the perspective of patients, clinicians or drugs themselves.

From the older adult's perspective, the most significant adverse events are associated with taking more medicine than is needed, missing doses, taking wrong doses or taking the drug incorrectly or confusing drugs with similar-sounding names and appearances.¹⁶ Clinicians can contribute to adverse drug events by careless prescription handwriting in offices without electronic medical records, using oral instead of

written orders or failing to reconcile the patient's current drug protocol at each clinical visit.

Finally, even the appropriate prescription drugs can be dangerous for certain patients.¹⁷ The American Geriatrics Society has updated the Beers Criteria, a list of medications to avoid or use cautiously in older adults.¹⁸ The Beers revision lists medications that require close monitoring because of their impact on elders' kidney function, cardiac status, mental status or risk for falls.

The newer STOPP criteria (Screening Tool of Older Person's inappropriate Prescriptions) have been shown to more accurately predict adverse drug events in seriously ill elderly persons.¹⁹ The aged are particularly vulnerable to adverse drug reactions because of the number of prescription drugs that they take each day.

Medication errors or adverse events frequently result in emergency department visits. Hematological, endocrine, cardiovascular, nervous system and anti-infective drugs are usually associated with these ED visits by older Americans.²⁰ Seniors with adverse drug reactions also account for approximately 10 percent to 30 percent of all hospital admissions.²¹

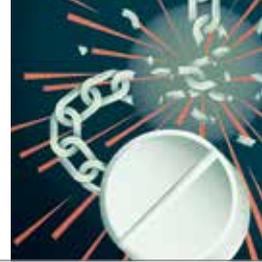
RECONCILIATION

Adverse drug events cost the government and the public about \$30.1 billion each year,²² and adverse drug events are responsible for 7,000 deaths annually.²³ Adverse drug events often are an unrecognized problem among American seniors. Although some adverse drug experiences are not preventable, others are. Primary care centers currently use a protocol to reconcile medication re-

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ords. However, medication reconciliation is only one component of a comprehensive patient drug-safety program.

In particular, reconciliation does not address medication management or assure that the patient or caregiver is an informed consumer of medication. For example, do patients or caregivers know what drugs have been prescribed and



the rationale that guided the provider to write the prescription? Each clinical visit is an occasion for primary care providers to assess their patients' knowledge and use of prescribed and over-the-counter medications.

Do their patients know the names and dosages of the drugs and why they have been ordered? Identifying gaps in knowledge enable the provider and staff to help patients and caregivers become more informed and empowered.

The primary care provider also should discuss risks and benefits of the medications in the patient's current drug protocol. Providers and pharmacies have become very aggressive in managing opioid use. Some of this knowledge and energy should be directed to enhancing medication management in primary care, especially for older adults with chronic illnesses.

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QUESTIONS FOR DISCUSSION

Older adults use one-third of the medications taken in the United States, and many seniors have numerous prescriptions for multiple chronic conditions. Medicines often have to be taken at different times of day, with or without food, sometimes titrating the dosage up or down in a course of treatment. No wonder there are medication errors! Sr. Rosemary Donley, SC, explains why seniors take so many more medications than they did just a few decades ago and suggests what should be done to reduce drug errors among the elderly, especially those living in long-term community settings.

- Although some medication errors can be ascribed to the poor vision, hearing or memory of elderly patients, other adverse events can be traced to over-prescribing, hurried instructions or inattention to other conditions/medications. What is your ministry doing to ensure that elderly patients and their caregivers are given clear instructions and the education they need when they leave the hospital or outpatient setting? What strategies are there for follow-up when a vulnerable senior may need more support in taking medications appropriately?
- Sr. Donley discusses the advantages of using tools such as the Beers Criteria and the newer STOPP criteria to assess elderly patients for drug adverse risk. Is your ministry up-to-date in these assessment tools? How easily does education about and communication of such information move among multiple caregivers, including family?
- Among the many factors that contribute to increased drug use by older Americans is the importance of patient satisfaction in how we evaluate our service. Discuss the ethical and practical ramifications of how patient feedback impacts decision making in prescribing medications for seniors.

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