E-Prescribing in Assisted Living: Keys to Success

Rachelle F. Spiro, RPh, FASCP

Changes in health care policy, industry-wide quality improvement efforts, media reports about medication errors, and pressure by government agencies and other groups have led to increased use of health information technology (HIT) by providers, practitioners, and facilities in a variety of settings—including assisted living facilities.

At national and regional HIT conferences in recent years, the message is clear: technology such as electronic medical records (EMRs), e-prescribing, and computerized physician order entry are here to stay. The use of such technology is not mandatory yet; however, it is being strongly encouraged.

In fact, it was only thanks to effective lobbying by organized medicine that the Medicare Modernization Act (MMA) did not require electronic transmission of prescriptions. Instead, the law mandates use of a national uniform standard for electronically transmitted prescriptions by 2009. It also established a grant program to incentify physicians to implement and use e-prescribing. Under this program, physicians will be able to apply for government grants for three years beginning in 2007 to buy hardware and/or software or to upgrade existing systems and educate staff.

The White House also is promoting HIT. In April 2004, President Bush issued an Executive Order calling for widespread adoption of EMRs within 10 years. At that time,
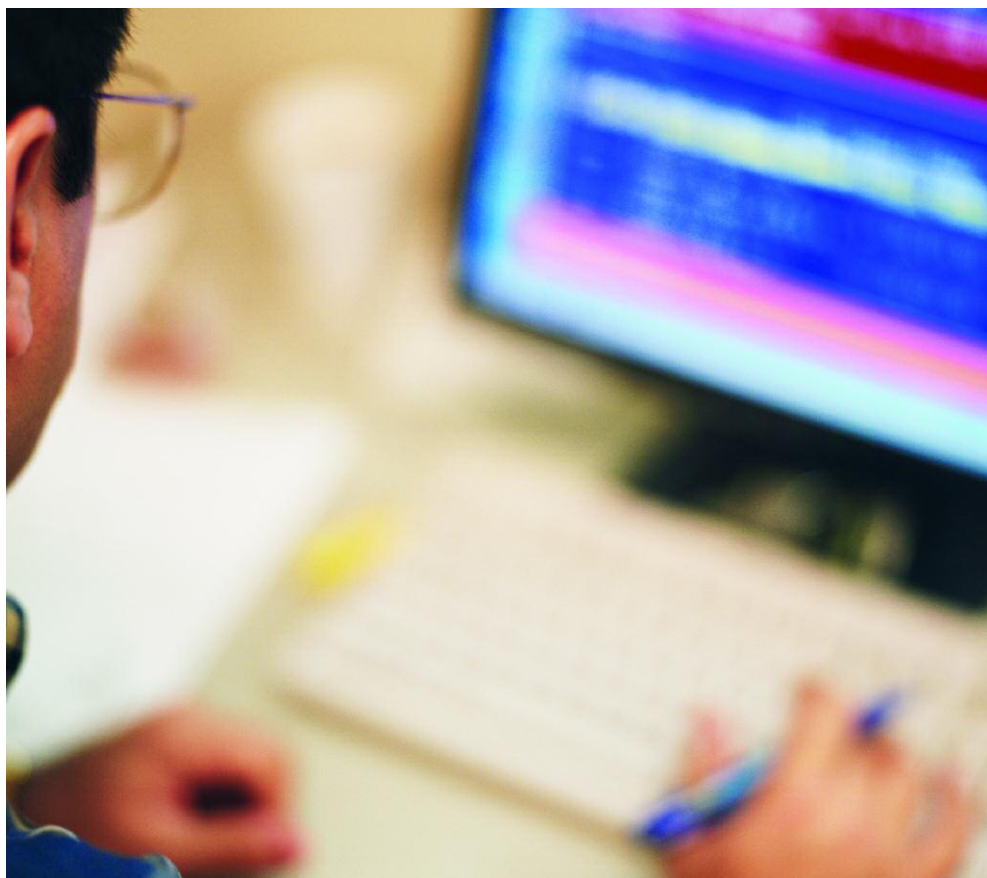
he also created the Office of the National Coordinator for Health Information Technology. A month later, David J. Brailer, MD, PhD, was named as National Coordinator for HIT. The new office promptly released a strategic action framework that outlined an approach toward national implementation of HIT in both public and private sectors.

Assisted living facility practitioners and staff need to understand at least the basics of e-prescribing,

what it does, and how it works. This knowledge can help them use this technology more effectively as it becomes more common in this care setting.

What is E-Prescribing?

Electronic prescribing basically is the transmission of prescriptions electronically—computer to computer—which replaces paper or fax prescriptions. With e-prescribing systems, physicians generate the

prescription electronically in the office, at bedside, or from another location; and he or she transmits this to the pharmacy for filling. E-prescribing also enables the physician to communicate prescription information with payors.

E-prescribing has many benefits. It has the potential to reduce medication errors by providing an instantaneous electronic analysis of dosage, drug-drug interactions, and therapeutic duplication. This enables the physician to change or correct prescriptions before the patient even gets the medication, thereby avoiding problems.

At the same time, e-prescribing can help improve quality and efficiency while reducing costs by promoting appropriate drug usage, providing information about drug coverage (and possible therapeutic alternatives), and generally improving the speed and accuracy of prescription dispensing. Finally, this technology can help improve communication between providers, the pharmacy, and the health plan.

It Works, But Will Physicians Use It?

Illegibility of physician handwriting has long been a common cause of prescribing errors in all health care settings. Several years ago, some hospitals and other facilities began to address this by sending their physicians to special classes designed to improve their handwriting. However, this was a stop-gap measure at best. More recently, many experts have identified e-prescribing as an answer to illegible handwriting.

For example, an Institute for Safe Medication Practices (ISMP) white paper, *A Call to Action: Eliminate Handwritten Prescriptions within Three Years*, states, "Prescription writing is perhaps the most important paper transaction remaining in our increasingly digital society; it seems simplistic to note that electronic prescribing tools could minimize medication errors related to

handwriting. Yet, even though such devices are available for use in hospitals, ISMP estimates that less than 5% of U.S. physicians currently 'write' prescriptions electronically."

Research has begun to document the specific benefits of e-prescribing. For example, a test of a CPOE system at Brigham and Women's Hospital in Boston demonstrated that the technology reduced drug-related preventable adverse events by 17% and serious medication errors by 55%. At the same time, the Agency for Healthcare Research and Quality is funding projects that are studying the

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use of handheld CPOE systems with decision support in primary care clinics. These studies are evaluating the impact of such systems on reducing medical errors and improving clinical care. They also are assessing barriers to using these systems and the cost-effectiveness of this technology.

Documenting the value of e-prescribing and getting physicians to use these systems are two separate challenges.

Traditionally, physicians have objected to e-prescribing systems, claiming that the cost of purchasing and implementing such technology is prohibitive. However, WellPoint, Inc., recently offered thousands of

physicians free e-prescribing tools; and the majority refused them in favor of practice-management systems. Elsewhere, the Council for Affordable Quality Healthcare, a Washington, DC-based coalition of health plans, made 200 free subscriptions available to e-prescribing software; and only 100 physicians took advantage of the offer.

Nonetheless, according to the e-Health Initiative, current surveys estimate that between 5% and 18% of physicians and other clinicians are using e-prescribing. And there is further evidence that attitudes—and practices—are changing. A 2004 survey of 180 physicians in the U.S. and Europe found that American practitioners were more willing to try technology. In fact, the majority—73%—said that they were amenable to trying e-prescribing tools.

At the same time, vendors seem to be getting more savvy in their efforts to get physicians to purchase and use e-prescribing technology. They are offering programs and options with an emphasis on training and support and maximizing interconnectivity with other systems.

Will E-Prescribing Work in AL?

Each state has different requirements that affect the prescribing process in the AL setting. If e-prescribing is a three-way electronic communication between the pharmacy, physician, and ALF, will the facility be able to interface with these players?

According to Lee Meyer, Director of Operations for Pharmacy Advantage in Los Alamitos, CA, there are certain requirements to get prescription information from the physician to the ALF in his state. "In California, the ALF can't take a fax order from the physician and give it to the pharmacy. The pharmacist cannot treat a fixed order from a facility as a valid script, fill it, and keep the original hard copy. The pharmacy only can receive orders "directly" from the physician.

There is a potential liability to the ALF if the administrator does not get a signed order from the physician," he explained. He added that the facility requires written instruction from the physician.

In his state, Meyer noted, the ALF maintains a file on each resident. "The resident enters the facility, and two things happen concerning their mediation therapy management," he said. First, the resident's ability to perform activities of daily living (ADLs) is assessed to determine if he or she needs assistance with taking medications. Second, the physician has to give authority for the ALF to manage the resident's medications.

In Meyer's view, this is an example of how the e-prescribing model will work in the ALF setting. He proposed, "A family member will bring in an over-the-counter product or a request for repackaged orders. The facility then will send an electronic message to the physician. He or she will approve the medications for use by the resident with an electronic signature and send a message to the pharmacy to update the resident's medication profile." When a new prescription is ordered, the medication history will be transmitted to the physician to ensure that a proper drug review and evaluation can occur when the prescription is ordered. Ideally, communication from the physician would be to the facility *and* the pharmacy simultaneously.

According to Arnie Clayman, Vice President of Infusion Services for Neighborcare in Baltimore, MD, the ALF administrator is licensed by the state. "ALF managers are responsible to see that residents' capability to self-administer and manage their mediation therapy is evaluated within 14 days of ALF admission. The evaluation can be performed by the physician, certified nurse practitioner, midwife, or registered or licensed nurse."

A 45-day review can be performed only by a delegating nurse who is regulated by the State Board of Nursing. The medication administration process in the ALF also is under the delegating nurse's control. The physician, delegating nurse, or pharmacist must perform a quarterly onsite medication review for residents who self-administer and require reminders and/or assistance.

The pharmacy may use a "Profile Only" process for medications received at the ALF but not dispensed by the pharmacy. In the AL, there are issues surrounding what is considered a prescription versus a chart order since there is no med-

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ical oversight mandated in ALFs.

This process might present some barriers or challenges for e-prescribing in this setting, as "there can be problems with a profile-only process, especially the question of who is liable for mistakes in the EMR when the pharmacist may not have received accurate information from the ALF."

This scenario touches on one of the greatest challenges to successful e-prescribing. It doesn't matter if the physician has the best e-prescribing technology available if his or her programs aren't able to communicate with computers at the facility and/or the pharmacy or if the facility and/or the pharmacy don't have up-to-date technology.

There are no definitive answers to this challenge to date. However, physicians or pharmacists looking to implement technology should reach out to the facilities and practitioners with which they work to determine what technology will be compatible and what capabilities they will need.

Looking Ahead: Future Unknown

Many unanswered questions about the future of e-prescribing remain. While the federal government is creating incentives for e-prescribing use by physicians and various groups are setting standards for this technology, it has yet to be seen whether these standards and incentives will be practical for and useable by physicians practicing in ALFs and for the facilities they serve.

If an e-prescribing model doesn't fit the ALF setting, there is the possibility that physicians will get frustrated and refuse to use the technology. Or these practitioners could force the AL industry to adopt an e-prescribing model that meets industry standards and meet practitioners' needs.

ALFs and the practitioners who serve their residents need to work together to help drive some of the answers regarding e-prescribing. This will require collaboration, cooperation, and communication between disciplines, vendors, administrators, and lawmakers. Physicians, pharmacists, and administrators need to be proactive in developing an e-prescribing model that meets the AL industry's needs and best protects the residents they serve. ALC

Shelly Spiro, RPh, FASCP, is an independent long term care pharmacy and information systems consultant. She performs consulting, lecture, and briefing services for the long term care industry's professional/trade associations, private industry companies, and federal and state agencies. She is based in Alexandria, VA.