

One-click prescribing

More and more doctors are throwing away their pens and prescription pads and going digital instead

By Jo Cavallo

At the Cancer Treatment Center in Swansea, Illinois, Medical Director Jorge Frank, MD, is a techno-enthusiast. "We don't have patient charts, and we don't have prescription pads," he says, "so everything is done on the computer. For instance, if a patient is sitting in front of me and says, 'I need a refill of my pain medication,' we access the pharmacy database in IMPAC, our electronic medical records system."

Through their electronic medical records (EMR) program, Dr. Frank and his colleagues have a link to pharmacies in the Walgreens' drugstore chain, where they send their patients' prescriptions electronically.

"We started using e-prescriptions about 3 years ago," says Dr. Frank, whose practice serves as an IMPAC demonstration site. "The problem was that we have six doctors here and not everybody writes legibly. But e-prescribing has definitely improved patient care and made us more efficient. Before we used this system, we would get calls from the drugstore saying, 'We can't read the doctor's handwriting.' It wasted a lot of our time."

Another advantage to e-prescribing, says Dr. Frank, is that the software indicates dosages. "You don't have to figure out whether the drug you are prescribing comes in 100 mg or 200 mg doses," he says. And after the prescription is generated, it adds each new drug to the list of medications a patient is already taking.

Slow going

Although electronic prescribing has been around for about 10 years, physicians have been slow to embrace

the technology. According to a study from Manhattan Research, a New York City-based healthcare marketing information firm, just 43,800 practicing physicians use e-prescribing. That figure is expected to jump over the next year as compliance for proposed e-prescribing standards in the Medicare Modernization Act (MMA) begins taking effect in January 2006. The MMA will require drug plans taking part in the new prescription drug benefit to support electronic prescribing.

Although MMA doesn't call for mandatory e-prescribing by physicians, the proposed regulations would set standards to make e-prescribing commonplace throughout the Medicare system in the future. Some of the new regulations include access to formulary and benefit coverage information, as well as transactions between prescribers and dispensers for new prescriptions and refills.

For several reasons, widespread use of point-of-care technologies such as EMR and electronic prescribing has been stalled until now. One major stumbling block: There wasn't an infrastructure in place that allowed prescriptions to go from a physician's office to a pharmacist's desktop computer.

"E-prescribing hasn't worked because there wasn't a consistency either within the physician community or the pharmacy community," says Kathleen Mahan, director of product management for SureScripts, a company that links electronic communication between doctors and pharmacists. "SureScripts was founded to help roll out an infrastructure in the pharmacy community, in the hopes that it would encourage physician adoption."

Pay now, save later

One of the biggest hurdles to overcome is start-up costs, which can run as high as \$250,000 or more. "But when you calculate your savings, it's worth it," says Dr. Frank. "We save \$22,000 per year in paper alone. If you add all the inefficiency of having to do things by hand, the system pays for itself within a short period of time."

"We're seeing a bit of a digital divide in healthcare," says Laura Adams, president and CEO of the Rhode Island Quality Institute, a Providence-based organization of healthcare stakeholders working to redesign the healthcare system in the state. "The larger group physician practices are able to embrace technology much faster than the smaller independent one- and two-physician offices. We're trying to do more regional and community collaborations so that we can get the whole community working together to help doctors transition to using information technology."

Part of the Institute's work, says Ms. Adams, is to encourage insurers to offer incentives to doctors making the switch to e-prescribing. "We want to begin speaking with medical malpractice insurers and say, 'We know electronic prescribing is safer. Can you do something for the physicians who are converting to the technology? Because it isn't easy, and it's costly.' We want as many people as possible involved in lowering the barriers so doctors can adopt the technology."

A cure-all?

According to a 2000 report, "To Err Is Human: Building a Safer Health System," from the Institute of Medicine, medication errors lead to 7,000

deaths a year, and illegible handwriting was cited as one of the most preventable sources of those errors.

"I favor electronic prescribing because the software program can put in limits to prevent errors," says Clifford Hudis, MD, chief of the Breast Cancer Medicine Service at Memorial Sloan-Kettering Cancer Center in New York City. Dr. Hudis uses a version of e-prescribing bundled into the hospital's EMR system installed there nearly 2 years ago by LanVision Systems, now doing business as Streamline Health. Sloan-Kettering's EMR allows Dr. Hudis to send electronic prescriptions to an internal pharmacy.

But studies published in the March 9, 2005, issue of *The Journal of the American Medical Association* dispute the notion that technology can cure medication errors. In one of the *JAMA* papers, Ross Koppel, PhD, a researcher at the University of Pennsylvania Center for Clinical Epidemiology and Biostatistics, asserts that one EMR system, called TDS, actually led to more errors.

Still, as the technology evolves, others sing its praises. According to the eHealth Initiative, a nonprof-

it healthcare information technology (IT) organization, \$27 billion in healthcare costs could be saved by the universal adoption of e-prescribing systems. The reasons they cite: fewer medication errors, increased quality control, and efficiency.

Plugged in

Another important advantage of e-prescribing for physicians is the convenience of having a patient's information at your fingertips no matter where you are. "I'll be out to dinner and get a call from a patient I'm covering for my partner," says Peter Kaufman, MD, chief medical officer for DrFirst, a Maryland-based healthcare IT vendor. "Before I return the call, I can pull up the patient's information on my smart phone and see a list of her medications, allergies, and a diagnosis. I can call the patient back with the program open and then, if necessary, send a prescription to the pharmacy at the same time."

Plus, say experts, contrary to conventional wisdom, installing an e-prescription service can actually save the physician and healthcare staff time and money in the long run. "Entering a patient's data by hand only takes 15 to 20 seconds," says Dr. Kaufman. "And many of our practices are saving an hour of staff time per doctor per day—time they would have spent calling pharmacies and handling refills. If they're paying their staffs overtime, that's instant savings because staff members can get their work done faster when they don't have to spend time on the phone with the pharmacy."

The one drawback to e-prescribing, especially for oncologists, is the Drug Enforcement Administration's (DEA) regulation prohibiting the electronic transmission of Schedule II controlled substances. Currently, for those drugs, pharmacists must receive manually signed prescription slips. However, according to Dr. Kaufman, new online security measures may convince the

DEA to loosen the restriction. "We're waiting to see what the new regulations say. But in the meantime, oncologists can use DrFirst for narcotic prescriptions as long as they print them out and sign them, and they still have a legible prescription that is checked for allergies, drug interactions, and formulary coverage," he says.

How e-prescribing works

All it takes to use electronic prescription technology is the proper hardware—a desktop PC, tablet PC, or a wireless handheld device—an Internet connection, and a subscription to an e-prescription software or application service, which is available from a variety of vendors. (See the box, "Get Connected," on this page.) Many software packages put all the prescribing information at a physician's fingertips, including patient histories, drug interactions, and the most appropriate and cost-effective drug for the patient's needs. With the DrFirst Rcopia application, patient data reside on the handheld device, and all data are encrypted, "so if a physician or a staff member loses it, the information wouldn't be readable by some random person who found the device," says Dr. Kaufman. Pharmacies also need similar IT equipment to receive the information. According to Kathleen Mahan of SureScripts, 75% of the 55,000 community pharmacies in the US already have the technology installed.

Besides the looming January 2006 compliance deadline for the MMA, momentum is also building in the private sector to encourage physicians to leave pen and pad behind and switch to electronic prescriptions. Several healthcare payers are offering incentives, such as a free handheld PC, to offset start-up costs. But for most physicians, the biggest incentive of all is ensuring patient safety.

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Get connected

Many e-prescription solution providers offer a variety of licensing price points—from under \$100 a month to \$500 per year—depending on the software features. Here's a list to help you get started:

Allscripts Healthcare Solutions

www.allscripts.com; 800-654-0889

DrFirst

www.rcopia.com; 888-271-9898

Gold Standard

www.empowerx.gsm.com; 800-375-0943

HealthRamp CarePoint

www.healthramp.com; 877-432-3379

Instant Dx

www.oncalldata.com; 800-576-0526

NewCrop Electronic Prescribing

www.newcroprx.com; 877-839-8063

SynaMed

www.synamed.com; 866-796-2633