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Expanding clinical connections

Prescriptions

If you're not e-prescribing, here's why you should, and how to get started.

By Ken Terry

“**E**very day, I pick up drug/drug interactions with my e-prescribing program,” says Salvatore S. Volpe, a solo med-peds specialist in Staten Island, NY. For the past year and a half, Volpe has been using the PocketScript program from the Dallas-based ZixCorp.

While the electronic-prescribing system has improved the efficiency of his office by speeding refills and cutting pharmacy callbacks, he's most impressed by how it helps him avoid adverse drug events. “There's no way a doctor can remember every interaction. I'm looking up not only the scripts I write but also scripts written by other doctors,” he says.

He can do that because PocketScript gives him access to many patients' dispensing histories. ZixCorp obtains this data from RxHub



New York med-peds specialist Salvatore Volpe (left) has been e-prescribing for more than a year, and feels it has enhanced patient safety.

(a company formed by three leading pharmacy benefit managers) and from other PBMs and health plans. Other electronic-prescribing vendors use the RxHub service, which also includes formularies of many health plans.

Even without dispensing histories, just entering patient medication lists and allergies into an e-prescribing

program can be a lifesaver. Azar A. Korbey, a family physician in Salem, NH, says that his Allscripts Healthcare Solutions electronic-prescribing program, known as TouchScript, has “probably saved me a dozen times” over the past seven years. “You've got somebody who has an allergy to sulfa, and you prescribe Celebrex—you don't think about it. The com-

puter gives you the big red screen that says, 'Stupid, you can't do this.' "

Because his prescriptions are complete, legible, checked against formularies, and screened for drug interactions and allergies, Korbey gets few callbacks from pharmacies. In fact, since he's been e-prescribing, the number of pharmacy calls handled by each of the nurses in his four-doctor office has dropped from about 20 a day to only one or two. As a result, he figures the practice is saving at least 15 minutes of overtime per nurse per day. The savings on that alone was about \$11,000 last year, he says.

And Korbey isn't even online with pharmacies yet. Like most doctors who e-prescribe, he faxes his scripts to the drugstores from his computer—which means scripts might still get lost or be incorrectly keyed into the druggist's computer system. But pharmacies across the country are gearing up to go online with physicians in the near future, and some have already done so. When that happens, what doctors write is exactly what patients will receive. Moreover, pharmacists will be able to send refill requests online to doctors' offices, which should save more staff time.

One physician who's starting to take advantage of this new approach is cardiologist Thomas E. Sullivan, immediate past president of the Massachusetts Medical Society. Sullivan, who uses the Rcopia e-prescribing program from DrFirst of Rockville, MD (and is a consultant to the firm), likes the two-way communications with pharmacies because it's faster and more efficient than the old way.

"It's cheaper than using my fax machine, and it provides an electronic turnaround for refills and queries," he says. "If there's a question for me, it'll come back on my computer. And when a patient calls the pharmacy and asks for a refill, the pharmacy sends me an electronic message, and as soon as I turn on my application, it comes up right in front of me and it's all written out."

The connectivity between medical offices and pharmacies is being spearheaded by SureScripts, a com-

pany formed by the chain and independent retail pharmacy associations. Physicians don't have to pay for the service, but to use it, they need an e-prescribing program certified by SureScripts. The company says it has already tested and certified its standardized transmission method in about 75 percent of the country's drug outlets (including the major chains), although far fewer

An e-prescribing doctor can write and send a refill in five seconds or less.

The image shows a screenshot of the Rcopia Rx software interface. At the top, it says "Rcopia Rx". Below that, there are fields for "Patient: Johnson, Anthony", "Pharm: Kaiser - Springfield (9878)", "Rx: Proventil HFA (Albuterol Sulfate)", and "Form: Aerosol Solution 90 mcg/Actuat". The instructions read: "Sig: Inhale 2 puff every six hours as needed using nebulizer, for asthma. Qty: 1 inhaler, Refill: #3". A pop-up menu is visible with options: "Send", "Save", "Print", "Send & Print", and "Add To Med" (checked). There are also "Cancel" and "Save" buttons at the bottom.

have trained their staffs on the system.

While it's not clear how many pharmacies are ready to use SureScripts' technology, the company is actively encouraging doctors to go online with druggists in 15 states: Arizona, California, Illinois, Indiana, Maryland, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Texas, and Virginia.

Insurers and the Feds push e-prescribing

Since last May, when President Bush called for universal electronic health records within 10 years, the federal government has been promoting e-prescribing, which is widely viewed as a key to improving patient safety and as a stepping-stone to the electronic health

record. While the Medicare Modernization Act requires e-prescribing standards to be in place by 2009, CMS Administrator Mark B. McClellan recently said he thinks they can be implemented by 2006. (Nothing in the law, however, requires doctors to prescribe electronically.)

This flurry of government activity has accelerated budding efforts by health plans to encourage e-prescribing. WellPoint, for example, has earmarked \$40 million to provide either of two packages to almost 19,000 network physicians who see a lot of plan members. One package consists of a wireless PDA and a one-year subscription to an e-prescribing service from either Allscripts or ZixCorp; the other includes a desktop PC and printer.

Blue Cross Blue Shield of Massachusetts and Tufts Health Plan offer a free, one-year subscription to PocketScript to 3,400 high-prescribing physicians. The offer includes a choice of a wireless Pocket PC or a BlackBerry "smart phone" (a cell phone that lets you connect to e-mail and the Web).

Many other Blues plans and commercial carriers are starting to sponsor e-prescribing programs for physicians, according to Donald Gravlin of Capgemini, a technology consulting firm. Internist and emergency physician Jon-athan M. Teich, chairman of the e-prescribing task force of the eHealth Initiative (EHI), a private advocacy organization, believes health plans will drive adoption of electronic prescribing.

That may well be, but today, few physicians are prescribing electronically. While different studies estimate that between 5 and 18 percent of doctors use e-prescribing programs, Teich said at a conference earlier this year that the real figure was no higher than 5 percent. The reasons he cited for the low adoption rate were time, cost, and lack of reimbursement.

The doctors we interviewed say it takes them 15 to 20 seconds to write an initial prescription on an e-prescriber. Some physicians can scribble an Rx faster on paper, notes Azar Korbey. But when it comes to

refills, an e-prescribing doctor can write and send one in five seconds or less, because all the information is already in the system.

The cost of getting started isn't as great as you might think, either. Including all of the components you need (we describe them below), e-prescribing might cost no more than \$2,000 in the first year, and much less thereafter.

Here is the information you need to know to get started with e-prescribing.

A variety of devices and connections

Standalone e-prescribing programs such as PocketScript, Rcopia, and TouchScript can be used on desktop PCs, tablet PCs, and a variety of handheld devices, including personal digital assistants (Palm or Pocket PC) and PDA/cell phone combination devices that provide Web and e-mail access. If your e-prescriber is part of an electronic medical record and can't be used outside of that program, you may be limited to desktop or tablet PCs. However, Amicore, Misys, and WebMD all offer PDA-based prescribing with their EMRs, and TouchScript can be used either as a stand-alone e-prescriber or as part of Allscripts' EMR.

The choice of device also depends on where you'll be using the e-prescriber. If you do most of your work in the office, a wireless PDA might be perfect. If you spend

a lot of time outside the office, and you want to be able to prescribe from anywhere, you should consider a BlackBerry or a palmOne Treo 600 combo device. While the wireless PDA will work in "Wi-Fi hot spots"—radio frequency receivers that let you piggyback onto a local broadband connection—the cellular connection to the combo unit will be available in most places.

However, cellular transmission is very slow compared with the broadband Internet connection you can access via Wi-Fi (wireless fidelity, a standard form of communication in wireless local area networks). If your electronic-prescribing program and patient data are served over the Web, the cellular transmission can slow you down when you're prescribing. But if all of your patient medication lists and demographic data are stored on your handheld, as in the Rcopia system, the speed of transmission doesn't matter, because you'll be using the connection only to send scripts and get updates. A Treo 600 can send three scripts a minute, but a doctor doesn't have to hold the device while that occurs, notes John Bartos Jr., president of DrFirst.

Allscripts urges physicians to get high-speed connections in their offices if they're going to access databases on the Web. This "application service provider" option can help overcome the cost barrier for offices that don't already have computer networks. But if you do have such a network, Allscripts will install the drug interaction and reference databases on your local server. You can get formulary and reference updates instantly over the Internet, and dispensing histories can be downloaded overnight for all the patients on your schedule the next day.

New York meds-peds specialist Sal Volpe uses a Dell Axim PDA with a wireless Wi-Fi card about 75 percent of the time, and he says that the high-speed connection makes PocketScript easier to use. When

he's out of the office, he uses a



BlackBerry combo device with a T-Mobile cellular connection.

The initial costs vary widely

E-prescribing software fees average about \$50 a month, but that's just the beginning. You must also consider the costs of hardware, wireless connectivity, data transmission, implementation and support, and the transfer of demographic data from your practice management system to your e-prescribing program.

Hardware costs: The Dell Axim X30 PDA (Pocket PC), which offers 64 MB of RAM, is priced at \$349. On the Palm side, the top-of-the-line Tungsten C costs \$399. Both of these units

have built in Wi-Fi capability. PalmOne's Treo 600, a leading combo device, will cost you from \$349 (after mail-in rebates) to \$549, depending on which cellular service you choose. BlackBerry combo units go for anywhere from \$99 to \$499, depending on the model, the cellular firm offering it, and mail-in rebates.

Wireless connectivity: The cost of putting in a wireless network varies from \$70 for a home-style kit up to \$800 for what Allscripts calls "commercial-grade" wireless with robust security. Or you can spend \$200 to \$500 for wireless access points designed for small businesses.

Data carrier fees: The business-class charges quoted by most broadband services run from \$100 to



\$400 a month, although Volpe says doctors can get high-speed Internet service for \$40-\$50 a month. Cellular data fees range from \$20 a month for T-Mobile to \$50 monthly for Verizon. If you already have cell phone service, data might cost less; Sprint, for instance, charges customers an additional \$10 a month for data transmission. BlackBerry's e-mail/Web service costs from \$35 to \$50 a month, depending on the carrier.

Implementation and support:

E-prescribing programs can be downloaded from the Web, and technical support is included in monthly software fees. It's more likely to be remote support, via the phone or the Web, than in-person visits, however, especially if you're in a small practice. Donald Gravlin of Capgemini suggests that some doctors might want to contract with a local computer service bureau or value-added reseller to install and support their e-prescribing and wireless systems.

PM interfaces: While it can cost \$2,000 to \$6,000 to write a real-time interface between a practice management and an electronic-prescribing program, most practices don't choose that option. Instead, they have their patient demographic data up-loaded at one time to their server or the vendor's server, and enter data on new patients manually. The one-time upload typically costs "a few hundred dollars," says Bartos. You can also have an assistant enter medication lists and add them to the database, either all at one time or as patients come in.

Ultimately, e-prescribing is a patient safety issue.

The business case for e-prescribing

It's unlikely that doctors who adopt e-prescribing will see immediate cost benefits. A recent report on e-prescribing by eHealth Initiative notes that, while it financially benefits payers and pharmacies, the greatest cost is borne by clinicians.

But Thomas Sullivan of the Massachusetts Medical Society, who helped write that report, says that some physicians *can* benefit from e-prescribing. "The economic case is a lot easier to demonstrate to primary care doctors and internal medicine subspecialists who tend to be high-volume prescribers. This is particularly true if they have a lot of patients with chronic diseases, who tend to have a lot of refills.

"The office efficiency is tremendously enhanced by the way these newer e-prescribing programs work. Whereas before, my office had to do a lot of phone calling and return a lot of calls, or play fax tag, that's virtually eliminated. So that's the business case."

For Sal Volpe, the big time advantage lies in refills. "You look up the patient's name, pick a med from the list, point and click, tap 'refill,' and you're done." But he always pulls the chart, even for a refill. "It's good medicine," he says, noting that he might need a test result, for instance, to prescribe the right drug or the right dose.

Many physicians, however, write refills for some patients without pulling the chart. And since an e-prescribing program gives them instant access to the patient's med list and allergies, they're less likely to ask for the chart if they prescribe electronically, says Bartos. When physicians don't need to see the record, they can save \$4 to \$8 per chart pull, notes Dan Michelson, chief marketing officer for Allscripts.

Ultimately, e-prescribing is a patient safety issue. But that can also have economic consequences. "What's the likelihood of me being sued now?" says Volpe. "Reducing that risk is worth a lot. Doctors are ignorant of the extent of drug/drug interactions—and if they knew more, they'd be thinking more about it." ■

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