

# Peer Perspectives on Electronic Prescribing: Guarding against potential medication errors



## SITUATION

Employing more than 400 physicians and additional clinical and clerical staff, Sierra Health Systems represents one of the largest medical service providers in Southern Nevada. In 2002, the company initiated a program to implement the AllScripts TouchWorks electronic medical records (EMR) system — a system certified to connect to the vast majority of U.S. community pharmacies through the Pharmacy Health Information Exchange™, a secure network operated by SureScripts®.

By 2004, Dr. Richard King's practice had begun using e-prescribing, with the hope of automating the labor- and time-intensive workflow processes

required to manage both new prescriptions and refills, and to reduce the potential for medication-related errors.

"With so many look-alike and sound-alike medications, traditional hand-written prescriptions have a tremendous potential for mistakes, especially considering how horrendous many doctors' handwriting can be," says Dr. King.

## IMPLEMENTATION

To enable the new system, each staff member was given a desktop computer, a wireless network was established throughout the clinic, and wirelessly enabled laptop computers were put in each examination room.

While Dr. King and his associates received just about an hour of formal training, he says: "Once you play around with the system, you get used to it very quickly. We also try to help each other by sharing tricks and shortcuts that we have discovered through trial-and-error experimentation."

This sentiment is echoed by staff: "Once you get past the startup issues, educate your staff members and reorganize your workflow processes, your whole prescription-management process will become much more efficient and accurate, and much less work-intensive," adds Maryann Carter, LPN, the Senior Patient Care Coordinator (PCC) for Dr. King's practice.

*Once you're comfortable with it, you'll never go back to handwritten prescriptions again."*

— Dr. King

## EXECUTIVE SUMMARY



**Richard King, D.O.**

- In practice for 9 years
- South Eastern Medical Associates (Las Vegas, Nev.)
- Specialty: Family Practice
- Practice Size: 12 adult medicine providers, 2 pediatric providers; 28 clinical and clerical staff
- Technology Provider & Solution: Allscripts, TouchWorks EMR
- Avg. Daily Rx Volume: 40-60 New Rx/doctor, 50-60 Refills/doctor
- Rx Time Savings: Pharmacy connectivity significantly reduced staff time spent managing 1000+ requests for prescription refills per day and strengthened relationship with pharmacist counterparts.

## RESULTS

Prior to the upgrade, the process for writing new prescriptions would require King to write the patient's name, age, date, medication, dosage, strength and instructions for each medication required. "You can imagine how much effort is required to write 10 prescriptions for an older or chronically ill patient," he says.

Now Dr. King and his colleagues are able to create new prescriptions electronically and then, with just the push of a button, submit them automatically to the patient's pharmacy of choice.

And, Dr. King notes that the new electronic system ensures automatic medical documentation of all prescription-related transactions, so it eliminates the burden on staff to write explicit details about each prescription in the patient's chart — a labor-intensive, error-prone process.

Because the majority of community pharmacies in the area have direct computer-to-computer connectivity with the TouchWorks system, the protocol in King's office is to encourage patients needing a prescription refill to ask their pharmacist to initiate the request. Using this new approach, the networked pharmacist is then able to submit the refill request directly to the doctor's laptop computer.

This has several advantages. First, because the pharmacist's request to refill a prescription contains all of the detailed information about the patient, the medication (including dosage, instructions and number of refills), there is no need for the staff to "hunt around for information to complete the patient's refill request," says Dr. King.

Meanwhile, when a refill request shows up on Dr. King's laptop as a "task," he can review it, approve it and submit the refill order directly back to the pharmacy in a matter of moments, along with an electronic note instructing the nurse to let the patient know the requested prescription has been submitted to the pharmacy.

"Before, when a patient would call and leave a message, we'd have to pull the chart, attach a note, wait for the doctor to grant or deny it, and then call the pharmacy and wait to finally get through to the pharmacy technician to call in the prescription," says PCC Carter. "With so many potential delays throughout the process, we used to tell patients it could take three to five working days for us to authorize and complete the refill request. Now, we're able to fulfill their requests within an hour or two."

And by streamlining and automating the overall prescription refill process, "we're saving more than two hours each day — time that can now be spent on other, more patient-oriented tasks," says King.

## BEST PRACTICES

- **Jump in.** "Our technology overhaul got started as part of a larger company-wide mandate to implement EMR and e-prescribing systems, so it was met with a bit of resistance," says Dr. King. His advice to others: Jump in and get started, realize that it will take time to get used to it.
- **Share experiences:** Adoption and use of the prescribing system was enhanced when prescribers and staff worked together to share shortcuts, tips and best practices discovered over time.
- **Put pharmacies in charge of refill requests:** Directing patients to call pharmacies for refills, not the practice, ensured more complete information and reduction of tedious phone and fax based requests through computer-to-computer connectivity

## IMPROVING SAFETY

Increased reliance on electronic communications to submit new prescriptions and authorize refills has virtually eliminated the occurrence of pharmacies calling the office to clarify illegible or unclear information related to the drug, the patient's name, the dosage, the number of refills, or the instructions. Now, says Dr. King, "the primary queries we get are from pharmacists, who are calling to verify potential safety-related issues, such as whether it's okay to automatically refill a prescription so soon after the initial one was written, or to question us if we have changed from one medication to another, or altered the dosage of a given drug, from one visit to the next."

"This has led to much more genuine and meaningful interactions between our office and the pharmacists, and this benefits the patients directly by providing an added safety net against potential medical errors," says Dr. King.

## CONCLUSION:

"E-prescribing is definitely the wave of the future," says Dr. King. "After some initial resistance, today we have universal acceptance. Now that everyone is on board with this, there's no way we'd ever go back to the old way of prescribing."