Texas Medical Association
Health Information Technology
Practice Management Services

Christopher Crow, MD

- Plano, Texas
- Three-physician practice
- *Specialty*: Family medicine

Case Study: *Change Is Good*

When Plano family physician Christopher Crow, MD, entered practice six years ago, his knowledge of computers was admittedly limited: "When I opened my practice, I couldn't turn on the computer." But Dr. Crow quickly became convinced that shifting his practice from paper medical records to electronic medical records (EMRs) would improve both the quality of care and the practice's bottom line.

Dr. Crow and his two partners established in their practice a culture receptive to change and particularly to the introduction of information technology. "Our mantra is 'change is good,' " Dr. Crow said. The office staff already were accustomed to using computers in the management of the practice and, outside the office, in their personal lives. And Dr. Crow became the physician champion leading his practice's effort.

Based on his experience, Dr. Crow sees three factors as critical to the success of an HIT acquisition:

1. Strong physician leadership,
2. Sufficient resources for educating both physicians and staff, and
3. The patience to allow everyone in the practice to overcome the learning curve.

The physician champion's responsibility is to keep everyone in the practice pointed in the same direction. He or she must communicate to the entire practice that although increasing efficiency is a major goal in an HIT purchase, at first the practice will have to slow down so that both physicians and staff can gain proficiency in using the software. Then the practice can integrate necessary information from the paper medical record into the electronic system.

In Dr. Crow's practice, the physicians handled the integration by reviewing the medical records of patients as they came in for their appointments and flagging any sections of the records that needed to be scanned into the EMR. In the early period of EMR use, that process slowed down the practice considerably and lengthened the physicians' working day. But in a matter of weeks, the need to integrate data into the EMR or to consult the paper chart declined rapidly.

The use of EMRs also has had a major impact on physician documentation. While the physicians still have the option of writing notes in the medical record, documentation has become template-driven. The advantage, Dr. Crow points out, is that templates allow the practice to build a database that includes all of its patient encounters. To build that database, all the physicians have agreed on a uniform approach to documentation, and as a result, the practice's common data-focused approach has significantly improved quality of care. "We have moved from passive to active management and are case managers for populations

within our practice," He said. It also has given the practice the capability to document pay-for-performance treatment criteria.

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For example, Dr. Crow's practice used its EMR-generated data to determine whether the practice's diabetic patients were having regular eye examinations for the detection of diabetic retinopathy. The physicians were confident at the beginning that their practice would score well relative to the national average. In fact, only 36 percent of their diabetic patients were having regular eye exams, significantly below the national average.

The physicians responded by purchasing the equipment necessary to do the exam, a step that immediately increased the practice's exam rate to 60 percent, and a long-term program was created to raise the exam rate to 90 percent. Similarly, the practice uses its EMR system to manage protocol-based drug management (e.g., every patient on antidepressants is required to see a physician every six months).

Early in the acquisition process, Dr. Crow and his partners decided to discard their legacy practice management system, because linking it to any of the HIT systems under consideration would require the use of two vendors to maintain the dual systems — a strong negative in Dr. Crow's view. He also had contemplated the use of tablet PCs for data entry in the exam rooms, but a visit to a pediatric practice where flat panel screens were showing educational cartoons to waiting patients changed his mind. Dr. Crow's practice uses the flat screens to provide health education materials and to inform patients about the practice.

In addition to improving quality of care, the HIT acquisition also resulted in improved practice financial performance. Dr. Crow estimates that it took only 18 to 24 months to pay off the full cost of the HIT system, less time than he expected.

The practice's net revenue increased by approximately $75,000 per physician due to improved efficiency and a greater ability to generate revenue. The following improvements highly contributed to the increased revenue:

- The practice operates with only 2.5 employees per physician — approximately half the national average of slightly more than five employees per physician.
- The improved clarity of documentation demonstrates the appropriateness of higher level evaluation and management codes.
- The superior efficiency of all the practice's work frees physicians to see more patients.

Dr. Crow began the search for a new integrated system by visiting vendor trade shows, talking with colleagues, and reviewing local market penetration data. That process narrowed his focus to nine or 10 systems that had a strong local presence in the Dallas area and that were frequently and favorably mentioned by colleagues. Visits to developer Web sites for additional information and an opportunity to try demonstration versions of the various software packages reduced the number of systems under consideration to five or six. Site visits to family medicine practices using those products further reduced the potential candidates to two.

Next came the vendor demonstrations. Dr. Crow views them as most beneficial when they are unhurried and focused on how the technology captures the services most commonly provided in the purchaser's office. Physicians should set aside at least two hours for each vendor demonstration and take steps to ensure that all of the presentations focus on their own practice's actual use of EMRs.

The typical vendor demonstration does not accurately depict the use of the technology as it will function in a practice office. There is no patient or no network, and only a canned database whose contents may or may not resemble the patient encounters that most frequently occur in a specific office. Because of this, Dr. Crow recommends that prior to a vendor presentation, physicians go through their medical records and identify three or four cases that typify some of the most common problems seen in their practice. At least two weeks before presentations begin, the physician's office can send copies of these cases (with the patient identities removed) to the vendors asking that they use the cases in constructing their demos. The use of a practice's own cases moves the demos a step closer to addressing that practice's needs. Dr. Crow also urges physicians to focus their attention on the use of the technology as opposed to the appearance or manner of the presenter.