Working Smarter, Not Harder, in a Family Practice

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When Spring Garden Family Practice (SGFP) in York, PA, converted from paper records to an electronic medical record (EMR) four years ago, the medical director wanted his staff to work smarter, not harder.

The staff's productivity was impaired by sorting through tons of paper, looking for charts, and filing paper reports. An EMR, it was hoped, would improve office efficiency and automate tedious, mundane tasks. In addition, it was a potential means of reducing stress, improving job satisfaction, facilitating communication, improving the quality of documentation, and ultimately enhancing the quality of patient care.

Today, the SGFP staff members unanimously agree that they have achieved these goals. They attribute much of the project's success to the selection of a quality EMR product and reputable company, the iterative process used to implement the system, strong leadership, the ongoing training and evaluation process, and their own commitment to optimizing their use of the EMR.

The Setting

SGFP employs one physician (the medical director), one physician's assistant (PA), two nurses, four support staff, and an office administrator. The medical director sees approximately 40 patients per day, and the PA sees 30. They both spend the majority of their time providing direct patient care. The patient mix for the practice includes all ages, with the wide range of problems expected in a family practice setting. Approximately half of the patients are enrolled in a managed care plan, 20 percent have Medicare, and the remaining 30 percent are self-pay or covered by private insurance.

All of the clinical and support staff use the EMR to complete their daily job functions. An avid computer user with excellent programming skills, the medical director was instrumental in the decision to implement an EMR. However, many of the office staff had few or no computer skills prior to the implementation. Today, these people are now proficient users and vocal advocates of the system.

Implementing One Step at a Time

SGFP used an iterative approach in the fall of 1995 when implementing the EMR system. The first person to learn was the medical director, who had some background with computers. He decided to work directly with the vendor to learn the software. Once he was fairly comfortable with the system, he introduced the clinical and support staff to its features a little at a time. The office administrator and other staff tested and refined proposed procedural changes. This approach allowed them to be actively involved in the implementation process and to gain confidence in their new skills.

Converting to the EMR took approximately six months. At the end of the conversion process, paper records were no longer pulled for patient visits. During the first three months after installation, much of the staff's time was spent populating the patients' EMR records. Only active records were converted to the EMR. Clinicians dictated visit notes, allergies, immunizations, and medication records, while the support staff implemented and improved the scanning process.

The staff's goal had always been to "go paperless." During the conversion process, however, the staff decided to wait until the EMR was sufficiently populated with current information before they stopped pulling patient records. After that point, they found that the paper record was of little value because all current information was available electronically. Information captured during patient visits and from outside facilities was entered electronically or scanned into the record. Old paper records from patient visits prior to EMR implementation were stored in the basement.

How It Works Today

Today, the practice has essentially reached its goal of using the EMR as a paperless medical record. Thirteen EMR workstations are located throughout the practice—in each examining room, the physician's and PA's private offices, the reception area, the nurses' station, and the back office.

Outside reports are scanned into the system using scanning software. The support staff directly enters lab results from outside laboratories. The only exceptions to the paperless rule are graphical reports such as EKG tracings, because SGFP's system does not adequately handle graphics.

Both the medical director and PA dictate their notes immediately following each patient's visit. The notes are transcribed and loaded into the EMR. During a patient visit, the provider documents significant findings on a half sheet of paper which is used as a reference when dictating visit notes. The worksheets are kept until the final dictation is loaded into the EMR, and then they are shredded. Other paper reports are kept until the staff is confident that they have been successfully scanned into the appropriate patient's record, at which time they are also shredded.

Although the practice encountered some initial problems with the quality of scanning and the time it took to scan, an upgraded optical character reader (OCR) application and additional software corrected these problems. The office staff and providers now spend approximately eight to 10 hours per week on this part of the process.

More Communication, Less Stress

Managing health information at SGFP has changed significantly—for the better. All users agree that the quality of the record itself and the clinical documentation is far superior to its old paper counterpart, and that the system is more complete, accurate, legible, and organized.

In addition to improving documentation, SGFP staff find that the system's built-in e-mail feature has greatly improved communication, both with patients and with each other. Patients' questions and requests for prescription refills are responded to more quickly. For example, instead of waiting outside the exam room door to "catch" the physician or PA between patients, the staff can simply e-mail a request, and clinicians check their e-mail frequently throughout the day. These e-mail requests and their electronic replies become a permanent part of the patient's record, eliminating the need to reenter a note. The convenience of the e-mail system has also resulted in much better documentation of phone messages.

Both the clinical and the support staff believe that they are more productive since the implementation of the EMR. They spend less time hunting for records, tracking down "sticky notes," and finding answers to patients' questions. Front office staff can easily and quickly answer questions asked by other offices or facilities about patients' medication, allergies, or recent problems when scheduling consult appointments or studies. Patients no longer worry about "bothering the doctor" when they call for information such as the date of their last tetanus shot or whether they are due for a follow-up visit.

In addition, the physician and PA have been better able to stay on schedule each day. They attribute this improvement to the EMR and the office's better overall organization. Nearly all records are accessible with a few keystrokes during the patient encounter. Older reports in the EMR are quickly located with a powerful search function. Aggregate data is easily retrievable and manipulated via the EMR. An example of a useful query is a response to a drug recall—a task the office administrator found nearly impossible in the old paper system, but which is quick and simple using the EMR. Managed care site reviews also take far less time, and the inherent organization and completeness of the new record result in significantly higher scores.

All of these factors have contributed to more job satisfaction and less job stress for many of the SGFP staff. The practice is proud of its records and confident that patient information is complete and accurate. Many frustrating and repetitive tasks associated with maintaining and retrieving paper records have been eliminated.

Perhaps most importantly, the physician and PA at SGFP believe that the EMR has allowed them to provide better patient care. Care has improved, they believe, not only because they are more efficient in seeing patients and documentation is improved, but also because of built-in EMR features such as health maintenance templates, prescription writer, problem lists, and drug interaction reminders.

A Commitment to Improvement

Clinicians and support staff say they have found no significant disadvantages to using the EMR in practice. The staff is committed to making the most of the system, and in fact everyone in the practice is encouraged to look for new and better ways to use it. As staff makes suggestions, the medical director and office administrator have been able to implement many of them. The staff works together as a team, and each person is committed to simplifying processes and improving the services provided to patients.

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