



Easing into tech

Even if full-fledged EMR systems are out of reach for your practice financially, there are still ways to automate.

Pamela Lewis Dolan

AMNEWS STAFF

Shahid N. Shah, CEO of Netspective, a consultancy based in Lanham, Md., compares technology adoption to buying your first set of wheels. You might be better off buying something that's small but functional and easy to drive, and something that is not a crippling loss if it breaks down.

A lot of practices make the mistake of adopting an 18-wheeler of an electronic medical record system when they aren't even ready to drive a sedan. Evidence of this is the 30% rate of practices that adopt an EMR only to deinstall it later, Shah said.

There are two approaches to getting in the technology driver's seat with a vehicle you can control.

One is automating one process at a time. The other is adopting a so-called lightweight EMR, an EMR with limited functionality. Either could save you from a costly mistake by giving you the experience you need before jumping into a costly, high-functioning EMR.

And while total automation cannot be achieved without a fully-functioning EMR, most experts agree that some level of automation is better than none. But where to start is different for everyone.

Experts say a doctor's first step should be looking critically at the practice and its daily processes, and then deciding what could be made more efficient with technology. The answer could be a stand-alone system aimed at a particular task, such as electronic dictation. Or if the goal is to create electronic records for more efficient record-keeping, it could be a lightweight EMR. Either way, experts warn that

even if a practice has no intentions of adopting a full EMR in the foreseeable future, such a system should be a consideration when moving forward with any starter technologies.

If not done thoughtfully, gradual implementation of technology can cause a host of problems, not the least of which is reduced efficiency when employees are forced to toggle from one system to another to enter data when multiple systems are not interoperable. Data migration to a new system also can cause headaches that could be avoided by doing homework ahead of time.

Lightweight adoption

With the average EMR running about \$50,000 per physician, not including monthly maintenance costs, a lightweight EMR system at about \$5,000 can sound attractive.

Functionality is the biggest difference between a lightweight EMR and a fully-functional one. Most lightweight EMRs, for example, do not have the capability to do decision support, coding or e-prescribing — items standard on fully functional systems. A lightweight EMR is, at its most basic, an electronic patient record that can help physicians file, sort and query patient groups — tasks that would be impossible on a paper-based system. Most are Web-based, and don't require expensive hardware such as an in-house server.

But just because you minimize your financial risk, that doesn't mean the decision should be taken lightly, experts warn.

"If you are getting an EMR, Web-based or not, you need to ask a lot of questions," said Claudia Tessier, vice president of the Boston-based research and consultancy Medical Records Institute.

The biggest concern is ownership of the data and what happens if the vendor goes belly-up, she said. And as national pressure builds for a national health information exchange, practices will want systems that can talk to each other and transfer data.

Tessier said this is an area in which the marketplace is starting to make some progress. Previously, vendors prided themselves on having proprietary systems. Now, they are starting to acknowledge that "if I am going to offer a successful EMR, I have to offer one that can communicate with other EMRs," he said.

Another version of lightweight EMRs are medical-grade document management systems, according to Shah. There also are general-purpose document management systems. But Shah likens those to paper files in a big box. "You can

30% of medical practices that adopt a full-fledged EMR system deinstall it later.

Weighing your options

CONTINUITY OF CARE RECORD

Pros: Can be created in any format; available for patients on mobile phone applications.

Cons: Data is limited.

DOCUMENT IMAGING

Pros: Reduces paper; images can be e-mailed.

Cons: Accuracy dependent on quality of scan; original may need to be kept unless document is scanned in its entirety.

ELECTRONIC LAB REPORTING

Pros: Eliminates phone calls and waiting; patient can be alerted of benign results in real time.

Cons: Data has to be entered twice to get into patient file.

ELECTRONIC TRANSCRIPTION

Pros: Automatic coding possible; easy integration with EMR.

Cons: Some won't integrate with EMR.

E-PRESCRIBING

Pros: Creates basic patient file; patient safety improved with cross-reference checks.

Cons: Data has to be entered twice to get into patient file; data limited.

LIGHTWEIGHT EMR

Pros: Inexpensive; easy to install.

Cons: No built-in e-prescribing; no decision support tools; no coding system.

MEDICAL-GRADE DOCUMENT MANAGEMENT SYSTEM

Pros: Can receive images; data can be sorted and tabbed.

Cons: No coding; no decision support; no e-prescribing.

PERSONAL HEALTH RECORDS

Pros: Creates patient file that can be shared easily; provides cross-check for medical and drug history.

Cons: Access often controlled by patient; accuracy, completeness of data not ensured.

SPEECH RECOGNITION TRANSCRIPTION

Pros: Saves in transcription costs; easy integration with EMR; automatic coding possible.

Cons: Requires editing to be finalized.

SOURCE: CLAUDIA TESSIER, MEDICAL RECORD INSTITUTE, SHAHID SHAH, NETSPECTIVE, AND OTHER SOURCES.

put stickers and tabs in the files, but it's still a big box."

Medical-grade systems understand that the files are related to a patient, he said. The systems can receive different types of files, including scans and images. Beyond understanding that documents belong to a specific patient, the systems comprehend that the records belong under a specific group or tab in that patient's file. Higher-end systems can even receive and file faxes. If the goal is to eliminate or reduce paper in the office, this is a great first step, Shah said.

One step at a time

T.J. Jean, manager for the Frisbie Center for Cancer Care in Rochester, N.H., knows firsthand the importance of setting goals and knowing your needs before adopting technology.

For this three-physician oncology practice, adopting a fully functional, interoperable EMR was the goal. But adopting a computerized physician order entry system was the logical first step, which it took in 2004.

"Oncology is very specific in terms of chemo treatments and what we need to monitor for our patients and lab values that are constantly changing," Jean said. At the time, the practice wasn't aware of an EMR that could meet those needs, he said.

Two years after adopting the entry system, the practice adopted an EMR, but waited another two years before integrating it with the entry system. Jean said taking the implementation one step at a time allowed everyone to get up to speed on each new system. "We wanted to do this very orderly," he said. "That was our comfort level moving forward, and I'm so glad we did it that way. It was very successful."

When starting from scratch, Shah recommends small practices look to the back office as a starting point. Most practices already have a practice management system that can create a basic technology infrastructure, as well as a basic patient roster.

A continuity of care record — a basic record that identifies the patient, lists prescribed medications and recent diagnoses — can be compiled from data found in the practice management system, and is a valuable tool that can be used with any level of technology, Tessier said. The information could save a physician from searching through large medical files for relevant information. Cell phone applications are available that allow patients to store their own CCRs and send them to their doctors.

CCRs also can be a good starting point for populating any new electronic database that could be adopted in the future.

Shah said once a basic electronic infrastructure is in place, the next step should be moving from a paper-only system to a paper-plus e-mail system. Internal e-mailing systems can help expedite internal communication between physicians and their support staff. External e-mailing systems can give patients the ability to e-mail questions or concerns to their physicians as well as allow physicians to participate and add to their patients' personal health records, some of which can be integrated with a practice manage-

Proceeding with caution

Now that Medicare is offering incentives for electronic prescribing, which will turn to penalties for non-use by 2012, the number of practices adopting e-prescribing systems is expected to grow substantially in the coming months.

Experts say prescribing is one of the easiest processes to automate, and that e-prescribing is one of the easiest ways to create an electronic patient file outside of an electronic medical record. But, experts say, buyers should proceed with caution for the next few months.

Robert Tennant, senior policy advisor for health information technology for the Medical Group Management Assn., said there is no shortage of e-prescribing systems on the market today. But picking the wrong one can mean giving up those Medicare bonuses.

Currently, to qualify for the incentives with an EMR-based e-prescribing system, the EMR must be certified by the Certification Commission for Healthcare Information Technology. CCHIT is scheduled to start certifying stand-alone e-prescribing systems in July. Stand-alone systems must carry specific functionalities in order to qualify for the incentive, and it's likely Medicare will require CCHIT certification once the criteria are released in July, Tennant said.

Certification also will ensure stand-alone systems are interoperable with any future technology the practice decides to adopt.

For physicians looking to adopt a stand-alone system before July, experts recommend they talk to vendors about becoming CCHIT-certified and ensuring any necessary upgrades if the systems don't meet requirements.

"If they say they have no plans to become CCHIT-certified, then you probably don't want to go with them," Tennant said. ♦

— Pamela Lewis Dolan

ment system.

Tessier said the industry that has seen the most growth and change, in this area is electronic transcription systems. The ability to use these systems alongside an EMR was near impossible before, but that is changing. Even without an EMR, electronic transcription files can be saved as basic electronic files for future downloading into an EMR. They also can be used as a tool for more accurate coding as some stand-alone transcription systems can assign codes based on the content of the transcription.

John Parente, MD, a family physician at Cigna Medical Group in Phoenix, said he can recognize some benefits of a piecemeal solution over an entirely paper-based system. But he said going that route presents some challenges. Nine years after his practice ripped out an EMR and went back to paper, his practice is in the process of installing a fully functional EMR around stand-alone systems such as electronic lab reporting and dictation that it adopted after the failure of its first EMR.

The biggest difficulty was working with multiple systems before they were interoperable, Dr. Parente said. Physicians had to toggle between systems, sometimes entering the same data twice.

Having multiple systems interconnected creates a health record as opposed to just a medical record, he said. The health record allows physicians to gain a broader view of their patients' health from one single entry.

But he acknowledges, many small practices will never be in a position to adopt a fully functional system all at once. So is taking what you can get the best solution?

"Does it benefit that practice? I would say yes, but it depends on what their goal is," he said. If the goal is to use the technology as a way of providing better patient care while improving efficiencies, it's probably worth it to invest in a fully functional EMR as step one, Dr. Parente said. ♦