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Jul. 9, 2004

Technology Consult

The quest for an easy EMR

By Robert Lowes

- Ease of use depends partly on the machine-human interface—what you see on the screen, how you navigate it, how you enter data.
- One easy-do system parcels out dictation to database fields.
- Insurers and employers are beginning to reward doctors who convert to EMRs.

It's no secret that the high cost of electronic medical records puts off many a physician. But at a giant convention on EMRs held in Fort Lauderdale in May, software vendors targeted another deterrent: Complicated, clumsy programs that have discouraged some doctors from automating their charts and left others sorry that they tried.

"Too often, a practice will buy an EMR, but only 15 or 20 percent of the doctors will chart with it," said Jim Eley, a vice president for EMR vendor InteGreat.

"Nobody talks about the EMR systems that are *disinstalled*," said Evan Steele, president of SRS Software, which also was displaying its wares at the conference dubbed "Toward an Electronic Patient Record," or TEPR. (Yes, that's electronic *patient* record, just one of 10 or so maddening synonyms of EMR.)

Ease of use depends partly on the machine-human interface—what you see on the screen, how you navigate it, how you enter data. TEPR attendees were quick to praise some interfaces and damn others as they watched vendors chart a mock patient visit. An EMR with a jam-packed, confusing screen that required lots of scrolling put a frown on the face of gynecologist Heather Argyle from Naples, FL. Argyle brightened when the next program displayed a simpler screen that lets the user call up different portions of the record by clicking on file folder tabs.

"It's good to start with something familiar," said Argyle, who came to the annual conference with other members of her group, Anchor Health Centers, to shop for an EMR.

Internist Gary Parsons, Anchor Health's medical director, noted that user-friendliness wasn't the only criterion on his group's wish list. "We also want internal messaging and the ability to generate reports, which will be important as payers demand proof that we're meeting quality standards," said Parsons. "The easiest-to-use system may not offer those features. So we may

have to make some compromises."

Some vendors, though, are betting that user-friendliness will become the make-or-break issue in EMR selection. Dictaphone, for example, introduced an EMR program that automatically extracts four data elements—diagnoses, procedures, medications, and allergies—from a doctor's transcribed dictation, then creates an instant problem list, an instant medication list, etc. All the doctor has to do is talk.

The technology behind this wizardry—natural language processing—addresses a longstanding conundrum about data entry. Although an EMR built around a database allows you to analyze and retrieve data in countless ways, it also requires structured data entry—typing or dictating text in a box, or checking off an item on a pick list. In essence, you're filling out a very, very long form. And many doctors consider that too time consuming.

Natural language processing gets around that problem with ad-hoc structuring, pulling out bits of information and plugging them into database fields. To be sure, the clinical database in Dictaphone's new EMR is tiny compared to those in most other programs. The software doesn't mine dictated notes for physical exam findings, for instance, although national sales director John Beebe said Dictaphone will expand the database over time.

While natural language processing is leading edge, other EMR companies rely on less flashy technology in the quest for the quick-and-dirty EMR. SRS Software was one of several vendors at TEPR that showed doctors how they could convert handwritten exam notes into an EMR through high-speed scanning. Such programs have different ways of creating electronic file folders for digitized documents, whether they're X-rays, lab reports, or letters. In the SRS system, you slap a barcode label on the hard copy before scanning it. "People call it supermarket technology," joked Evan Steele, "but we're giving doctors what they want."

Still other vendors, like InteGreat, are taking a different tack. Aware that a heavy-duty EMR can overwhelm a doctor, they're touting incremental adoption. "The doctor begins by viewing data in the program," said InteGreat's Jim Eley. "Then he graduates to entering a little data. Eventually he's entering a lot of data." Call it slow and manageable rather than quick and dirty.

EMR makers have struggled to convert physicians to their software any way possible, but they've made gradual progress. Recent studies suggest the percentage of doctors using an EMR has inched up past 15 percent. Throughout the 1990s, that percentage had commonly been pegged at about 5 percent.

And quickly converging forces will push that number higher. Six California insurers, for example, have rolled out a pay-for-performance program that rewards doctors for automating their charts. A coalition of large employers that includes Ford Motor Company, General Electric, and UPS is giving doctors in their health-plan networks an annual bonus of $50 per qualified patient if they invest in information technology.

Moreover, industry-wide standards for EMRs, such as a chart summary called the Continuity of Care Record, are emerging so that data can flow freely from system to system. And last April, President Bush set a goal of creating an EMR for every citizen within 10 years. There's a clear consensus that for the sake of good patient care, medicine should be just as computerized as banking or overnight delivery.

No wonder the advertisements for TEPR crowed that "2004 is the Year of the Electronic Health Record." Now it's a matter of giving doctors software they'll like.

Shopping for a new system? Check out these award winners

Every year, a panel of TEPR judges hands out honors to healthcare IT companies that produce the best products in various categories. Here are the 2004 winners in categories relevant to private-practice physicians. They're ranked in 1-2-3 order.

EMR systems for small and solo practices: NextGen Healthcare Information Systems and Physician Micro Systems (tied for first), SynaMed.

EMR systems for medium and large practices: Allscripts Healthcare Solutions, NextGen, Physician Micro Systems.

Practice management systems: NextGen, eClinicalWorks, SynaMed.

Document imaging and management systems: eClinicalWorks, Cerner, SynaMed.

Communication and connectivity systems: Medfusion, Kryptiq, Phytel.

E-prescribing management systems: DrFirst, Allscripts, SynaMed.

Mobile device for healthcare: Midmark Diagnostics Group, Hitachi, MedicWare.

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Robert Lowes. Technology Consult: The quest for an easy EMR. *Medical Economics* Jul. 9, 2004;81:26.

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