Electronic Medical Records:
10 Questions I Didn't Know to Ask

Buying an EMR system? No matter how great it seems to be, get good answers to these questions before you buy.

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When my partner and I started our practice, we decided it was the perfect opportunity to begin using electronic medical records (EMRs). We learned as much as possible about the various systems on the market and tried several demos. Eventually we chose Practice Partner from Physician Micro Systems Inc. (206-441-8490; www.pmsi.com). We purchased the system's scheduling, billing and patient-records components.

Three years later, I still think it's a good system. But through our experience with it, I've discovered that there is a lot more to buying software than simply finding a program that does what you want it to do. To buy the right system for your practice, you have to ask the right questions. Here are 10 questions I wish I had known to ask when we reviewed various systems.

1. How is the product licensed?

Purchasing software for a home computer is relatively straightforward: You buy one copy and agree to put it on only one computer. But when you buy software for a network in a physician practice, where a number of people have access to a single server, the licensing is a lot more complicated.

Some companies will grant a "site license" under which you pay for the use of the software at your site with no restriction on the number of users. More commonly, however, vendors license their software per user. If you're licensing a system per user, be sure you know exactly what the vendor means by this; it can be more complicated than it sounds. For example, Practice Partner has a "park" feature that allows you, when you're working with a patient record, to bring up a blank screen (for example, to prevent unauthorized people from accessing the patient record while you step out of the exam room) and then quickly log back into where you were in the system. Even though no one can use the software when it's parked, the system still requires an active license to keep the record in park. Therefore, if you want to have computers in every exam room and be able to put them in park when you aren't in the room, you would have to purchase a separate license for each computer.

2. What does each license actually provide?

Physician Micro Systems issues separate licenses for the various components of its system (such as scheduling, billing and patient records). The idea is that you buy licenses only for the people who will need to access each system component. At

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To find the right EMR system, you have to ask the right questions before you buy.

Most vendors license their software "per user," a term you should be sure to ask them to define.

If licenses are issued separately for various components, make sure you understand the relationships between the components before deciding who needs access to each one.

Find out how quickly the system releases licenses when a user exits improperly or the system crashes.

first glance, this seems like a great way to save money in that you appear to pay only for what each staff member will use (e.g., nonclinical staff wouldn't seem to need licenses for the patient-records program). However, this isn't necessarily true. For example, one of my favorite features of Practice Partner is its internal e-mail, which allows you to link a message to a patient's chart. But we found that anyone who answers the phone and wants to link an e-mail message to a chart has to have a license for the patient-records program. So we had to buy a patient-records license for the receptionist, even though she never looks at patient charts, just so she could send the clinical staff messages that are linked to charts. Physician Micro Systems has since improved this situation by enabling one message system to be used across the scheduling and patient-records programs (but still not the billing component).

3. How soon are licenses released when a user exits?

A final aspect of licensing to consider is the amount of time it takes for a license to become available – in other words, how soon another user can log on – after a user logs out or after the system crashes.

Early on, we had particular difficulty trying to get back into the system after it crashed or after a user exited improperly. Initially in these situations, the system wouldn't release the license until we ran a utility program, which couldn't be run while anyone was using the system. So, for example, if my laptop lost power and caused my user license to lock up, I had to ask one of my staff members to exit the patient-records program to free up a license so that I could get back to seeing patients. Once we came to a point at which everyone could exit, we could run the utility and free up the frozen license. Physician Micro Systems has since improved the utility program so that it can be run while people are using the system, but doing so still takes time when you're trying to see patients.

4. What technical support is available, and when?

No one looks forward to having to use it, but technical support is a necessary evil – and one that you have to pay for. Unlike much of the home-computer software that comes with free technical support, most vendors of business and medical systems charge an annual fee for the help they provide (in addition to what you pay the phone company for the call).

All vendors offer technical support, but you need to know what kind of support is available, when it is available and who will be providing it. For example, Physician Micro Systems is located in Washington state, and our practice is in South Carolina. Under our first support agreement with the company, we couldn't reach anyone for support until 8 a.m. Pacific time, which is 11 a.m. our time. That's an awfully long time to wait when you find a problem first thing in the morning. Physician Micro Systems did contract with another firm to provide support early in the morning, but one of my first experiences with the subcontractor was a disaster. The suggestion I received for solving our problem included deleting our entire medical billing database, which required several hours of my time to restore from backup files – and didn't solve the problem. Eventually, we contracted with Physician Micro Systems for support 24 hours a day, seven days a week.

5. How much does technical support cost?

Although we were able to obtain 24/7 support from Physician Micro Systems, it didn't come cheap; the annual cost is 15 percent of the value of the software. This kind of support is expensive, but the security of knowing that you can reach a reliable person at any hour is well worth the cost.

When you contract for technical support, you need to be very clear about what the

KEY QUESTIONS TO ASK ABOUT ANY EMR SYSTEM:

- How is the product licensed?
- What does each license actually provide?
- How soon are licenses released when a user exits?
- What technical support is available, and when?
- How much does technical support cost?
- How is text imported into the system?
- Which image formats will the system support?
- What printers will the system support?
- What if you need to replace the system?
- Is everything in writing?

support fee buys for you. Will you reach a human being who can walk you through your problems, or will you be directed to Internet-based help files? The only way to judge the quality of a vendor's support is to talk with people at practices that actually use the vendor's software; don't rely on sales reps and the statistics they quote. When you check with other practices, don't simply ask, "How is the technical support?" Instead, be specific:

- When is technical support available (and unavailable)?
- How long does it take to reach someone when you have a problem?
- How long does it take the technical support staff to offer a solution?
- Do the solutions offered actually solve your problems?

6. How is text imported into the system?

You also need to consider how you will get information into your EMRs. No matter how you enter your notes, you will still need a way to import other text (such as X-ray reports, notes from consultants and operative reports) into your records. Using a scanner and an optical character recognition program to convert the text on those pages to text in your EMRs saves an enormous amount of physical storage space, and it lets you access the information much more easily. But be sure you're comfortable with how this will be done. Ask whether additional hardware and software is required for this task. In addition, ask what text formats the software can read.

7. Which image formats will the system support?

EMRs have a tremendous potential to store medical images. But be sure you know which image formats the systems you're considering will support.

Images are saved as certain types of files, and these are indicated by the three-letter extension (such as BMP, PCX, GIF or JPG) on the names of the image files. For example, a JPG file of a chest X-ray might be named smithchest.jpg. The problem with storing images in EMRs is that they take up enormous amounts of memory compared with text. But some image formats are much more efficient than others (the same image might occupy 200k of memory in one format and 10k in another). Choosing a system that allows multiple image formats allows you to select the file type that best balances efficiency with visual quality for a given kind of image. Having a system that allows multiple file formats also gives you more choice about the sources from which you can accept images (for example, scanners and digital cameras support only certain file types).

Because of the limited number of image formats that Practice Partner supports, we had to purchase additional software to convert image files to a format our system can handle. For this task, we chose FaxVue Pro by Faxtastic – a product that has since been discontinued.

8. What printers will the system support?

Even a completely computerized practice still has to work with paper to communicate with a paper-based world (I have yet to receive a request for patient records on a disk). So be sure to consider the issue of printing. Unfortunately, not every printer will work with every EMR system.

Initially, we used four types of printers ranging from a very basic Bubble-Jet to virtually state-of-the-art laser printers – and we still couldn't print a complete patient chart. After experimenting with numerous printers over a 2½-year period, we finally found one that would enable us to print a complete patient chart. Make sure you know what printers are compatible with the system you want to purchase and what printer drivers you will need. And ask the vendor to demonstrate the system's printing capabilities during installation in your practice.

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9. What if you need to replace the system?

When you're at the brink of buying a new EMR system, the last thing you want to consider is having to replace it. But given how quickly both the technology and your needs can change, the time to start thinking about the transition to your second EMR system is the day you start looking for your

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Make sure you understand how technical support is defined and how much it costs.

Ask how text other than your notes can be imported and whether additional hardware and software is required.

Determine whether the EMR system allows multiple image formats and whether it allows you to choose the format best suited to the circumstances.

Make sure your printers are compatible with the EMR system.

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Be sure you'll be able to access your data and transfer it to a new system, should the need arise.

Get every promise in writing.

first one. It's a lesson that a friend of mine learned the hard way. When his software license agreement was about to expire, he decided to switch to a new system. But the day after the license expired, he found that he couldn't access any of his data.

Before you buy a system, be sure that you will be able to access your data if you decide to switch. In addition, ensure that the data can easily be transferred to another system. Otherwise you may find yourself having to print all your records and scan them into your new system.

10. Is everything in writing?

After two years of challenges as well as success, I still think EMR systems are the way to go for family physicians. What they cost you in hassle is more than offset by what they deliver in efficiency and quality of documentation. But dealing with software companies is no different than dealing with any other vendors: You need to know what questions to ask before you buy, and you need to get every promise in writing. Otherwise those "free upgrades" and "hassle-free interfaces" that you were promised can end up costing you tremendous amounts of time, money and anguish. The oldest advice applies to the newest technologies:

> **After two years of challenges as well as success, I still think EMR systems are the way to go.**

Caveat emptor. [For more information, see "Electronic Medical Records: The *FPM* Vendor Survey," *FPM,* January 2001, page 45.]

Don't get me wrong

This is not an article about Practice Partner; please don't consider it a review of the software. I just want to point out that, when you buy any EMR system, you're likely to run into surprises – and I want to help you avoid some that we ran into. Still, be prepared: Three years after you buy your system, you will probably have your own list of questions you wish you had asked. FPM