

Avoiding common pitfalls in selecting an EMR system.

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Computers

Avoiding Common Pitfalls in Selecting an EMR System

Sure the demo version is wonderful, but how can you tell what the program is really like?

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Fam Pract Manag. 1999 Nov-Dec;6(10):47-48.

Electronic medical records (EMR) systems are an emerging technology with great promise for family physicians. A well-designed system can bring streamlined record-keeping, easy access to information, more useful tracking of patient care, improved documentation and, perhaps, clinical decision support.

If you've been through a demonstration, you've seen how simple it looks to write a progress note, manage patient care and run performance improvement reports. The vendor probably also promised increased productivity, quality and patient satisfaction.

However, EMR systems have technological limitations. The following tips will help you to uncover them and choose a system well suited to your practice.

Beyond the demo

Demo disks and structured demonstrations tend to present highly idealized, simplified cases. To determine whether a system is right for you, you'll need to dig deeper:

Don't be afraid to challenge the system. Ask for an unstructured demonstration that gives you a hands-on view of a few complicated cases across different ages and genders. For example, an evaluation of a patient with fatigue may provide a more realistic look at how the system will really work for you. Consider using a few actual cases from your own records.

Learn about product development. The final product may reflect some clinical assumptions made by its developers. For example, a system designed with an internal medicine focus may not include pediatric growth charts or prenatal-care templates. The product you choose should support the scope of your family practice's services, and you should be able your needs.

Check with users. Even the salesperson's so-called satisfied customers may turn out to be surprisingly dissatisfied once you start asking them questions. Many vendors have physician-advisory groups whose members should be accessible to potential customers. Call these and other clients and ask them to describe difficulties they've experienced and how the vendor helped solve them. If possible, visit a user to see the EMR in action. Consider taking along staff members to get their perceptions. And you should go beyond contacting the list of names provided by the vendor. [For information about technology resources, see "[FP Net, Fam-Med offer online information technology advice.](https://www.aafp.org/fpm/1999/1100/p47.html)"]

Evaluate hardware needs. Will you use desktop PCs, laptops, hand-held devices or a combination? How much hardware will be required to make the system functional for clinicians and staff? How will it connect to your network? How will you get the hardware to the point of care? What operating system does the EMR software require – DOS, Windows, Windows NT, Unix or Macintosh? Can you obtain support for that operating system? How will the EMR system interface with your billing software? Getting good answers to these questions is crucial.

FP Net, Fam-Med offer online information technology advice

If you are in the market to purchase information technology, two helpful resources are available for family physicians. You can participate in FP Net, a clearinghouse for computerization resources staffed by the American Academy of Family Physicians' technical panel on computerization, and Fam-Med, an internet discussion group on information technology in family practice.

FP Net allows AAFP members to gain advice about electronic medical records and other computer technology. Simply post a question on the AAFP's electronic bulletin board (AAFP member number required), and it will be forwarded to a family physician or other professional for a response. Your question and the answer will be posted later so your colleagues can also benefit from the advice. If you have an answer to a question or solution to a problem that you see on the bulletin board, you can post a response as well. The site also features articles, software and hardware vendor listings and computerization conferences. To gain access to FP Net, go to www.aafp.org/fpnet/qa.html. Fam-Med is geared toward the use of information technology in family medicine. Members can post inquiries or browse through old postings. The list averages 10 to 20 messages a week, but members can subscribe to a digest form. To subscribe, go to www.fpen.org/fam-med.

Understand the finer points

Features such as structured data entry and business-operations software provide the means for you to track clinical performance for health maintenance or disease management. It is important that you try to get a good grasp of how these features can affect your practice before you select an EMR.

Structured data entry. Structured data entry allows the EMR to manage and retrieve information by forcing the user to document key components of an encounter – from the history and physical through the diagnosis and treatment plan – by choosing descriptors from preset lists. Clinicians who feel strongly about maintaining their own documentation style may feel constricted by this process. However, the more they deviate from the structure, the more difficult it is to capture and reliably analyze clinical performance. Choosing an EMR that allows you to customize the lists of clinical descriptors will help ease the transition to structured data entry.

Business-operations software. Most EMR vendors offer business-operations software that integrates with the EMR. This addition allows you to track patient scheduling, clinical encounters and billing in one system. If you choose to maintain your own billing and scheduling system, you may be able to purchase an interface to automate communications between your business system and the EMR. Interfaces can be expensive, but without one, your staff will have to create and maintain duplicate data.

Look for hidden costs

You will of course have to pay for hardware, software and licensing fees to operate the EMR system, but you may incur other, less obvious costs as well.

Re-wiring for access. It's likely you will have to re-wire your building to make records accessible at all the points of patient contact, such as your front office, work stations and exam rooms. If you choose to use desktop PCs instead of more portable devices, you may need to redesign or refit your exam rooms and work areas.

Creating an interface. If you maintain your current billing and scheduling system, you will have to choose between paying for an interface and paying staff for duplicate data entry. Interfaces for common billing systems are built into some EMRs. Or a custom interface may have to be designed to link the EMR to your existing system. In either case, each interface adds costs.

Training staff. Depending on the EMR you purchase, it may take as much as 20 hours of staff and clinician time to learn to use it. You may be faced with a choice of closing your practice for a few days or paying staff overtime for training. Although some practices quickly acclimate to the electronic record, the cost to the average practice can be as much as a 10 percent to 20 percent loss in productivity during the first year.

Going paperless. Converting active patient charts to the EMR will add to your expense, if you choose to do so. A relatively inexpensive optical image scanner can help. However, clerical time will be required to scan and store data, and you'll need more disk storage space. If you aren't able to go paperless, you must consider the cost of maintaining two records.

Reading the fine print. Thoroughly evaluate your contract with the EMR vendor to look for additional costs. It is reasonable to expect that fixes to your version of the EMR come at no cost. However, it is likely that newer versions of the product will require you to sign and pay for a new license agreement. There may be an annual maintenance contract or fees for using the vendor's help-line services. Updates to drug and ICD-9 databases may also be a recurring cost.

Weigh your options

EMR systems, even at their current state of development, can support practice improvement. However, they remain a work in progress. If you are considering an EMR purchase, proceed with caution. Anticipating and planning for any stumbling blocks you may incur could help you to be successful in the long term. After all, you will have to live with this system, so don't rely on the vendor to give you *all* the product information in the demo.

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