I have a secret for you. In the world of electronic health records (EHRs), especially EHRs in small family medicine practices, bargains may await you. I’ve driven both the luxury and economy models of EHRs, and so far, relative to what you get for your money, the economy models are winning. The economical EHR offers 70 to 80 percent of the functionality of the luxury EHR at a fraction of the price. Some of the software available was even developed by family physician entrepreneurs, either out of desperation or as a labor of love within their own practices. Thanks to their sweat and compulsion, you can find complete, reliable, reasonably priced software for your practice today.

**What should your EHR do for you?**

The trick to finding the right software at the right price is to know what your practice needs – and what it doesn’t. Many of the bells and whistles that come with the more expensive, luxury models may be superfluous to the typical family medicine practice. An inexpensive EHR, which I define as less than $3,000 for the software alone, should have the capability, either independently or with inexpensive paper management software, to achieve an office with no paper charts. This is essential, as the...
return on investment in an electronic record depends heavily on the elimination of paper charts. However, I’m convinced that there are four costly EHR features small family medicine groups can live without:

• **Expandability.** The ability to transfer the record from one physician to hundreds, encompassing practices separated by location.
• **Granularity.** The ability to limit access of various groups of physicians, secretaries and nursing staff to specific areas of the chart.
• **Customization.** The ability to set up the record (usually for an added cost) to satisfy specific needs.
• **Cross-specialty functionality.** The ability to use the record with multiple specialties across a medical enterprise.

These four features can add a substantial sum to the cost of your EHR. Although large medical groups may find them beneficial, it is likely that you don’t need them. If you aren’t convinced your practice will use them, don’t waste your money.

**Basic EHR functions**

Among the vast array of EHR functions currently available, there are some basic features you should look for. Some of the more expensive models do offer enhanced versions of these features, as I explain when applicable, but the key to finding an affordable EHR is to evaluate each feature’s importance to your practice’s daily operations. As you read through the features, keep in mind your practice’s needs so you can distinguish what is necessary from what is not.

**Basic interface appearance and functionality.** Many of the less expensive products have simpler, well-laid-out screens with minimal switching between screens and minimal pop-up screens. The primary interface is often a tab-top menu, which is fairly intuitive, much like paper charts. Some of the more expensive products have features such as pop-up calendars and hyperlinks, which, although nice, can add undue complexity. Make sure you take a good look at the basic interface and do not be influenced by features that will add more complexity and time.

**Note creation.** This aspect of the EHR is usually at the forefront of doctors’ minds. Price does seem to have some bearing on how this feature is implemented, so this may be the place to splurge. Usually, but not always, more expensive products have sophisticated macros consisting of text expanders or documentation dialog boxes. Text expanders are small groups of words that, when selected, expand into full text for documentation. I tend to prefer them to dialog boxes as they allow the physician to work in one continuous window.

On more expensive EHRs, you can add templates and macros to streamline documentation for common visits in your practice. However, inexpensive EHRs created by physician programmers are more likely to offer you the ability to reuse previous dictations and other information, which is a helpful feature.

**Scanning and paper management.** This is a key feature if your office intends to eliminate paper charts and electronically store all patient information (including consultant’s notes, lab reports, X-rays, etc.). Less expensive EHRs may not include the ability to scan documents at all, but you can add this function by purchasing a third-party product. Look for more expensive EHR solutions to be able to scan multiple-page documents directly into the patient’s chart.

**Integration with practice management**

For features like basic interface appearance and integration with practice management software, an inexpensive model can be easier to use and just as effective as a pricier model.

I’m convinced that there are four costly EHR features small family medicine groups can live without.
Do not be influenced by features that will add more complexity and time.

and billing software. These features are available on products of all prices. The less expensive products are generally fine for smaller practices since the more expensive products are meant to be expandable over a larger and more varied physician population.

Database structure. Inexpensive EHRs generally function with simpler, less expensive databases. This usually puts an upper limit on the number of users of such records, so make sure you understand the limitations and abilities of the underlying database before you buy.

Prescribing module. Inexpensive and expensive electronic records offer the same core functions: printing legible prescriptions, renewing prescriptions, compiling favorite prescription lists, printing one or multiple prescriptions at a time, and keeping track of expired prescriptions and medications that did not work. Luxury features found in higher-priced products might include allergy checking, drug interactions, prescription plan cross-checking and clinical decision-support with medication names and dosages in a list.

Problem list. The functionality and style of the problem list varies between products and seems to have no relationship to price. I have not found a problem list in an EHR that I considered particularly complete or user-friendly. You should look for problem lists that answer the following questions to your satisfaction:

- Are you able to link a problem with the ICD-9 code?
- Does the electronic record force you to use an ICD-9 code and prevent free text entry?
- Does the problem list allow you to filter

INEXPENSIVE EHR OPTIONS

Before you invest in an electronic health record (EHR), experiment with several products, such as those listed here. Some programs can be downloaded from the Internet for a trial run, or for a few hundred dollars, you can purchase one and test it out. Many EHRs are modular in nature, which means you can buy the initial product for a reasonable price and add modules as desired.

<table>
<thead>
<tr>
<th>Price</th>
<th>Highlights</th>
<th>Imaging</th>
<th>Trial</th>
<th>Developer</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOAPware <a href="http://www.docs.com">http://www.docs.com</a></td>
<td>$300-$3,999, basic module $300 Ability to link to practice management software; modular software and large number of primary care templates available; large user base; network capable.</td>
<td>Optical character recognition (OCR) and imaging modules available.</td>
<td>No; Web demo or demo CD available.</td>
<td>Randall Oates, MD (family physician)</td>
</tr>
<tr>
<td>SpringCharts <a href="http://www.springcharts.com">http://www.springcharts.com</a></td>
<td>$700 (single computer), $2,600 (three computer network) Practice management and EHR; Java enabled; will work on PC, Macintosh and Linux platforms; network capable.</td>
<td>Single page jpeg.</td>
<td>Yes; download from the Web.</td>
<td>A team of physicians and technology professionals</td>
</tr>
<tr>
<td>Cottage_Med <a href="http://mtdata.com/~drred/">http://mtdata.com/~drred/</a></td>
<td>Free but requires FileMaker Pro Customizable; will work on PC, Linux or Macintosh platforms.</td>
<td>Multi page.</td>
<td>Download FileMaker Pro demo from the Web.</td>
<td>Stefan Topolski, MD</td>
</tr>
<tr>
<td>ComChart <a href="http://www.comchart.com">http://www.comchart.com</a></td>
<td>$500 for single user version (one computer) Will work on PC and Macintosh platforms; runs with included version of FileMaker Pro; network capable.</td>
<td>OCR.</td>
<td>Yes; download from the Web.</td>
<td>Hayward Zwerling, MD</td>
</tr>
</tbody>
</table>
active and inactive problems as well as different types of problems?

• Does the problem list link in some way to the assessment and plan so you can easily complete the encounter note and bill for your services?

**Reminders and communication.** Many of the less expensive EHR programs have simple methods for facilitating communication among small numbers of physicians and staff and for generating care reminders. Expensive EHR products usually allow a large number of physicians and ancillary staff to communicate, as well as attach pertinent areas of the electronic chart to the communication. Some of the more expensive products have fairly mature reminder systems, which can track studies, such as mammograms and anticoagulation treatments, from the initial order to the final result.

**Health maintenance.** Both less expensive and more expensive EHRs can have health maintenance sections. Look for the product’s ability to incorporate guidelines, and, in more expensive products, the flexibility to set the guidelines yourself.

**Motivation, perspiration and implementation**

Learning which features you need and which are expendable is a crucial first step to purchasing an EHR. Remember, success with your EHR system will depend not on how much money you invest but on how much time you invest in research and implementation. When all the factors are weighed, no matter which EHR system you choose or how much you spend, it is vitally important that your office work as a team to make implementation successful. A less expensive, modestly-featured product implemented carefully is better than a more expensive, fully featured product implemented in a shoddy fashion.

With this in mind, you can achieve the twin goals of eliminating paper records and completing your charting in real-time during the patient visit, regardless of the price of your EHR. The payoff will be an EHR that meets your practice’s expectations, saves you time and money, and helps you provide better patient care.

Send comments to fpmedit@aafp.org.