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Electronic Medical Records: A Buyer's Guide for Small Physician Practices

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Electronic Medical Records: A Buyer's Guide for Small Physician Practices

Prepared for:

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About the Authors

Forrester Research, an independent technology research firm, identifies and analyzes trends in technology and their impact on business. More information on the company is available at www.forrester.com.

About the Foundation

The **California HealthCare Foundation** (CHCF), based in Oakland, is an independent philanthropy committed to improving California's health care delivery and financing systems. Formed in 1996, our goal is to ensure that all Californians have access to affordable, quality health care. Visit www.chcf.org for more information.

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Executive Summary

INCREASING NUMBERS OF OFFICE-BASED DOCTORS in smaller practices are deciding to buy electronic medical records (EMRs). Why now? Product costs are coming down, and practical experience with the systems has made the potential return on investment (ROI) easier to calculate. Equally important, new studies in journals such as the *Journal of the American Medical Association* (JAMA) and the *New England Journal of Medicine* (NEJM) are underlining the need for physicians to do a better job of reducing medical error rates in outpatient settings, as well as within hospitals. Another factor looming on the horizon is that health plans and large, self-insured employers are experimenting with bonus programs for doctors who document quality, which EMRs can do quite well. Such programs effectively provide small practices with an extra incentive to purchase EMR systems by promising to offset part of the cost.

To help doctors weigh the benefits of this technology, the California HealthCare Foundation worked with Forrester Research (Forrester) to produce a buyer's guide to EMRs for the office-based doctor, with a particular emphasis on practices of nine or fewer physicians. Accordingly, this study provides a detailed analysis of the products available from eight vendors of EMRs for small practices. These systems were evaluated by assessing the strength of each vendor's current offering, the company's strategy for the future, and its presence in the marketplace.

All eight options emerge as good, but not equal, choices. Logician, from GE Medical Systems Information Technologies, is the leader across all three dimensions—strength of current offering, future strategy, and presence in the marketplace—followed closely by Allscripts Healthcare Solutions' TouchWorks and iMedica's PhysicianSuite. Then come Medical Manager Health Systems' new Intergy and Amicore's Clinical Management software. NextGen Healthcare Information Systems' NextGen EMR, Misys Healthcare Systems' Misys EMR, and Physician Micro Systems' Practice Partner Patient Records likewise rate as strong performers.

This report will also discuss what the Institute of Medicine (IOM) has identified as the “hallmarks” of EMR excellence. Office-based physicians who want to be prepared for changes in medical practice should press for an EMR that goes beyond providing an integrated view of patient data, as important as that is. The next set of pressures will revolve around knowledge resources needed for clinical decision support; physician order entry; integrated communication with labs, imaging centers, colleagues, and patients; and population management. These considerations are included in the analysis and discussion that follows.

I. Introduction

An EMR Buyer's Guide for the Office-based Physician: Why Now?

Electronic medical records are not new. The Institute of Medicine (IOM) issued its first report on EMRs in 1991, then revised and expanded its analysis in 1997. On both occasions, the message was clear—that EMRs, to quote the subtitle of the 1997 report, are “an essential technology for healthcare.”

What has happened since 1997? Year by year, growing numbers of large medical groups and integrated delivery networks have purchased EMRs. But office-based physicians, especially in practices of nine physicians or fewer, have hesitated. Their misgivings center on whether they can handle the considerable costs involved and gain any significant improvement on the quality side of the ledger. They've had questions about timing, too. No compelling force—no government mandate, no huge scandal—has arisen to move things along.

In 2003, increasing numbers of office-based doctors are deciding to buy. A 2003 survey by the American Academy of Family Physicians pegged EMR use among its members at 24 percent. Why the upswing in interest, and why now?

EMR costs are coming down. A famous dictum in information technology holds that computer processing power doubles in performance and halves in cost about every two years. Moreover, dozens of new vendors have entered the EMR marketplace in the past five years, pushing down prices and converging around a common set of methods for displaying patient information and supporting physician entry of data. “These products are becoming more of a commodity,” one long-time EMR sales executive explained.

ROI calculations are positive. Practices will save time as chart pulls tail off and phone tag with pharmacies and other outside parties declines. Avoiding rejected claims appears to save even more money. A recent study of the potential impact of outpatient EMRs with advanced physician order entry features estimated that such systems reduce erroneous claims by 40 percent, primarily by flagging missing diagnostic codes and inferring appropriate corrections from analysis of the patient's record.¹

New studies are raising the stakes on avoiding outpatient medical errors. This spring, *JAMA* and *NEJM* lobbed not-so-coincidental volleys at the same target—adverse drug events in ambulatory settings.² Their findings? Such events are common, have major negative consequences, and can often be curbed in terms of impact or prevented outright. This is the start, long promised by reformers, of a drive to push error-reduction efforts beyond the walls of the hospital and into the suites of office-based doctors. The predictable next step: The Leapfrog Group and others will begin to pressure doctors to buy EMR-related technology that helps reduce errors.

Payers are pressing providers to document quality—and dangling incentives. Beginning this year in Kentucky, Massachusetts, and Ohio, General Electric and Verizon are testing bonus programs for doctors who prove they do a good job controlling their diabetic patients' cholesterol and other risk factors. Six California health plans are sponsoring a similar initiative, and the National Academy of Sciences is pushing the idea for Medicare and Medicaid. The goal is not only to have doctors document adherence to clinical guidelines, but also to promote extra pay for those who do so. Such efforts don't have the concentrated impact of a government mandate, but they do exert real pressure on providers.

II. Methodology

Evaluating EMRs from the Doctor's Point of View

For this study, Forrester conducted primary research to develop a list of vendors that showed a serious commitment to developing products for practices of nine or fewer doctors and had earned recognition for the quality of their offerings. The field was narrowed to eight final vendors on the basis of their willingness to submit to a lengthy product survey, provide a live demonstration, and make company leaders available for a detailed interview about their plans to improve EMRs for office-based doctors.

Several companies that were invited to participate declined to do so because of the effort involved. EMR purchasers who are interested in vendors not covered here can download the interactive spreadsheet, enter additional products, and compare them to the eight systems evaluated in this report.

The analysis presented below is focused on three key characteristics:

- The quality of the current offering, including features, ease of use, support and service, and cost;
- The vendor's strategy, meaning the future plans the company has for its EMR; and
- The vendor's market presence, in terms of financial strength, customer base, and partnerships with other firms.

The following discussion details how the Forrester Wave methodology was applied in evaluating office-based EMRs.

Current Offering

To reflect the practical interests of the office-based physician, the researchers broke down their analysis into four parts.

Functionality. Forrester analyzed 15 key features of the software, including how quickly and effectively the doctor can view critical information in the record, document the patient visit, write prescriptions and order tests, communicate with other professionals, and code the encounter (see Figure 1).

Usability. Six dimensions related to ease of product use were examined in detail, from navigation to integration with practice management systems (see Figure 2).

Figure 1. EMR Functions and Features

Functionality	How quickly and effectively can the doctor:
View	View the patient’s problem list, meds list, test results, and other information critical to the clinical purposes of the visit?
Document	Document the visit and the clinical decision-making process?
Identify	Identify clinical issues by means of alerts and reminders?
Decide	Decide clinical issues with the support of knowledge references and databases?
Prescribe	Authorize and manage prescription refills within the system? Access formulary information in electronic form for new scripts? Consult drug utilization review (DUR) databases integrated into the system? ePrescribe—route new scripts to pharmacies electronically without reliance on faxing?
Order	Order labs, images, and other non-medications?
Communicate	Communicate electronically with colleagues? Exchange secure email with patients? Structure patient communications in a clinically relevant way that facilitates physician decision making?
Code	Match ICD and CPT codes to the details of the patient encounter, integrate an E&M coding tool, and also integrate the SNOMED controlled clinical vocabulary?
Comply	Comply with rules and regulations on privacy, consent, etcetera?
Aggregate	Aggregate individual data into longitudinal records for easy viewing and graphing?
Manage	Manage the individual patient’s chronic diseases and conditions?
Standardize	Standardize disease management goals for subgroups of chronic disease sufferers within the practice?
Query	Query the system’s database to produce both individual and group reports on clinical issues—care, quality, outcomes, and associated costs?
Conduct	Conduct research, registry, and clinical trial-related efforts?
Incorporate	Incorporate information originating with the patient and, as a separate matter, with medical or patient devices?

Support. The authors inquired about four aspects of customer support: assistance with initial installation; help desk support; provision of software fixes and upgrades; and deals on related hardware, software, and Internet connectivity.

Costs. Vendors offer multiple product configurations at varying prices, with frequent tweaks and adjustments. This means that attempts at apples-to-apples price comparisons become outdated quickly. To address the problem, Forrester focused on two cost features that persist over time: financing flexibility, defined as the company’s ability to offer both monthly

leases (subscription terms or ASP plans) and long-term license purchase agreements; and the vendor’s approach to modular pricing, which gives users the flexibility to implement EMRs as needed and as budgets allow.

Strategy

Another consideration for the smart buyer is the strength of the company’s strategy. Purchases of expensive technology create a lock-in effect—the company you start with is often the company you stay with. So, while current features are important, so is a firm’s ability to plan for the

Figure 2. EMR Usability, Support, and Costs

Usability	
How easily can doctor and staff:	
Input	Input information using a variety of methods?
Customize	Customize the sequence of activities, tasks, and screens to suit personal workflow preferences and accommodate new users and specialties?
Understand	Understand the meaning of menu categories, graphics, icons, and symbols?
Integrate	Integrate with practice management systems and claims processing services?
Access	Access the EMR system remotely plus use a mobile device to dictate, view histories, document visits, and capture charges?
Process	Process, exchange, and store graphics and images?
Support	
How easily can doctor and staff:	
Install	Get help with an implementation plan, installation, and training?
Obtain	Obtain prompt and effective help desk assistance?
Arrange	Arrange software upgrades at reasonable cost?
Negotiate	Negotiate deals on purchases of related hardware, software, and connectivity?
Cost	
Does the product offer good quality at an affordable price, as evidenced by the:	
Financing flexibility	Offer of both monthly leases and long-term license purchase agreements?
Modular pricing	Option to buy systems in a flexible, modular way, as needed and as budgets allow?
External support costs	Annual external support cost?

future. The researchers inquired into two elements of strategy:

- **Executive vision.** How compelling is the executive team’s view of the future of electronic medical records?
- **Product road map.** Do executives have a sound plan for improving the EMR in the areas of functionality, usability, support, and cost?

Market Presence

It’s crucial to know whether a company is likely to survive economically and remain a future source of software maintenance and upgrades. A good way to gauge staying power is to probe a company’s business position. The authors asked questions in five areas:

- **Installed base.** How large is the company’s installed base, in terms of concurrent user (physician and staff) licenses sold as of December 31, 2002?
- **Revenues.** What were the company’s 2002 revenues?
- **Number of employees.** As an indication of capacity to perform the range of activities of any successful technology company, what was the total number of employees at the end of 2002?
- **Size of sales force.** As an indication of ability to sell products, what was the number of sales employees at the end of 2002?
- **Business partners.** What important partnerships, if any, has the company formed with other firms and organizations?

III. Buying an EMR

Choosing an EMR for Your Practice: A 12-Step Program

Choosing EMR systems can be daunting. How to negotiate the maze? The authors suggest the following approach:

- 1. List high-priority needs.** “Save time and improve quality” is a good place to start. Users should also force themselves to be specific about the recurring instances of wasted time, lost money, diminished quality, and personal frustration that plague their practice most. Other issues to consider include: time-consuming chart pulls, too much telephone tag with the pharmacy, and under- or over-coding exacerbated by imprecise documentation.
- 2. List the EMR product features most likely to meet those needs.** The report’s roster of 15 key EMR functions can be used as a checklist for assessing the ways that technology can help address doctors’ most pressing needs.
- 3. Factor in future requirements.** A good EMR must be able to accommodate future contingencies, such as: adding or changing clinicians, office sites, or specialties; opportunities to collaborate with local hospitals in electronic record sharing; and assisting health plans in meeting Health Plan Employer Data and Information Set (HEDIS) guidelines.
- 4. Write up a simple request for proposal (RFP).** This report’s inventory of functionality, usability, support, and costs offers an organizational framework for spelling out priorities and asking each EMR vendor to describe, in writing, exactly how their system will address them. The RFP should include component-by-component pricing requests for two or three product combinations.
- 5. Make the commitment to having doctors enter data.** An EMR is like Quicken or Microsoft Money software. It depends on users entering information, day in and day out, building up a data repository that generates a longitudinal picture. In most outpatient settings, where staff are spread thin, this happens only if doctors do their share of data entry. It does not make sense to buy an EMR until a critical mass of doctors in a practice is ready to commit to the process.

6. Choose either keyboard and mouse or stylus and touchscreen. Since physician data entry is crucial, the doctors in a practice must address the basic question of how they will enter information into the system. Dictation helps, and someday voice and handwriting recognition will ease the burden, but for now the heavy lifting is done via point-and-click, using either conventional typing with or without a mouse or, in the case of PDAs and lightweight tablets, stylus and touch-sensitive screens. A good EMR system—all the products reviewed here qualify—will accommodate both methods, giving each user a choice.

7. Test-drive each system using common scenarios prepared beforehand. Product demonstrations by salespeople produce exaggerated impressions of a system's user-friendliness. What to do? Stipulate a scenario, on the spot, as the basis for the demonstration. An effective scenario involves a physician from the practice (ideally not someone selected for their typing ability or comfort with computers) examining a patient with a specific medical history and specific complaints of the physician's choosing. The question is, can the salesperson and system adjust on the fly to demonstrate the effectiveness of EMRs for documenting a visit?

8. Obtain three physician references from each vendor. It is important to insist that all be located within the immediate geographic area and that none have financial ties to the vendor other than being a customer. Potential buyers should then visit these sites in person, with their staff, to observe these users put the EMR through its paces under real field conditions. Since customer service and support is

crucial, buyers should also take care to ask questions about the timing and effectiveness of initial installation, their access to technical support, software fixes and upgrades, and availability of deals on related hardware, software, and Internet connectivity.

9. Score competing candidates. In the case of the eight EMRs analyzed here, this scoring has already been done. For other products, users will need to combine the responses to their RFP with information from the test drive and references. The product can then be graded using the "Add vendor" feature described above. Use the "Custom weightings" feature to vary the priority attached to each attribute.

10. Settle on a purchase plan. The most basic choice users face is between outright purchase, in the form of a software licensing fee per user or per physician, and an application service provider (ASP) plan. ASPs involve monthly payments that may continue indefinitely, in return for the seller providing the EMR system over the Internet and supplying all software fixes and upgrades as they become available.

11. Nail down commitments on initial implementation and technical support. Again, since customer service is crucial, buyers should insist on a written implementation plan that encompasses: data conversion from paper records; creation of interfaces with billing systems, labs, and other computer systems; configuration of customizable components such as alert values and clinical guidelines; and onsite training. Users should be equally firm about obtaining a basic service-level agreement—an agreed-upon schedule for finishing work and troubleshooting problems within stipulated time frames.

12. Take advantage of a buyer's market.

Healthcare Informatics magazine counts more than 200 companies claiming to make EMRs for small or midsize physician practices, which amounts to too many sellers chasing a set number of practices. Since EMRs, like cars, come with different sets of features, buyers should use this leverage to negotiate a good deal. Electronic interfaces connect EMRs to testing labs but usually at added expense. Alerts don't fire off until data parameters get entered into the system. Disease-specific templates and guidelines, scheduling modules, and prescription management tools typically cost more. Given the competition for customers, it should be possible to get some of these bells and whistles at no extra charge.

How to Get Full Value from This Buyer's Guide

As a tool for comparing vendors of EMRs for the small practice, the CHCF Web site offers an interactive spreadsheet that can generate scorecards for each company's product.

This EMR Evaluation Tool, which was developed by Forrester Research, can be downloaded at <http://www.chcf.org/topics/view.cfm?itemID=21520>. It is designed to help users customize their assessment of EMR systems by:

- Weighting Various Attributes.** The "Scores and weightings" worksheet allows users to insert their own choices in the column titled "Custom weightings" (the total must add up to 100 percent). An attribute can be removed from consideration by

entering a weight of zero. The program will recalculate scores automatically. To restore the original numbers, users can click "Use Forrester's weightings" (see Figure 4.1).

- Adding additional vendors.** The EMR software marketplace is fragmented, with many competing players. The authors recommend the companies that rate highly in this report. However the online rating lets users consider additional possibilities by clicking "Add vendor" on the "Scores and weightings" worksheet to compare other EMR manufacturers to those selected for the study (see Figure 4.2).

Figure 3. EMR Evaluation Tool

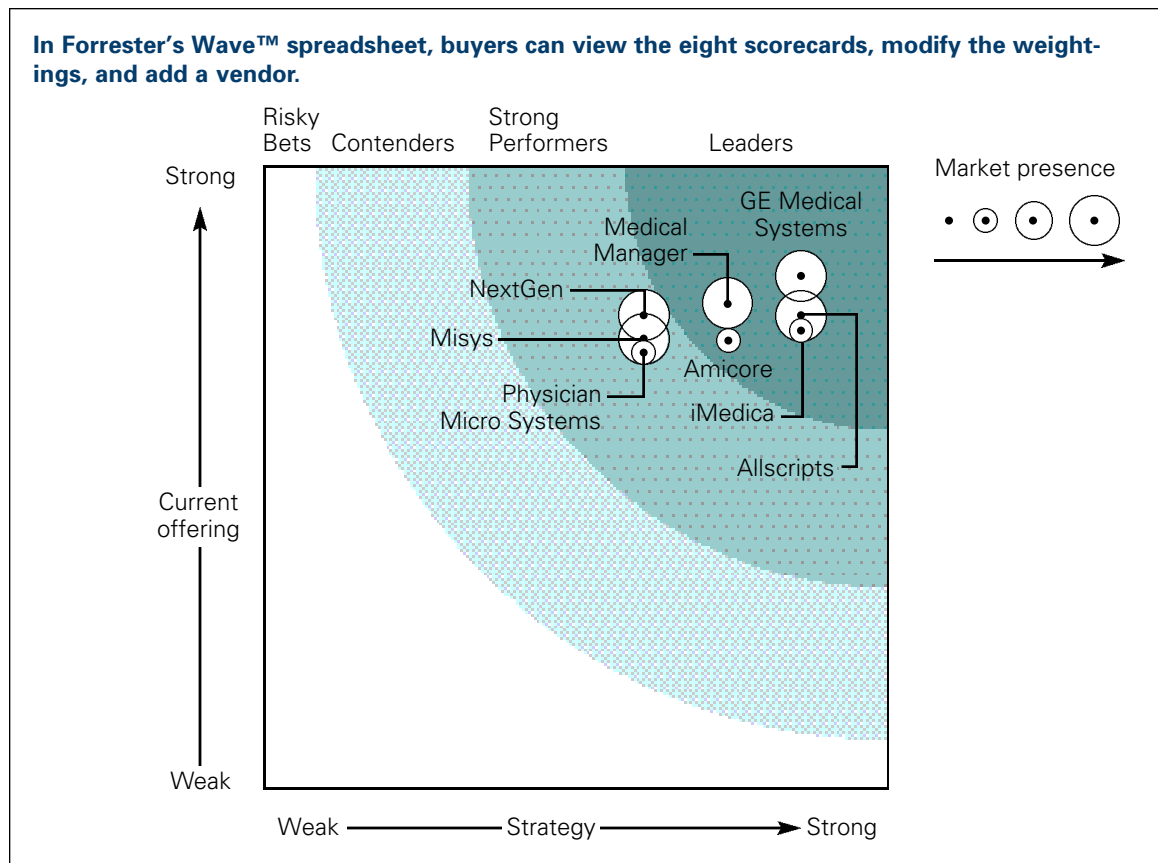


Figure 4. Customizing the EMR Evaluation Tool

The online version of this figure is interactive: <http://www.chcf.org/topics/view.cfm?itemID=21520>.

Figure 4.1. Modify the weightings in this spreadsheet to create a Custom Forrester Wave.

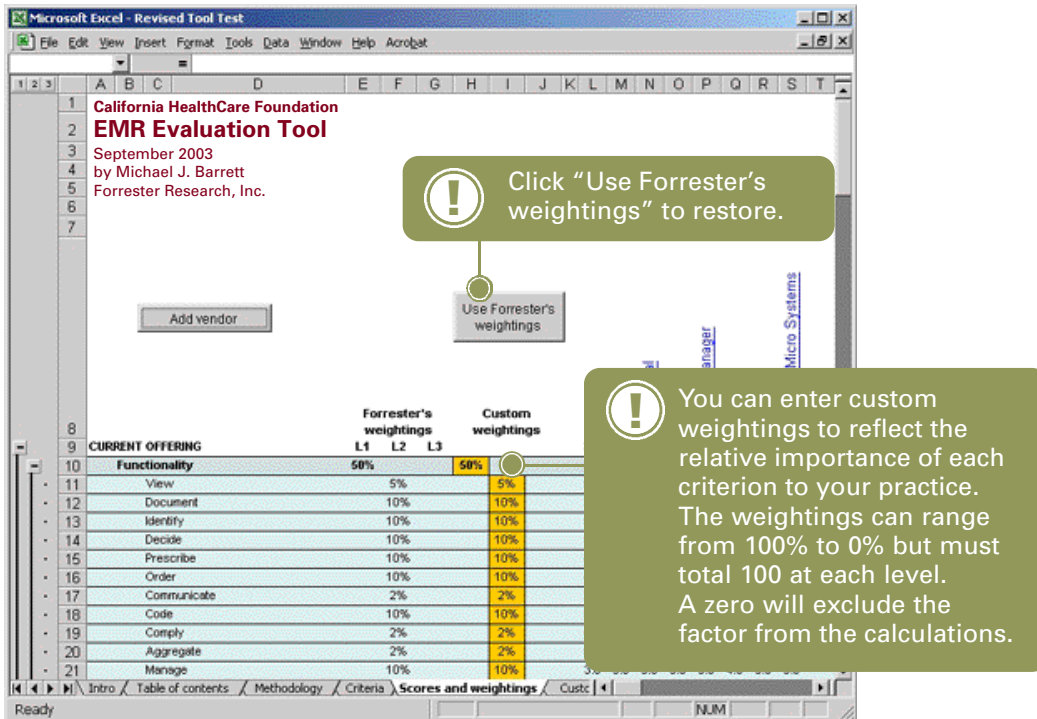
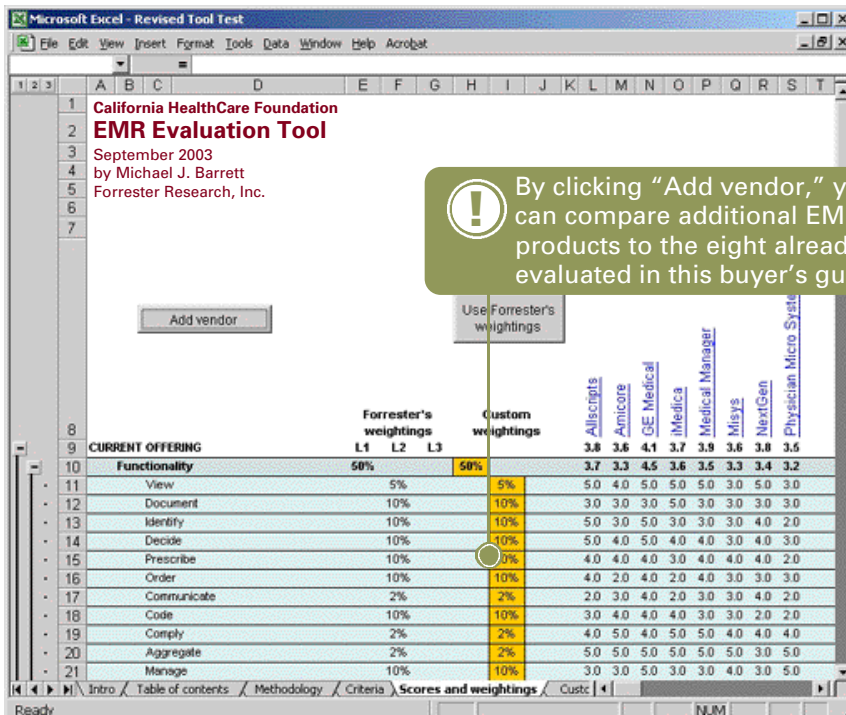


Figure 4.2. Use the spreadsheet to evaluate additional EMR vendors.



IV. Sorting the Products

ALL EIGHT EMRS EVALUATED HERE ARE GOOD choices, but there are notable differences among them. Logician, from GE Medical Systems Information Technologies (GEMS-IT), is the leader across all three dimensions—strength of current offering, strategy, and presence in the marketplace—followed closely by Allscripts Healthcare Solutions’ TouchWorks and iMedica’s PhysicianSuite. Then come Medical Manager Health Systems’ new Intergy and Amicore’s Clinical Management software. NextGen Healthcare Information Systems’ NextGen EMR, Misys Healthcare Systems’ Misys EMR, and Physician Micro Systems’ Practice Partner Patient Records also perform well when rated against the specific features listed in this report.

But buyers may want to weigh several broader factors along with these results. The 1997 edition of the Institute of Medicine report identified a list of “hallmarks” of EMR excellence, as well as a number of additional attributes it believed would figure strongly in the future of EMR technology.³ Six years later, these key concepts range across the specific attributes of functionality, usability, and strategy, and constitute a final set of considerations that physicians should take into account when purchasing an EMR.

An Integrated View of Patient Data

Most of today’s electronic record systems, including all eight reviewed in this report, succeed at a core set of basic functions involved with entering and storing clinical information and enabling its retrieval as needed. These enable doctors to:

- **View critical information.** EMRs do a good job of combining data from various sources and presenting problem lists, medication lists, test results, etc. in an organized way.
- **Document the visit.** Differences in charting time are real—iMedica has done particularly well in timed contests against other systems. The researchers were also impressed with the documentation performance of other systems, including Logician and Misys EMR.
- **Customize the display of information.** The systems Forrester analyzed permitted users to arrange activities, tasks, and screens to suit a multitude of personal preferences.

Access to Resources That Provide Clinical Decision Support

Beyond the basics of viewing and documenting, the great potential of EMRs lies in equipping doctors with relevant information at the point of decision and the point of care. In 1997, it was quite difficult to present encoded clinical knowledge to doctors at the moment they were interpreting patient information on a computer screen. Today, EMRs in the office-based market should allow doctors to:

- **Identify clinical issues by means of alerts and reminders.** Aside from activities related to prescribing discussed below, EMRs for smaller office-based practices have not focused enough on building sophisticated clinical alerts into their systems. Companies with otherwise advanced features for clinical support provide only blank templates that must be filled in, value by value, before alerts will work. This is why the authors recommend that buyers spend some initial bargaining chips on obtaining the vendor's help to set up the various alerts and reminders offered by the system. Logician, the GEMS-IT EMR, is particularly sophisticated in its approach to alerts and reminders.
- **Decide clinical issues with the aid of knowledge references and databases.** Through a partnership with the American College of Physicians-American Society of Internal Medicine (ACP-ASIM), Allscripts incorporates the group's evidence-based clinical guidelines within its EMR. In this case, alerts are built in: An icon appears next to an item on the patient's problem list or medication list whenever a guideline or monograph is available. Amicore, GEMS-IT, and iMedica have strengths here as well.

Computerized Physician Order Entry

Computerized support for clinical decision making depends on the context provided by a patient encounter. Context, in turn, depends on the quality of the data entered into the system. While emerging technology and support staff can help, only the physician, working at the point of care, can feed the system information that is detailed, timely, and likely to minimize medical errors. The essence of this task is computerized physician order entry (CPOE), a feature of EMRs that allows doctors to:

- **Prescribe medications.** A number of the systems reviewed here offer prescription management, formulary, drug interaction information, and electronic prescribing in a well-engineered product. The fly in the ointment—and the reason these systems did not earn even higher grades in this report—is that prescription features, although smoothly integrated into other elements of the EMR, typically come in stand-alone modules available only at extra cost.
- **Order tests, images, and other services.** By using the computer to record their directives to labs, radiology, fellow clinicians, and other third parties, doctors create crucial scaffolding for the electronic medical record. All the EMR systems examined for this study did a good job of recording non-medication orders.

Figure 5. Sorting the Products

Company Name	Product Name	Current Offering	Strategy	Market Presence
Allscripts Healthcare Solutions	TouchWorks	● ●	● ● ●	● ●
Amicore	Clinical Management	● ●	● ●	●
GE Medical Systems Information Technologies	Logician	● ● ●	● ● ●	● ●
iMedica	PhysicianSuite	● ●	● ● ●	●
Medical Manager Health Systems	Intergy	● ●	● ●	● ● ●
Misys Healthcare Systems	Misys EMR	●	●	● ●
NextGen Healthcare Information Systems	NextGen EMR	● ●	●	● ●
Physician Micro Systems	Practice Partner Patient Records	●	●	●

Good ● Better ● ● Best ● ● ●

Integrated Communications

As the IOM pointed out, the mounting emphasis on outpatient care increases the importance of coordinating the activities of health care professionals in different physical locations. Systems should allow doctors to:

- **Route orders to third parties and get results back.** Once physicians enter orders, the EMR needs to route them to internal and external third parties and accept results automatically into the system. Medical Manager, Allscripts, and GEMS-IT stand out due to the quality of their interfaces with LabCorp, Quest Diagnostics, and other ancillary providers.
- **Communicate with colleagues.** As the scorecards attest, most of the systems evaluated here offer secure messaging for internal exchanges among professionals. These features operate from within the EMR, so that messages can be stored as part of the extended record and elements of the record itself transmitted as attachments.

Consumer Features

The self-directed patient, bent on sharing decisions with the doctor and interjecting research from the Internet into the conversation, was not a big factor in the mid-'90s. But the IOM foresaw the day when EMRs would have to accommodate the activist consumer. Today's EMRs should:

- **Bring patients into the communication loop.** When it comes to extending their secure messaging environments to include patients, none of the systems examined here distinguished themselves. At best, they integrate with a commercial product like Microsoft Outlook.
- **Lay the groundwork for online consultations.** The study found no EMRs that extend to doctors and their patients the capacity to conduct clinically relevant "virtual office visits" for routine, non-emergency matters. The independent firm RelayHealth offers the technology, and IT vendors such as IDX Systems are

working on competing products, but the innovation has yet to take hold in the office-based market.

- **Educate individual patients in the self-management of their conditions.** In the case of diabetes, for example, the Allscripts partnership with the ACP-ASIM gives its EMR users access to materials with which to train patients on prevention, disease education, and disease self-management. Self-management is broken down further into issues of diet, exercise, smoking cessation, home glucose monitoring, urine monitoring, foot care, and early identification of hypoglycemia.

Population Management Tools

In its most prescient recommendation, one that resonates strongly in an era of concern over biological and chemical weapons and epidemics of new infectious diseases, the IOM urged EMR companies to design systems that safeguard and advance the health of the entire patient population of a practice, medical group, or community. Beyond the capacity to manage the long-term conditions of the individual patient, today's effective EMR should help doctors to:

- **Standardize disease management across an entire group.** Physicians need to press vendors on this issue. Systems won't deliver until they enable clinicians to identify subgroups of disease sufferers among their patients and track adherence to disease management guidelines and care plans. The system capable of performing best in this area—GEMS-IT's Logician—works with Clinical Content Consultants, a development partner, to develop guideline-assisted encounter forms for EMRs.
- **Query system databases.** Users must be able to obtain group reports on care, quality, outcomes, and costs. iMedica performs strongly here. Care, quality, outcomes, and associated cost reports are built into iMedica's system,

including reports on compliance with HEDIS guidelines, and all of the information resides in a relational database to support easy queries.

- **Conduct clinical research.** An EMR should be flexible enough to accommodate a doctor's decision to participate in research, registry, and clinical trial-related efforts. In 2001, GEMS-IT formed a Clinical Data Services division to find research uses for the data accumulating in various installations of Logician, its outpatient EMR. iMedica has anticipated customer research interests by building a database structure to support research by an individual doctor and by multiple physicians within its user base. In both cases, participation is purely voluntary; even de-identified data is not mined without the doctor's permission. Still, the capability is good to have.

A Time to Act

For a practice that is prepared to buy, this tool can help in making an informed decision. Purchasers should evaluate specific attributes of functionality, usability, service, cost, strategy, and market presence, apply this report's 12-step program for choosing an EMR, and, as a final step, factor in the broader considerations that matter most to them.

Appendix

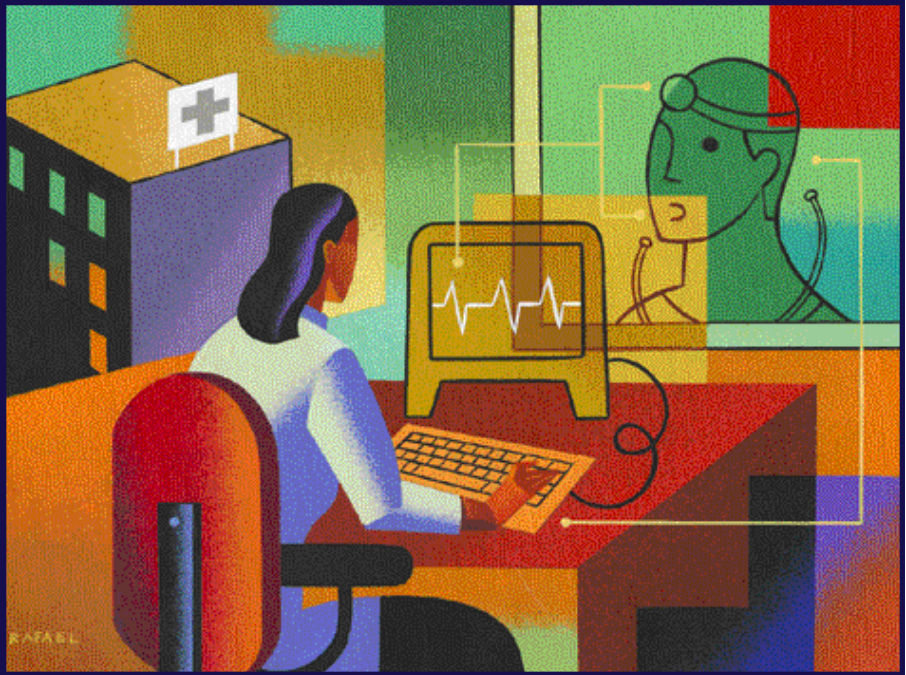
Products Evaluated

Company Name	Product Name	URL
Allscripts Healthcare Solutions	TouchWorks	www.allscripts.com
Amicore	Clinical Management	www.amicore.com
GE Medical Systems Information Technologies	Logician	www.medicallogic.com
iMedica	PhysicianSuite	www.imedica.com
Medical Manager Health Systems (Web MD)	Intergy	www.medicalmanager.com
Misys Healthcare Systems	Misys EMR	www.misyshealthcare.com
NextGen Healthcare Information Systems	NextGen EMR	www.nextgen.com
Physician Micro Systems	Practice Partner Patient Records	www.pmsi.com

Endnotes

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