ELECTRONIC HEALTH RECORDS (EHR)
Frequently Asked Questions Manual

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Acknowledgements:

AADA is grateful to the following dermatologists for the generous contribution of their expertise and time in reviewing this manual.

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INTRODUCTION

To assist dermatology practices with their transition to electronic health record (EHR) adoption, the Academy has developed a comprehensive set of frequently asked questions (FAQs) that provide answers to a range of EHR-related queries. The answers to these FAQs will help you identify issues and recognize important barriers to overcome as you move your organization toward implementation.

Transitioning to using an EHR system requires careful planning, preparation, and follow-through. Studies have shown that the hardest part of any EHR implementation is managing how technology alters a practice’s workflow. EHRs are fundamentally about ready access to and management and maintenance of patient data and practice information.

Determining the most effective approach to introducing an EHR system into a dermatology practice means knowing your practice’s operational readiness, staff preparedness, workflow style, technical requirements (hardware, software, maintenance, support, and training), and budget.

Compare these factors to your practice’s specific needs and capabilities. This will help drive your search and enable staff to make an informed decision about the choice of EHR system. Success in adoption starts with planning, practice-wide assessment, and team preparation.

To stay current with the latest developments in EHRs and health information technology in dermatology, visit the Academy’s health information technology (HIT) kit at www.aad.org/hitkit.
FAQ Section 1: Taking the EHR Plunge — Assessing Practice Readiness

Q: How do we determine that our practice is ready to begin serious investigation into acquiring an EHR?

A: There are several considerations when determining readiness. Practice leadership usually initiates the process by simply asking the question about readiness. More specifically, leadership should evaluate the following elements:

1. **Motivation for wanting an EHR**: A practice is more likely to be ready for EHR when it is viewed as a tool to support quality improvement, patient safety, provider productivity, and user and patient satisfaction rather than viewing the EHR solely as a governmental mandate, a means to gain an incentive, or competitive necessity.

2. **Organizational culture**: A practice is ready for an EHR system if its staff adapts well to change, especially if they have successfully implemented a major project on time and on budget. It’s also important for providers and staff to be accountable for their actions.

3. **Management and leadership**: A practice should be cohesive in its mission and vision, and leadership should set realistic goals and expectations. Leaders should communicate regularly with all staff.

4. **Operational and systems approach**: A practice is more ready for EHR if it routinely uses a continuous quality improvement process. Workflows and processes should be regularly reviewed and a systems perspective should be taken when making changes. Strides should be made to standardize workflows and processes where feasible in advance of EHR vendor selection.

5. **Technical**: A practice should assess its technical infrastructure, including how current the practice management and other information systems are, including network type and capacity. Also, evaluate the staff’s expertise and availability to undertake an EHR project, as well as their ability to support ongoing optimization efforts.

6. **Computer skills**: A practice’s leaders should assess provider and staff skills in using a computer, types of applications with which people are familiar, and how well existing systems are used, including e-mail, scheduling, drug knowledge resources, Internet usage, hospital portal if available, and typing skills.

7. **Clinical documentation**: Evaluate present documentation practices and institute programs to comply with documentation practices where needed.

8. **Financial readiness**: Leaders should understand their practice’s financial position, financing options, total cost of ownership, licensure, and maintenance costs for an EHR system.

Q: Are there assessment tools available to assist in evaluating our readiness?

A: The American Academy of Dermatology has a comprehensive EHR toolkit available for members on its website at [www.aad.org/pm/hit/dehrm/index.html](http://www.aad.org/pm/hit/dehrm/index.html). The Dermatology EHR Manual (dEHRm) includes a variety of tools to help a dermatology practice assess readiness. In addition, there are a number of tools available on the Web, which you can locate by doing a search for “EHR readiness assessment.”
Q: If we find out from a readiness assessment that we are not ready for EHR, what should we do?

A: Many dermatologists and their staff members are apprehensive about the cost, are concerned they might not have the ability to change the way they practice, and fear they might not have the capability to make the right decision about such an important investment. Some ways to overcome these concerns include the following:

1. **Become educated about EHR.** Everyone fears the unknown and many resist change. Learning as much as possible about EHR before committing to acquire one is critical. Many providers think that just because they approach a vendor they have to be ready to buy. This is not true, although you will have to be prepared to be firm with the vendor if its representatives attempt to sell you a product too quickly. Talk to other providers who have adopted an EHR; learn what worked and what didn’t during the implementation. Use the Internet to explore every aspect of the technology, including benefits, pros and cons, implementation strategies, etc. Use the cost/benefit tools in the Dermatology EHR Manual (dERHm) or search for other tools on the Internet to anticipate the total cost of ownership, which includes not just the hardware and software, but the implementation costs, training costs, and potential costs in reconfiguring space. The more you learn about EHR, the more informed you can be as a customer. The learning process alone will provide you with the confidence that answers are readily available to virtually any question and that you are not alone. Many others have gone before you, and you can reap the benefits of their experiences.

2. **Get your house in order.** If you identify issues in the readiness assessment that need attention, fix those first. An EHR cannot fix people, policy, or process problems. For instance, if few in the practice even know how to turn on a computer, it is a good idea for staff to attend some training courses. If some providers aren’t good about documenting a problem list, or every provider in the practice has a different protocol for nurses to renew prescriptions, or other variations exist, determine if there is a legitimate clinical reason and, if not, begin to standardize. You must have set and consistent protocols in place to implement an EHR effectively. Everyone must be on board for EHR to work because everyone will be using it simultaneously. Implementing an EHR before standardizing procedures can create unnecessary stress. It is much easier to transfer preset protocols to EHR than implementing them while in the midst of setting up an EHR.

3. **Start setting practice goals and taking steps to achieve those goals.** These should be related to the things you have identified that can be fixed in advance of implementing an EHR. Learn to set milestones to achieve goals and take time to celebrate successes. Implementing an EHR is more about improving your practice than about installing technology. The discipline of setting practice goals is an excellent way to aid in being more disciplined.

4. **Consider adopting a migration path where components of an EHR are used before launching a full EHR implementation.** For instance, many practices are starting with e-prescribing as a way of getting providers to use a computer. E-prescribing is a relatively low-cost investment, is easy to learn, and provides significant clinical and operational value. Please note, however, that if you purchase a stand-alone e-prescribing system, make sure this system is compatible with whichever EHR system you plan to buy. Some providers adopt registries, e-visits, a patient self-administered medical history tool, or clinical messaging as graceful on-ramps to EHR. Of course, what is included in your migration path and its duration might be influenced by external pressures, such as various incentives. Still, it is important to weigh the benefits of easing into EHR rather than to jump in too fast and make mistakes that might keep you from realizing not only the incentives, but other goals you seek to attain.

E-Prescribing on the Web

For more information about e-prescribing, visit www.aad.org/pm/hit/eprescribing/index.html.
Q: What resources exist to learn more about EHR? Where do we begin?

A: There is so much to learn about and so many resources to use that researching an EHR system can feel overwhelming at first.

One good place to begin is with the Dermatology EHR Manual (dEHRem). It might be helpful to read one section at a time and supplement this content by browsing the Internet to learn more.

As you review multiple sources of information, you will find it becomes easier to discriminate between information that represents extreme positions (negative or positive) and information that is more mainstream. Look for industry leaders and refereed information just as you would if you were looking for information about a new disease state or treatment regimen.

However, do not discount social networking sites. Blogs, wikis, and online communities can extend your ability to touch many people without expending any money. In addition, you will spend considerably less time finding answers to your questions online as opposed to attending meetings, talking on the telephone, etc.

Recognize that the EHR is a major investment, not only in dollars but in time to select, implement, learn, and optimize. Also, one size does not fit all. You need to become sufficiently knowledgeable to make your own choices.

Do not underestimate the importance of preparation and planning. Nearly everyone who has adopted an EHR identifies preparation and planning as an underutilized activity that truly makes a difference. Some have likened the process of deciding on an EHR acquisition and adapting to the change it brings to the process of mourning. It takes time to go through the stages, but change is as much a part of the cycle of life as death and taxes are.

Q: How can we assure ourselves we will get the best EHR?

A: Just as there is no car, house, or other form of investment that is perfect, there is no perfect EHR. Even if you could build an EHR yourself, you will find that what you thought was the right way to design it initially might not be right later as you become accustomed to using it or as your practice changes.

However, you want to understand what compromises you may need to make, and you need to take charge of the process. It has been widely recognized that a practice can take what someone might identify as the “best EHR” and do a poor job implementing and get poor value; whereas another practice can take a standard product and do an excellent job implementing it and receive great value.

As with most things in life, the more effort you put into the process of planning, selecting, implementing, and optimizing the EHR, the more you will get out of it.

According to industry experts, the following four levels can help you plot your location on the EHR migration road map. Studying each level will help you prepare for successful adoption.
## Level 1: Interested but unsure of how to move forward

### Challenges
- Cost
- Belief that you need to wait for product certification/technical stability
- Lack of consensus: mixed levels of buy-in or support within the practice
- Horror stories and fear
- Little technical skill
- Unsure of where to start
- Other competing priorities

### Solutions
- Education and information on:
  - Current costs as of fsets
  - ASP and shared/collaborative alternatives
  - Incremental implementation approaches (i.e., adopting e-prescribing technology first and phasing in EHR modules)
- Greater exposure to success stories for everyone in the practice
- How-to guides and information
  - AAD's HIT-KIT available at [www.aad.org/hitkit](http://www.aad.org/hitkit)

## Level 2: Evaluating EHR systems

### Challenges
- Disjointed evaluation approaches
- Paralysis
- Decisions before planning
- Single-person decisions
- Poor vendor management
- Overlooking integration needs

### Solutions
- Follow a proven, disciplined evaluation process:
  - Establish goals and vision before requirements
  - Identify requirements before evaluation
  - Perform evaluation before making decisions
- Work collaboratively with other practices to share and learn both:
  - Your current readiness level
  - What you have to do to move along the path
- Use good research that is already available
- Gather education and information about integration and interfaces:
  - Within the practice
  - With outside entities (labs, other practices, and hospitals)

## Level 3: Purchasing an EHR system

### Challenges
- You’re unclear about what to buy and when:
  - Well-thought-out plans for EHR system use are not in place
  - Incomplete evaluation process
- Buying experience with vendor contract and negotiation
- Buying the EHR sales team versus the technical support team

### Solutions
- Plan before your purchase
  - What do you need immediately versus what you need over time:
    - Equipment and devices
    - Integration and/or interfaces
    - Functionality
    - What you can realistically take on
- Seek advice of those who have gone before you
- Seek knowledgeable legal advice and educate your practice about:
  - Warranties
  - Performance standards
- Pay vendor at successful milestones

## Level 4: Optimize your implementation

### Challenges
- Resistant practice staff
- Lost without a driver
- Reliance on paper as a crutch
- Data entry delays intake
- Voice recognition isn’t satisfying

### Solutions
- Identify mentors
- Appoint team leader
- Develop interfaces and reports for monitoring
- Consider patient portals and kiosks
- Batch-process dictation files and use staff to edit

Source: Medical Group Management Association (MGMA)
FAQ Section 2: Garnering Support for EHR — Benefits

Q: What are the benefits of EHRs to small dermatology practices?

A: The primary financial benefits of EHRs for small dermatology practices accrue in the form of efficiencies that enable providers to see more patients after staff complete the initial learning curve. These efficiencies derive from fewer repetitive tasks, no more waiting for misplaced charts to be found, more efficient handling of telephone messages and prescription refills, remote access to patient information, integration of evidence-based clinical guidelines, and improved exchange of information among referring providers. In addition, there might be the ability to garner an increased number of referrals through the ability to demonstrate high-quality results to patients via digital photos and improved delivery of patient education materials. Dermatologists who qualify for Medicare or Medicaid incentives under the stimulus package can earn up to a total of $44,000 per physician if they adopt EHR by 2011 or 2012 (learn more at www.aad.org/pm/hit/hitdashboard). There might also be opportunities for improved evaluation and management (E&M) coding and supporting documentation. If the practice uses dictation for notes and letters, transcription costs can be significantly reduced. In addition to financial benefits, quality of care, patient safety and customer satisfaction, benefits are achieved through direct access to drug knowledge, medication lists, allergy information, and other point-of-care decision support; reduced patient wait times; and improvements in turnaround time for telephone messages and medication refills.

Q: Why do some practices believe they are not getting the promised benefits from their EHR?

A: There are two primary types of benefits: those that provide a direct financial return and those that reduce the hassle factor — for providers and patients alike. The extent to which benefits accrue depend largely on the provider’s specialty, type of EHR acquired, current practices, and how well the practice adopts all of the EHR features. For instance, if your practice doesn’t treat many Medicare or Medicaid patients, you will not have the same opportunity for incentives as those providers for whom the Centers for Medicare and Medicaid Services (CMS) is a major payer. If you don’t dictate notes today, there won’t be cost savings from reduced transcription. If the EHR you acquire doesn’t enable you to interface with labs to bring results in structured format directly into your system, someone will have to index and file the electronically received documents or scan paper reports into your EHR. If your providers do not acclimate themselves to documenting all elements of a patient visit at the point of care using structured templates, they will continue to find themselves staying late to enter notes.

Q: Do EHR benefits outweigh the cost and time spent in acquiring and learning how to use the EHR?

A: In addition to direct benefits — although they vary by practice type — there are indirect benefits. These might be somewhat longer-term, but are powerful nonetheless. Many practices find they must automate to stay competitive. Patients are starting to demand the convenience afforded them by your use of e-prescribing so they can drive to a pharmacy and have their medications ready for pick-up. An increasing number of people are using personal health records and will request copies of their records from you in electronic format. Health information exchange organizations are growing in many communities, and practices without EHRs will be the missing links in continuity of care. There also are implications for recruiting new professionals. Both new nurses and physicians want the convenience of and access to the enhanced knowledge resources EHRs afford. Ultimately, insurance and other auditors might question why a practice has not adopted an EHR, and the practice will not be able to demonstrate the quality of care it provides compared to a practice that uses EHRs.

Premium Discount Programs
A number of medical professional liability insurance carriers have in place or are launching premium discount programs available to physicians who adopt EHRs.

In some cases qualifying physicians can receive a 5 percent reduction on their premiums. These programs typically require the practice to meet underwriting and claims approval and be willing to participate in the carrier’s approved risk-management program, as well as show evidence of having fully implemented and used a certified EHR for at least one year.

Dermatology practice leaders are advised to check in with their malpractice carriers to learn more about how to qualify for this opportunity.

Source: Medical Liability Monitor.
FAQ Section 3: Garnering Support for EHR — Planning and Goal Setting

Q: What planning is required for an EHR?

A: In addition to understanding what an EHR is and making your practice ready for adoption, there are many important decisions to make about acquiring an EHR. These include:

1. Do we start with an EHR or do we follow a migration path by which we can ease into automation?
   
   If members of your practice are accustomed to using computers and are ready for the change, acquiring a comprehensive EHR is probably the most effective and efficient strategy. However, if there is resistance to change and your practice employs few users of computers, it might be better to phase in the use of information technology.

2. Do we replace our practice management system (PMS) in addition to acquiring an EHR?

   Many EHRs are now being sold with highly integrated PMSs that offer many new features, including enhanced scheduling, automated reminders, access to health plan eligibility information, a patient portal, and more. The incremental cost of such a system is not as great as replacing the PMS and acquiring an EHR separately. Vendors selling these systems also can provide strategies for managing old accounts receivable and data conversion.

   For example, some vendors can write a data-conversion program to move your old data to the new PMS. They might instead evaluate the feasibility of this approach and recommend doing only a “balance forward” if the quality of your old data is not good. Alternatively, if an EHR vendor also sells a PMS but the system has been acquired from another company in a merger or acquisition and has not been built from the same developmental platform as the EHR, it is only “well-interfaced.” In this case, consideration should be given to how new the practice’s current PMS is and how well it interfaces with other systems. Some vendors are known for having much more proprietary systems than others, where interfaces are costly to write and maintain. In this case, the well-interfaced PMS is likely to be the better strategy. However, if there are strong references for solid interfacing capability and the current PMS is relatively new, it might not be desirable to replace it. It is important to note that some EHRs with integrated PMS cannot be separated. Even when they can be separated, it is generally more difficult to add such a PMS later.

3. Should we consider some form of hosted environment or should we acquire a client-server license and maintain the system ourselves?

   This is a multi-pronged question. First, a client-server system that you maintain requires an upfront capital investment and ongoing support, both to the vendor in maintenance fees and for staff or consultants to set up and maintain the system. In comparison, a hosted environment creates a tenant relationship where there is less upfront expenditure (primarily for input devices, scanners, printers, local network development, customization, training, and interfaces) and a continual monthly fee that is more than the maintenance fee alone on a client-server license.

   Modest local support still will be needed on an ongoing or retainer basis. Often, the size of a practice and proclivity of staff members who are able to provide information technology support are the determining factors. A second consideration is what you want hosted. You might only want to use a data center where servers are maintained and acquire a straight client-server license.

   Alternatively, you may choose an application service provider (ASP) model where both the hardware and software are hosted. Some providers are reluctant to use an ASP because they want more control over the software and their data. Some vendors sell ASP versions of the EHR software that are less customizable than their client-server versions, so if you want a highly customizable product, an ASP might not be for you. However, if you are willing to use a turnkey product that does not afford a great deal of customization, an ASP vendor that has been in business for some time often is more reliable and offers greater security and backup than a small practice typically can afford or wants to invest in. Finally, software as a service (SaaS) forms of EHRs use a true Web-based structure that improves usability and manageability. There are few such EHR products on the market now, and they might be less mature in their design.

Q: How do we decide which model of EHR — client server, hosted, ASP, or SaaS — is right for us?

A: A practice needs to understand its options, understand its goals for an EHR, and do the math. Only you know your practice. Does it require a lot of customization; do you prefer to be hands off? Do you have the capital and ongoing resources to host an EHR or is it more comfortable for you to trust an established vendor? Do you prefer to trust in your hiring abilities to staff IT functions? Answers to some of these questions might depend on your locale. Other answers will depend on your finances and your staff’s culture of adapting to change.
**Server decisions: Web-based application service provider (ASP) model versus client-server model**

Practice size matters when arriving at a choice of an EHR. Some health information technology (HIT) experts advise smaller practices to consider an ASP EHR model, unless the practice is large enough and can afford to pay $60,000 for a full-time HIT staff to maintain the software and equipment. Many vendors offer both an application service provider (ASP) and a client-server version of their EHR software. It also might be advisable to start out with an ASP version and switch to the client-server version later if appropriate.

**Application service providers (ASPs)**

ASPs sell Web-based applications. If you work with an ASP, you will use software on vendor-owned equipment, and your data will be located outside of your practice at a secure site or data facility. You will not have to purchase a server outright. Instead, you will contract for this through the ASP. Because the ASP owns the equipment and maintains the server, the practice has less technical responsibility. With an ASP model, the EHR vendor, a hospital, or another entity hosts the server and the practice accesses the server via the Internet. Other cost-savings benefits include not having to buy an expensive server to host the software, pay for a license to use the program, or install updates and back up your data. Instead, you’ll pay a monthly fee, typically from $350 to $750 per provider per month (although some cost less). If you don’t already have a T1 line, you’ll want to get one to give your office a reliable, high-bandwidth connection to the Internet. This can cost an additional $500 monthly.

**Client-server models**

If you choose not to use an ASP, you will have to buy a server with adequate space and speed for your practice needs, as well as the necessary hardware for exam rooms and workstations. You or your technology staff-person will be responsible thereafter for backing up your data, maintaining the server, and upgrading software. You might have to pay licensing costs for each workstation (depending on your licensing agreement with your Health IT vendor). After the initial start-up costs, you will only pay for upgrades and maintenance. According to some estimates, client-server EHRs can cost an average of $20,000 to $40,000 per physician, although less-expensive systems are available.

**What to watch out for:** Because it’s easier for EHR companies to enter the ASP market, make sure that the vendor you choose is financially viable and is likely to be in business for the long term with customer service and support. Make sure you get a system that allows for meaningful use of EHRs to qualify for the Centers for Medicare and Medicaid Services’ (CMS) financial incentives.

<table>
<thead>
<tr>
<th>Models</th>
<th>Key Features</th>
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| Application Service Provider (ASP) | • Vendor or third party hosts data and servers off-site  
• Communication across Internet  
• System administration and maintenance managed remotely  
• Lower initial costs (ASP EHR requires fewer hardware components and is easier to maintain and upgrade compared with traditional client-server software applications)  
• Lower total cost of ownership (TCO)  
• Less customization available |
| Server-based                     | • Data and servers located in practice  
• Communication across local network  
• System administration and maintenance managed locally  
• Greater freedom to customize  
• Higher initial costs (given additional hardware and support/maintenance requirements)  
• Higher total cost of ownership (TCO) |

<table>
<thead>
<tr>
<th>Models</th>
<th>Pros</th>
<th>Cons</th>
</tr>
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| Application Service Provider (ASP) | • Efficient when you have no technical person to choose, maintain, and troubleshoot the system  
• Good if you won’t be in practice for a long time and won’t recover costs  
• No major financial commitment required  
• Little installation time  
• Don’t need to maintain server and updates  
• No licensing fee | • In rural areas, problems with Internet connections could create practice difficulties  
• Over time, monthly service costs can add up  
• Potential question of patient records privacy  
• If you leave a vendor, you could have some difficulty getting your medical records back  
• You will continue to pay as long as you use the server |
| Server-based                     | • No long-term monthly usage fees  
• System does not rely on Internet connection; little chance of interruption of service and use  
• Patient data are completely private and safe; is not held in remote server  
• More ability to get customized features and workflow  
• Greater ability to customize program | • Requires person on staff to maintain and install updates; deal with technological problems  
• More costly than ASP model  
• Must back up data regularly |

Sources: Medscape.com, American Medical Association (AMA)
Q: Why is it important to set goals for using an EHR?

A: Goal-setting helps answer questions about what form of EHR you want, what you can afford, and how you might choose to phase in a system. However, goals do more than merely help you select an EHR product. The late Fitzhugh Dodson, who was a prominent child psychologist, once wrote, “Without goals, and plans to reach them, you are like a ship that has set sail with no destination.” Few practices today can afford to drift wherever such a ship may take them. If you want to achieve the benefits you believe an EHR can afford, you must set specific, measurable goals and manage to obtain those goals. For instance, if providers in your practice want to complete charts by the end of each patient visit, specific metrics should be established, monitored, and their achievement celebrated, or course correction strategies put in motion to help achieve the goal. Goal setting isn’t always easy. Many fear setting goals and being seen as a failure if they can’t accomplish them. Goals should be as realistic as they are specific and measurable. Goals should not be set in concrete, but adjusted as needed according to circumstances.

Q: Why is an EHR so much work to set up?

A: An EHR is not only an automated form of documentation, but as the Institute of Medicine patient record study reported, a “tool with much enhanced utility.” If you view an EHR as a means to automate information that supports the practice of medicine, you will view it much more as a clinical tool than a substitute for a piece of paper. To incorporate your practice’s parameters and work seamlessly with health care professionals, the tool must be highly sophisticated and able to respond to the way you work. Many observe that the easier an EHR is to use, the more sophisticated it must be on the back end.

The Importance of Self-Assessment

Switching to an EHR system can be done effectively and efficiently, but it requires self-awareness. If you spend enough time in the self-assessment stage of the selection process, the transitional stages will be much easier than if you proceed with a trial-by-fire mind-set. Be sure to attend to the following:

- Make sure you have a plan for working with staff and patients.
- Consult your staff about what they need, what they want and what they are afraid of. Make sure everyone knows their position won’t become obsolete.
- Assign a person to keep tabs on the climate of the office. Check in with this person regularly.
- Train your staff to respond to patient questions, complaints and concerns. Inform patients about what this technology can do for patient care. Get them excited about the change.
- Plan for ample training and hands-on learning so everyone is comfortable with the technology.
- Plan for slowed processes, and be prepared to be patient as adult learners adjust.
- Make sure everyone in your practice reaches a certain comfort level with the new HIT so you can attend to patients appropriately without technology getting in the way. This technology should enable care, not interfere with care.

Sources: American Medical Association (AMA), American Academy of Dermatology (AAD)
FAQ Section 4: Cost/Benefit Analysis

Q: Why is it important to do a cost/benefit analysis for an EHR?

A: A cost/benefit analysis helps determine two important things. First, it enables you to get a solid understanding of what an EHR costs, both up front and over time so you can determine the feasibility of acquiring an EHR and what funding sources you may need to consider. Second, it helps you impose the discipline of setting and meeting goals for an EHR by quantifying benefits in monetary terms. A cost/benefit analysis helps you calculate when your EHR will start paying for itself. This information can help motivate your staff to meet your return-on-investment goals. For example, if you want an EHR to help you gain control of paper shuffling, a cost/benefit analysis requires you to assign a monetary value to that goal and gives you a benchmark with which to evaluate your success.

Q: Where can I obtain data to perform an accurate cost/benefit analysis for an EHR?

A: Initially, you will use whatever information is available to you to document an estimate of what an EHR would cost and what your financial benefits are. This can come from literature, your colleagues, or initial vendor conversations. These estimates — which might include a range of costs and benefits — should give you a ballpark idea to begin to think about whether an EHR is feasible at this time, where you might get the funding from, and how soon you could expect a payback. As you pursue a formal vendor-selection process, your estimates will be refined by the proposals you receive from vendors. Compare these refinements with assumptions you made earlier to reevaluate both your requirements and their feasibility. For example, if you want an EHR to support incorporation of anatomic graphics and/or digital photos that can be enhanced for patient education, you might find that some of the lower-cost products do not support this functionality. You then have the information to decide whether the benefits outweigh the costs and whether to lower your expectations or plan to increase the size of your investment.

Q: Is it feasible to get a reasonable payback from an EHR for a small office?

A: This is an important question because, as it suggests, the payback period for a small office is generally longer than it is for a larger practice. This is because small practices can’t take advantage of economies of scale. You might have already streamlined your revenue and expenses. For example, you might not dictate notes so you incur minimal, if any, transcription expense. In addition, if you calculate your payback period strictly on actual cash savings or revenue generation, your payback period will be longer than if you consider the value of staff time or quality of care. For example, if you find through baseline data collection that all staff members combined spend three hours a day pulling and filing charts, filing lab results, and preparing charts for your patient visits, it is unlikely that you will be able to eliminate a staff member, or even cut back hours for a given staff member. However, there is value that can be created if you establish the expectation that the time savings will be used to follow up with patients. The goodwill generated from this activity might ultimately result in an increased number of patients.

Planning Can Save You Money

Cost: Look carefully at your budget and plan rigorously for potential pitfalls. With careful planning, the cost of HIT won’t outweigh the benefits, but without planning cost might defeat your efforts.

- The average cost of an EHR is estimated to be $30,000 per physician.
- The average maintenance of an EHR system is estimated to cost between $3,000 and $15,000 per year.
- You might need to pay your staff overtime as they work longer hours during transition.
- You will lose productivity and will have reduced patient volume while staff is adjusting.
- Customizing your EMR — getting necessary interfacing software for your existing HIT, or customizable templates — might cost you extra.
- Purchasing necessary hardware to support your software is expensive.
- ROI shouldn’t be expected until many months down the line — potentially more than a year into your transition.

Source: American Medical Association (AMA).
Q: What costs and benefits should we look for from an EHR?

A: The Academy’s Dermatology EHR Manual (dEHRm) tool includes a cost/benefit analysis program that lists potential costs and sources of benefits, and enables you to calculate one-time and ongoing costs (see [www.aad.org/pm/hit/dehrm/planning/analysis.html](http://www.aad.org/pm/hit/dehrm/planning/analysis.html)). The nature of the product you are looking at is a determining factor. You might want to construct your cost/benefit analysis as a spreadsheet to compare costs and benefits for various vendors or product types.

For example, if you acquire an EHR through a straight license agreement, you will have a large capital investment up front, and then only maintenance/service fees on an ongoing basis to pay the vendor. This will require you to have staff or contract support to manage hardware, install upgrades, generate reports, and perform other functions as needed to keep your system up-to-date. If you acquire an EHR through an application service provider (ASP) or software as a service (SaaS) vendor, you will not have the up-front and staff costs, but your monthly fees might be higher. There also might be a difference in benefits between these two forms of acquisition. For example, the straight licensure product might provide more flexibility, whereas ASP and SaaS models tend to be less sophisticated and might not support all the benefits you seek. The cost/benefit analysis, however, should highlight differences and help you make choices.

Q: Will the 2009 American Recovery and Reinvestment Act (ARRA) incentive program cover the cost of an EHR?

A: A maximum Medicare incentive of $44,000 per eligible provider is available if you start using an EHR system by 2011. If you are a Medicaid provider, there is an incentive of up to $25,000 in the first year and $10,000 in each of four subsequent years, but you cannot get both incentives. Per provider, then, if your up-front costs for an EHR are calculated as roughly $25,000 with a 20 percent annual maintenance fee, your total investment of $45,000 is essentially paid for during the five years of the incentive. These estimates might or might not include hardware, and actual costs might be lower or higher depending on the product you choose. For more information, see [www.aad.org/pm/hit/HITDashboard/federal.html](http://www.aad.org/pm/hit/HITDashboard/federal.html).

The Business Case for EHR

Careful attention and a methodical approach to workflow analysis and process mapping are critical when considering an EHR. The Dermatology EHR Manual (dEHRm) details these steps to practice redesign. Section 3: Planning [for EHR] discusses calculating costs, benefits, and value over time.

Worksheet 10: The Business Case for EHR Worksheet provides some examples of potential costs and benefits you might want to evaluate in your EHR analysis. It’s available at [www.aad.org/pm/hit/dehrm/planning/analysis.html](http://www.aad.org/pm/hit/dehrm/planning/analysis.html).

Source: American Academy of Dermatology (AAD).

Tips for Managing Costs

1. Although a small dermatology practice needs to keep close tabs on its technology budget, foregoing key features can lead to trouble.

2. For small practices, the key with EHRs is that they need to be affordable but not lead to inferior products.

3. There is growing pressure on vendors to raise their systems’ functionality bar by delivering and certifying their capabilities for, among others, registry functions, quality reporting, and clinical decision support.

4. A bad decision today might lead to a painful conversion to something else further down the road.

5. If you plan to be in practice for more than five years, consider an EHR system that has sufficient features and capabilities to stay with you if your practice capabilities evolve or regulations increase.

Source: Medscape.com.
FAQ Section 5: Workflow Analysis

Q: Why do we need to do workflow analysis when the EHR will change everything anyway?

A: There are several reasons to do workflow analysis:

1. Workflow analysis is a technique used for continual quality improvement whether or not you are acquiring an EHR. Workflow analysis can help you streamline processes and contribute to quality care and patient safety. Doing this analysis in advance of an EHR also enables you to fix broken processes to avoid the old adage of garbage in = garbage out. For example, if you do not have a specific protocol for nurses to triage prescription renewal requests, reaching agreement on such a protocol, documenting it, and requiring its use can be an important way to ensure quality and patient safety. You can then embed that protocol into the EHR to gain further assurance that it will be followed. Workflow analysis promotes process improvements needed for practice redesign by helping to reduce variation that often leads to inefficiency. For example, if there is more than one dermatologist in your practice and they schedule appointments differently, standardizing on a scheduling structure can improve office efficiency immediately, and might enable you to automate the entire function so patients can log on to your website — through a patient portal — and schedule their own appointment requests in the future.

Workflow analysis also helps you prepare for EHR implementation. For example, if you find that prescribed medications are not always brought forward to a medication list, or the medication dose, etc. is not described fully on the medication list, you might want to pay more attention to doing so to help staff preload data into your EHR more accurately, completely, and efficiently. In the future, the EHR will populate this medication list for you automatically, but giving you a start on your active patients can help improve the speed with which you can learn the computer and use it efficiently.

2. Performing an analysis of your current workflows also can help you recognize the types of problems that exist in your practice and prepare you to better identify and evaluate the functionality you need in an EHR to overcome those problems. For example, if you find your patients frequently call you the day after an appointment for a refill, you might want functionality in your EHR that when you open a visit for a particular patient you will be reminded of not only what medications the patient is taking, but any that are due for a refill within an amount of time you specify. A second example is you find your patients do not always get routine lab tests done in advance of a visit. You can look for an EHR that integrates with the practice management system to produce a reminder to your staff to advise patients that they need lab work done prior to the visit they are scheduling. A third example is pharmacies calling because a prescribed medication is off formulary. To eliminate such calls, you will want to look for an e-prescribing function that performs formulary checking.

Cost/Benefit Analysis

To develop a cost/benefit analysis to determine a return on investment based on an EHR’s potential value proposition, please consult the Dermatology EHR Manual (dEHRm) at www.aad.org/pm/hit/dehrm/planning/change_workflow.html. Specifically, Section 3: Planning for EHR analyzes these approaches and provides handy worksheets for dermatology practices to use.

A good place to start is worksheet 8: Key Clinical Processes Tool used for establishing a practice’s goals for EHR adoption, which identifies processes to map and define process boundaries.

Workflow is defined as the way work is performed and patient-related information is communicated within small- and medium-sized practices and between those practices and external organizations such as community pharmacies and local hospitals.

The two most common ways to conduct a workflow and process map are via narrative lists or flow charts. The worksheet 9: Workflow Questionnaire can help the dermatology practice map out a more comprehensive patient workflow. To minimize risks of disruption and to manage workflow changes necessary to launch the EHR system, it is helpful to identify administrative steps and clinical process flow, and develop modeling processes that will aid in process improvement.

Sources: American Academy of Dermatology (AAD), Agency for Health Care Research and Quality (AHRQ).
Performing an analysis of your current workflow that identifies today’s problems also helps create interest in EHRs. For example, if a colleague or any members of your staff are resistant to adopting an EHR, identifying problems that could be solved with an EHR will help them recognize how helpful it could be. Much of the resistance to using an EHR comes from staff who do not fully appreciate the state of affairs and might not understand the need for workflow process evaluation for operational improvements and efficiency gains.

Q: Does the vendor perform workflow and process analysis for us?

A: Generally, EHR vendors do not perform workflow and process analysis. An increasing number of vendors, however, are recognizing the importance of such analysis and are recommending that you perform it. A few will work with you to perform the analysis, but still do not do it for you. Oftentimes, you are better off performing workflow and process analysis yourself. It takes some time to perform, but the analysis can help you with vendor selection.

There are efficiencies you can achieve in advance of acquiring the EHR through such an analysis, and those performing the analysis will better understand why an EHR can be helpful. Be aware that workflow and process analysis is a technique that has been widely used in all industries to help make processes more effective and efficient. You don’t even need to be thinking about an EHR for workflow and process analysis to be helpful.

Q: How do we perform workflow and process analysis?

A: There are several methodologies that can be used, but any technique that helps you identify all the steps and their sequence (i.e., workflow) can be helpful. Most tools are based on creating some form of flowchart, using a set of symbols. It is not necessary to get fancy with formal tools and techniques, but it is important to document your analysis.

The act of documenting what you do is an invaluable part of the analysis. It helps you see all steps in a process. It helps you identify where there are breakdowns in communication, a lack of protocols for decision-making, unnecessary duplication of effort, and steps that are often missed or are otherwise error prone. Documenting current workflows helps you later compare these to new workflows and can help you pinpoint where there are changes that you need to learn. The documentation can be an invaluable training aid for new EHR users and new staff. For detailed information about how to perform workflow and process analysis, see the dEHRm toolkit at www.aad.org/pm/hit/dehrm/planning/.

**Workflow Analysis**

Keep in mind that you’re adopting HIT not to replicate your old methods on a computer, but to make your methods smoother, richer, and more efficient.

- Ask everyone in your practice to make a list of their daily tasks and duties. Ask them to identify which tasks are tedious or repetitive, and then rank them by complexity. Use the workflow questionnaire in the Academy’s dEHRm tool to help with analyzing and designing your workflow (available at www.aad.org/pm/hit/dehrm/planning/).

- Make a master list of everything your practice does on a daily, weekly, and monthly basis, and use this list to evaluate the software.

- Calculate completion times for each task; understand which tasks could easily become electronic.

- Identify if new tasks will be required with the new system, and who will take care of these new tasks.

- Create diagrams of how information flows throughout your practice. With an EMR, everyone has access to patient records simultaneously. How will this change the flow of tasks from person to person? Will some tasks become obsolete?

- Conduct a few model patient visits. Identify snags and slowdowns — walk the charts through each handoff and document where modifications are needed.

Source: American Medical Association (AMA).
FAQ Section 6: Requirements Analysis

Q: Why is an EHR requirements analysis important?

A: There are two important reasons for conducting an EHR requirements analysis:

First, a requirement analysis helps you identify the critical components you want in an EHR. However, it is true that those new to EHRs might not be fully familiar with all of its potential capabilities and either expect too much or too little from a product. However, this state of affairs is the best reason for doing a requirements analysis. There is tremendous educational value in conducting a thorough requirements analysis that will help your practice recognize the extent of change an EHR will bring about and how you can best prepare for it.

Second, many might wonder why it is necessary to undertake a requirements analysis when product certification should ensure necessary requirements are met. However, the certification process only certifies that a product has specified functionality and certain other capabilities. Certification coupled with other information might also provide some value judgments on usability, vendor support, and other useful information. However, certification does not focus on a given practice understanding its own goals for an EHR, or identifying any special requirements you might have that are unique or unusual for your environment. Finally, product certification validates that a function exists, but it does not tell you how it is performed.

Q: How is a requirements analysis conducted?

A: The traditional process is to convene representative users (i.e., dermatologists, nursing staff, and administrative personnel) and compile a list of functions you want the EHR system to perform. However, because many users might be unfamiliar with EHRs, a better process is to use a patient scenario. First, describe the visit from start to finish, identifying all of the information used in the process, including information you would like to have. Second, think about and capture all decision points and thought processes surrounding each step of the patient visit and treatment. When the scenario is documented it can be several pages in length, even for an average patient. Finally, review each element of the scenario and identify what functionality you would like to see in an EHR. The scenario process can be enhanced if you combine it with workflow and process analysis (see the planning section of the dEHRm at www.aad.org/pm/hit/dehrm/planning/ for more resources and tools) and/or use an EHR consultant as a facilitator. However, the greatest value from the requirements analysis is in learning. A consultant should serve as a guide or coach, not simply be there to give you the answers.

Q: Our No. 1 requirement is usability, but how is that expressed? What do we look for?

A: Usability is difficult to pinpoint, is somewhat subjective, and is subject to levels of standardization that EHR vendors have not yet adopted. However, there are some key aspects to consider and approaches to evaluate how usable you think a system is, as follows:

- Have a patient scenario in mind as you compare products. Think about what information you need first, next, etc.; what kind of reminders you would like to have as you review labs results or write prescriptions; and how you can create an order or task, capture charges, make a referral, etc., throughout the patient visit. This is your workflow. As you review products, ask the vendors to show you how you might use the EHR with your patient’s scenario. Determine if the workflow follows your normal workflow, improves upon it, or does not make sense to you.

- Use a mental checklist to evaluate a key set of specific features that will make the EHR more usable for you. The quiz on p. 18 of this manual provides a list of some of these features.
Usability Features

The more yes answers you have to this quiz, the more usable the system is likely to be.

Yes  No  Can you determine what the icons or symbols shown on the screen mean without being told by the vendor or having to hover a mouse over them?

Yes  No  Does it take only one or two clicks to get to where you want to enter data or to retrieve information (e.g., if you are in a template, can you call up a specific photograph while in the template screen and view it from the same screen)?

Yes  No  As you enter structured data elements through a drop-down menu or check box, does the system convert the elements you have selected into narrative phrases that produce a user-friendly note?

Yes  No  To complete an entire note for one visit, are you able to stay on one screen (i.e., you do not have to jump around to several screens to document the history of present illness, another for the review of systems, and yet another for recording physical exam information)?

Yes  No  Does the system provide templates for recording common patient problems encountered in your practice (versus having to create the templates yourself or buy them from a third party)?

Yes  No  Are you able to modify templates yourself, on the fly, based on your practice preferences?

Yes  No  Does the system learn your favorite drugs, patient problems, tasks, etc., as you use it so these are displayed before other options in a list?

Yes  No  Are common patient problems in your practice easy to identify, in terminology you are accustomed to using (e.g., can you find “mole” or must you use a term like “skin lesion”)?

Yes  No  Can you enter data for multiple patient problems on one screen (e.g., “Doctor, Can you remove this mole here; and, by the way, I have a rash over there)?

Yes  No  Can you enter tasks from the same screen as you are entering note information (e.g., can you enter a prescription for a drug and print out an instruction sheet on how to use that drug from the same screen)?

Yes  No  Is the data you enter in one location automatically transferred to other applicable parts of the chart (e.g., the entry of a prescription for a drug automatically populates the medication list)?

Yes  No  Does the system remind you to enter required data, but not force you to do so before you move on to another screen, another patient, or even close for the day?

Yes  No  Does the system enable you to set clinical decision alerts to the level most comfortable for your practice (e.g., does it alert you to an abnormal lab result for a patient or that the patient is allergic to the active ingredient in a drug you are evaluating for use, but does not remind you that a topical medication should not be administered orally)?

Yes  No  Are documentation aids used consistently throughout the chart?

Yes  No  Are the documentation aids structured so they reduce risk of compliance problems (e.g., does the E&M coding support require you to decide on the code given the information presented, or does it apply a default value based on previous entries that you can change — if you remember to)?

Source: MargretA Consulting LLC.
FAQ Section 7: Understanding the Marketplace and Selecting the Right Software and Hardware

Q: Why do EHRs cost so much?

A: As the Institute of Medicine observed as early as 1991, an EHR is not just the automation of a paper chart; it is a tool with much enhanced utility. More recently, in 2009, the National Academy of Sciences observed that “Health care decisions often require reasoning under high degrees of uncertainty about a patient's medical state and the effectiveness of past and future treatments for the particular patient. In addition, medical workflows are often complex and non-transparent... Complex care is increasingly provided to patients in a time- and resource-pressured environment.”

This report also envisioned that the future of health care would require comprehensive data on patients’ conditions, treatments, and outcomes; cognitive support for health care professionals and patients to help integrate and account for uncertainties in patient-specific data; integration of evidence-based practice guidelines and research into daily practice; and tools that allow clinicians to manage a portfolio of patients and to highlight problems as they arise both for an individual patient and within populations.

Clearly, for an EHR to supply context-sensitive templates to capture data that can be turned into patient safety alerts, quality of care guidelines, preventive care reminders, reimbursement support, and workflow and productivity improvements, it must be highly sophisticated with careful design and constant updating. As a result, the cost of an EHR reflects the level of continual research and development required to ensure reliable support.

Vendors with Small Practice Expertise

Each dermatology practice’s workflow and specific needs vary greatly. There are EHR companies that focus on small practices, so consider choosing a vendor who knows your world and can develop and deliver products and support around it. Here are some more tips for small practices:

1. Vendors that focus on small practices might be more likely to take their particular needs into account.
2. Look beyond EHRs that are generic products. Some systems are a bit more complex and might be more labor-intensive to deploy.
3. A vendor that focuses on small practices understands that the two-doctor practice doesn’t have a dedicated IT person on staff. Often they built the system and processes to accommodate that situation.
4. Several excellent decision tools and resources can help with a small practice’s search for the right EHR.
5. Check out the Academy’s Dermatology EHR Manual (dEHRm) at www.aad.org/pm(hit/dehrm and its “Additional Resources” section that lists a host of tools and resources to help you assess your options and facilitate an informed decision process.

Sources: Medscape, American Academy of Dermatology (AAD).

Q: Why can’t I take an EHR home with me and try it out before I buy it?

A: An EHR is not a turnkey system or a product you can take out of the box and start using without system configuration, data preload, testing, and training. The system must be configured to meet each practice’s needs to be most useful to that practice. For a dermatology practice, for instance, you would not find an EHR to be very useful if it was not able to receive lab results from your hospital or commercial lab provider, or if it did not incorporate your specific patients’ demographic, insurance, and medication history. The system should be as intuitive as possible, but even off-the-shelf word processing or spreadsheet programs come with training materials.
Q: Why isn’t the EHR product I was looking at today and really liked certified?

A: The Certification Commission for Health Information Technology (CCHIT) has been certifying ambulatory EHR products since 2006, and by necessity the group had to start with products for the largest user base. CCHIT recently started specialty, or domain, product certification and there are plans to start certifying products for use in dermatology practices. Be aware, however, that some products you may review have been designed by a dedicated physician to fit a niche need. They might be innovative and intriguing — and low cost.

But the product might not be commercial grade and might not include all the functionality needed to support the broader base of users, even within that specialty. For example, it might enable you to document dermatological problems and incorporate and manage digital pictures in special ways, but it might have grown out of an academic environment and not have any charge capture or E&M coding support. The developer might not be able to afford the ability to warranty its use, supply implementation support, or provide regular updates. As a result, such products may hold great promise, but not meet the certification criteria.

Q: Why do I need a certified EHR product?

A: Undoubtedly, there has been criticism to date of the current certification process. As always, there are many sides to the certification story. However, it is clear that with the Medicare and Medicaid incentives (known as HITECH) in the economic stimulus package of 2009, the certification process is being refined in a number of ways: to address specialty needs, to consider ways to incorporate innovation, to determine whether all the functionality upon which the criteria are based truly are essential, and to evaluate product usability. The products also have to meet the definition of meaningful use to quality for stimulus package incentives (for more information about meaningful use, visit the Academy’s website at www.aad.org/pm/hit/HITDashboard/federal.html).

This definition includes incorporation of clinical decision support, ability to exchange data for care coordination, and means for quality measure reporting. And, quality measure reporting also is under review to ensure that the scope of measures for reporting include those that are most important. Certification helps you narrow the field of vendors from more than 250 products to something more manageable. It provides assurance that the vendors on this shorter list have met a minimum set of functional and other criteria.

Q: What is the best source for finding the right EHR for my practice?

A: Probably the best way to find the right EHR for your practice is to recognize that there are multiple sources of information. There is no single source of truth. For instance, you can talk to three different dermatology practices that bought the same product, but because of how the product was implemented and other factors, it might be a great success in one, acceptable in a second, and a failure in a third. In this case, talk to all three. Find out what was unique in each that caused the success or failure and try to emulate (or avoid) that process. Look at the products from vendors that exhibit at meetings you attend. If you do not have the opportunity to attend many meetings, go online and visit EHR vendors’ websites that have demos.

Even if these vendors might not be ones you might otherwise consider, running through the demos is educational. Talk to peers across your state and the nation. Collect business cards and jot down which products they have. Consider which vendors seem to be most popular. Call them later for a reference if any of the products are among those you are ultimately considering. Review publications and survey results. Triangulate all the information you have access to with what you know about your practice. It might be necessary to do a readiness assessment to learn more about your practice with respect to potential computer use. Conduct workflow and process mapping to get intimate with how things really work. Look for ways to overcome workarounds and duplication of effort in the EHRs you are evaluating. Most importantly, you are making a major financial investment in an EHR, so you want to do thorough due diligence. Do not take your neighbor’s recommendation for granted! Spend the time up front planning and covering all bases before making a decision.
Q: What kind of due diligence should I do on the vendor? How do I know if the vendor is financially stable and will be around in the future?

A: After you have canvassed the marketplace to identify those vendors that are certified and most suitable for dermatology, you should send three to six vendors a request for proposal (RFP) that includes the key questions you want to ask. The dEHRm tool at www.aad.org/pm/hit/dehrm/ supplies an RFP template, including a series of questions that should help you assess a vendor's financial stability. You have every right to ask them how long they have been in business, how many and what type of staff they have, the number of clients, what percent of their revenue they spend on research and development, etc. You also can evaluate their financial stability by looking at their product upgrades and history of certification. If upgrades are provided regularly and they have been certified every year since certification began in 2006, the vendor must be sufficiently strong financially to afford those changes and improvements. Of course, if the company is publicly traded, certain financial information is in the public domain. If they are a private company, you can ask them to be prepared to provide financial statements if they become a finalist in your selection process. The company's history, longevity, and client base generally provide sufficient assurance that the company is not operating out of someone’s basement.

However, you must be aware that no matter what size or financial position a company is in today, that could change. A highly successful but small company could be bought out by a larger company. The market is consolidating. When a company is bought out, however, the products generally stay around in their current state for a period of time that enables the buying company to transition the clients to any new changes they make. In many cases, a buyout is a way for more money to be put into product development and can ultimately better for the clients.

However, companies also can appear to be financially sound initially, but then go into bankruptcy. A key factor to protect you is to ensure that your contract addresses this potential circumstance. In any contract you negotiate, no matter how large or small the company, ensure that you have access to your data and the source code that comprises the application's software in the event the company changes hands and no longer supports the product, or goes out of business entirely. You also might ask in the contract that the company supply you with the names of staff members who might be able to assist you in the event of closure. If you can’t get this written into the contract and you decide to go with this vendor, make sure you make friends with staff and follow up with them if they leave the company so you have a list of people who might be able to help you if you are concerned about the future of the company.

Other forms of due diligence can help you assess financial stability and also put you in touch with others who have bought from the company and with whom you can potentially band together in addressing some of the company's potential viability issues. These forms of due diligence include conducting site visits and reference checks. Contacting other users not only reassures you that someone else has bought the product and is using it, but gives you tips for how best to implement it, and can provide a life-long network of user support going forward. Contact as many other practices as you can, especially if the vendor is relatively small.

Evaluating Vendor Options and Contracts

It is imperative to select a software program that meets federal requirements for Medicare’s incentive payments while enhancing your practice's clinical and administrative processes.

1. First, ask if the software is certified at the level that will qualify your practice for the federal incentive payments. If the product is not certified, then when will it be?

2. Does the software offer a seamless interface with your practice management system?

3. Will the vendor be able to offer discounts to your practice with the expected increase in demand for EHRs?

4. Will the vendor have enough staff to effectively implement your system, train staff, and provide sufficient maintenance support?

Source: Medical Group Management Association (MGMA).
Q: Do I really need to send vendors a request for proposal (RFP), especially if I am only considering certified products?

A: There aren’t any product selection police that check how you conduct your vendor selection, but there are some tried and true techniques that enable a more objective and balanced approach to vendor selection. It is certainly not necessary to issue the enormously complex RFPs of the past, but a carefully constructed RFP (see dEHRm at www.aad.org/pm/hit/dehrm/) can be very helpful. In addition,

- The process of identifying functional requirements you want in your EHR and that you will ask the vendor to describe through the RFP is a highly educational process. Many practices observe that they did not fully understand an EHR prior to committing to a given vendor’s product.

- Any given function might exist, but how it works can vary considerably across vendors. An RFP can seek information on not whether the function exists, but how it works. When the RFP is followed up with structured demos — where vendors are supplied a specific patient scenario — you can learn a lot more about whether you like the way a given function works.

- Certification cannot measure everything that is unique to your practice. The RFP is an opportunity to get very specific about needed interfaces, desired subspecialty functionality, unique business lines you would like to integrate with your practice management system (e.g., perhaps you also are in the business of selling non-medical products and services), state-specific requirements for quality measure reporting or privacy/security practices, and many other needs.

- Perhaps the most important reason to issue an RFP is it describes your practice and enables the vendor to quote you a specific price given the number of providers, number of staff, number of locations, nature of computing technology in existence today, your preference for straight licensure or application service provider model of licensing the software, and many other factors. It is the starting point for contract negotiation.

Q: How do I decide which EHR product to choose?

A: After you have completed a requirements analysis, fully understand the marketplace, and conduct a formal vendor selection process — sending out RFPs and conducting other due diligence — the product that is right for you should be evident. To summarize:

- Use the vendor analysis tool in the dEHRm (www.aad.org/pm/hit/dehrm/vendor/) to help you summarize your findings from the various forms of due diligence you perform.

- Consider the cost/benefit (a tool also is included in the dEHRm at www.aad.org/pm/hit/dehrm/planning/analysis.html). Remember, lowest cost does not necessarily provide the best benefits. You want to find the product that most suits your practice and provides the best overall value.

- Recognize the importance of learning all you can, understanding readiness, and educating your practice members. Many practices just want to be told what product to buy. The act of going through the steps yourself ensures a better understanding of what you are getting into. There is no substitute for this homework. If the EHR is not usable, doesn’t include dermatology templates, isn’t customizable to unique workflows, or the vendor doesn’t help you improve your workflows with the EHR, the product is not right for you.

- Avoid analysis paralysis. Another factor to keep in mind is that practice leaders can find they fear making a decision because of the large investment and the feeling that they are less than 100 percent knowledgeable. If you find yourself getting into this situation, go back to the processes you have performed. Have you thoroughly mapped current workflows and processes to identify your requirements? Has everyone in the practice had a chance to see demos of EHRs and think about what changes they will bring about? Have you conducted all steps in vendor selection due diligence? If so, you’re ready. Remember, there is nothing in life that is 100 percent certain. In addition, although it is important to go through a thorough due diligence process, if the vendor is certified — signifying sufficient market acceptance — then others have gone before you and been successful. You can, too!
Q: Which is better: tablets I can carry around or a desktop that is cheaper?

A: There isn’t a one-size-fits-all approach to this. There are pros and cons of tablets, which are generally used in a wireless environment, and desktops, which are hardwired. Some of the differences are a matter of personal preference (e.g., some physicians do not like the weight of tablets; others have no objection to logging into a desktop for each encounter). In other cases, your patient population may be a determining factor (e.g., do you treat many young patients who are computer savvy and might want to start using the desktop in the examining room while you are out of the room).

Your decision might also be based on the availability of the requisite network technology. A practice based in a very old building with brick walls may not be able to use wireless very easily. A practice in a remote location of the country might not have good broadband coverage, or it is very expensive. Wireless technology tends to be slower today, but this also is changing rapidly. The dEHRm (www.aad.org/pm/hit/dehrm/assessment/index.html) provides a technical evaluation to make this comparison. Also recognize that hardware is not a lifetime investment. It becomes obsolete, so plan for refreshing your hardware periodically. This also is an opportunity for you to try out new forms of hardware.
FAQ Section 8: Template Construction

Q: What is a template? What is the purpose of using templates in an EHR?

A: A template is a pre-developed set of variables, the values for which are supplied for each individual instance of use. In an EHR, templates guide the entry of structured data needed to automatically create documentation, provide clinical decision support to aid in making diagnosis and/or treatment decisions, and generate clinical performance data for continuous quality improvement. Templates should be context-sensitive (i.e., specific to the given patient and condition) and evidence-based (i.e., based on best available external clinical evidence from systematic research).

Q: If the EHR does not have templates for dermatological conditions, do I have to create my own?

A: Although some EHR products enable you to create your own templates, it is easier to acquire an EHR from a company that maintains a library of templates that include those for dermatology. Factors to use in evaluating templates include:

- What is the source of the guidance in the templates? Some EHR vendors subscribe to knowledge database services that continuously supply updates to templates, including ensuring that variables are available to support quality measure reporting. Other vendors use internal staff or a contractor to keep templates current. Still others maintain a library to which users contribute their template changes.

- Are templates modifiable by either a vendor at a price, by practice staff with specific training, or by the user on the fly? Modifiable templates can be a double-edged sword. Being able to modify a template enables you to customize it to your needs. But you might not realize you are customizing templates to reflect former workflows and processes and are eliminating data variables you need for complying with quality measure reporting for incentives, or to ensure that clinical decision support is working properly.

- What do the templates do? All templates guide collection of structured data, but some link to tasking functions, whereas others embed tasking functions that make it easier to follow workflow. Some templates also enable linking to images, which is especially important for dermatologists who want to incorporate photographs. Some templates also enable structured documentation through anatomical drawings, also making it easy to enter the location of skin conditions. Some templates enable both structured data collection as well as narrative annotation through keyboarding and/or dictation/speech recognition. This is important, but enabling too much narrative often results in new users using the narrative only, which defeats the purpose of structured data. Look for the ability to enter comments associated with structured data entry.

- How do the templates work? Are they intuitive? Do they reflect logical thought processes? Can multiple problems be handled from a single template?

If you are faced with creating your own templates for the EHR you are using, it is recommended that a physician be assigned to learning how to develop templates (this may require attending a special training session held by the vendor) and assume leadership within the practice for this function, including ensuring that all clinicians are engaged in the template design or at least review.

If the EHR you are using does not support template development, you might find that there are other limitations the system has with respect to impending incentive programs. As a first step, discuss your concerns with the vendor. If your vendor is not certified, this can preclude you from taking advantage of incentives. Determine what your vendor’s plans are to become certified and get in writing some guarantees that upgrades will be forthcoming. If the vendor is reluctant to do this, you might be faced with acquiring a different product.
Q: What is template management? Why is it important to manage templates in an EHR?

A: Template management refers to the process of ensuring that templates are optimized for their use.

- The process starts with reviewing the suitability of templates in vendors’ product offerings prior to purchase.

- During implementation, there is an intensive period of in-depth template review and potential modification. Templates should be reviewed by users to ensure they reflect the desired workflow, are easy to use, and collect necessary data for reporting purposes. Decisions should be made about required versus optional fields and the level of clinical decision support sensitivity you want to enable from the templates. However, it is important to avoid the temptation to modify too much at this stage. Many who have implemented EHRs are suggesting that users wait at least three to six months after go-live to modify templates, except those essential for data-reporting purposes. This gives users time to learn how to use the system as a whole and to better know what they really want changed.

- After implementation, it is important to periodically audit template use. Observe where data fields are rarely, if ever, used and remove them or make them into required fields. Check the contents of comment fields to determine if they are used in place of structured data entry and if any modification in structured data fields needs to be made to accommodate data frequently entered in comment fields. In some cases, it might be that terminology in a template is not familiar and adding a synonym might help compliance.

- Monitor results from template use. If you are using templates to guide data collection for any required or incentive reporting programs, make sure these data are always entered correctly (as you audit template use) and that the results match your expectations. For example, if you believe all providers in the practice are using e-prescribing but find that only 80 percent of claims have one of the three applicable G-codes, this needs to be investigated. Some providers might be forgetting to apply the G-code for when no medication is prescribed or a controlled substance was prescribed.

- Keep templates updated if the vendor does not do that for you automatically. If the vendor keeps your templates current, review all changes as they come in to ensure they are consistent with your practice goals and that they do not adversely affect any previous changes you made to your clinical decision support system.
FAQ Section 9: Contract Negotiation

Q: What are some of the practical issues we should be aware of in negotiating an EHR contract?

A: First, be aware that every contract is negotiable, both on terms and price. After you have requested a proposal from your vendor of choice, read the contract thoroughly. You might want to refer to the contract checklist in the dEHRm at www.aad.org/pm/hit/dehrm/vendor/. Document every item in the contract you don’t understand or you have an issue with. This becomes your “issues letter” and the first step in your negotiation process.

Give this to the vendor and request the contract be revised or issues explained to you further where the vendor is unwilling to change the contract. At that point, you generally find yourself beginning a process of making compromises, so it might be helpful to annotate on your copy of the issues letter what your priorities are. Remember, however, what must result is a win-win situation. A vendor that believes they cut too big a deal will very likely find ways in the future to make up for it.

Remember also that the best position to be in when negotiating a contract is where you have a fall-back position. Undertaking a thorough vendor selection process in which several vendors are evaluated should enable any practice to have a second choice in the event negotiations fail with the first choice. Negotiations rarely fail, but having a backup helps practice leaders to be more confident in their negotiations, usually resulting in a stronger contract.

Q: How much can I expect an EHR vendor to negotiate on price?

A: This varies significantly by vendor. Some will negotiate on base price and make up for it in higher implementation fees or support fees. Others will negotiate only moderately on base price and provide stronger assurances that implementation costs and support fees will be reasonably capped. It is a good idea to talk to other practices that have negotiated with your vendor of choice to learn the vendor’s sweet spot, or hire a contract consultant who has experience negotiating with your vendor of choice.

Be aware, however, that price isn’t everything. Payment terms are extremely important. Many vendors want a down payment of 50 percent then another 25 percent on installation, and the rest on go-live. This effectively means they will get 75 percent before they ever deliver the system to you, and with the final payment on the day of go-live, you have no opportunity to ensure that it works in practice. A better payment schedule is 10 percent down, 10 percent on software installation, 20 percent on completion of training, 20 percent on completion of testing, 20 percent on go live, and 20 percent 90 days after you go live.

Preferred EHR Payment Schedule

Here is a breakdown of when payments typically are due and how much is owed:

- Down payment: 10 percent
- Installation: 10 percent
- Post-training: 20 percent
- Post-testing: 20 percent
- Go-live: 20 percent
- 90 days post-live: 20 percent

Source: Margret Amatayakul, MBA, RHIA, CHPS, CPHIT, CPEHR, FHIMSS.
Q: How do I protect myself from vendors who may go out of business or who won’t live up to their promises?

A: Every contract should have a contingency clause. If the one you have been presented with does not, be sure you have one added. This should address things like the period of time in which you will be notified of the product being sunsetted (i.e., the vendor will no longer support the product, or an older version of the product) and that in the event the company goes out of business the application will not be disabled. This allows you to continue using the application until you have found another vendor.

In some cases the vendor will create an escrow account where continuously maintained source code for the application is placed that can be provided to you or your designee so that you can continue to maintain the software yourself. An escrow arrangement, however, often comes with an extra fee and might not be necessary as long as the software remains viable to use.

If you are negotiating an application service provider (ASP) arrangement, additional terms are needed to address ownership of data, in what format the data will be returned to you, and access to the software to run your data. Practices should be aware, however, that most ASP vendors will sell their business to another vendor rather than shut down completely. Still, it is essential to have appropriate protections in the contract.

In addition to contingency clauses, the contract should be very specific about upgrades: when they will occur, how they will be provided, and whether there are any additional fees for them or their implementation. Annual support and maintenance fee increases should be capped (usually at the CPI index plus 3 percent for only the current year). Changes that are required by state and federal regulation also must be addressed in the contract. In general, these should be treated as part of the normal upgrade; but there may be extenuating circumstances. If so, these need to be explained in the contract.

Finally, it is important to know what you are buying when negotiating a contract, and do not buy promises! If the vendor tells you some functionality you want will be in the next upgrade, get it in writing in the contract and hold the vendor to it. You should treat the contract as a living document and check off each and every item during implementation. Regularly review the contract against upgrades and other events to ensure everything remains current. This includes items such as updating the HIPAA business associate contract when there are new regulations (which are expected under HITECH) to using your contract as leverage if the vendor does not update an interface that is affected by an upgrade.

Vendor Protections

If a vendor sunsets a product or goes out of business, you should negotiate a contract that includes the following protections:

- Require at least two years of notice for products being sunsetted.
- Require that access to software not be disabled if company goes out of business.
- Require return of data in standard format if the application service provider (ASP) goes out of business.

Recognize that mainstream vendors are very unlikely to go out of business, but:

- Avoid buying from vendors who have limited or no client base.
- Require support for software for at least two years if a vendor sells the company or merges with another.
- Contact the acquiring company to learn its plans for your product. Monitor your system closely for any degradation in service or support.

Source: Margret Amatayakul, MBA, RHIA, CHPS, CPHIT, CPEHR, FHIMSS.
FAQ 10: EHR Licensing Agreements

With the passage of the 2009 Stimulus Act and its HITECH provisions, electronic health records (EHRs) are once again squarely in the government’s sights. Despite President Bush’s 2004 State of the Union address advocating for nationwide development of an EHR infrastructure, and creation of the Office of National Health Information Technology Coordinator, adoption of EHRs has remained slow across the country. The Stimulus Act aims to change this. Under the Act, your practice might be able to obtain up to $44,000 from the federal government for meaningfully using an EHR. Meaningful use has yet to be finally defined, but EHRs clearly are hot again.

If you are reading this, chances are you are considering adopting an EHR. As part of this process, you will undoubtedly be presented with the vendor’s license agreement, which is the contract that gives you the right to use the software comprising the EHR. This section focuses on five essential questions about the EHR license you should know the answers to before signing, and whether lawyers are important and when.

Q: What do I get for my money?
A: The scope of the license controls the number of computers on which you can install the software, how many people might use the software, and/or how many physical locations will house the software. Any of these numbers can influence the license price. Consider your practice’s infrastructure and determine whether the scope best suits your practice’s needs.

Licenses are often priced on a per-computer or per-user basis or for use in a specific facility, building, or office suite (a site license). Per-computer licenses benefit practices that have fewer computers, but many users. By contrast, practices with only a few users but a larger number of computers benefit more from a per-user license. Finally, a site license is better suited to a practice that has many computers and users in a single building because the site license will cover the entire physical space of the practice without regard to the number of individual users or computers. A site license, however, might be more expensive. If a license’s scope does not meet your practice’s needs, you will need alternative language and pricing, or you should shop around with multiple vendors.

The license also should address the delivery/implementation schedule for the software. Usually, the vendor will help you install the software and implement its use in your practice. Pay close attention to whether there are different delivery phases/stages, whether training sessions are offered in the agreement, and what constitutes completed delivery and/or implementation of the EHR. You also need to know what, if any, steps you must perform to help the vendor set up the EHR, and whether failure to perform them will delay the installation. If you and the vendor have a dispute over whether installation has been properly completed, this language will help control the issue.

Q: If there is a problem with the software, what will the vendor do to help?
A: The support clause stipulates who helps you when the software crashes and what kind of help you can expect, which is one of the vendor’s most important duties to you. If your practice abandons paper records, a robust support clause will be essential to maintaining productivity. Support can include training for your staff, in-person or telephone support, and software updates and/or patches. You might have to pay additional monthly fees, or support might be included in the cost of the license. You might also have to do certain things to obtain support.

For example, you might be required to designate a specific contact person to act as a liaison with the vendor for support issues. There might also be operational and maintenance requirements. You might have to install the software on a computer in a room kept at a certain temperature, or install all updates and/or patches that the vendor provides. These requirements might not seem burdensome on their face, they might include hidden practical costs such as investing in additional hardware to meet environmental requirements, or installing updates that make the software less efficient for your practice.
You also should consider the matter of modifications. Typically, licenses prohibit an end-user from modifying the software, or modifications might void warranties or negate the vendor’s obligation to provide technical support. You will need to know what constitutes a modification. If you are not careful, what you think of as a minor change to the program could preclude you from receiving future technical support. If this isn’t in the license agreement, you will need to have it added.

Finally, the license should clearly state the vendor’s obligations to modify the software to comply with new legal requirements. You need to know whether the vendor will provide free updates to bring the EHR into compliance with legal requirements, and what constitutes a legal requirement itself. For example, the Stimulus Act incentivizes the adoption of EHRs by subsidizing the cost of an EHR if the practice adopts and meaningfully uses the EHR before a certain date. The program eventually penalizes practices for failure to adopt by reducing Medicare payments to them. If the EHR license does not consider the Stimulus Act incentive program to be a legal requirement, the vendor might have no obligation to bring your EHR into compliance and might require you to pay for any such updates.

Q: Whose data are they anyway?

A: Because vendors often place commercial value on data, pay close attention to how the license addresses data ownership and use. The license should explicitly say that any data you create are your property. You also should be compensated if the vendor uses your data. For example, if the vendor intends to sell your practice’s prescribing patterns to a pharmaceutical marketing firm, you should be compensated. Compensation can take the form of direct payment, discounts in EHR costs, or the vendor might provide additional services not otherwise included with the license. Of critical importance is what happens to your practice’s data upon termination.

Q: How do I get out of the license, and what happens then?

A: The termination clause is vitally important. It might seem strange to think about termination while you are trying to negotiate the deal in the first place, but remember: When it comes to the termination clause, you are planning ahead for the worst, even if you currently assume the best. Failure to address this can lead to disaster.

A termination clause may permit either or both parties to terminate for any reason on written notice, or might only allow termination for breach (with or without a cure period). Grounds for termination might also be spread throughout the document in the clauses governing the parties’ duties. In addition, some obligations might survive termination, such as vendor conversion of data, mutual duties of confidentiality, and non-solicitation clauses.

The license should let you terminate for more than a vendor’s breach. In other words, you should be able to terminate without cause. If you are dissatisfied with the vendor’s service, you should still be able to terminate even if the vendor has not actually breached the contract. If only the vendor can terminate without cause, you will want this to extend to your rights, too.

You probably will have to return the software upon termination, but you should know what happens after that. If your data are stored off-site, make sure the vendor will return them. If the data can only be read by the software, determine whether the vendor will convert your data to a non-proprietary format upon termination, and whether you will lose any information in translation. Keep in mind that you have legal requirements you must meet with respect to patient data. Even if there is a dispute over payment or outstanding obligations, don’t let them hold your data hostage.

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Data Privacy Issues

If a vendor wants to use data from your EHR whether you are compensated or not, the HIPAA Privacy Rule requires you to either obtain consent for such disclosure from each patient or only allow the vendor to use de-identified data. The HIPAA Privacy Rule has very specific requirements for de-identified data, including the removal of 17 specific data elements that might identify the patient plus the requirement to remove “any other unique identifying number, characteristic or code, except as permitted by law.” The HITECH Act of 2009 (part of the stimulus legislation) further addresses uses of patient data for marketing purposes (which is frequently the intent of the purchaser of such data), imposing even stricter requirements for obtaining patient consent.

Source: Margret Amatayakul, MBA, RHIA, CHPS, CPHIT, CPEHR, FHIMSS.
Q: What if there’s a dispute?

A: If the license doesn’t include guidance about what happens in a dispute, you will have to go to court. However, many licenses also provide for arbitration. Arbitration can be less expensive and less time-consuming than litigation, but might be conducted by an impartial lawyer or retired judge. Understand that if arbitration is the sole means by which disputes are to be resolved, you will not be able to sue in court if there is a problem. On the other hand, arbitration is usually confidential, so there will be no public record of the dispute.

The license might also restrict the issues for which the vendor is liable. This will be controlled by certain disclaimers embedded in the document. These disclaimers are usually in boldface or all capital letters, and generally will disclaim the vendor’s liability for physical harm caused to a patient (i.e., if the software mixes up a patient’s prescription or blood type), loss of business caused by the EHR’s failure, and other issues, including warranties of merchantability. These disclaimers usually are non-negotiable, and appear in virtually all licenses. However, you will want to know what the disclaimers cover specifically, so you know the grounds upon which you can sue. Your lawyer can explain these issues to you.

Q: What is my lawyer’s role?

A: Software licenses are full of technicalities. These are in addition to the legal issues (such as venue, governing law, waiver of breach, and assignment clauses) in all contracts. Still, there is much a physician practice manager can determine before using legal help. But, not only is the EHR system one of the most essential resources of your practice, it is a major capital outlay and should be approached much like buying real estate. When you need help, be sure the lawyer you use knows the technicalities of the area.

This article by no means lists all of the issues and pitfalls that might lurk in a license agreement. Software license agreements can be complicated, and even a license agreement with simple language might be problematic in terms of the issues it fails to address. If the above information sounds complicated, that’s because it is. Software licenses are not something to be taken lightly, even if the vendor tells you the language is just boilerplate. Given the level of investment — both of your time and your money — you need to know what the license covers, what it doesn’t, and what your risks are before you sign. An attorney can help you better understand what’s there and what isn’t, what you can afford to ignore, and what language needs to be changed. However, even if the terms are non-negotiable, you can at least know what you are getting into ahead of time and plan accordingly.
FAQ Section 11: Implementation and Process Improvement

Q: Why does it take so long to implement an EHR?

A: A good implementation can be expected to take a significant amount of time. You must thoroughly plan and prepare your practice's users to adapt to new workflows and technology, ensure that the system is configured properly and tested so it works as intended, and rolled out in a manner that supports adequate training for all new users. Although how long such an implementation actually takes varies considerably with the size of the practice, the product, and how you choose to roll it out; do not be surprised that this period of time spans, on average, about three to nine months.

Taking any shorter time probably means that corners are being cut somewhere that will backfire later. If the system is not configured properly or interfaces are not fully tested, users often end up having to re-enter data, which can be an error-inducing and time-consuming situation. Intervening paper processes are not only a hassle to manage, but can be a patient safety risk if it is not clear where information is located or if partners covering for one another can access needed information. There also might be additional costs associated with fixing issues after go-live rather than during the implementation. Finally, a poor implementation often leads to poor adoption because users have less faith in the system, dislike the workarounds, or become frustrated with the inability to perform tasks they expected to be automated. Alternatively, taking too long can result in anxiety and concerns about what might be going wrong, loss of interest, or intervening variables affecting the implementation that require rework.

Performing Due Diligence

Medicare's EHR incentive program might reimburse much of your EHR's cost, but you should approach your adoption process as if your practice were incurring the entire cost.

1. Identify a project team and create an implementation plan that addresses each aspect of the process, from product selection to ongoing support and maintenance.

2. Work with your staff to identify basic requirements, system capabilities, staff abilities, actual liabilities, timing issues, and desired clinical and administrative options.

3. Plan to develop an integrated/tightly interfaced practice management system software and EHR system to maximize practice operations.

Source: Medical Group Management Association (MGMA).

It is surprising how frequently poor implementations occur. Sometimes they are the result of unwillingness on the part of the practice to take the time to plan for the implementation. Many practices do not recognize that it is not the technology that causes improvement, but the way people adopt the technology that helps achieve positive results. In its EHR pilot study, the American Academy of Family Practice found that “the practices with a well-defined plan had fewer issues and problems during implementation and use than those that were less disciplined in their preparation ... [and] the most success was achieved when the plan started with a critical look at the practice by questioning the merit of the current workflow and processes.”

Q: I've heard horror stories about implementations, so how can we assure ours goes smoothly? What are the critical success factors to a good implementation?

A: There are several factors that make for a successful implementation. And, they begin before vendor selection:

- Understand the practice's readiness for an EHR. Even in a solo practice, all members of the practice — physician, nurse, and administrative staff — need to understand what an EHR is, what affect it will have on the practice, and how to begin to prepare for the level of change it brings about.

- Take an inventory of the practice's needs for improvement, set specific and measurable goals for achieving those improvements with an EHR, and use these goals in vendor selection. This step will not only help you select the product most right for you, it will also set appropriate expectations for what an EHR can — and cannot — do.

- Evaluate how your workflow and processes can be improved with an EHR and what changes will need to be made to achieve those improvements. Document these as a beginning step to achieving the discipline necessary to both implement and fully utilize an EHR system.
• Use a detailed implementation plan to ensure all necessary steps are undertaken during implementation and planning for go-live. Do not rely solely on the vendor to perform all aspects of the implementation; however, it is important to understand — preferably before signing the contract — what tasks the vendor will perform and which you need to undertake. Assume responsibility for all tasks, whether this is ensuring that the vendor has performed the tasks appropriately or that you have accomplished the tasks you need to perform. Flag any issues that arise to ensure that you follow up on them until they have been resolved. Ensure all project milestones are met satisfactorily before making milestone payments.

• Designate someone to be the project manager. Even in a very small practice, someone needs to be given time to take charge of the project. This person does not have to be either a clinician or an IT person. In fact, highly technical people generally do not make good project managers. Primarily, the person needs to be able to envision the big picture while being sufficiently detail-oriented to ensure that all steps in the implementation plan are completed. This person must be confident in working with contractors and should be given the authority to take appropriate action as is necessary to get the job done.

• Physician and nurse engagement in the project is critical. Even if the practice takes an incremental path to an EHR where early phases are more focused on office activities, the goal of an EHR ultimately is intended to aid clinicians in taking care of patients. Not only must all physicians and nurses be on board, but they need to be a part of the planning and decision-making about how their clinical process will change.

Q: Is it better to use a big bang approach and implement everything at once, or is it better to phase in various parts of the EHR?

A: Perspectives on the right way to roll out an EHR are shifting a bit with more industry experience and incentives for actual adoption; however, each practice needs to evaluate what is right for them.

Early thinking was to start with low-hanging fruit that provides value to the practice overall, then move slowly to physician use. For example, early wins can be achieved by first implementing clinical messaging, then lab results tracking, and next prescription renewals; in general, tasks that do not require the physician to use the computer at all, or could be used for lookup only. Such functions also do not require a true EHR because e-faxing, using encrypted e-mail, or a secure portal are sufficient.

Such use of limited automation may go on for a period of several years. Recently, incentives for use of e-prescribing have pushed more physicians to adopt standalone e-prescribing systems — with great patient safety benefits at low cost. Their deficiencies are recognized by their users, and many have stalled at this stage because the next step entails a full-blown EHR. For those acquiring an EHR, however, the implementation often has occurred slowly, initially with only the front office or back office functions moving to the EHR. When physicians start using the system, it might be only for lookup, or for e-prescribing, internal tasking, standard order sets, and/or referral communications. Many physicians continue to use dictation, speech recognition, and/or document scanning for visit documentation. Many never move on to adopt structured data entry using templates that support clinical decision-making. In some cases, practices do not get to this stage of adoption because they do not participate in quality improvement and pay-for-performance/incentive programs that require structured data, or they are willing to pay staff to abstract such data for them. In other cases, they are uneasy making such a change to their workflow and processes, especially because there is little support — either inherent in the products or directly from vendors or others — to help them make such adjustments.

A more phased-in approach might ease physicians into using the computer, this might be more theoretical than real, especially if the physicians never get to the end state. The result often is a hybrid record situation where part of a patient’s record is in the computer and part is on paper. This creates parallel systems — paper and electronic — often causing more work for staff. Even if all paper forms are scanned or electronically fed into the EHR from the transcription system, there is additional work for staff in scanning or at least indexing the forms, and often printing them out (and later destroying them) for non-users at the time of a visit. Such partial adoption of an EHR not only limits the potential efficiencies to be gained from an EHR, but might also put the patient at risk. For example, there can be confusion about whether a lab test was actually performed, or whether test results were followed up. Medication errors can occur from incomplete information about medication history.
Finally, there definitely are benefits from some level of automation, but there is a growing body of evidence that a partial implementation of automation can put patients at more risk than keeping all documentation on paper. In partial implementations, physicians often do not move beyond a certain stage in the rollout — never to fully take advantage of enhanced clinical decision support that comes from structured data entry for medical necessity checking, E&M coding support, alerts to abnormal test results, reminders for preventive screenings, earning incentives, or performing quality improvement.

As a result of many partial implementations being a barrier to full adoption and therefore full value, some EHR experts are urging a more rapid phase-in, or big bang, implementation approach. Incentives for EHR use also are promoting such roll-out strategies. Many EHR products also are supporting such implementations because their functions are more highly integrated, making it easier to adopt all functions at once, or at least more functions more quickly.

Q: **How do we know we’ve succeeded in our implementation?**

A: If you have set specific and measurable goals for what you want an EHR to help you accomplish, you will not only be able to measure their achievement, but very likely you will know intuitively that you have succeeded in meeting the goals. Unfortunately, many practices are unwilling to set such goals, or are only focused on implementing the EHR — not achieving results from using the EHR — which really is an ongoing process. The following famous quotes or famous people making the quotes are words to live by when planning to implement an EHR!

“Success is a journey, not a destination.”
— Ben Sweetland

“Success doesn’t come to you … you go to it.”
— Marva Collins

“The difference between a successful person and others is not a lack of strength, not a lack of knowledge, but rather in a lack of will.”
— Vincent T. Lombardi

“Desire is the key to motivation, but it’s determination and commitment to an unrelenting pursuit of your goal — a commitment to excellence — that will enable you to attain the success you seek.”
— Mario Andretti

Lessons Learned: **Source of EHR Adoption Failures**

1. Poor project management
2. Inappropriate product selection
3. Inadequate staff training
4. Insufficient and inappropriate infrastructure (i.e., provider-patient interface, memory, connectivity speed)
5. Inadequate interface between clinical and administrative data (the interface between the clinical EHR system and the scheduling and billing practice management system)

Source: Medscape.com

Online Resources

To learn more and to determine what approach is best suited to your practice, consult Section 5: Implementation and Training of the Dermatology EHR Manual (dEHRm) at [www.aad.org/pm/hit/dehrm/implementation/index.html](http://www.aad.org/pm/hit/dehrm/implementation/index.html).

For more information about e-prescribing, visit the AAD’s e-prescribing Web page at [www.aad.org/pm/hit/eprescribing/index.html](http://www.aad.org/pm/hit/eprescribing/index.html).
FAQ Section 12: Privacy and Security

Q: We are a small practice, so HIPAA doesn’t apply to us. What do we need to do about privacy and security?

A: Irrespective of the size of your practice, if you — or a billing service on your behalf — transmit claims or conduct other financial or administrative transactions electronically, you are a covered entity under the Health Insurance Portability and Accountability Act (HIPAA) and must comply with its requirements and those added to HIPAA under the HITECH Act of 2009. However, even if you are not a HIPAA-covered entity, other laws and ethical and professional obligations compel you to address privacy and security — especially as you work to acquire an EHR. Most states have statutes that address privacy and security in at least a general sense. In 44 states there are specific state data breach notification laws that are broader than even health care that require you to report breaches of personal information. States vary in their requirements, so contact your state medical society or other resources for detailed information. Identity theft, including medical identity theft, is a growing crime and does not require electronic systems to be perpetrated. Finally, most physicians accept the Hippocratic Oath, which includes preserving a patient’s privacy. Perhaps more than anything else, a wrongful disclosure or denial of a patient’s rights to his or her health information that is attributable to your practice could have serious implications for the practice.

Q: What are the most important privacy requirements to address in EHR planning?

A: There are two areas in which many small practices often need to enhance their privacy activities. These include both human and electronic processes.

First, protecting the privacy of an individual’s health information is of increasing concern to the public and must be recognized by all providers whether they’re using an EHR or not. Practices should make sure that they regularly discuss privacy practices with staff to reinforce their importance. Staff should feel comfortable asking questions about privacy and discussion about what is right should be guided by reference to the HIPAA privacy rules (available at www.aad.org/pm/compliance/hipaa/). Notices of privacy practices should be posted somewhere for patients to see and all patients should be given a written acknowledgement of this policy. Have the patient sign this acknowledgement because it is an indication that he or she received the notice. Signing this is NOT an authorization for release of information. Separate authorizations are necessary for releasing information not related to treatment, payment, and operations. Unless required by state law, it is not necessary to have an authorization to release information to another treating provider. Just as HIPAA is important to protect privacy, it should not be used as an excuse to provide inadequate care. “I can’t do that because of HIPAA,” is never an appropriate response. There should be a way to address almost every reasonable request, even if it means getting the patient to sign another authorization form.

Second, there is a need to not only ensure that both human and electronic systems are in place to protect a patient’s privacy, but to ensure patients’ rights to their information are honored. Under HIPAA, one of the top five most frequent privacy complaints is that providers refuse to supply patients with access to their health information. Now, under HITECH, you must not only comply with such requests as required by HIPAA, but you must be able to supply patients with a copy of their health information in electronic form if they request it. You also must be able to account — when requested by the patient — for disclosures for treatment, payment, and health care operations when made through the EHR, such as when you refer a patient to another provider and send information about the patient electronically. Under HIPAA, disclosures for treatment, payment, and operations were an exception to the accounting for disclosures requirement. Under HITECH, you must honor a patient’s request not to send information to a health plan if the patient has paid for the services in full, out of pocket.

Q: What are the most important security requirements to address in EHR planning?

A: There are 18 specific security requirements in HIPAA that cover administrative, physical, and technical aspects of protecting not only the confidentiality of health information, but the integrity of the data (i.e., that it is not changed during electronic processing or transmission) and the availability of data (i.e., that it is readily accessible to authorized users when necessary). The following groupings of the requirements might help overcome concerns that security is a daunting task:
• **Security Management Process, Security Incident Procedures, and Evaluation** are requirements that — working together — ensure that ongoing security risks are identified and addressed. It is important to document risks in the environment and how you plan to address them, to track information system activities that pose potential risks (such as system crashes or updates that cause problems), and to carry out sanctions for security breaches consistently.

• **Assigned Security Responsibility, Workforce Security, and Security Awareness and Training** are requirements that focus the practice on assuring that the security policies of the practice are documented, made known to all individuals as they become members of the workforce, carried out on an ongoing basis, changed as information systems changes occur, and followed as members of the workforce terminate their employment.

• **Business Associate Contracts** requirements are increasingly important in an electronic environment. HITECH has added a number of provisions that more tightly bind business associates to HIPAA requirements and enforcement. It is very important that for every contract your practice has with a company that has any access to protected health information, there is business associate language that is consistent with HIPAA requirements.

• **Contingency Plan, Facility Access Controls, Workstation Use, Workstation Security, and Device and Media Controls, Integrity, and Transmission Security** might be grouped together because they deal with ensuring that data are appropriately backed up, that there is a disaster recovery plan, that there are office safety measures in place that protect human and electronic assets, and that data are not able to be accessed by other-than-intended persons. Recent Federal guidance on HIPAA and the new HITECH requirements also have addressed the need to protect portable electronic data assets. For example, this includes data stored on portable devices, which should be encrypted and not just password-protected, or destroyed if the device is being destroyed. Ideally, portable devices should be used only for entry and retrieval of data and should not have data stored on them at any time. In addition, protected health information should not be transmitted except through a secure process.

• **Information Access Management, Access Control, Audit Controls, and Person or Entity Authentication** are all requirements relating to who may have access to what information under what circumstances — and proving they are who they say they are, as well as ensuring there are logs of who has accessed what information when. Authentication processes and other measures may seem burdensome, especially in a small office. You should be aware that many patients are expecting to see them used, and might even attempt to take advantage of lax practices! With the exception of the very young and the very old, your patients might well be more computer savvy than you are!

**Q:** We’ve never had a privacy or security complaint that went to the Federal government. Why is it important to take extra precautions now?

**A:** Health information technology (HIT) is playing a major role and an increasing number of breaches are being made public due to new data breach notification laws. As a result, it is important to recognize that in addition to those who see great benefit to health and health care as intended from adoption of HIT, there are those who might see opportunity for personal gain, often resulting in harm. Such concerns are also the reason why stepped-up enforcement of HIPAA has been included in the HITECH Act of 2009, why privacy and security protections have even been included in the proposed definition of meaningful use with respect to incentives for adoption of EHR technology, and in the Patient Safety and Quality Improvement Act (PSQIA) of 2005 that protects the privacy of patient safety information (including reducing liability risk). The public is becoming much more aware of privacy and security issues. But rather than give up their use of computers, they will expect to see all with whom they do business affording adequate protections and will not hesitate to report what they perceive as violations. It is therefore incumbent upon every provider not only to take the necessary precautions, but to ensure that your patients are well-informed about what precautions you are taking, what their rights are, and what is not a violation of HIPAA. To learn more about what information the federal government is providing the public, including literature that helps you describe what is not a violation, visit: [www.hhs.gov/ocr/privacy/hipaa/understanding/consumers/index.html](http://www.hhs.gov/ocr/privacy/hipaa/understanding/consumers/index.html).
FAQ Section 13: Regulatory Changes

Q: What is the HIPAA 5010 and ICD-10-CM?

A: In 2003, the industry was required by HIPAA to adopt the X12 Version 4010 for electronic claims and other financial and administrative transactions (such as eligibility verification, claims status inquiry, electronic remittance advice, and prior authorization). Even though you might have continued to use paper encounter forms and perhaps not taken advantage of the other electronic transactions available to you, your billing service converted your paper to electronic claims. Many changes have taken place over the years with new needs for information relating to these transactions. As a result, CMS will be requiring all covered entities to adopt the updated Version 5010 effective Jan. 1, 2012. In addition to some changes in data requirements, the new version of the transactions also accommodates the new version of the International Classification of Diseases (ICD-10), which has been approved for adoption by Oct. 1, 2013. ICD-9-CM, which is currently being used, has run out of space in its numbering structure for new codes. In addition, all other countries in the world that participate in the World Health Organization (WHO) have been using ICD-10 for more than a decade now, putting the United States at a disadvantage in terms of being able to exchange comparative data for trending and population health purposes. The ICD-10-Clinical Modification (ICD-10-CM), which is the new, customized version for use in the United States, enables much greater specificity to describe illnesses and injuries.

Q: How do the new HIPAA 5010 and ICD-10-CM versions affect my practice?

A: Both the new HIPAA 5010 transactions and ICD-10-CM diagnosis codes will affect your practice, but in somewhat different ways.

If you are a covered entity provider under HIPAA, you will be required to make the necessary changes to your systems to adopt the new 5010 version of the claim. If you still use paper encounter forms, this might entail only very few changes to your forms. Your billing service will be able to accommodate (and take advantage of) other changes. However, you might want to evaluate a practice management system (PMS) that would enable you to generate electronic claims yourself, even if you continue to send them to a billing service to process. A PMS would also enable you to check a patient’s eligibility in advance of the visit so you can collect co-pays at the time of the visit. You might also find a PMS gives you greater control over your accounts receivable and collections process by supplying you with electronic remittance advices (explanation of benefits) and the ability to request claims status information. Although still an optional transaction, the HIPAA transactions also can enable electronic submission of claims attachments, which is especially helpful if you have an EHR.

The change to the ICD-10-CM codes will be more significant than the HIPAA 5010 transactions. If you purchase standard encounter forms, your vendor should make the necessary changes on the forms, but you will need to understand these changes as you start to use them. ICD-10-CM provides alphanumeric codes that enable by far greater specificity. If you use a practice management system (PMS), your vendor should be updating its software and at some point issue an upgrade to you. If your experience has been such that the vendor has been late in addressing other changes in the past, it would be in your best interest to contact the vendor and push for an implementation date for the new transaction standards. However you assign codes, paper or electronic, in addition to understanding the specific changes in codes, you also want to study how the changes in codes affect your reimbursement. Early in the implementation cycle, health plans may not have fully worked up their payment structure for the new codes. However, contacting them to find out specifics as the effective date of Oct. 1, 2013 draws nearer should prove helpful. If you are unable to get information from the health plans in advance, be sure to monitor your reimbursement after the effective date and communicate with the health plans about any differences. There is nothing in the issuance of this regulation that requires health plans to change their payment structures, but what codes you apply might affect whether you continue to be reimbursed at the same rate or not. If you are using the wrong codes, you want to find out immediately!

HIT Dashboard
Visit the HIT Dashboard on the AAD’s Web site at www.aad.org/hit/HITDashboard/icd10.html for more information and practical guidance on HIPAA 5010 and ICD-10.
Q: What should a dermatology practice start doing to prepare for use of the HIPAA 5010 and ICD-10-CM standards?

A: There are several steps you should take to prepare for the HIPAA 5010 and ICD-10-CM standards.

With respect to the HIPAA 5010, contact your billing service and encounter forms supplier and/or practice management system (PMS) vendor to determine how they are getting ready for the change and when you can expect to receive updates. Ask them to keep you informed about any new data requirements so you can plan how to capture these data if necessary for your practice.

Next, become knowledgeable about the ICD-10-CM codes. At a minimum, acquire a copy of the code book and a coding instructional manual. Depending on how broad your scope of practice is, you might want to have someone attend a training program. Coding manuals and training programs are widely available, from Web-based seminars and courses to in-person classroom training sessions.

Once someone within the practice has become knowledgeable about ICD-10-CM, that person can anticipate the changes that will be made to the encounter forms/PMS. Have your “super coder” verify the changes once they are made. The super coder should understand any differences from what was expected or seek a correction if the upgrade is in error.

Also have the super coder conduct a training session within your practice for everyone who will be affected, including dermatologists who will be assigning the diagnosis codes for their patients.

Finally, have the super coder monitor your reimbursement, including monitoring requests for additional information, denials, etc. This individual should be in a position to negotiate with the health plan about the appropriate codes. You should be aware that there is a General Equivalence Mappings (GEMs) tool that provides a network of relationships between ICD-9-CM and ICD-10-CM (and the corresponding ICD-10-Procedure Code System [ICD-10-PCS] for hospital coding of procedures). In some disease categories, there is a one-to-one relationship between the old ICD-9-CM and the new ICD-10-CM codes. In many cases, however, there is a one-to-many relationship between ICD-9-CM and ICD-10-CM. As a result, you will be more accurate if you apply the ICD-10-CM codes directly rather than rely on a mapping tool. See [www.cms.hhs.gov/MLNProducts/downloads/ICD-10_GEM_factsheet.pdf](http://www.cms.hhs.gov/MLNProducts/downloads/ICD-10_GEM_factsheet.pdf) for more information.

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**Top 10 Questions to Ask Your PM/Billing Vendors about 5010**

1. Does my vendor contract include an update to the 5010 standards or will I be required to pay for this upgrade? If so, how much will it cost?
2. When will my system be upgraded with the 5010 standards?
3. Will I need to purchase any new hardware?
4. Will you be increasing your yearly fees to cover the cost of 5010 implementation?
5. Will there be testing and validation phases where I can see if any problems occur when submitting claims?
6. Who should I call if we have problems submitting claims?
7. Will the 5010 upgrade include a 277 Claims Acknowledgement electronic transaction to show me if there was an error in the claim?
8. Will the 5010 upgrade include a Functional Transaction 999 to show me that the claim was accepted by the carrier?
9. If there is an error with the claim, will I receive a readable error report and will my system be able to accept this?
10. Will this require any additional training by my staff? If so, where can I obtain this training?

Sources: American Academy of Dermatology (AAD), American Medical Association (AMA).
Q: How will the HIPAA 5010 and ICD-10-CM standards affect my decision, planning, and preparation to adopt an EHR?

A: Although there is no absolute relationship between the HIPAA 5010 and ICD-10-CM standards and your acquisition of an EHR, there are some things to consider.

If you are a paper-based practice, you might want to consider acquiring at least a practice management system (PMS) even if you still want to use a billing service. The PMS enables you to have more control over the coding and billing process. Especially important is that the new HIPAA 5010 transactions for eligibility verification will have much stronger support than they did previously. This should enable you to increase your co-pay collections, reduce denials, and speed up your accounts receivable. Many providers use a remote billing service to process claims generated by the PMS. Of course, the PMS also provides appointment scheduling, patient registration, and other functions. Some also incorporate general ledger, accounts payable, and payroll functions, some or all of which you might or might not decide to acquire.

Many practices today are considering acquiring an electronic health record (EHR) system, especially in light of the stimulus incentives, which are available at the maximum amount of $44,000 per eligible provider spread over five years, if you start using an EHR by 2011 or 2012. Many EHRs are now being sold with a fully integrated PMS at a very low incremental cost to the EHR, which reduces the costs and hassles associated with managing an interface between the EHR and PMS. Many practices find that the PMS has by far superior functionality to old, standalone systems. It is often feasible to run down accounts receivable in the old system or pay to have your billing service run down the A/R for you. Compare the cost of continuing the license of an old PMS to the cost of the service. You will often find you come out ahead, especially with the additional features of the new PMS.

If your plans call for either a PMS or both a PMS and EHR to take advantage of the stimulus incentives, other incentives available through the CMS e-prescribing and/or Physicians Quality Reporting Initiative (PQRI), other payers’ incentives, bonuses from a corporate-wide program if you are a member of an integrated delivery network, or you simply want to gain the benefits of these systems, the best advice is: Do not delay. Although the vendor you buy from might not yet have the HIPAA 5010 transactions and ICD-10-CM codes sets ready, the last thing you want to do is go through the process of transitioning to these standards in an old system and then again in a new system. Furthermore, unless you negotiated your old contract otherwise, you might be faced with paying for the upgrades. You can negotiate for these to be supplied as part of the vendor’s regulatory upgrade requirement at no charge as you negotiate your new contract. This also will reassure you that your practice will be ready for the upgrades, rather than having the uncertainty that comes with wondering if your old PMS vendor will upgrade on time.
FAQ Section 14: Chart Conversion and Preload

Q: What do we do with our paper charts after implementing an EHR system?

A: Practices have several options for their paper charts, including: (1) doing nothing and pulling them for patient care until the record has largely been rebuilt into the EHR, (2) conversion of all or some of the paper chart content into scanned images, (3) preloading key data that are abstracted from the chart so they are ready for use in the EHR, or (4) a combination of these. Depending on how much of the chart is converted or preloaded into the EHR, the paper charts can be destroyed, warehoused, or closed, where only reference is permitted in the future.

Q: What are the advantages and disadvantages of not doing any chart conversion or preload?

A: In the past, some practices did not do any conversion or preload and essentially users built a new record for the patient in the EHR as they used it. This is probably the most accurate and complete way to make a conversion, but is very time-consuming, especially while new users are learning how to use the system. Many find the loss of productivity, and hence revenue, unacceptable.

Q: What are the advantages and disadvantages of scanning paper charts into the EHR?

A: In the past many practices scanned all paper documents into the EHR, either by staff working overtime, temporary staff brought in, or through a commercial service. This enables you to destroy, or at least warehouse, your paper, and might free up space in your office for other, potentially revenue-generating activities. However, scanning can be costly and leaves you with the need to search for a document in the EHR (much like searching for your paper files) and then only have the ability to view the document. No data will have been preloaded into your EHR to populate your patients’ problem lists, medication lists, last labs, etc.

Q: What are the advantages and disadvantages of preloading key data into the EHR?

A: Preloading data helps you use the new EHR more efficiently and effectively, thereby reducing the learning curve and lessening early productivity loss. A medical assistant, transcriptionist, coder, or other staff member with a good command of medical terminology (often working some overtime or in a temporary capacity) is needed to accurately preload data, and the user must verify its accuracy when the new EHR is used. Preloaded data should be kept to the minimum essentials. The paper chart will need to be pulled for one or two visits after go-live for reference, and then it can be closed.

Q: Should chart conversion or preload be done all at once or over time?

A: It is important to plan early in your EHR selection, and some EHRs have tools that aid these processes. If you are going to scan paper, changes might need to be made to your paper chart forms, such as to always record on standard-sized paper, no shingling of documents, etc. If you are going to preload data, users should immediately attempt to consolidate problem lists, medication lists, and other key information and write or even print these as legibly as possible. Then, if selected documents are to be scanned and selected data preloaded, this should be done only a few days prior to the scheduled visit so it is the most current information.

Q: What is the best way to manage chart conversion?

A: There is no one right way or even a most common way. However, there seems to be an emerging recognition that a combination of data abstraction of key data and then scanning a few selected documents marked by the dermatologist during the first visit with the EHR is the most cost effective and contributes the most to user adoption. Use the Chart Conversion tool in the deEHRm toolkit (available at www.aad.org/pm/hit/dehm/index.html) to help you consider what might work best for your practice.
Q: What do I do with the office space I gained after chart conversion?

A: Regardless of the amount of space gained after scanning patient records, consider putting that free space into productive use. A patient chart room can be converted into an exam room to help you accommodate patient demand and boost productivity. If the additional space gained from chart conversion is less than a free-standing room, consider using it as office space for your support staff.

### Migrating paper to an EHR

Converting and transferring paper charts to electronic health records will depend on your practice's goals and culture. Depending on your dermatology practice, you must decide how much information to transfer to the EHR, and which method best fits into your practice's workflow.

#### Conversion methods

1. **Import transcribed dictation.**
   - Notes dictated and saved as an electronic transcription file.
   - Create shell of a digital record for each patient when importing demographic information from practice management system.
   - Add transcribed dictation and file it in a documents section of each record.
   - Dictated information can be very handy.
   - Slowly phase out paper charts, beginning with ones for inactive patients by scanning them onto CDs apart from the EHR.

2. **Basic data key in.**
   - Type essential information from patients’ paper chart — the problem list, the medication list, recent lab test results, the latest history and physical exam, etc. — into data fields for each individual electronic chart.
   - Decide who should handle this key-in task to ensure record accuracy and integrity. Look for volunteers or college students to provide a low-cost alternative for this task.
   - Decide when data key-in should take place. Option 1 — which could take several months — involves converting all the charts before beginning to use EHR system. Option 2 — or a more gradual approach — involves entering data as charts are pulled for appointments.

3. **Scanning as you go.**
   - Being able to scan paper into your EHR is imperative. Otherwise, you might risk being flooded by paper copies that pour into the office from other health information technology backwaters.
   - Invest in scanner(s) with the necessary software, unless your EHR program already comes with a scanning module.
   - With scanning technology in hand, why not use it to copy a patient’s paper chart into the EHR when booking their next appointment? This approach can help with converting charts for only those patients whom you’ll see in the future.
   - Scanning key components of the paper chart — the medication and problem lists, the most recent progress notes and lab results, etc.
   - Once a patient schedules an appointment, have a staffer scan the record either before or after the visit. In the latter scenario, the physician can use the patient chart during the visit and designate pages to be imported into the EHR.
   - Have the patient fill out a patient history form online prior to the appointment and have your EHR automatically update the patient’s file.

4. **Scan it all at once.**
   - **Wholesale scanning** has drawbacks: It might take up to a year or more before you cycle through your patient base and their story and again, state statutes vary significantly, from seven years to as many as 25 or even 30 years.
   - Alternatively, **incremental scanning** might overwhelm staff, especially if the practice books a lot of patients for same-day or next-day appointments, leaving little lead time to feed paper into the scanner.
   - **Bulk scanning** before going live with an EHR eliminates these problems. You can either assign this job to your staff — in which case you would need to figure out what period of time or how many weekends it would take — or you can hire an outside scanning company to do high-speed, volume, scanning within a few days. Scanning companies might charge a basic rate of 5 cents to 15 cents per image, depending on volume. Prepping each piece of paper — removing staples, undoing dog-ears — can add a few pennies more, as can indexing images so they match up to individual electronic charts. The cost of scanning 2,000 charts averaging 30 pages apiece could easily top $5,000. Scanning just the essentials of each record can trim the bill considerably. Bulk scanning deprives you of paper charts for several days. To minimize the disruption to your practice, hold back the paper charts of patients who have appointments during the scanning period and do those later. Or, schedule the work for a weekend (and expect to pay more per image) or when you’re on vacation. Not every practice can afford to bulk-scan. If you partially scan charts, remember to type in core data, or import transcribed dictation. You should plan on discarding paper documents after scanning if you have scanned the entire chart. However, laws vary by states, but some states require you to keep the scanned documents for three to six months, presumably during which time you would notice if something didn’t get scanned. Also, if you are going to scan only certain documents and not the entire chart, you are better off refilling the scanned documents so you have a complete historical record until the statute of limitations runs out. Your malpractice carrier can advise you whether you need to keep your records for longer than the statute of limitations in your state and again, state statutes vary significantly, from seven years to as many as 25 or even 30 years.

Source: Medical Economics, MargretA Consulting, LLC.
FAQ Section 15: Go-Live and Gaining Adoption

Q: How should we plan go-live to get the most adoption?

A: During implementation planning you should have laid out a clear plan that addresses several factors relating to go-live. During the course of implementation, any necessary adjustments should be made. Following your plans closely during go-live will make the process less hectic and enable you to focus on at-the-elbow support for the new users. Steps leading to go-live include:

• **Migration path.** You should follow whatever path you have decided to take with respect to application staging. Do not change course in the last minute because you risk inadequate system testing and training. If you find it desirable to speed up your application adoption later, do so in a thoughtful and still well-staged manner.

• **Chart conversion and preload strategy.** It has been demonstrated that the more key data (e.g., problem lists, medication lists, allergies, recent labs) you can have entered by staff in advance of go-live will significantly contribute to better physician adoption.

• **Clinician engagement.** It also has been demonstrated that the more physicians and nurses are engaged in system selection, planning changes to workflows, and reviewing templates, the more ready they are to accept the changes and the more open they are to training.

• **Training.** So long as clinicians have been engaged throughout the project, actual hands-on training should be conducted in a just-in-time manner. Many practices are finding that some classroom training, role playing, and a dress rehearsal are keys to success.

• **Clear the calendar but don’t clear the decks.** For the first week or two it is important to lighten the schedule by at least 50 percent so that the physicians have time to complete their use of the application at the point of care. Although productivity goes down, this investment has proved to return results that enable physicians to see the same number of patients sooner and in a less-rushed and more satisfying manner. If physicians so choose, they might find they can even increase the number of patients they see in a day. However, all staff must be present during go-live. The best-case scenario would be that staff members are sitting around doing nothing because nothing has gone wrong with the system and the users are adopting the system well. If this continues for the first few days, staff can use the time to help convert charts and preload data.

• **Patient engagement.** At a minimum, use a sign at the reception desk that you are undergoing an EHR implementation. Some vendors will provide “under construction” signs. A brochure is provided in dEHRm at [www.aad.org.pm/hit/dehrm/index.html](http://www.aad.org.pm/hit/dehrm/index.html) that you might want to distribute. The more you get the patients engaged in your project, the more at ease they will feel, and those who are computer savvy might be helpful to you.

• **Debriefing, reinforcement, and celebration.** During the first week, specific debriefing times should be scheduled and used even if there is little to talk about. This is time for taking a break from the stress, sharing tips about what users have encountered with the system, and acknowledging the successful implementation aided by all staff. This is the “rest after surgery” that is critical to the health of the project.

Q: What kind of training is necessary to gain physician adoption of an EHR?

A: Several training modalities exist, and more than one should be used to address different aspects of learning to use the EHR. All are predicated on the fact that physicians have been engaged in the project throughout:

• Classroom training can be a literal classroom approach where all persons are trained in a group; however, physicians generally prefer a one-on-one approach. Still, the first training for each physician should be away from the examining room or office, preferably in a classroom type of setting. This training should be geared to showing each one user how to use the application, giving them pointers on how to get help, and providing a cheat sheet. The cheat sheet ideally follows the workflow of the application and might best be a process map of their new workflow and processes.
• Practice using the system. EHR systems should have both a test environment and a production environment. In the test environment, there should be some test patients that physicians can use to enter data and test out what the system does with the data. It is important, however, to guide the physicians’ expectations for what they will be able to do. If the test environment only includes the first application to be used and not all of the modules because of your staged rollout, you must remind them of this limitation. Some physicians might want to go further and learn more on their own. If you see this might happen for some, you might be able to manage more applications in the test environment than in the actual production environment. But still be aware that this might frustrate those who want to use the system more fully and cannot. Although such an environment is more typical in a large practice, for the small practice deciding on just how much to roll out at one time must be a decision made by the physicians in a consensus process.

• Role playing is being adopted by several vendors as a way to help physicians overcome their concerns about how using the computer in the exam room might be depersonalizing. Having a physician and other staff member role-play an actual patient encounter reinforces the classroom training and adds skills in engaging the patient in the process of documentation. This is both a technical process as well as a change in mind-set from, “What I choose to document is a secret,” to, “This is the patient’s information and I want to make sure it is accurate and complete.” Patients who are more actively engaged in their health care process overall — in documentation, in deciding on their treatment regimen, and in reporting on their compliance actually — are found to have better results.

• Dress rehearsal is another strategy some vendors are deploying to make sure the entire office is ready for the day of go-live. This frequently is planned for the Saturday prior to a Monday go-live, where all staff members participate in a mock Monday morning. Ideally, the vendor provides a scenario and is present to do a final check on all aspects of the program, equipment, network, etc. Although this is more typically performed in a big bang rollout and for larger practices, small practices might find it helpful to combine the role-playing and dress rehearsal with their designated project manager serving as the vendor with the clip board checking readiness.

Q: How much support does an EHR go-live require?

A: Even in a small practice, the person designated to be the project manager must be freed up to focus exclusively 100 percent on the EHR go-live. This project manager will not only have project oversight duties, but is a knowledgeable user and should be able to help with the majority of issues new users face. This individual must be ready and able to anticipate the need to intercede in any issue surrounding the EHR. Issues might be as simple as resetting a forgotten password on the fly or pointing out the icon to convert a table into a graph; or as complex as working on fixing a bug, including calling the vendor immediately to be guided through the fix if the vendor is not present on the day of go-live. For practices with more than two or three physicians, a second person should be tasked to help. This person ideally should also be a super user, having received more intensive training and who has been actively engaged in the system build. This might be a member of the nursing staff who is relieved of normal nursing duties during go-live. Larger practices will almost always have a representative of the vendor present during go-live.

Q: How do we deal with person who is resistant to using the EHR?

A: Anticipating resistance early and understanding the reason(s) for resistance are key to overcoming this situation. If a concerted effort is made throughout planning, selection, and implementation to engage everyone, it will be very apparent who is a resister. Assigning resisters to perform specific tasks that get them used to a computer in advance can be helpful. Some examples include:

• Ask a resister to search the Web for product demos that all staff can review. A private lesson on how to use search the Web, leading the individual to a specific result can demonstrate how easy it is to use a computer.

• Resisters can be asked to pull certain tools from the dEHRm that might aid in understanding the marketplace, such as how to manage change or how e-prescribing works.
• A visit to the SureScripts website and entering the practice’s ZIP code to see how many pharmacies in the community are certified can demonstrate the extent to which others are using computers.

• Asking resisters to review and comment on templates — online — will get them accustomed to using basic computer word-processing and keyboarding functions.

Even though most resisters can be spotted early, some might not surface until they are faced with using the computer. It is for this reason that the role-playing and dress rehearsal are important. These provide a safe and private way for learning to occur. It might also be necessary for a peer to support a resister, providing special one-on-one suggestions or tips on using the system. Not only peer support, but peer pressure can be a powerful motivator.

Positive results must be demonstrated to convince resisters about the importance of their adoption and the value of the EHR in general. As you are establishing goals for what you want to accomplish with the EHR, be sure you include some goals that are easy, early wins. For example, if physicians are frequently frustrated by not having lab results when they need them, collect baseline data about how frequently patients are seen without the needed lab results or how frequently extra time is spent looking for them. Setting as a goal that all such lab results will be available online would be very easy to accomplish. After the first week of go-live, post before and after results that demonstrate improvement. Implementing a continual quality improvement (CQI) program is a process that many physician practices do, with or without an EHR. A CQI program is greatly facilitated by having an EHR and can be an important motivator for full adoption of the EHR.

For more information about the implementation process, see www.aad.org/pm/hit/dehrm/implementation/rollout.html.

Minimizing Chance of Failure

Here are some tips to ensure things go smoothly:

1. Promote teamwork between practice administration staff, physicians, and other clinicians.

2. Set realistic requirements, goals, and timeframes.

3. Arrange sufficient EHR product demonstrations to narrow your vendor options.

4. Visit practices similar in size, specialty, and type of practice management system.

5. Network in person and online with colleagues to share concerns, war stories, and successes.

6. Consider retaining a consultant to assist with software selection and implementation.

7. Purchase supporting hardware that meets your physician’s workflow needs (for instance, tablets rather than desktop computers to enhance the physician-patient interaction).

8. Double everything: computer storage, and speed requirements, staff training, and your patience.

Source: Medical Group Management Association (MGMA)
**FAQ Section 16: Interoperability**

**Q:** What does interoperability really mean in EHRs?

**A:** Interoperability is the ability of two different computer systems to exchange data in a meaningful way. There are three levels of interoperability:

- **Technical interoperability** is the most basic level. This is where, for example, a laboratory information system (from a commercial lab, hospital, or system in the practice) is able to send lab results for a given patient to the patient’s EHR. This basic interoperability is achieved when both the sending and receiving systems follow a standard protocol (such as from Health Level Seven (HL7)) to enable correct matching of the patient, and the order with the results.

- **Semantic interoperability** refers to the data that are expressed in a standard terminology, allowing for common understanding, or meaning. For example, the lab results might be encoded using the standard laboratory observation terminology, Logical Observation Identifiers Names and Codes (LOINC®).

- **Process interoperability** addresses workflows, user roles, and other process elements important to using the information exchanged. For example, your office should not have to contact the laboratory information system to request the results of your own patients’ lab tests — they should be sent as soon as they are ready. (In other words, the lab pushes results to you; you do not pull the results.) Alternatively, if you participate in a health information exchange, you might find that lab results for tests you did not order may only be pulled upon your special request.

**Q:** Why doesn’t the EHR I’m looking at have all three levels of interoperability?

**A:** In most cases, systems have been designed only to be able to perform technical interoperability, and then only with a specific interface program written that is specific to the laboratory information system (e.g., Lab-Q) and to your EHR (e.g., EHR-Y in Dr. D’s office). There are several reasons for this:

- Vendors have been reluctant to design their systems to be more open and standards-based, believing that will create brand loyalty.

- Providers have not demanded more interoperability until very recently because many have not been interested in exchanging information through their computer systems.

- Maturity of information system technology in general has not supported more widespread exchange. Broadband capability is a fairly recent phenomenon, transmission security has only recently being tightened, and structures to support exchange policies within health care are just starting to be put in place.

- Standards exist for more sophisticated interoperability and most providers have not wanted to make that investment. Terminology standards also exist, although few providers have demanded that vendors incorporate them into their products. Lack of use of the terminology standards means they are not familiar to providers, and as a result they tend to prefer the familiar, proprietary terminologies vendors have used to meet individual needs. Terminology standards also are more sophisticated than what many practices really need, so in some sense, terminology standards that exist are not ready for prime-time usage.

**Q:** Should we wait to acquire an EHR until such time that interoperability will be easier to achieve?

**A:** The short answer is no. There are two important factors contributing to this reality, as follows:

- The first is with or without Federal stimulus money, we are facing a chicken-and-egg dilemma. Without more demand for better interoperability (which would imply waiting) vendors will not sell enough to invest in creating products that incorporate newer standards and technology. Even with increasingly stringent requirements for what constitutes meaningful use to earn incentives, the Federal government can only push so far. There recently have been and will continue to be progress made on the interoperability front, but waiting puts practices at risk for not earning incentives and for not being competitive in the marketplace.

- The second factor contributing to the need to start now is that, with significant incentive money becoming available soon and sanctions following shortly thereafter, starting the buying process as early as possible will give you time to make a smart choice and plan thoroughly for the change. Because of the huge gap in how many providers have systems and how many do not, waiting until just before the stimulus money starts to be distributed means you will have to make a quick decision about what product to buy and potentially cut corners in implementation and training. It is has been widely demonstrated that inadequate planning and poor implementation processes produce a less-than-desired result.

However, starting the buying process now should be performed with appropriate protections in place. Be sure that the contract you sign includes a requirement for the vendor to keep the product upgraded to meet new statutory requirements.
FAQ Section 17: Personal Health Records

Q: Why should our practice support a personal health record (PHR)?

A: Many individuals are seeking greater involvement in their health care and want to be able to manage their personal health information, especially as they travel, see other specialists, or want to be better-informed health care consumers. PHRs enable individuals to become more engaged in their health and health care. A practice's support for a PHR might range from simply providing copies of health information to the patient upon request to actually offering a PHR service. In between these extremes, you might provide a patient-friendly summary of each visit or you might submit specific information to a patient's Web-based PHR if they provide you access. Patients might also request that you access their PHR to obtain their health history. In some instances where it would be helpful for you to have a diary of a patient's response to medication or certain vital signs information over time, the information coming through a PHR could save you time during patient visits. It is a good idea to have policies in place to guide your physicians and staff about how to respond to any request about PHRs.

Q: How reliable are personal health records (PHRs) if the patient is entering information?

A: The reliability of PHR information depends on the nature of the PHR, the source of the information, and the patients themselves. Many PHRs enable the physician's office to enter information through a fax service, uploading of documents, or through the Continuity of Care Document (CCD) standard that can be generated from an EHR. PHR services also might collect information from e-prescribing systems and claims data. Information from such sources is generally “sourced” to the contributor and locked down so that the patient cannot change the information. Therefore, it is as reliable as the source, which might be highly reliable if it's coming from a provider directly and less than ideal if it's coming from claims data. Information that the patient enters directly will be identified as such. This might be even more reliable than the information you glean during an interview with the patient, where the patient might be nervous, you might be rushed, or information might simply not be available to either of you. Alternatively, if you suspect that the patient is attempting to falsify information, you likely will be able to judge this from both the interview and the entries in a PHR. You should never act solely on PHR information unless you know the patient and trust that he or she is making every effort to enter information correctly. Of course, this would be just as true in an interview, where if you have any suspicions you would seek ways to validate the information you are getting through additional questioning, obtaining records from other providers, and running certain lab tests, etc.

Q: What does a personal health record (PHR) cost?

A: A PHR service will cost you nothing if your patients are maintaining them. The only cost to you might be in supplying them with copies of their information. Some providers will provide a patient-friendly summary at no cost and charge the allowable cost-based fee for record copying for other information. Some providers believe that PHRs are an excellent way to achieve interoperability without going to the expense of having interfaces developed and so are willing to waive the cost of all copies. Sometimes primary care providers set up PHRs for their patients, so the cost to a specialist would be nothing other than supplying information. If you want to set up a PHR service for your patients, there are vendors who will do so at no cost to you, and using advertisers to cover the cost of the service. Others might charge a small fee per patient, which you can decide whether you want to pass this cost on to your patients.

Q: How likely will our patients want a personal health record (PHR)?

A: Your patients’ interest in PHR probably depends on their demographics. Today, the most common PHR users are those who have chronic disease and the elderly (or their families and/or caregivers). Medicare and the Department of Veterans Affairs, as well as several health plans, are starting to support PHRs as a means for their beneficiaries to better manage their health and health care. Your patients who participate in these programs might be interested in having you use this PHR.
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- **E-prescribing**
  - **E-prescribing** – Find resources for the new e-prescribing incentive, information about vendors, and various tools to assess your practice’s readiness and save you money!
- **DermLex**
  - **DermLex** – View this standardized terminology of dermatologic diagnoses, therapies, procedures, and laboratory tests.
- **HIT Dashboard** – Learn the latest updates on HIT developments as they happen!
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