# MEDICAL PRACTICE EXCELLENCE IN THE 21ST CENTURY

**How to assess your practice before choosing the best information technology. Plus, 5 IT applications to consider integrating into your practice. *Part 3 of a three-part series.***

*By Margie Satinsky, M.B.A.*

*This article is the third in a three-part series on medical practice excellence in the 21st century. The first article explained the five components of managing a balanced practice. It also provided suggestions for organization and management, business planning, and marketing. The second article focused on financial management. This third and final article addresses ways in which information technology can add value to your practice and provides guidance for making your decisions.*

If the potential benefits of information technology offer so much promise, why are there so many horror stories? Take for example the transition to electronic health records made by the Greenhouse Family Practice in Philadelphia in 2005. They compared the transition to flying an airplane without a pilot! The practice rushed through its decision process and implementation without a good understanding of the underlying challenges. According to the four physicians in the practice, "Going live rendered everyone in the office incompetent to do their core jobs."[1]

Other practices bemoan their inability to recover their financial investments, their decreased productivity, and the difficult transitions from legacy to new systems.

These are scary comments. Yet, many have benefited from information technology. Information technology can add value to your practice in three ways. First, it can help you improve the quality of care by reducing errors, monitoring chronic conditions, and allowing patients to become more involved in their own care. Second, it can improve practice efficiency by streamlining processes and communications. Third, if you select applications that are affordable for your practice, you can enhance your bottom line.

Why are there are some successes but so many failures? Why do some practices spend far more money on IT than is necessary? In some cases, physicians are seeking a magic bullet, not tools that can assist them in achieving specific practice goals. In other situations, the practice purchases an IT application without taking the time to address office system redesign. Finally, unless you are building a digital dermatology practice from the start, introducing new IT applications involves change — not something that comes easily to most people or that can occur without thoughtful management.

This article identifies five IT applications that you might want to consider. It suggests questions that you should ask about your practice before you contact vendors. In addition,

the article contains specific steps to take in a particular logical order, keys to successful implementation, and helpful resources for learning more.

## IMPORTANT INFORMATION TECHNOLOGY APPLICATIONS FOR YOUR PRACTICE

Five important IT applications apply to a dermatology practice. They include the following:

1. practice management system (PMS)
2. electronic health records (EHR)
3. digital photography
4. electronic prescribing (e-prescribing)
5. functional Web sites that allow you to communicate with both your patients and with other physicians.

Here, I'll explore each of these applications.

### 1. Practice Management System

Most practices already have a PMS that handles scheduling, billing, and collections. Upgrading or changing your PMS is an inconvenience, and so many practices don't bother investigating the advantages that many newer systems have over older legacy systems. Many of these newer systems incorporate powerful claims scrubbing features within the software. Claims that are likely to be rejected because of an error never make it out your door. The software flags them so you can fix the problem, and your claims denial rate dramatically decreases.

Another feature in newer PMS systems is the ability to post remittances directly to your account and to electronically deposit receipts into your bank through a lock-box system. The reporting capabilities of the newer PMS systems are excellent, so you can easily identify problems with a particular payer or patient.

A major question about your PMS, be it your existing system or a new one that you are considering, is its relationship to other IT applications in your practice.

Does your PMS system *interface* with other IT applications, or is it *integrated* and built off the same operating platform as other applications?

Integrated systems offer many advantages, not the least of which is the ability for the user to easily switch from one application to another.

### 2. Electronic Health Record

The second important application of IT in your practice is the electronic health record. The EHR captures clinical information on your patients. The information belongs to your practice, and you have options regarding where you keep the data. If the data reside on a server that is physically located at your practice site, you are responsible for security and backup. Software upgrades and system maintenance occur at your office.

An alternative and much less-costly model, the Application Service Provider (ASP), allows you to rent space from a third-party entity that uses the Internet to distribute software and software-based services from a central data center to a large geographical area. The third party remotely hosts your data, and it is responsible for ongoing security, maintenance, and upgrades.

Because the price difference between these two options is significant, many smaller practices prefer the lower-cost ASP option.

Regardless of whether you choose the client-site server or ASP model, the process for entering clinical data into your EHR is the same. Clinicians use a hand-held device, voice recognition, or a tablet. Some EHRs also have portals that allow patients to enter information. The EHR is your practice's reservoir of clinical information. You can access information about individual patients or about groups of patients. For example, if a new effective drug for acne were to become available, you could easily go into your EHR and extract the names of patients who might benefit from it.

Will every dermatologist implement an EHR system into his/her office? It depends whom you ask. Writing in *Skin & Aging* in January 2006, Dr. William Philip Werschler and his co-authors commented, "Unless you plan to retire within the next 10 years, the question is not if, but when and how you will incorporate an EMR into your practice."[2]

Although the external push for EHR from the government and from private payers is strong, not all dermatologists agree with the need to eliminate paper records. For example, Dr. Steven Hubert, a dermatologist who practices outside of Trenton, NJ, considered conversion to EHR and decided against it. He comments, ". . . the cost, lack of dermatology-specific programs, and the seemingly huge adjustment/transition period has prevented me from making the switch."[3]

The technology of EHRs is evolving. In the 1970s, computer-based patient records (CPRs) were the state-of-the-art. These CPRs gave way to electronic medical records (EMRs) that could capture structured and unstructured data from paper and from disparate computer systems and that were usually maintained by a single organization.

Now, EHRs have the ability to capture information from more sources. The next enhancement is an electronic patient record (EPR) that allows patients to enter information into a record that they — rather than the provider — own.

In parts of the country such as Massachusetts and Seattle, communities are moving ahead with regional health information organizations (RHIOs) that extract information from different EHRs to create a community-wide database.

### 3. Digital Photography

Digital photography is the third important IT application for your practice. Instant results let you reduce the cost in time and money of developing traditional photographs. You can easily insert the digital pictures directly into your EHR.

Dr. Neal Bhatia explains another advantage of this particular application — protection from liability, saying "Everything we biopsied, or for every patient who had cosmetic surgery done, we would take a photo and paste it in the electronic chart. If you had to, you could go back to the photo and say, "This is what you looked like before you began treatment."[4]

### 4. E-Prescribing

The fourth important IT application for dermatologists is e-prescribing. This technology has the potential to dramatically reduce the number of deaths related to adverse drug reactions as well as prescription drug costs. E-prescribing has three capabilities:

## VENDOR RED FLAGS

- **Unwillingness to collaborate with other vendors**
- **High prices for updates**
- **Resistance to customization**
- **Corporate instability**
- **Track record of non-responsive technical support**

- It offers clinical decision support by providing reminders and alerts and by promoting compliance with guidelines and formularies.
- It integrates patient data from an EHR, such as medical conditions, current and prior medications, drug allergies, test results, and physician personal preferences. When this information is combined, documentation and clinical support can improve.
- E-prescribing also facilitates communications among physicians, pharmacies and health plans. The establishment of standards is critical to the widespread use of e-prescribing, and the Department of Health and Human Services has designated five pilot sites to test its initial standards.

### 5. Functional Web Site

The fifth IT application is a Web site that allows you to communicate with patients and referring physicians. More and more practices consider their Web sites to be a second portal or doorway to their offices.[5] For example, your Web site can allow you to collect patient demographic information prior to the office visit. Once you have this data, you can verify insurance eligibility ahead of time.

Other Web site functions allow patients to log on to your Web site using a secure password in order to request appointments and prescription renewals, obtain test results, and pay bills online. Some physicians are comfortable with online consultations for existing patients. Patients who use this feature pay a flat consultation rate in advance, and the physician retains the ability to ask patients to come into the office for a face-to-face visit.

## BEFORE CONTACTING VENDORS: ASK YOURSELF THESE QUESTIONS

Before you invest in any supporting information technology, it's essential to address important questions about your practice. After you have a good understanding of your goals, strengths, and weaknesses, you can approach vendors to determine if their applications and services meet your needs.

*Ask yourself these questions about your practice:*

- What are my long-term strategic business goals, and how can IT help me achieve them?
- Within the next 5 years, do I plan to make changes in the range of services that I offer? A practice that provides general dermatology does not have the same IT needs as a practice that provides cosmetic surgery.
- Am I planning to add new locations?
- Do I plan to add physicians and/or staff to my practice?
- What is my budget for IT services?
- Who in my practice is currently responsible for IT planning, implementation, and training? Is that individual(s) qualified to assume responsibility for a major IT innovation?
- Should I work with external practice management and IT consultants who can help me make decisions about IT and implement solutions?
- Will my staff embrace new IT applications that can support the practice?

## THE RIGHT STEPS IN THE RIGHT ORDER

Regardless of which IT application(s) you are considering, success in selection

## DEVELOPING A VENDOR CONTRACT CHECKLIST FOR EHR

***Make sure the following items are included in your checklist:***

- Standard legal terms
- Specification of hardware, software and training
- Business associate agreements, including specific HIPAA provisions
- Hardware lists: manufacturer, model, year, hard drive size, memory, network card speed, modem type and speed, size of monitors, types of keyboards
- Hardware service contracts for server and work stations
- Hardware and service costs, including (or not) installation and set-up
- Hardware warranties if equipment is purchased directly from vendor
- Type of cable, speed of network cards, type of hub and routers, and network software
- Maximum number of network users and costs of increasing users and connections
- Cost and timetable for maintenance
- Contact information during and after office hours
- Pre-implementation tasks, timetable, and costs
- Software: itemization by modules, number of concurrent users, cost/user, total system cost
- Options for entering data into the system: patient-entered, dictation, templates, and/or speech
- Current and maximum number of users
- Cost of purchasing additional software modules if not used at outset
- Plan and cost for interfacing with other legacy systems such as laboratories, hospitals, practice management system companies
- Cost and frequency of upgrades
- Training costs: how many trainers for how many hours? Travel costs? Cost of additional training that you request
- Distinction between pre-and post-implementation phases of the project
- Availability of user groups and frequency of meetings
- Fees for customization
- Technical support during and after regular business hours
- Assignment of project manager and/or account manager to your practice

*Source: Satinsky, M.* Medical Practice Management in the 21st Century: the handbook. *Oxford: Radcliffe Publishing; 2007. Reproduced with the permission of the copyright holder.*

## EVALUATING THE RESULTS OF THREE IT APPLICATIONS

***Practice Management System (PMS)***

- Lower accounts receivable
- Fewer accounts over 90 days
- Lower average days in receivable
- Higher staff satisfaction
- Fewer claims denials
- Fewer patient complaints about billing and collection

***Electronic Health Record (EHR)***

- Higher patient satisfaction with the promptness of your response to their concerns
- Higher physician and staff satisfaction
- Favorable feedback from medical colleagues
- Reduction in phone calls
- Easier triage
- Decrease in documentation time
- Reduction in time spent searching for patient records
- Better ability to manage groups of patients with particular diseases/conditions

***Interactive Web Site — with Ability to Communicate with Patients and Clinicians***

- Increase in number of new patients who identified your practice through your Web site
- Higher patient satisfaction regarding ability to contact your practice, request appointments and prescription renewals, obtain test results, and pay bills online
- Decrease in phone calls as patients become more comfortable with your Web site
- Higher staff satisfaction

*Source: Satinsky, M.* Medical Practice Management in the 21st Century: the handbook. *Oxford: Radcliffe Publishing; 2007. Reproduced with permission of the copyright holder.*

and implementation is heavily dependent on your taking specific steps in a particular order. Avoid the temptation to pick up the phone, call a consultant, and request a quick recommendation. Every practice is different.

Here's a list to guide you in taking the right steps in the right order:

- Make sure your practice complies with the HIPAA Privacy and Security Rules.
- Set clear IT goals and priorities for your practice.
- Establish an IT task force that includes physicians, other members of your clinical and administrative staff, and an external management consultant. Most practices make IT decisions infrequently, so consider asking an experienced professional for help.
- Do a workflow analysis of your practice and identify your strengths and weaknesses. If the flow of patients and information in your practice is inefficient now, new technology will automate inefficiency, not correct the problems.
- Do your homework on the big IT picture so you are knowledgeable about current trends and future expectations. The last section of this article contains a list of resources.
- Identify vendors with products that can meet your needs. Two independent organizations that review and rank vendors and their products are KLAS Enterprises (www.healthcomputing.com) and AC Consulting Group (www.acgroup.org). If you are considering an EHR for your practice, make sure it is certified by the Certification Commission for Healthcare Information Technology.
- Develop a formal Request for Information (RFI) that you send to more vendors than you expect to interview. Use this document to seek basic information, not detailed proposals.
- Ask several vendors to make preliminary on-site presentations to your IT task force. You are still at the learning stage, and these early demonstrations will help you understand the technology before you go further.
- Develop a formal request for proposal (RFP) that contains a standard set of specifications. Send it to vendors whose preliminary information appeared to be appropriate for your practice.
- Review the vendor proposals, compare the responses to your requirements, and rank the vendors according to criteria that are important to you. Pay attention to vendor "red flags" that suggest potential problems. ***See Vendor Red Flags for more information.***
- Make site visits and do reference checks.
- After selecting the most appropriate vendor(s) for your practice, review and sign a formal agreement. Ask an external consultant or attorney to review the document. ***See Developing a Vendor Contract Checklist for EHR for more information.***
- With the assistance of your vendor and an IT consultant, develop an implementation plan.
- Following implementation, evaluate the results. ***See Evaluating the Results of Your IT Applications.***
- Start again! Decision-making in IT is cyclical and never really ends.

## KEYS TO SUCCESSFUL IMPLEMENTATION

Successful implementation of your IT applications depends less on the technology than on people. Applications that are a spectacular success in one practice can be an abysmal failure in another.

Here are seven keys for successful implementation:

1. ***Be realistic about your timeframe.*** The process of making a decision on IT, the transition from your

## ADDITIONAL RESOURCES

If you are interested in learning more about various IT applications, the following resources can be helpful to you.

### *Organizations That Focus on IT*

- American Medical Informatics Association (AMIA) (www.amia.org).
- Health Information and Management Systems Society (HIMSS) publishes a quarterly journal (Journal of Healthcare Information Management), partners in producing Healthcare IT News (www.healthcareitnews.com), and sponsors an annual conference with a large vendor exhibition (www.himss.org).

### *Physician Practice Management Organizations*

Medical Group Management Association (MGMA) is the professional organization for physician practice leaders (www.mgma.com).

### *Books and Articles*

- Amatayakul M. *Electronic Health Records, A Practical Guide for Professionals and Organizations*. Chicago, IL: American Health Information Management Association; 2004.
- Bachman J. The Patient-Computer Interview: A Neglected Tool that Can Aid the Clinician. *Mayo Clinic Proceedings*. 2003;78:07–79.
- Ball M, Weaver CA, Keil JM. *Healthcare Information Management Systems Cases, Strategies, and Solutions*. New York, Springer; 2004.
- Barrett MJ, Holmes RJ, McAulay SE. *A Buyer's Guide for Small Physician Practices*. Oakland, CA: California HealthCare Foundation; 2003.
- Brailer DJ, Terasawa EL. *Use and Adoption of Computer-based Patient Records*. Oakland, CA: California HealthCare Foundation; 2003.
- Carter JH. *Electronic Medical Records. A Guide for Clinicians and Administrators.* Philadelphia: American College of Physicians; 2001.
- The Complete EMR Selection Guide (from the *Journal of Medical Practice Management* and The Coker Group, Jan./Feb. 2006 Supplement).
- Dunn C. Strategic IT Moves. *MGMA Connexion*. 2007;7(5):37-43.
- Gartee RW. *Electronic Health Records: Understanding and Using Computerized Medical Records.* Upper Saddle River, NJ: Prentice Hall; 2006.
- Goldratt EM, Cox J. *The Goal: A Process of Ongoing Improvement.* Great Barrington, MA: North River Publishing Corporation; 2004.
- Hartley CP Jones ED. *EHR Implementation*. Chicago: American Medical Association; 2005.
- Kotter JP. *Leading Change*. Cambridge, MA: Harvard Business Review; 1996.
- Miller RH, Sim I, Newman E. *Electronic Medical Records: Lessons from Smaller Physician Practices*. Oakland, CA: California HealthCare Foundation; 2003.
- Satinsky MA, Curnow R.T. Chapter 12. Using Information Technology to Enhance the Quality of Care, Operational Efficiency, and Revenue in Your Practice. In: Satinsky MA. *Handbook for Medical Practice Management in the 21st Century.* Abingdon, Oxon, UK: Radcliffe Publishing Ltd.; 2007.
- Werschler WP, Larson K, Harland B. Practice Pearls: What You Should Know About EMRs. *Skin & Aging*. 2006;14 (1):28-29.

current to your new system, and the implementation itself are time-consuming tasks.

2. ***Identify a "physician champion,"*** one who is not only interested in IT, but who is willing to be a change agent for his/her peers.
3. ***Involve all the physicians in your practice, even those who have reservations about the changes you are making.*** You're striving for practice enhancement, not improvement that applies to one or two clinicians.
4. ***Agree on appropriate timing***. For example, if you are introducing two new applications, a new PMS and EHR, implement or activate the PMS first in order to secure your revenue stream. Some practices introduce a functional Web site before other IT applications because it's relatively simple.
5. ***Pay attention to the way in which your system(s) will interface with each other and with systems outside your practice.*** For example, as dermatologists, you are heavily dependent on reports from your pathology lab.
6. ***Purchase a level of IT support that is appropriate for your practice.***
7. ***Seek external guidance when you need it***; you don't have to do everything yourself. ■

**I would like to acknowledge and thank Dr. Robert E. Clark of Cary Skin Center in Cary, NC, for his input into this article.**

*Ms. Satinsky is President of Satinsky Consulting, LLC. She earned her B.A. in history from Brown University, her M.A. in political science from the University of Pennsylvania, and her M.B.A. in healthcare administration from the Wharton School of the University of Pennsylvania. She is the author of many articles and three books:* Medical Practice Management in the 21st Century *(Radcliffe Publishing, 2007),* The Foundation of Integrated Care: Facing the Challenges of Change *(American Hospital Publishing, 1997), and* An Executive Guide to Case Management Strategies *(American Hospital Publishing, 1995).*

*An adjunct faculty member at the University of North Carolina School of Public Health, Ms Satinsky is a member of the North Carolina Medical Society Quality of Care and Performance Improvement Committee, Medical Group Management Association, and North Carolina Medical Group Managers. She may be reached at (919) 383-5998 or margie@satinskyconsulting.com.*

**References**

1. Baron RJ, Fabens EL, Schiffman M, Wolf, E. Electronic health records: just around the corner or over the cliff? *Ann Intern Med*. 2005;143(3):222-226. Available online at www.annals.org/cgi/content/full/143/3/222.
2. Werschler WP, Larson, K, and Harland, B. Practice Pearls: What You Should Know About EMRs. *Skin & Aging*. 2006;14(1):28-29.
3. Dermatologists face digital divide over medical records. *Dermatology World*. 17(3):8.
4. Technology 101. The what, how much, and how long of building a digital dermatology practice. *Dermatology World*. 17(6):11.
5. Nelson R. Patients and email – don't be scared away. *MGMA Connexion*. 2007;7(5):31-33.