Laying a Path to EMR Implementation

(and avoiding stressing out over HITECH legislation)

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The HITECH Act of 2009 (part of the American Recovery and Reinvestment Act) allocated about $20 billion to stimulate the use of electronic medical records (EMRs, also referred to as "electronic health records", or EHRs) in U.S. clinics and hospitals. Much of this effort is being orchestrated by the Office of the National Coordinator for Health Information Technology (ONC). This spring, the ONC is supposed to issue final rules on health IT standards, implementation specifications, EHR certification technology, "meaningful use" of EMRs, and incentive programs for eligible professionals and hospitals.

What will the HITECH Act (and state legislation mandating ePrescribing by 2011, and interoperable EMRs by 2015) mean for physicians, especially solo practitioners and small practices? As the "day of reckoning" for adopting EMRs looms, we hear a number of responses from physicians—some tinged with anger ("Why don't they just leave me alone and let me do what I do best?"), frustration ("I'm trying to practice good medicine while being pulled in infinite directions!"), or panic ("Our practice can't afford this; we'll have to shut our doors"), and others suggesting denial ("I'll just keep doing what I'm doing until somebody tells me differently").

Even the busiest physicians will need to make time to sort out information about EMRs and IT, and keep it in perspective. So, what do we know about HITECH? What questions remain? And what can physicians do to comply with HITECH and other IT-related regulations without being overwhelmed by them?

HITECH: What we know

The potential monetary assistance from HITECH is not a gift or grant. HITECH payments will be based upon the percentage of the pre-existing services that medical practices have provided to Medicare or Medicaid patients—for example, 2011 payments will be based on care provided in 2010. Up-to-date information about HITECH funding is available at the ONC/HITECH Web site at http://healthit.hhs.gov. There are also many good articles describing the details of the act, easily found by doing an Internet search on "ONC" or "HITECH Act."

To qualify for HITECH funding, medical practices can't just implement an EMR; they must be "meaningful users" of certified electronic medical record technology. HHS (Health and Human Services, the parent agency for ONC and CMS [Centers for Medicare & Medicaid Services]) is in the process of defining "meaningful use" as applied to EMRs. Here are some key requirements that are listed repeatedly:

• Demonstrated implementation of a Certified EMR
• Use of e-prescribing (fully electronic transmittal of prescriptions via pharmacy clearinghouses to the patient's pharmacy, with drug-drug interaction, formulary, eligibility, and other bi-directional communication
• `HIPAA-compliant` Health Information Exchange (HIE) participation: sharing of essential patient information among disparate computer systems, probably via the National Health Information Network (NHIN) being developed
• Improved care processes (e.g., alerts about preventive care, abnormal lab results, duplicate care, etc.)
• Medical decision support (e.g., which antibiotic to prescribe for a given condition)
• Outcomes reporting (myriad sources—CMS, private payers, state agencies, etc.—are implementing both positive and negative incentives for care outcomes)

Even if a practice qualifies as a meaningful user, the funds available from HITECH won't cover the cost of implementing most of today's EMR products (frequently $25,000–$50,000 per physician), much less the cost of ongoing maintenance and support. And it isn't likely going to be easy to collect on the stimulus funds (think about the process of billing government payers currently). Therefore, physicians/practices will need to analyze their needs and do the research to avoid costly pitfalls.

HITECH: What we don't know

To be honest, there's no guarantee that five years from now physicians will see a net increase in income, no matter how diligent they are about implementing EMRs. There are just too many entities that want to decrease their own costs (e.g., federal and state benefit programs, private insurance companies, employers who pay for health benefits), and they don't usually talk to each other. Worse, they all have their paring knives aimed at physician practices.

Further, we don't know what will happen when the HITECH requirements become reality. Over the next eight months, "meaningful use" for 2011 has to be defined, and physicians need to comply with those requirements by the end of 2011 in order to obtain the full, advertised financial benefits offered by HITECH without any of the threatened penalties. The reality is that for many smaller office practices that don't have the resources of huge, integrated health care networks, it's simply not going to happen. Even if a physician cares for enough Medicare or Medical Assistance patients to qualify for maximum HITECH funds (and many don't), requiring practices to fulfill all regulations of the proposed legislation is not realistic because of four main factors: the timeline; the number of requirements; the complexity of the requirements; and the incentive/penalty structure.

To complicate the situation, requirements in the newly passed health care reform legislation will further affect electronic health data interchange (EDI) and, thus, the design and use of EMRs.

EMR benefits for physicians, patients

The unknowns have left many physicians who haven't yet switched to electronic medical records wondering:

• Will the EMR that I choose be able to meet "meaningful use" requirements?

• Will the EMR vendor that I choose still be in business in five years?

• Will the benefits of an EMR outweigh the costs?

• Will I still enjoy the practice and the art of medicine?

Despite these legitimate concerns, it's clear that the days of paper records are over—the time for adopting electronic medical records has come. It's undeniable: Many of our patients use computers and other electronic technology. They want to handle communications, appointments, prescriptions, and results electronically—and they expect us to do the same.

From the practice side, a well-designed EMR system can help improve patient care and safety by:

• Automating many of the mundane tasks of patient care (e.g., prescription refills, forms completion, and note creation) and providing opportunities that are not possible with paper records (e.g., statistical and outcomes reporting)

• Automatically reminding clinicians to perform important preventive care

• Providing a bird's-eye view of a patient in an instant, without flipping through that exasperating paper chart

• Alerting clinicians of abnormal test results, and persisting until action is taken

- Providing ongoing education, through expert knowledge support, while clinicians care for their patients

- Avoiding the pain of a lawsuit, for all of the above reasons

Choosing an EMR vendor/system

A review of many of the 200-plus EMR vendors reveals that there are many excellent medical software products from which to choose. Unfortunately, that good news is balanced by a number of common themes regarding vendors of EMRs:

• They are all accustomed to charging exorbitant amounts for their EMRs that hospitals and large clinic corporations have been willing to pay in the past.

• They promise everything, from a painless implementation to matching the system to your needs exactly.

• They are scrambling to stay in business.

• Some want you to think that you can just pick an off-the-shelf "box of EMR software," as you would do with tax software.

• Everyone wants on the bandwagon—including companies that have no clinical expertise whatsoever with EMR software and hardware.

A few EMR software companies are taking a different tack, but you have to seek them out. Among the more innovative options:

Some vendors are *spreading their charges over time* instead of requiring huge up-front in-vest-ments. However, you must consider:

• What is the total five-year cost per clinician? For the whole practice?

• Does my practice own the software at some point?

• What are the costs for upgrades?

• What happens if the vendor cannot meet "meaningful use" requirements?

Other companies are offering "*Software as a Service" (SaaS)*. They install a small application (program) on your computers, and the physician/practice ac-cesses the EMR (and the data it contains) via the Internet. The physician/practice pays a monthly fee, and the vendor does all of the hardware maintenance, software upgrades, data backup, etc. Practices considering this option need to ask:

• What is the five-year cost of implementation? For vendor services? For the Internet

service?

• What does the vendor do to safeguard patients' data? Are the data exchange and storage processes HIPAA-compliant?

• What happens when the Internet connection goes down? (Are adequate downtime procedures in place?)

• Who owns the data—the vendor or the physician/practice?

Some existing service providers (e.g., laboratories, practice management vendors) are offering an *"EMR" packaged with their legacy software*. View their claims with a skeptical eye—do you get great lab ordering but not-so-robust drug alerts? The same questions as above also apply.

Some hospitals or health networks (often in conjunction with a particular EMR software vendor) are offering *discounted or "free" EMR services if the physician/practice joins their network*. The big advantage is that they usually have IT staffs to manage the system. This also greatly simplifies information-sharing between inpatient and outpatient encounters. When considering this option, ask yourself whether the hospital has a history that engenders trust and whether it will be able to represent your best interests in the future. Remember, hospitals need to make a profit, just as you do, and there will be constant tension for resources between the IT needs of the hospital and those of the partnered clinics.

Some private companies and governmental agencies have made their EMR software available for free ("open-source" software): examples are VISTA (Veterans Health Information Systems and Technology Architecture), from the U.S. Department of Veterans Affairs, and RPMS (Resource Patient Management System), from the Indian Health Service. Bear in mind that if you choose open-source software, you will still need experts to implement it; these are not "plug-and-play" packages.

Finding help

It can be very difficult for physicians and practice managers to find the time to explore EMRs on their own. Just keeping abreast of developments in the EMR world to know what questions to ask is a daunting task. That's why it's essential to consider hiring experts who can guide you through the process. Not doing so is akin to building your own home using handyman magazines—it could all fall down around you (see sidebar for a list of EMR implementation components).

Fortunately, a chunk of the HITECH money is funding Regional Extension Centers (HITRECs) that can assist small practices in this entire process. HITRECs cannot choose a software vendor for you, but they can guide you through the steps necessary to make an informed decision. The HITREC for Minnesota and North Dakota is the Key Health Alliance, in Bloomington (www.stratis health.org/expertise/healthit/clinics/HITREC.html).

It will not be possible for the HITRECs to provide total support to all medical practices across their service areas (the current wording in the legislation leans strongly towards support for small primary-care clinics). However, there are private consulting firms that can help practices with the process of implementing an EMR.

Chaos isn't inevitable!

If the thought of installing an EMR system overwhelms you, your HIT Regional Extension Center or a private consulting firm can help you lay a path to implementation while minimizing the disruption to your practice. Most offices will not want a "big bang" approach, and will need to maintain parallel systems (electronic + paper) for a time. Using the electronic system simply to gradually collect information on patient demographics, active problems, medications, and allergies can lead you to a time in the not-so-distant future when you actually have that "bird's-eye-view" of each patient as a unique individual with distinct medical needs. And that is quite an accomplishment!

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<u>Sidebar: Components of EMR Planning and Implementation</u>

The essential parts of EMR planning and implementation include:
- Current workflow analysis (often ignored)
- Understanding that some of your workflows will need to change
    - No software can match all of your current methods exactly
    - This exploration frequently sheds light on workflow gaps (e.g., lack of a bullet-proof system for managing abnormal test results)
- Current software and hardware analysis
- Acquiring or interfacing to a practice management (billing) system
- Acquiring and/or integrating other software with the EMR (e.g. lab ordering & resulting, document scanning)
- Involving all members of the health care team in the process

- Working with physicians and staff to determine their priorities
- Assisting with change management, i.e., managing the fear of change that always occurs
- Presenting EMR vendor options from among the hundreds available
- Working with potential vendors to ask the hard questions, and making sure they will deliver
- Doing a five-year total cost of implementation
- Installation of hardware, software, networks
- Investigating and implementing government & payer incentive programs (ePrescribing, Pay for Performance, PQRI, etc.) to maximize reimbursements.
- Customization of the software to meet the customer's specific needs
- Testing: Software, hardware, new work processes
- Transferring essential patient data into the new system
- Staff training
- Providing on-site support for physicians and staff during "go-live" and over time
- Installing updates and assuring functionality over time