



Making Smart, Strategic Moves with HITECH and Electronic Health Records

By Annamarie Monks, CMPE

While many questions remain about the Stimulus Program and its impact on healthcare, there's no question that medical practice executives need to understand the game-changing nature of the program and begin to take steps to position their practice for a new era of healthcare information technology. This article highlights the new developments in healthcare IT and includes reactions and advice from two long time leaders and advocates for electronic health records in Massachusetts and Rhode Island: Micky Tripathi, CEO of the Massachusetts eHealth Collaborative and Laura Adams, CEO of Rhode Island Quality Institute.

HITECH and the Stimulus Program

HITECH is the *Health Information Technology for Economic and Clinical Health Act* contained within the \$787 billion federal stimulus legislation known as the *American Recovery and Reinvestment Act (ARRA)*. The ambitious goal of the legislation is national adoption of **electronic health records (EHR)** by 2014. Successfully implemented, EHRs have the demonstrated potential to improve care, increase safety and decrease costs. Despite these benefits, today only 17% of physicians utilize basic EHRs and only 4% utilize fully functioning EHRs in office and ambulatory practices nationwide¹. Massachusetts and Rhode Island have higher penetration rates but EHR are still far from common and comprehensive. Why? Despite the potential benefits, implementing an EHR can be a disruptive, practice-transforming experience with high hurdles in costs and time, and significant risks in poor implementations. HITECH will help lower the cost hurdle, but smart moves are necessary to qualify for funds, overcome the risks and realize the potential of EHR. The goal is a robust, nationwide, interoperable, privacy-protected health information technology infrastructure that improves healthcare.

Funds Available for EHRs and Healthcare IT

Healthcare IT had a high profile and big dollars in the stimulus program. Initial reports announced \$19.2 billion to improve healthcare IT and stimulate the economy. This included \$2 billion for infrastructure to be distributed by the Office of the National Coordinator for Health Information Technology (**ONCHIT**) and \$17.2 billion for incentives through Medicare and Medicaid. However, the Congressional Budget Office (CBO) now estimates **\$36.3 billion** in incentive bonus payments for eligible providers that demonstrate meaningful use of certified EHR technology.

- **Infrastructure - \$2 billion** in "jump start" funds will be rapidly disseminated, starting as early as the end of May 2009, as grants and loans to increase IT adoption. The funds

will be distributed by ONCHIT for projects related to standards evaluation and development; infrastructure for health information exchange (HIE); grants to states for the purpose of furthering EHR adoption; improvements in telemedicine delivery; and the establishment of Regional Health IT Resource Centers.

- **Incentive Payments - \$34 billion** is projected to be available through Medicare and Medicaid between 2011 and 2016 as “pay-for-use” payments to physicians and hospitals that demonstrate “meaningful use” of certified EHRs.
 - **Medicare** – The largest pool for physicians is from Medicare. A maximum of \$44,000 paid out over five years is available to physicians who are “meaningful users” of EHRs by 2011 or 2012. Lower amounts are available in subsequent years until the program converts from rewards to penalties for nonadoption in 2015.
 - **Medicaid** - Significant funding will be available through Medicaid for non-hospital based providers who have a Medicaid patient mix above 30% of volume (above 20% for pediatricians). Incentives will take the form of up to \$21,250 for EHR purchase and \$8,500 per year for five years for EHR operations. Funding is instead of, not in addition to, Medicare payments

Medicare and Medicaid - Incentives and Penalties

YEAR (calendar)	MEDICARE INCENTIVE					MEDICAID INCENTIVE	MEDICARE PENALTY
	Adopt 2011	Adopt 2012	Adopt 2013	Adopt 2014	Adopt 2015 and after	Adopt 2011	No EHR
2011	\$18,000	--	--	--	--	\$21,250	
2012	\$12,000	\$18,000	--	--	--	\$8,500	
2013	\$8,000	\$12,000	\$15,000	--	--	\$8,500	
2014	\$4,000	\$8,000	\$12,000	\$12,000	--	\$8,500	
2015	\$2,000	\$4,000	\$8,000	\$8,000	0	\$8,500	-1%
2016	\$0	\$2,000	\$4,000	\$4,000	0	\$8,500	-2%
2017	\$0	\$0	\$0	\$0	0	\$0	-3% and thereafter
Cumulative Total	\$44,000	\$44,000	\$39,000	\$24,000	0	\$63,750	

- Maximum payments are listed; actual payments subject to a number of factors such as charges and volume. The calculations, timing, frequency and reporting requirements will be published through the regulatory rule-making process.

- Since eligibility is based on usage, even physicians who already use EHR systems will be eligible.
- Payments dependent on “meaningful use”.
- Additional 10% payment to physicians in health shortage areas (HSA).
- Pediatricians with 20-30% Medicaid case load will earn proportionately less of the Medicaid incentive— a total of \$42,500 instead of the \$63,750 possible for physicians who meet the 30% case mix floor.
- Hospital-based physicians such as anesthesiologists, radiologist, pathologists, and emergency medicine physicians are not eligible for the incentive payments.
- Penalty to physicians who are not meaningful EHR users during 2015 and thereafter. Physicians may request hardship exemption from the penalty provision for issues such as lack of internet access in rural area.

Other Funds Available:

Best estimates from Micky Tripathi of Massachusetts eHealth Collaborative are that maximum Medicare funding will still leave a gap of \$20,000 between the cost of an EHR and the cumulative amount received in incentives. To help narrow the gap, providers should seek other funding opportunities for healthcare IT available from current federal, state, payer and hospital sources.

ePrescribing - ePrescribing (eRX) is often viewed as the first step to the adoption of full EHRs. There are benefits in improving medication safety, management of medication costs, practice efficiency and quality of care. In addition to these system benefits, successful e-Prescribers have the potential in 2009 and 2010 to earn a bonus of 2% of Medicare revenue through a new and separate Medicare incentive program. The bonus drops to 1% in 2011 and 2012, and 0.5% in 2013. Physicians who are **not** utilizing ePrescribing will be subject to penalties of 1% in 2012, 1.5% in 2013, and 2% in 2014 and beyond. Double-dipping with the HITECH incentive funds in 2011 and beyond will not be permitted.

Physician Quality Reporting Initiative (PQRI). PQRI is a voluntary program in which physicians collect and report their practice data in relation to a set of established performance measures. The program provides for the payment of up 2% of the total allowed charges for covered Medicare physician fee schedules services to eligible healthcare professionals who successfully report PQRI quality measures in 2009 and 2010. Funding in future years is uncertain. PQRI does not require an EHR but this kind of reporting is facilitated by an EHR. The voluntary PQRI program is considered by some a precursor to a mandatory pay-for-performance program CMS will eventually roll out in the coming years.

YEAR (calendar)	ePrescribing Incentive	ePrescribing Penalty	PQRI Incentive	Maximum Incentive eRX+PQRI
2009	2.0%		2.0%	4.0%
2010	2.0%		2.0%	4.0%
2011	1.0%		TBD	TBD
2012	1.0%	-1%	TBD	TBD
2013	0.5%	-1.5%	TBD	TBD
2014 and beyond	0	-2.0%	TBD	TBD

Public and Private Programs Supporting EHR Adoption

Besides these ePrescribing and PQRI programs available to all participating Medicare providers, there are a number of focused incentive programs to encourage EHR adoption. The Certification Commission for Healthcare Information Technology (CCHIT) did a survey and found over 100 programs around the country subsidizing EHR adoption or paying a premium for EHR use for a total payout of over \$720 million². Government agencies, insurance plans, employer coalitions and malpractice insurers offered 45 programs at last count. Another 59 programs, representing 159 hospitals, were offered by hospitals and health systems under federal “safe harbor” regulations that now allow hospitals to subsidize up to 85 percent of certain costs for physicians to acquire, implement and maintain EHRs. The state by state list is available at cchit.org. Many of these programs will be transforming themselves under the new HITECH act, but look for continued activity at your local level. States and municipalities will also be receiving federal stimulus funding and may direct some to healthcare IT.

“Meaningful use” of “certified EHR”

There is an important caveat to qualify for the HITECH reimbursements listed above. To be eligible for incentive payments, one must be a **meaningful** user of a **certified, qualified** EHR. While these terms – **meaningful, certified, qualified** – will be more fully defined by December 31, 2009 during the rule-making process, language in the Act provides a starting point:

The law defines a **meaningful user** as a physician who:

- Uses a certified EHR in a meaningful manner, which includes the use of electronic prescribing (e-prescribing)
- Uses a certified EHR that can accommodate the electronic exchange of health information to improve quality
- Submits information on clinical quality measures, as chosen by the Health and Human Services (HHS) Secretary, for the reporting period

A **qualified** EHR system is one that:

- “includes patient demographic and clinical health information, such as medical history and problem lists;
- has the capacity to
 - (i) provide clinical decision support;
 - (ii) support physician order entry;
 - (iii) capture and query information relevant to health care quality; and
 - (iv) exchange electronic health information with, and integrate such information from other sources.”

Of note, in the hundreds of pages of the Act, the terms “electronic medical record” or “EMR” are never used³. This is not simply semantics and not accidental. It reflects a movement away from EMRs which can refer to stand-alone, silo, noninteroperable, noncommunicating systems. Interoperability will be a critical component of HITECH and will be supported by the promulgation of standards and promotion of Health Information Exchanges (HIE) and Regional Health Information Organizations (RHIO).

Who will **certify** EHRs? The Certification Commission for Healthcare Information Technology (CCHIT) appears positioned to step into the role of certifying organization... but not so fast. The decision is up to the Secretary of Health and Human Services who will be advised by the National Coordinator (ONCHIT). David Blumenthal, the newly nominated National Coordinator writes in the April 9, 2009 NEJM: “... many certified EHRs are neither user-friendly nor designed to meet HITECH’s ambitious goal of improving quality and efficiency in the health care system. Tightening the certification process is a critical early challenge for ONCHIT.”⁴

In the NEJM article, Dr. Blumenthal appears to be listening to some physicians’ concerns that CCHIT criteria are a set of checklists with little regard to usability. CCHIT does seem ready to reinvent itself to fill the role and CCHIT criteria are likely to change based on Secretary/ONCHIT input. One thing that is known is that the certification requirements are expected to become more stringent over time.

Both Ms. Adams and Mr. Tripathi cautioned against setting too low a bar in defining “meaningful use”. According to Ms. Adams, it would be primitive and could be detrimental to define the bar as low as electronic prescribing. She would like to see the “exchanging health information” criteria as a **noun**, as in provider connection with a **Health Information Exchange** where data could be shared with other providers, and not simply a **verb** of exchanging information, such as between a physician office and pharmacy or within a proprietary healthcare system that doesn’t talk to other parts of the healthcare system. “Meaningful use doesn’t just happen. It’s not plug and play. EHRs don’t generate value on their own if the system isn’t configured for certain functionality and the practice isn’t trained to utilize it”, according to Mr. Tripathi. In thinking about functionality, Mr. Tripathi compared EHRs to a program like Microsoft Word where users may utilize only a small fraction of its features and functions. Similarly, EHRs will have many features and functions but if a provider just owns an EHR without using its clinical decision support, results management and other value added features, it should not be construed as meaningful and incentive eligible use of an EHR. Mr. Tripathi noted that most physicians don’t have a network to plug in to.

Barriers and Benefits of EHR Adoption

So far it sounds like all good news ... what's the catch? Despite the expected infusion of funds, what hasn't changed yet is that implementing EHRs can be extraordinarily difficult and potentially risky. Micky Tripathi relayed findings from HHS that 30-40% of retail EHR implementations fail – largely because of improper or nonexistent implementation services. As evidenced by the low EHR adoption rates, especially for fully functioning EHRs, physicians have been slow to embrace them. The reasons for caution include:

BARRIERS TO ELECTRONIC HEALTH RECORD ADOPTION
• prohibitive upfront cost worsened by the tightening credit market
• perceived lack of financial return from investing in EHR; many of the benefits accrue to the payer yet the cost is borne by the physician
• the implementation process is disruptive because practice workflow must be re-engineered
• perception that physician's role will change to data entry clerk
• lead time to implement and reduced productivity and revenue during ramp up
• technical and logistical challenges in installing, maintaining and updating hardware and software
• system reliability and downtime concerns
• audit and compliance concern when coding from EHR templates
• consumers' and physicians' concerns about privacy and security of electronic information including stricter HIPAA regulations
• physicians' concerns about losing patients when patients and records can move easily around the system
• impending retirement or other practice changing plans

HITECH makes possible a new worst case scenario: Imagine a practice that has implemented an EHR, at great cost and disruption to the practice, but the software isn't "certified" or the provider doesn't qualify as a "meaningful user". It's 2015 and the practice is out the funds sunk into hardware, software, training and transition and also not earning the \$8,000 payment under the incentive program. Worse, the provider is now subject to a 1% penalty for not having an EHR plus a 2% penalty if they are not e-Prescribing!

Another risk that is new with HITECH is expanded HIPAA **Privacy and Security** rules and penalties. The Act strengthens enforcement of the HIPAA privacy rules and creates a right to

be notified in the event of a breach of identifiable health information. This will create an administrative burden on practices and audit trails that are typically beyond the functionality of today's EHR. However, addressing patient privacy and security concerns is an important goal in gaining patient and physician acceptance.

Despite the stories of stalled and failed implementations, there are a growing number of successful implementations. And each implementation brings the system closer to the goal of a robust, nationwide, interoperable, privacy-protected health information technology infrastructure that improves healthcare. The most important concept to realize is that an EHR is transformative – it touches so many aspects of the practice. The leadership needs to take time to examine their goals, the organization's culture and capacity, the current workflows and make sure the EHR will facilitate a safe, efficient process. The benefits to be accrued are many:

BENEFITS OF ELECTRONIC HEALTH RECORDS
<ul style="list-style-type: none"> • Improved quality of care and outcomes
<ul style="list-style-type: none"> • Enhanced patient safety with reduced medication errors and other medical errors
<ul style="list-style-type: none"> • Better medical records access
<ul style="list-style-type: none"> • Enhanced patient education materials
<ul style="list-style-type: none"> • Quicker turnaround times for results of lab tests and imaging studies
<ul style="list-style-type: none"> • Improved diagnostic process
<ul style="list-style-type: none"> • Streamlined health maintenance and chronic disease management.
<ul style="list-style-type: none"> • Protocol-based treatment
<ul style="list-style-type: none"> • The reduction in expenses associated with the management of paper records
<ul style="list-style-type: none"> • Significantly more efficient and accurate coding and billing of claims as a result of template-based documentation. Reduced charge lag and complete charge capture.
<ul style="list-style-type: none"> • Improved practice efficiency through streamlined workflows
<ul style="list-style-type: none"> • Easier qualification for pay-for-performance reimbursement

An Action Plan for Medical Practice Executives

Whether you already purchased and implemented an EHR or just starting to survey the landscape, you need to take action. Due to the rapidly changing environment, you will need to stay agile and continue to make progress, even with imperfect information. Monitor the MGMA and other industry sites for federal rule-making developments and decisions on certified EHR systems, definitions of meaningful use, EHR loan programs and implementation assistance.

If you have already purchased an EHR, you will need to have a plan to make sure the EHR is fully deployed, meets certification requirements under HITECH, is connected to other systems such as pharmacy and lab for interoperability, and your physicians are trained to be meaningful users.

If you don't have an EHR, you should begin a disciplined and organized process of assessment and evaluation in 2009/2010 and target implementation in 2010 in order to receive the maximum bonuses available under the program starting in 2011. This is an ambitious timeframe and contingent on organizational readiness for a transformative project. Practice readiness for this journey can be assessed by evaluating organizational alignment (culture, infrastructure, leadership and strategy) and organizational capacity (IT support, management capacity, workflows and finance). After readiness, steps include system search and selection, negotiation and purchase, design and deploy, and finally ongoing maintenance and continuous improvement.

Asked what advice they would give to medical practices, Laura Adams and Micky Tripathi also stressed the need for action. Ms. Adams said there should be serious discussions within the practice right now. Practices need to understand how quickly the door will slam. If in the early stages of EHR discovery, seek out opportunities for help and support in the decision making process. Identify someone who is a champion, who can lead the effort. The leader doesn't have to be a physician but if not, there should be a physician champion on the team. A basic item is to look at the practice volume and determine if eligible for Medicare or Medicaid incentives. If Medicaid, will be able to submit receipts and receive reimbursement for EHR expenses. Rhode Island is preparing a set of modules to help practices through the process. Practice leadership should attend the free program on April 30th sponsored by the RI Medical Society and RI Quality Institute.

Micky Tripathi advice to practices without EHRs is to "get started right away; get an EHR as fast as possible. But don't do it alone. See if you can link up with an IPA or PHO which may offer a subsidy and more importantly, the program infrastructure and management".

This is an exciting time and one that calls for action. Laura Adams would like to see the full implementation of the RI Health Information Exchange although she cautions that one "not confuse stimulus with sustainability" and Rhode Island will need to develop a long term sustainability plan for the HIE. Micky Tripathi believes the MeHC is a strong contender for the role of regional health IT extension center to help practices implement EHR. He'd like to see HITECH fund, and physician practices utilize, robust implementation support services from MeHC and similar groups because the HITECH incentive model can be inefficient, ineffective and high risk without strong implementation support.

It will take a great deal of leadership, commitment and creativity to address the challenges of healthcare IT and realize IT's potential. It will take a great deal of funding as well and HITECH provides an unprecedented investment in this vision. As stewards of these resources (and taxpayers), our efforts can help the healthcare system move towards the vision of a robust, nationwide, interoperable, privacy-protected health information technology infrastructure that ultimately improves healthcare.

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Electronic Health Records –Basic and Fully Functional Systems

Functionality	Basic System	Fully Functional System
<i>Health information and data</i>		
Patient demographics	X	X
Patient problem lists	X	X
Electronic lists of meds	X	X
Clinical notes	X	X
Medical history and follow-up notes		X
<i>Order-entry management</i>		
Orders for prescriptions	X	X
Orders for laboratory tests		X
Orders for radiology tests		X
Prescriptions sent electronically		X
Orders sent electronically		X
<i>Results management</i>		
Viewing laboratory results	X	X
Viewing imaging results	X	X
Electronic images returned		X
<i>Clinical-decision support</i>		
Warnings of drug interactions or contraindications		X
Out-of-range test levels highlighted		X
Guideline-based intervention or screening reminders		X
Total		

Source: DesRoches, C., et al, Electronic Health Records in Ambulatory Care — A National Survey of Physicians, New England Journal of Medicine, Volume 359:50-60

Endnotes

¹ DesRoches, C., et al, Electronic Health Records in Ambulatory Care — A National Survey of Physicians, New England Journal of Medicine, Volume 359:50-60

² Survey of Private and Public EHR Programs: <http://ehrdecisions.com/wpcontent/files/CCHITIncentiveIndex20080925.pdf>

³ http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h1enr.pdf

⁴ Blumenthal D., Stimulating the Adoption of Health Information Technology, N Engl J Med. 2009 Mar 25. [Epub ahead of April 9, 2009 print]