Hospitals Scramble to Meet Deadlines for Adopting Electronic Health Records
Pharmacy Systems Will Be Updated Slowly but Surely

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Bill Spooner, Chief Information Officer at Sharp Healthcare, couldn’t wait to flip his calendar to 2011. That’s when the four acute-care hospitals that make up his company in San Diego, California, will probably receive the first installment of what he estimates will be a total of $20 million to $30 million in federal payments over four years. The money will be made available thanks to an amendment to the 2009 stimulus bill, known as the American Recovery and Reinvestment Act of 2009 (ARRA). The Health Information Technology for Economic and Clinical Health (HITECH) Act, part of ARRA, makes about $20 billion available to hospitals and physician practices starting in 2011 if they meet a definition of “meaningful use” of electronic health records (EHRs).

To many hospitals, that “if” looks as steep as the Himalayas—only 6% to 12% of hospitals currently have certified systems in place—and the climb is going to be a very expensive one too. However, Sharp network hospitals are already near the top. The four acute-care hospitals (Memorial, Chula Vista, Coronado, and Grossmont) have each deployed Cerner Corporation’s 2007.19 EHR system. This system needs some tweaking, because it was put in place before the Office of the National Coordinator for Health Information (ONC) at the Department of Health and Human Services (DHHS) published final meaningful-use requirements last July.

Cerner is in the process of upgrading its base 2007.19 system with a Service Pak 12 add-on. After this Service Pak is installed, Sharp and other hospitals that upgrade their Cerner systems can also claim 2011 HITECH incentive payments. The size of the payment depends on a number of factors, but the total will be more than a $2 billion base amount for each hospital that has a Centers for Medicare and Medicaid (CMS) certification provider number. The HITECH funds are often termed incentives, but this term is misleading. The millions per hospital become available only after the hospital has spent many millions of its own dollars putting a certified EHR system in place; therefore, the money is actually a reward.

Most hospital systems won’t qualify as quickly as Sharp for the millions of dollars in reward money, says Rich Umbdenstock, President and Chief Executive Officer of the American Hospital Association.

“The American Hospital Association (AHA) remains concerned that the requirements may be out of reach for many of America’s hospitals,” he says.

Yet most hospital systems are starting the uphill slog anyway. That is true of the 73 hospitals in the Catholic Health Initiatives system. Stephen Moore, MD, Senior Vice President and Chief Medical Officer, states that perhaps only two or three of his hospitals will qualify for incentives in 2011. He points out that any hospital whose first year of qualification is 2013 can still qualify for a full incentive payment. Those facilities that qualify in 2014 receive diminished payments through 2016. Dr. Moore expects all 73 hospitals to have certified meaningful use EHR systems in place by 2014. The inpatient capital cost systemwide will be about $400 million plus an additional $20 million in operating costs. He estimates that the 73 hospitals will be eligible for about $200 million in HITECH incentives. Asked whether he is bothered by the nearly $400 million gap between expenditures and federal grants, Dr. Moore explains:

“It is a false assumption that there is no value to what we do. We all firmly believe we need to provide better and safer care while also responding to health care reform.”

Another reason some hospitals are making what could appear to be crazy financial decisions is that those failing to meet the meaningful use definition by 2015 will see their Medicare reimbursements reduced starting that year.

Attaining meaningful use certification will be less costly—though no less onerous—for smaller hospitals, such as Fayette County Hospital in Vandalia, Illinois. This is a critical access hospital with 25 acute-care beds and 85 chronic-care beds. Greg Starnes, Chief Executive Officer of Fayette, says:

In my case, the estimated cost for software and hardware necessary to achieve meaningful use criteria will likely be close to $750,000. Training and process changes are likely to cost an additional $50,000 to $100,000. There will also be substantial costs associated with establishing the interfaces to enable all the hospitals’ and other providers’ systems to connect.

Mr. Starnes will have to balance the need to spend on a hospital-wide, meaningful use—certified EHR against other needs, such as a new computed tomography (CT) scanner for a minimum of $350,000 or a digital mammography unit for approximately $350,000. Because of the recession, he has already cut his staff and has reduced hours and pension contributions in an effort to cut costs. Capital funds, therefore, are in very short supply. Critical access hospitals can receive both Medicare and Medicaid incentive payments if a state decides to offer the latter.

When Congress passed the HITECH Act in February 2009, it wasn’t thinking about the adequacy of hospital capital budgets; the idea was to force hospitals and physicians’ offices to use EHRs to improve patient health outcomes and safety and,
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at least theoretically, give a boost to the flagging economy via orders for medical technology systems and employment of additional health information technology (IT) professionals. (Meaningful use requirements and penalties are similar for ambulatory-care practices.)

Like any other well-intentioned congressional legislation, however, the devil was in the details. Those details had to be ironed out over a 17-month period by the ONC (which set the technical meaningful use standards) and by the CMS (which established the federal grant disbursement rules for hospitals and physician practices.)

Hospitals strongly criticized the initial meaningful use standards and some of the grant limitations that the ONC and the CMS had initially issued in January 2010. Both agencies took some of that criticism to heart, and they made numerous adjustments in the final rules that they published in July 2010. However, some in the hospital community are still dissatisfied. The AHA’s Dr. Umbdenstock adds:

Unfortunately, CMS continues to place some barriers in the way of achieving widespread IT [information technology] adoption by our nation’s hospitals and physicians. In particular, individual hospitals in multcampus settings are unfairly excluded from incentive payments. Additionally, we are concerned this rule may adversely impact rural hospitals and the patients they serve and exacerbate the digital divide in health care. We also are concerned that the rule requires hospitals to immediately use computerized provider order entry (CPOE), which can be complicated and costly to implement and takes time to do right.

Stage 1 criteria. CPOE is one of the 14 core (mandatory) meaningful use requirements hospitals must meet at this stage, which covers fiscal years 2011 and 2012. Hospitals must also meet five of 10 menu requirements in stage 1. Core requirements involve:

- benchmarks for CPOE (only medication information must be entered).
- reporting of quality data to the federal government.
- up-to-date diagnoses, active medications, drug allergies, demographics, vital signs, and smoking status recorded as structured data.

Menu requirements include drug–formulary checks and medication reconciliation. A hospital can apply to the DHHS for an exemption from meeting either core or menu requirements, but it is not clear on what basis an exemption would be granted.

Stage 2 criteria. These requirements, scheduled to go into effect in 2013, expand upon stage 1 criteria. Changes at this stage are reflected by a larger number of core objective requirements in the following areas:

- disease management
- clinical decision support

- medication management support for patient access to their health information
- transitions in care
- quality measurement and research
- two-way communication with public health agencies

Stage 3 criteria. Requirements would involve achieving improvements in:

- quality, safety, and efficiency.
- decision support for national high-priority conditions.
- patient access to self-management tools.
- access to comprehensive patient data.
- improvement of population health outcomes.

HITECH incentives are currently available only for hospitals and physicians, not for pharmacists; thus, no criteria among the stage 1 core and menu modules apply to hospital or retail pharmacies alone. However, Mark N. Brueckl, RPh, MBA, Assistant Director of Pharmacy Affairs at the Academy of Managed Care Pharmacy, points out that HITECH includes about $2 billion in grants for health care providers beyond physicians and hospitals. Newly eligible providers will be included by the time the stage 2 program begins. He and many others in the pharmacy community hope that the additional group of CMS-approved “eligible professionals” includes pharmacists.

“We’d love to see it happen by stage 2, but the important thing is to ensure that pharmacists are recognized as eligible professionals for HITECH,” Mr. Brueckl says.

Although stage 1 criteria do not affect pharmacies directly, they certainly affect pharmacists. It is in this area that the CPOE criteria loom largest. Hospital physicians and nurses will be using Blackberries, iPads, and other electronic devices to order medications at a patient’s bedside. The inpatient or outpatient pharmacy receiving that electronic order does not have to do anything to comply with the meaningful use standard. The drug–drug and drug–allergy checks will be going on in the background. Accordingly, hospitals will want to upgrade their pharmacy software systems. Kyle Meadors, Director of EHR Testing at the Drummond Group, Inc., says:

The meaningful use certification requirements which will most likely affect hospital pharmacies are the security and privacy requirements. Because of the heterogeneous nature of many hospital systems, the user interface and controls at the pharmacy could be very different from the clinician’s user entry point. As a result, some privacy and security aspects, like user access control or audit log, may need to be specifically tested at the pharmacy component of the hospital’s EHR system.

Pharmacists who have been accustomed to the back-and-forth steps associated with written prescriptions will have to adapt to CPOE exchanges. Chris Urbanski, Director of Pharmacy Informatics and Medication Integration at Clian Health, notes that the role of the pharmacist will shift from direct order entry to verification when CPOE comes into play. After
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the pharmacist has reviewed the order and any alerts and has judged the order to be appropriate, he or she must assign the correct dosage form or product to each medication order, as determined by hospital policy, the formulary, or both. Questions or clarifications concerning prescriptions can be sent electronically to the physician and other patient-care professionals to streamline the medication-use process.

When the ONC published the final requirement in July, it eased the CPOE requirement. The proposed rule that was issued in January 2010 said CPOE must be used for 10% of all hospital orders. In July, the final rule changed this to specify that for more than 30% of individual patients with at least one drug in their medication list, at least one prescription had to be entered via CPOE. The final rule also switched the terminology for drug–drug and drug–allergy contraindications from requiring alerts to requiring notifications.

The medication reconciliation requirement—a menu objective—was changed to clarify that this step had to be performed, for example, during a “transition of care” from a hospital to a nursing home. Medication reconciliation is not required when a patient is transferred from one hospital department to another; however, it is required when a hospital admits a new patient from a residence or long-term care institution. To meet the menu criteria, the facility must perform medication reconciliation for at least 50% of patients for whom it is required—with the caveat that this number need include only transitions of care related to patients whose records are maintained using certified EHR technology (i.e., not all patients who are received).

Kathy Mathena, MSN, RN, Clarian Health’s Executive Director of ARRA Compliance (the Act that includes HITECH), states that the seven core hospitals that will comply with meaningful use in 2011 will probably not choose medication reconciliation as one of the five menu items to report on in stage 1. However, she expects the stage 2 core requirements to include not only include medication reconciliation but also perhaps a more rigorous criterion.

“We are working toward compliance for all menu items. And while medication reconciliation is currently completed on our patients, the code set in our current Cerner system is not as user-friendly as it needs to be in terms of medication reconciliation.”

Of all the proposed core and menu criteria, medication reconciliation was the top target for pharmacy groups because it is seen as a wedge with which to widen the scope of practice. Carla McSpadden, RPh, CGP, Director of Professional Affairs for the American Society of Consultant Pharmacists, says:

For the meaningful use of EHRs to be effectively achieved and for the quality of care for patients to be improved, the complex process of medication reconciliation must include the clinical decision-making and expertise of the pharmacist. Additionally, while automated data systems can compile merged lists of medications, the process of medication reconciliation will not be effective without the verification of such information with the patient or his/her caregiver and the confirmation of the medications that are currently being taken by the patient, and the frequency with which they are taken. The process must include the transfer of information in the form of education and counseling by the pharmacist to the end user; the patient, in a format that is both understandable by and effective for the patient.

However, the ONC explicitly rejected the argument that pharmacists needed to be involved in stage 1 medication reconciliation. In July 2010, the Federal Register notice stated:

We believe that it is beyond the scope of meaningful use, as pharmacists are not eligible professionals for the EHR incentive programs and that the provision of patient counseling is more aligned with the objectives of clinical quality measures. Information from the medication reconciliation could be used for the basis of clinical decision support rules but is not in and of itself a clinical decision.

To make a case in time for pharmacists to be included as new eligible professionals for stage 2, nine pharmacy groups formed a Pharmacy e-Health Information Technology Collaborative in September 2010. The goal is to develop standards and formats for a pharmacy EHR product that the vendors could then incorporate into products. Both the National Council for Prescription Drug Programs (NCPDP) and Health Level Seven International (HL7) are working on this. After the standards are in place, meaningful use criteria would have to be developed by the ONC and then built into vendor pharmacy systems.

Presumably, the full-blown, inpatient systems being offered by vendors as meaningful use-certified meet the medication reconciliation criteria, whether or not they are one of the five of 10 menu items with which a hospital decides to comply. Whether completely integrated, all-in-one hospital EHR systems, physician office systems, or pieces thereof, all HITECH-compliant software must be certified as meeting meaningful use standards by one of three accrediting organizations:

- the Certification Commission for Health Information Technology (CCHIT) in Chicago, Ill.
- the Drummond Group, Inc., in Austin, Texas
- InfoGard Laboratories, Inc., in St. Louis, Calif.

These organizations are ONC–Authorized Testing and Certification Bodies (ONC–ATCBs). Vendors such as Cerner, Allscripts, Epic Systems Corporation, GE Healthcare, and others have gravitated to the CCHIT because of its history certifying medical information systems.

Sue Reber, Marketing Director of the CCHIT, says that the organization has so far certified five vendor inpatient EHR systems; however, several more components of inpatient systems are certified as EHR modules. She explains:

This is consistent with how hospitals purchase and implement EHRs. They rarely rely on a comprehensive system to do it all. The provider will add other certified modules to fill the gaps or come to us to certify their self-developed bits. We are developing a special program to accommodate that.

Although vendors typically submit their software to the CCHIT for certification, the CCHIT started accepting hospital applications in December 2010, when it introduced its EHR Alternative Certification for Hospitals (EACH) program. Hos-

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Hospital EHR systems are certified remotely, at a cost of no more than $33,000 (the price a vendor pays for having a complete ambulatory EHR system certified). Kyle Meadors of Drummond says his company will also certify hospitals remotely.

Certification prices can be a thorny issue. The CCHIT charges vendors more for certifying a full EHR system compared with Drummond, which charges $19,000; InfoGard’s price is $19,400. Sue Reber explains that CCHIT costs more because it also provides additional, non-HITECH certifications for IT systems used in ambulatory inpatient, emergency department, behavioral health, and long-term care and post-acute care settings.

“We compete beyond price,” Ms. Reber says.

Hospitals whose EHR systems meet the meaningful use definition in the federal government’s fiscal year 2011 (which began on October 1, 2010), 2012, or 2013 qualify to receive a full HITECH payment over four years. The sum available is a base figure of $2 million plus the product of a per-discharge amount (of $200) and the number of discharges (between 1,150, and 23,000). Whatever that figure is for fiscal year 2011, the hospital receives 100% of it, and that figure is reduced to 75%, 50%, and 25% in the remaining three years.

Separate Medicaid incentive payments—in addition to the Medicare payments—will also be available to a select group of critical access hospitals, which include acute-care and children’s hospitals. Those payments will come from the state, which can choose not to participate in the incentive program. If a state does participate, the CMS will match state incentives at 100% and at 90% of a state’s administrative costs in administering the program. The much smaller universe of hospitals that can qualify for Medicaid incentives do not have to meet a meaningful use definition in 2011 to receive funds. They simply have to purchase certified HIT systems, but they do have to meet the definition in 2012.

In 2011, hospitals can self-certify that they have met the meaningful use definition; this can be done during any 90-day period. For 2012, however, the hospitals must report compliance data electronically to the DHHS to prove that they have met the meaningful use definition.

Clarian’s Kathy Mathena suggests that most hospitals or hospital systems will make the necessary EHR investments needed to meet the meaningful use definition because they fear that the loss of Medicare payments starting in 2015 will be substantial.

“I don’t think hospitals will willingly or knowingly take the penalty. The question will be timing and availability of resources to assure successful implementation,” she says.

REFERENCE