

HITECH Lays the Foundation for More Ambitious Outcomes-Based Reimbursement

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The US healthcare system has decades of research and anecdotal evidence suggesting the potential transformational power of healthcare information technology (HIT). Yet the widespread use of electronic health records (EHRs) in the United States has not materialized, depriving the country of EHR-enabled quality, efficiency, and safety gains.

It is estimated that optimizing the use of labor, reducing the number of adverse drug events and duplicate tests, and instituting revenue cycle management through investments in HIT systems can help typical hospitals generate savings of some \$25,000 to \$44,000 per bed per year. On an industry wide basis in the United States, that translates into \$30 billion to \$40 billion annually.¹

In 2009, the Obama administration provided the healthcare industry with an incentive-oriented opportunity to break down the barriers to HIT adoption and achieve true progress via the meaningful use of EHRs. Through the Health Information Technology for Economic and Clinical Health (HITECH) Act, the federal government is making up to \$27 billion available in incentive payments, followed by penalties, over 10 years for eligible professionals and hospitals.

In response to the release of the final “meaningful use” criteria on July 13, 2010, several industry associations and organizations quickly issued position statements. Although many positions were supportive, noting the significant cost and quality problems of US healthcare, a few organizations expressed concern that the requirements may be out of reach for many hospitals.

For example, the American Hospital Association took issue with the potential impact on rural hospitals and the immediate use of computerized provider order entry (CPOE), among other aspects of the rule, asserting that notable barriers continue to stand in the way of achieving widespread HIT adoption by our nation’s hospitals and physicians.²

Arguments aside on whether the stage 1 meaningful use bar was set too high, I believe all healthcare stakeholders—providers and vendors alike—can agree that meaningful use is a very potent idea. It says that if our goal is care improvement, adoption is only relevant if the technology is used well. In effect, HITECH has permanently shifted our focus

from adoption of HIT to its use. Moreover, it is important that the federal government’s goals remain aspirational, outlining a vision of care in this country that

Through the Health Information Technology for Economic and Clinical Health (HITECH) Act, the federal government is making up to \$27 billion available in incentive payments, followed by penalties, over 10 years for eligible professionals and hospitals. HITECH is extended by the sections of the Patient Protection and Affordable Care Act (PPACA) that deal with payment reform. Of particular importance are those sections that discuss accountable care organizations and the different ways that Medicare will pay for care. These changes may be more significant to the industry and to healthcare information technology (HIT) than the “meaningful use” regulation itself. In some ways, meaningful use becomes the tactical plan for achieving the strategic plan outlined by PPACA. The HIT market will evolve to include exchanging data, orchestrating the coordination of care across settings, and finally guiding caregivers with contextual knowledge at the point of care.

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Take-Away Points

Use of practice data that are collected and analyzed through health information technology will lead to organizational learning and improvement resulting in:

- Improved patient care.
- Linkages of provider practice measurement and interventions for improvement.
- Reporting for physician accountability such as licensure, board certification, and credentialing, and effective pay-for-performance.

is “transformed.” This will require a delicate balance between acknowledging the urgency of mass adoption and recognizing the myriad challenges that adoption of meaningful use imposes on each provider.

In this commentary, I examine the interrelationship between HITECH and payment reform, both of which require a sophisticated nationwide HIT infrastructure to support changing reimbursement models. Against this backdrop of reform, I also will look at the key implications for HIT as the healthcare market evolves.

WE’VE ONLY JUST BEGUN

Now that the rules have been finalized, providers and their vendor partners will spend the next several months defining and implementing their near-term game plans. For instance, the eligible hospital meaningful use objective for CPOE changed from having 10% of all orders entered to 30% of all medication orders entered. Additionally, any licensed healthcare professional can enter orders into the medical record per state, local, and professional guidelines. Although this is a positive step toward reducing preventable medication errors, it raised the bar for providers who are implementing CPOE.

To successfully roll out CPOE and achieve adoption by physicians and other caregivers, it is essential that the work flow of these providers is efficient. In the inpatient setting, separation of medication ordering from nonmedication ordering breaks the work flow for both physicians and nurses, creating an unreliable and potentially unsafe process. Therefore, the industry’s best practice is to roll out an integrated approach to entering orders. Thus, this change to 30% of medication orders entered in effect raised the bar to 30% of all orders for hospitals.

Numerous variations of this scenario are playing out across the healthcare landscape as providers and their EHR vendors take a step back to recalibrate implementation plans and product release schedules. Meanwhile, others who took little or no early action to prepare may be coming to the realization that procrastination was not a sound strategy.

Additionally, 2 near-term significant HITECH implementation issues must be considered by the government.

First, the vendor community and our customers already are

under tight schedules to meet stage 1 deadlines for EHR adoption. Based on the initial schedule to next release stage 2 regulations by the summer of 2012, we might find we have even less lead time to clear this bar. Through the proposed and finalized meaningful use rules and the recommendations of the Health Information Technology Policy Committee, there should be early “signaling” as to the content and timetable of the next stage(s). Although there is a need to preserve flexibility in defining the next stages, there is utility to the clarity of a multistage meaningful use path. This clarity supports the certification processes and assists vendors and providers in developing their HIT strategies and budgets.

Second, given the magnitude of the incentives, a large portion of the development agenda for EHR vendors will be driven by the need to support meaningful use and the requirements of payment reform. Medicare and Medicaid reimbursement demands will come to dominate EHR development and may crowd out other development requests from customers. Care will need to be taken to preserve the ability of the industry to innovate and respond to provider needs that may not be directly linked to meaningful use. Meaningful use parsimony is a desirable attribute.

As the government examines these issues, there is a risk that EHR vendors and providers will singularly focus on meaningful use stage definitions, associated standards, and certification criteria that change every other year. Although this “rhythm” will be a fact of industry life, we should understand that HITECH is part of a broader context of healthcare reform.

Building Blocks for Payment Reform

The federal EHR strategy and funding offer ample support to create the long-desired nationwide system of interconnected EHRs. However, this strategy also will have a profound impact on the delivery of healthcare in this country, as it is part of a broader, multifaceted healthcare reform initiative.

The recently passed healthcare reform legislation known as the Patient Protection and Affordable Care Act (PPACA) underscored the federal government’s interest in new care delivery models such as accountable care organizations (ACOs) and new reimbursement approaches such as episode and bundle payments that address the cost and quality imbalance by significantly improving the efficiency, quality, and coordination of care delivery. In fact, it is expected that the federal government will advance these types of arrangements with a fair amount of vigor in a short period of time—roughly 3 years. Therefore, one really ought to assume that HITECH is fundamentally laying the foundation for payment and structural reform, which assumes widespread meaningful use of interoperable EHRs.

With all that the final meaningful use rule does spell out, it carefully stops short of aligning incentives with changes in care outcomes. Although providers must report quality data, early stages of meaningful use do not require that specific improvements in care occur. In defining meaningful use, it was understood that broad care improvements would require a longer lead time than is likely to be reachable under the initial HITECH timetables.

Hence, HITECH is extended by the less-discussed, but profoundly impactful PPACA sections that discuss ACOs and the different ways that Medicare will pay for care. These changes may be more significant to the industry and to healthcare information technology than the meaningful use regulation itself.

Case for Accountable Care Organization and Payment Reform

In many ways, the healthcare cost discussion has been around for decades, and as such, it might be easy to dismiss the discussion as one of those background anxieties that permeate the industry. But healthcare costs continue to rise, consuming more and more of the gross domestic product. In fact, the Congressional Budget Office projects that by the middle of this century, healthcare will consume one-third of the country's gross domestic product.³ However, we continue to lack data suggesting that care quality and safety are rising accordingly. In addition, there remains too much variation in care quality and healthcare practice, and we simply do not see a whole lot of narrowing of that variability.

Furthermore, healthcare costs are unevenly distributed: 10% of patients account for 64% of costs, and many of these patients have chronic conditions such as congestive heart failure, diabetes, and hypertension.⁴ Only through more coordinated care that prevents avoidable complications for patients with chronic illness will we be able to truly drive down costs.

In some cases (eg, diabetes), we have fairly good measures by which to judge the quality of care. But in other cases, such as psychiatric or mental health disorders, the measures are limited and we are often unable to show whether one provider is more effective, more efficient, and better than another.

The goal of an ACO is to improve the integration of care across providers. Within an ACO, one organization would be accountable for care coordination, quality, and efficiency for a defined cohort of patients. These accountable organizations are expected to implement a wide range of significant management, legal, and other leadership structures to manage these programs. The goal is to ensure that the payments are appropriate, clinical processes are streamlined and follow the best evidence, and the necessary reporting is in place. Last but not least, the ACO must demonstrate, in a variety of ways, its com-

mitment to being patient-centered and to engage patients in the management of their care and overall health. Within this definition, we begin to see some of the same general themes expressed through the stated goals of the HITECH Act.

Payment reform, of course, incentivizes providers to be efficient. It centers on the basic premise of paying for episodes of care or bundles. A fixed payment allows providers to make additional revenue as long as they meet a well-defined set of care quality goals.

We also know that the federal and state governments account for about 50% of the reimbursement that occurs in this country. And as the federal government goes, so goes the private sector. With the federal government removing the first-mover disadvantage that can occur with these kinds of activities, one ought to expect that health plans will shortly follow suit.

Passage of PPACA requires that providers and vendors define their EHR product and implementation road maps with the goal of supporting payment reform and changes in care accountability. Meaningful use can be seen as a series of steps and stages toward realizing that vision. In some ways, meaningful use becomes the tactical plan for achieving the strategic plan outlined by PPACA.

Current and New Functions of Health Information Technology

As we consider what payment reform means to those who consume and supply information technology, we can begin to see that most of today's core EHR capabilities are very relevant. Hence, the need to roll out a program that intends to drive providers to meaningful use. For example, it will matter that a problem list is recorded and that prescriptions are written electronically. Virtually all EHRs on the market today are capable of performing these functions. However, we have to make sure that our clinical staffs use those technologies and use them appropriately.

At the same time, other functions will increase in importance, so that many EHR capabilities generally present now will become even more important in the future. Furthermore, as vendors define their development agendas to help providers thrive in this new world of meaningful use and payment reform, new functions or those that currently are underdeveloped (to the degree that they exist at all) will be needed. Consider these examples:

Identifying and Tracking a Patient Across Multiple Organizations

With the ACO model in place, it becomes much more important to track a patient across care settings. For example, if Ms X is seen in 4 or 5 different provider organizations, there has to be a way to link the different medical record numbers

assigned to her by these organizations. The goal is to gather together all the clinical data, not only for the purpose of treating Ms X, but also to have a sense of the cost of taking care of her and the quality of the care that is delivered. As such, the notion of a regional or ACO-based master patient index becomes increasingly important.

Clinical Decision Support

The second area that will increase in prominence is clinical decision support, which takes many forms. It takes the form of order sets or alerts that highlight abnormal results. It also could take the form of reminders to see a patient who hasn't been seen in months and who is at risk for his or her care not being as well-managed as it should be.

Disease Registries

The third area is disease registries, which allow us to take a look at a cohort of patients to assess quality and efficiency, and to compare one physician's practice with another physician's practice. For instance, a registry of diabetic or asthmatic patients would bring together a summary set of clinical data that allow us to look at our care. Most importantly, it would allow us to understand and identify specific providers or areas where the type of care is not up to the standards that we would like to see.

Tools to Support Care Collaboration

If there is a care team responsible for managing a patient, particularly patients with multiple chronic diseases or high acuity, the care team must have technologies that support their collaboration. In other words, they must be able to get together using electronic means and discuss a patient, record notes, or perform handoffs during care transitions. Poor communication at the time of handoff has been implicated in near-misses and adverse events in a variety of healthcare contexts, including 70% of hospital sentinel events studied by The Joint Commission.⁵ These types of collaboration tools will need to be added to the basic EHR and will become extremely important for managing patients over long periods of time and across multiple providers.

Events Messaging

Additionally, the care team will need to be aware of events that have happened to the patient, because these events will affect management of the patient. For example, if a patient is seen in an emergency department in another city, a note will be sent to the care team that says your patient was seen in the emergency department, here is why, and here is what was done. Various events might indicate that the care being delivered is no longer following the path we want to see, and therefore an intervention could be made.

Personal Health Records

Clearly, many of the episodes and bundles will focus on patients with chronic diseases, and we are better off if we have engaged chronically ill patients. Although personal health records have very modest adoption across this country, their importance will increase. We will use them in a variety of ways, such as:

- Providing patients with access to their data so they understand their current health status.
- Allowing patients to communicate with their care providers (eg, ask questions, discuss symptoms, renew medications, request appointments).
- Enabling patients to enter their own data (ranging from correcting a medication list to entering data about their symptoms and how they are feeling, particularly if there has been a change in treatment pattern).
- Providing patients with access to health information and management tools (eg, education, discussion forums with other patients who have conditions similar to theirs).

Health Information Exchange

The last major category of information technology with implications for the future is health information exchange (HIE). Heavily emphasized in the HITECH legislation, HIEs will become increasingly important in the era of accountable care and payment reform. States have received grants to further the adoption of infrastructure necessary to enable one provider to share data with another provider.

Initially HIE will take the form of a push of clinical data. For example, one provider will send data to another provider about a specific common patient, enabling one to know what the other did. The provider who receives these data will be able to incorporate them into the patient's ongoing healthcare plan.

Health information exchange also will need to support the patient events messaging mentioned earlier. For example, if a patient is asked to have a magnetic resonance imaging exam to rule out cancer, but the patient happens to miss the appointment, a caregiver needs to be informed of this missed appointment so that the appropriate follow-up can occur.

In time, any provider will be able to request data about a patient from any other provider in the region, perhaps even in the country. As a result, we will be able to obtain a composite clinical picture of the patient regardless of where that patient was seen in the country.

TURNING DATA INTO KNOWLEDGE

In addition to the EHR-based capabilities described above, there are information technology implications to consider related to business intelligence and analytics.

HIT Market Evolution

Many organizations struggle with managing the quality of data. As an industry, we are still fairly primitive in our ability to look at data, to understand what they mean, and to take actions based on that understanding. Therefore, we should expect data management to become increasingly important in the years ahead. At the end of the day, if you do not know whether you are making or losing money on a particular bundle or an episode, you could wind up in a lot of trouble in very short order, even if your clinical staff is using a top-notch EHR.

Organizations will need to make sure that their business intelligence technologies support them in a wide range of areas. One area is assessment of their quality and costs, not only for internal consumption, but also for reporting purposes. There will be a significant need to look at variations in practice and understand where providers are falling short, or whether a particular provider or set of providers has uncovered a new or better way to deliver care.

For example, through our data management approach and our business intelligence techniques, we might do an assessment that says some of the care that we are delivering could be delivered by a nurse practitioner rather than a physician. The same quality is likely to occur, but we could significantly reduce our costs. Or we could move our care from one specialty group to another specialty group and maintain or perhaps even improve quality while managing or lowering our costs. By using business intelligence techniques, we can look at different scenarios and approaches to delivering the necessary care, given the arrangements we have for a particular set of bundled patients or episode patients.

The other area in which we will need to improve is predictive modeling, which allows us to identify those patients who are likely to experience significant distress or additional care needs in the months and years ahead. This group clearly includes the elderly, who often have multiple chronic diseases and might have cognitive disorders and poor social structures at home. We need to identify these patients as early as possible and surround them with the care resources necessary to make sure they stay healthy and avoid unnecessary hospitalizations and adverse events that can happen with multiple medications, providers, and conditions.

LOOKING AHEAD

The federal EHR strategy has been established, and the country has begun implementing it. The strategy is ambitious, multifaceted, and sophisticated. The implementation process involves many uncertainties and will not be easy. However, the strategy has a high likelihood of leading to substantial increases in the meaningful use of EHRs. As providers progress

through the stages of meaningful use, the HIT market will evolve across the horizons of exchanging data, orchestrating the coordination of care across settings, and finally guiding caregivers with contextual knowledge at the point of care.

For provider organizations, this evolution combined with pending PPACA effects should prompt a significant strategy discussion both at the board level and with the medical staff as we prepare for a future that, frankly, is not too far away.

Significant collaboration between providers and their vendors will be essential. They must work together to manage a complex information technology infrastructure and application base, and share a strategic perspective on the evolution of the technology being implemented. The partnership must work in lockstep to support the provider's strategic plan, with the vendor having a broad understanding of the organization's long-term clinical, financial, and administrative goals.

For example, a wide range of ACOs are likely to be implemented. Some will involve close partnerships with a health plan. Some will be based in hospitals, and others will be based in physician practices. Some will have significant risk sharing with physicians, and others will implement modest risk sharing. Vendors must work with providers to understand these variations and identify where existing products can be implemented "as is" and where custom work must be done.

It is not possible to be an effective ACO or to receive bundled and episode payments and manage them well without a very strong HIT base. If a provider organization looks at itself and identifies some areas of deficiencies, the time to start moving is now.

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