More has changed in the past 2 years than has changed in the past 20. With the passage of the Health Information Technology for Economic and Clinical Health (HITECH) Act and the Patient Protection and Affordable Care Act, the healthcare industry has begun a journey that will fundamentally reshape healthcare delivery in America. The next five years will see changes we have never seen before—changes that are both uprooting and uplifting. That is precisely what the industry needs.

Many comparative measures are used to contrast the cost of care in the United States to the rest of the developed world. Sadly, the US expenditure on healthcare is without peer, whether expressed as a percentage of gross domestic product, as a percentage of household income, or in absolute dollars. The fact that, per capita, Americans spend two to three times more on healthcare than do citizens of any other developed country is neither appropriate nor sustainable. Worse yet, despite our high expenditures, the United States lags the majority of other developed countries in mortality amenable to healthcare (deaths that can theoretically be averted through good healthcare).

A Once-in-a-Generation Opportunity

Why hasn’t the United States been improving at a faster pace? Most would agree that it is our unique payment system, which perversely rewards increased volumes and punishes achievement of better outcomes that would result in lower utilization of healthcare services. But if payment reform were to suddenly happen overnight, could the United States quickly transform itself from a volume-based health system maximizing utilization to an outcomes-based system maximizing health?

No industry has succeeded in orchestrating such a massive turnaround in the way it does business without a robust information infrastructure. Yet, as with other global health comparison measures, the United States lags far behind other countries in implementation of an electronic health information infrastructure. Healthcare leaders have a responsibility—and a tremendous opportunity—to rectify this underdeveloped capability.

The stars have aligned to present the country with a once-in-a-generation opportunity to put in place enablers necessary for health reform. President Obama has made healthcare his top domestic priority.
HITECH provided substantial financial incentives—more than all past initiatives combined—to accelerate the adoption and meaningful use of electronic health records (EHRs). The administration’s focus on healthcare, combined with the enablers provided through HITECH, will focus industry attention on one of the most pressing infrastructure needs—adoption and effective use of health information technology (HIT)—that must be in place before true health reform can be implemented.

**HITECH and Meaningful Use of HIT**

Despite decades of literature demonstrating the value of EHRs to improve health (Bates and Gawande 2003), the market failed to overcome major obstacles impeding their dissemination and effective use. HITECH provides enabling financial incentives and programmatic support to overcome many of these obstacles. Congress clearly intended HITECH not as a “cash-for-software” program, but rather money to be applied to meaningful use of EHRs and personal health records (PHRs).

To help support Congress’s intent, HITECH called for the establishment of an HIT Policy Committee to advise the national coordinator for HIT and the Centers for Medicare & Medicaid Services (CMS). The HIT Policy Committee developed a framework that CMS subsequently used to qualify whether providers meet the “meaningful use” test. The framework includes five categories of criteria, four clinical and one foundational:

1. Improve quality, safety, and efficiency of healthcare and reduce healthcare disparities.
2. Engage patients and families.
3. Improve care coordination.
4. Improve population and public health.
5. Ensure privacy and security of health information.

Healthcare organizations must meet fairly aggressive criteria in each of these categories to receive HITECH incentives. CMS estimates that as much as $27 billion may be paid out in Medicare and Medicaid HIT incentives throughout the life of the program. Each eligible professional could qualify for as much as $44,000 in the Medicare program or almost $64,000 under Medicaid. Hospitals may qualify for $2 million (base) plus an additional amount based on volume. Although it has received less media attention, another $2 billion has been set aside for programs that address critical infrastructure issues that benefit all healthcare providers and organizations, with a special focus on community hospitals and physician practices (Blumenthal 2010).

**Implications for Hospital Leaders**

Health reform is a near certainty. Hospital leaders must activate or accelerate plans to put in place a robust HIT infrastructure that will ensure that their hospitals not only can take advantage of the HITECH incentive program but, more important, will have the essential infrastructure needed to meet the objectives of health reform.

According to the Futurescan survey data, the vast majority of respondents plan to implement EHR systems, but most have not completed their implementations. For some, lack of full physician support and engagement may be an impediment. HITECH aligns hospital incentives with physician incentives, making now a good time to act. Hospital leaders should take advantage of the aligned incentives to partner with their medical staffs and community physicians in a shared strategy to interconnect and exchange patient information to improve care. The following recommendations are critical not only to successful implementation of HIT, but also to effective use of the information to continuously improve clinical performance and efficiency.

**Hire the best.** As Jim Collins states in his book *Good to Great* (HarperBusiness, 2001), it is always the “who” before the “what.” According to Collins, those who build great organizations make sure they have the right people on the bus and in the key seats before they figure out where to drive the bus. Implementation of an EHR is a complex, multiyear, multimillion-dollar project in any setting. Both the cost of implementing and the opportunity cost of failing are too great to risk on an inexperienced leader.

An experienced chief medical information officer is critical. Training in informatics and the skills of an executive physician leader are essential to this role because of the importance of physician engagement. Informatics goes beyond IT; it is a multidisciplinary field that combines knowledge of information technology, project management, and change management with firsthand knowledge about clinical practice and workflow considerations.

Although the available workforce suitable to fill this role is still limited, new training programs are being developed. In addition, remote learning opportunities such as the American Medical Informatics
### FUTURESCAN SURVEY RESULTS: Electronic Health Records (EHRs)

**How likely is it that the following will be seen in your hospital's area or, if in bold print, your hospital specifically, by 2016?**

<table>
<thead>
<tr>
<th></th>
<th>Very Likely (%)</th>
<th>Somewhat Likely (%)</th>
<th>Somewhat Unlikely (%)</th>
<th>Very Unlikely (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Today, IT spending amounts to 3.5 percent of the total operating budget in the average hospital. By <strong>2016</strong>, this percentage will double.</td>
<td>47</td>
<td>39</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>2. Hospitals will allocate a sizable proportion of their EHR budgets to train physicians in the effective use of EHRs.</td>
<td>38</td>
<td>48</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>3. By <strong>2016</strong>, all hospitals will have EHRs that are interoperable with those of their physician staff to assist with care coordination between inpatient and outpatient care, during admission, and following discharge.</td>
<td>25</td>
<td>51</td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>4. By <strong>2016</strong>, hospitals will use remote home patient monitoring to track patient recuperation from hospitalizations and to intervene early in order to reduce unnecessary readmissions.</td>
<td>56</td>
<td>32</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>5. By <strong>2016</strong>, your hospital will no longer use paper charts to deliver and manage patient care (Stage 7 on the HIMSS Analytics EMR Adoption ModelSM).</td>
<td>61</td>
<td>28</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>6. By <strong>2016</strong>, your hospital will have received (or be on track to receive) its full share of federal stimulus funding as a result of complying with federal “meaningful use” requirements.</td>
<td>39</td>
<td>44</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>7. By <strong>2016</strong>, all of your hospital’s patients will have access to their electronic health information, which they can export to various websites that will help them make more informed decisions about their care.</td>
<td>31</td>
<td>54</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>8. Advances in clinical research will accelerate as a result of widespread adoption of EHRs and personal health records (PHRs). With patient consent, use of EHRs will make it easier to conduct clinical research, and use of PHRs will allow researchers to assess patient outcomes more easily.</td>
<td></td>
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</tr>
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</table>

**Note:** Percentages in each row may not sum to 100% due to rounding.

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Association’s 10x10 program (www.amia.org/10x10) provide college-level courses in this area.

**Partner with physicians and the medical staff.** Implementation and meaningful use of HIT depend critically on effective use by physicians. Consequently, physicians must be engaged not only as stakeholders, but also as true partners in redefining the workflow and processes that will improve outcomes. If the implementation process is done properly, in addition to implementing an EHR, a new outcomes- and improvement-oriented culture will have been
What Practitioners Predict
EHRs will spur hospitals to spend more, train doctors, and coordinate care. Respondents predict that electronic health records will be a major source of change in their own hospitals and in hospitals in their community. Nearly half consider it “very likely” and another 39 percent “somewhat likely” that by 2016, IT spending will double to 7 percent of hospital total operating budgets, compared with 3.5 percent today. One driver of increases in EHR spending, according to respondents, will be the availability of funds to train physicians in the effective use of EHRs. By 2016, over three-quarters of respondents think all hospitals will have EHRs that are interoperable with those of their physician staffs, improving coordination of care. By that date, respondents predict, hospitals will also use home monitoring to track patient recuperation from hospitalizations and to intervene early to reduce unnecessary readmissions.

In their own hospitals, use of paper charts will cease as hospitals reap stimulus federal funds. Predicting the impact of EHR implementation in their own hospitals, more than half of respondents think it is “very likely” and another 32 percent “somewhat likely” that their hospitals will have stopped using paper charts by 2016. In addition, 89 percent expect their hospitals to receive federal stimulus funding as a result of complying with federal “meaningful use” requirements.

Patient-initiated and clinical research will be enhanced. Eighty-three percent of practitioners predict that their hospitals’ patients will have electronic access to their health information, which they can export to various websites to help them make informed decisions about their care. Finally, 85 percent of participants think it likely that widespread use of EHRs and personal health records will accelerate progress in clinical research, in part by making it easier for researchers to assess patient outcomes.

Built, poised to meet the needs of health reform.

Provide feedback reports using credible quality measures. Futurescan survey respondents agree that payment for volume of health-care services will be coming to an end soon. Creating a culture of improvement must be based on credible clinical quality measures that physicians believe in. The country must convert from its traditional claims-based public reporting measures to ones that are based on clinical data derived from EHRs. Field experience shows that when providers receive well-validated, credible quality reports that are consistent with clinical guidelines, they naturally work to improve their own scores. As part of its HITECH activities, CMS is developing new measures that will fully leverage clinical data in EHRs.

Engage patients. One of the meaningful-use criteria categories addresses electronic connectivity with patients to provide them with access to their health data and to the knowledge needed to undertake actions that improve their health. Patients and their families are untapped resources to improve care. Online home monitoring and electronic visits will be crucial to hospitals’ efforts to reduce 30-day readmission rates. It will be important for hospital administrators to work with their medical staffs to share information between hospital and ambulatory care settings and to work together to extend care to the home environment.

Integrate health data across the continuum. Reliable, seamless exchange of health information is critical to care coordination and will be essential to operating new models of care (e.g., accountable care organizations, medical homes) upon which future payment systems will be based. As part of implementing HITECH, the federal government has provided grants to state organizations to help implement standards and policies to exchange health data securely among multiple provider organizations. Hospitals should participate in these health information exchange organizations and establish not only technical electronic partnerships but also organizational collaborations, which are important to instituting these new models of care.

In Closing
The trajectory of health reform is clear. Following Wayne Gretzky’s often-quoted strategy, the industry should skate to where the puck is going to be, not where it has been. Qualifying for the meaningful-use incentives provides more than supplemental revenue. Successful implementation and meaningful use of HIT position the hospital to not only meet the goals of reform, but to succeed because of it. True health reform may be several years off, but the HIT infrastructure must be put in place now—before time runs out.  

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References