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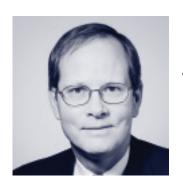
Life Sciences & Health Care

Health Care Review

Executive insights on critical industry issues

Embracing Information Technology Is Essential to
Health Care Organizations' Survival Despite Uncertainty
about How It Is Evolving, IT Expert Advises

Featuring:

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While admitting the challenges the health care industry faces in implementing information technology (IT) for medical records and other operations, John Glaser resolutely believes that the industry should move forward with all possible speed. He has been at the forefront of efforts to advance the strategic application of IT to health care in eastern Massachusetts—first at Brigham and Women's Hospital (BWH) and now at Partners HealthCare, which includes BWH—and throughout the United States for more than 20 years. Founding chairman of the College of Healthcare Information Management Executives and past president of the Healthcare Information and Management Systems Society (HIMSS), he is optimistic about the prospects of full IT adoption in the health care industry even though he predicts it could take up to two decades to achieve.

Having recently joined the Deloitte Center for Health Solutions as a senior advisor for care delivery innovation initiatives, Glaser is focusing on health IT project management, clinical information systems, and transformation of care delivery. He also specializes in areas of convergence across health plans, health providers, and life science companies, particularly regarding regional initiatives, personalized medicine, and telemedicine.

In this **Health Care Review,** *Glaser gives his perspective on the forces driving the IT movement in health care, the need for payers and providers to participate in the movement even though its evolution is uncertain, the availability of vendors and consultants to help participants choose options, the nature of IT leadership as the movement develops, and the timing of eventual adoption of needed technology.*

Glaser is currently the chairman of the board of directors of the e-Health Initiative, which represents multiple stakeholders—employers and purchasers, health plans, hospitals, clinicians, laboratories, suppliers, consumers, and others—in health care and health information. The initiative's goal is to improve health care quality, safety, and efficiency through electronic means.

Recipient of a Ph.D. in health care information systems from the University of Minnesota, Glaser has published more than 100 articles and 4 books on IT in health care, and is on the editorial boards of **CIO Magazine***,* **Healthcare Informatics***,* **Biotechnology Healthcare***,* **Journal of Biomedical Informatics***, and* **Journal of Healthcare Information Management***.*

> "Although federal, employer-payer, and other forces are converging to advance IT in the health care industry, the directions it will take are still unclear," Glaser notes

■ When John Glaser considers the "IT forces or initiatives that are converging in the health care industry," he acknowledges that "the result is a swirl than can be hard to understand." He notes that "one vector of this is the set of federal initiatives led by Health and Human Services (HHS) Secretary Michael Leavitt and David Brailer, M.D., Ph.D., National Health IT Coordinator. A lot of the focus at HHS is on creating interoperative national health records, whether the electronic health record (EHR) in the physician's office or computerized physician order entry (CPOE) in the hospital, and on crafting a mechanism to allow the exchange of data between the systems." The data exchange not only would allow a more complete composite picture of a patient's care, whatever the setting, but also would facilitate medical research and public health activities, including surveillance.

Glaser explains that HHS has sponsored various efforts, "such as funding demonstrations of national health information networks, zeroing in on what it calls the 'harmonization of standards,' developing certification standards and processes for EHRs, and examining privacy laws to analyze ways in which they can be made more rational." He notes that the e-Health Initiative and Markle Foundation have conducted corollary activities, with 200-plus communities coming together to link clinical systems and advance the federal agenda.

Glaser indicates that "a second vector consists primarily of employer and payer pressure on the provider community to improve the safety of care, demonstrate quality of services, and reduce unnecessary utilization. This pressure is spurring action for EHR adoption, CPOE, and a variety of systems that help to measure and report on the quality of care." As purchasers realize that they have to be major participants in the safety, quality, and utilization of health care services, they are experimenting with various ways to "incent" physicians to adopt quality improvement technologies. "This can involve giving away e-prescribing technology and introducing pay-for-performance (P4P) programs."

A third vector centers on ongoing provider efforts to improve care quality, increase operational efficiency, and lower care costs. Glaser indicates that hospitals and physician practices "are slowly but surely adopting systems such as CPOEs and electronic medical records. While faced with limited capital and daunting implementation and process redesign challenges, providers are moving towards fuller adoption of clinical information systems. Most providers believe that these systems will be essential contributors to their ability to thrive in the years ahead."

Finally, Glaser sees a fourth vector: "the slowly evolving, but nonetheless irresistible force, of the genomic revolution." Investment in IT can help physician researchers understand the genomic basis of disease, whether a chronic illness like asthma or an acute cardiac condition. He concludes that the various forces that are converging at HHS and among purchasers, providers, and those involved in advancing medical science make "this both a very exciting and a very confusing time."

> "Taking an attitude of 'I'll ride out the storm' is not a wise idea whenever change is afoot in the industry," and that especially applies to IT, Glaser warns

■ "My general belief is that, in times of great uncertainty, when there are multiple futures that you can imagine, you take steps to be viable in as many futures as possible," Glaser says. He contends that "to sit back and wait can be the worst thing to do. Various organizations in various industries over the years or over the decades took shelter from the storm when there was major change afoot—technology or otherwise—and the result is that they either were severely wounded or they disappeared. Others were quick to move; although they made mistakes, when the clarity became apparent, they were in a much better position to take advantage of it, to thrive in it."

Recognizing that payers and providers want to make as few mistakes as possible in adopting IT, Glaser stresses keeping as many options open as possible. "An example of this would be a series of steps to bring in EHRs in the outpatient setting and to improve outpatient care processes. Under any scenario, that's important to do. Another series of steps would involve measuring the quality of care and having good organizational mechanisms to zero in on problem areas, where the care may not be as good as it ought to be or where the costs are too high. Under any scenario, it's important to continue to improve quality and reduce costs."

Glaser explains that "there are activities, all of which are based on various foundational elements of IT as a tool and which center on continued efforts to make health care safer, of higher quality, and less expensive. The organizational elements include adopting the EHR; providing programs to support people with chronic diseases who need to be monitored and managed; measuring and reporting quality outcomes; and reaching out—often through the Internet—to patients in their homes so that they have greater access to and convenience of care and sufficient information about their coverage, benefits, and health status."

> "Technology is not a barrier," Glaser points out, explaining "there's no shortage of talented and skilled vendors and consultants to effect IT adoption"

■ Addressing those in the health care industry that are waiting for IT to advance, Glaser counters that the technology is sufficiently developed. "At the most recent HIMSS conference, over 800 vendors exhibited; 25 percent of them may not be around next year, but another 25 percent will. Admittedly, it's difficult to establish world-class clinical systems, and there is variability in vendor performance, but it's not a correct 'read' to say that the technology's undeveloped. In fact, if the technology froze dead in its tracks—no movement, no advances—it's not clear to me that it would limit the care improvement agenda."

Glaser adds that "one doesn't have to look too far to see very significant clinical systems activity. The Commonwealth nations—for example, England, Australia, and New Zealand—and the Scandinavian countries have EHR adoption rates that are in the 80th percentile for primary care physicians. Technology doesn't seem to have slowed down these countries in getting high adoption rates and in beginning to make other electronic-based changes in their health care systems. I think the technology's there and the vendor community's there."

Citing his own organization, Partners HealthCare, as an example, Glaser notes that its EHR is used by 3,100 physicians, with a goal of 5,400. There is integration of data from outpatient settings—physician offices, clinics, and health centers—with data on the inpatient side. "Partners' ability, which is good and getting better, to improve its daily processes of care referrals, ordering of drugs, and other operations, and to measure its outcomes would not be as advanced today if it had not started over 15 years ago to be more efficient and effective." While he acknowledges that there are more aggressiveness and greater sophistication with IT in eastern Massachusetts, Partners' market area, than in many other parts of the United States, he sees no reason why geography should be an obstacle.

> "At this point, it's speculative to say where the leadership will derive, whether from a consortium of employers or health plans or from different segments of providers or even consumers," Glaser says

■ When Glaser considers the leadership behind current and potential efforts to advance IT in the health care industry, he looks at various sectors' motivations and constraints. Turning to the federal arena, he recognizes the considerable interest of Medicare, with a 40-percent-plus share of the health care market, in improving the quality of health care services and reducing the costs of care for aging and disabled persons. At the same time, he views Medicare as facing some restrictions, such as looming insolvency issues and budget-neutral limitations on new programs. "I think the Medicare program will incrementally move in the way of demonstration programs, of which a number are already underway, and in the direction of putting a growing—but relatively small—percentage of payment at risk based on IT-enabled P4P."

Glaser adds that "the Office of Personnel Management, the group within the federal government that provides health insurance coverage to federal employees, is in a position to say, during its negotiations with payers and providers, that it needs to see evidence that they are adopting EHR technology and that care is improving as a result. The number of federal employees provides significant leverage."

Turning to the private arena, Glaser warns providers "not to underestimate the power of the private sector, of organizations in the Fortune 500 or local business consortia that are paying for the care of large numbers of employees and want to improve the delivery of services provided those employees." He explains that employers are strongly motivated to adopt programs such as Bridges to Excellence, a P4P program aimed at physicians and medical practices that is based on performance measures developed by the National Committee for Quality Assurance. He views provider acceptance of such approaches as an S-shaped curve, whereby a small percentage of providers will participate "out of pure vision" and another segment will move once the direction is clear, while still another group will remain on the fence until the return on investment (ROI) is convincing and yet another will not budge, no matter what."

Considering the efforts of insurer associations and other groups to try to form coalitions of employers, health plans, providers, and others to drive P4P and other IT-based initiatives, Glaser sees some constraints to concerted action. "Certain organizations may find collaborative activity difficult for competitive reasons. Also, different employers are geared to different localized markets, depending upon where their offices or plants are located." He says that "some are focused purely and simply on ratcheting down costs, while others—with explicit and direct IT incentives—are intent on achieving quality-improving outcomes." He concedes, however, that, "if the providers are unable to resolve continued increases in costs or variations in performance, employers' and purchasers' tolerance level may evaporate and they may share a more concerted focus."

> "Largely because health care is such a complex industry, the IT evolution will take decades," Glaser comments, "but that's no excuse to hold back"

■ Full implementation of IT will likely take decades to accomplish, Glaser maintains, "largely because the health care industry is exceptionally complex." Noting that President Bush has set a deadline of 2014 for the industry's technological evolution to be completed, Glaser says that 2024 may be a more realistic date.

Commenting that management strategist Peter Drucker called the academic health center (AHC) "the most complex organization ever created," Glaser contends that the health care industry of which the AHC is part has complex processes and a complex knowledge domain. "It's made more complex because health care is a socio-economic good that tries to rationalize good business thinking with the need to offer service and provide free care to communities. Like all complex phenomena, it is largely incapable of moving rapidly unless there's some catastrophic event."

Glaser emphasizes that the IT evolution "will take time because the industry is already concerned about health care costs, so payers and providers will be deliberate and thoughtful in investing money. It will take time because the industry is very fragmented and it's hard to move a fragmented industry. It will take time because achieving the goal depends upon negotiations among those who pay for care, those who provide it, and those who receive it." And, it will take time because there isn't a demonstrated ROI for the provider who pays for these systems, given the misalignment of financial incentives in the health care industry. "There's very clear evidence that providers can reduce errors—medication errors and other failure-to-follow-up mistakes. There's very clear evidence that utilization and expenditures on drugs and radiology procedures can be reduced. There's very clear evidence that conformance to care guidelines for those with chronic illnesses is improved. But use of IT as a tool, while contributing to all kinds of care gains, may not add up to an ROI. It's hard to assign a dollar gain to a service improvement. Doing a better job of avoiding an adverse drug effect may have an economic gain for the patient. It may mean an economic gain for the payer, because the patient is not hospitalized. But it may not mean stunning improvement in the provider's margin."

Nonetheless, Glaser stresses, "The fact that it is going to take time doesn't mean there shouldn't be efforts to speed it up. It doesn't mean that every organization in the industry is bound by the extended timetable: some will move faster than others. It does mean that achieving the goal will require persistence, focus, and thoughtfulness that will have to be sustained year in and year out." He concludes that those in the industry that achieve widespread implementation of EHRs and full interoperability with data systems in other parts of the country will have an advantage over those who lag behind. "Assuming that there will be increasing incentives for implementation and interoperability—and for being more efficient and offering higher quality services—getting there more quickly is the path to take."

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