

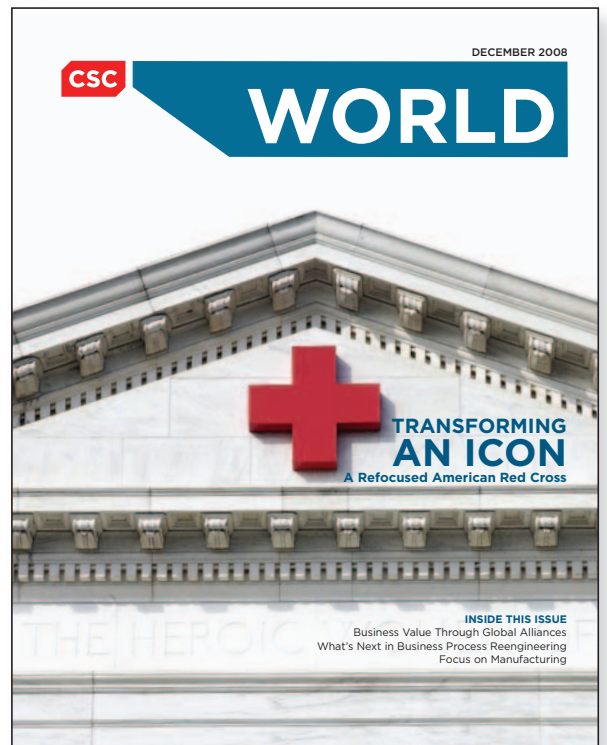


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Health Information Exchanges:

At the Intersection of Healthcare, IT and Business



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# HEALTH INFORMATION EXCHANGES:

## AT THE INTERSECTION OF HEALTHCARE, IT AND BUSINESS

by Erica Drazen, Jason Fortin and Laurance Stuntz

### New England healthcare organizations illustrate the challenges and rewards of HIEs.

When providers and patients have access to complete health information, they can make better decisions, and care will be safer and more efficient. Initiatives known as Health Information Exchanges (HIEs) are key to achieving this goal. They provide the capability to securely exchange health information across settings and among stakeholders so that quality of care is optimized and costs are as low as possible.

**A successful HIE does not occur in a vacuum. Project leaders must understand the unique makeup of stakeholders in the community.**

Interest in HIEs is high. According to a 2007 study, virtually all U.S. states are actively engaged in e-health strategies that use IT to improve healthcare. Patients are increasingly aware of the benefits of HIEs as well. According to a 2008 CSC survey, 70 percent of Americans would be more likely to vote for a presidential candidate who supports creation of a nationwide health information network.

The increased focus on HIEs and the availability of grant funding have jump-started efforts, but a steady number of organizations are closing their doors without ever having exchanged any information. A study published in December

2007 finds that close to 25 percent of the 145 Regional Health Information Organizations (RHIOs) believed to have existed in mid-2006 are now "likely defunct."

One conclusion from a study of failed exchange organizations is that most HIEs lack a viable business case. Newer exchanges have struggled to identify and finance initial services because they do not have enough hospital participation. The same study concluded that providers have few incentives, and in fact face substantial disincentives to share data with other organizations, and that, in general, health plans and employers were not willing to fund core clinical data exchange as a benefit for patients.

So, how best to build and sustain an HIE program?

**Initiatives need to provide a clear benefit to multiple stakeholders around an existing business problem.** Simply put, participants must use the data available and the exchange must ultimately result in higher revenue or reduced costs for major stakeholders. Improving the efficiency of the payment process is an often neglected area that can provide quantified value to both providers and payers.

**Grant money should be used to develop the business case and possibly for initial capital outlay, not for funding operations.** While outside funding can help to alleviate some of the upfront costs, too much reliance can lead to a situation where stakeholders actually have little invested and little incentive to focus on business value.

**A critical mass of participants is required.** Healthcare processes involve multiple providers, payers, pharmacies and other organizations. Health information exchange is no different.

**Focus first, then expand.** Regardless of the end goal, the initial effort should focus on a single process or related set of transactions.

**Have a single, open infrastructure that is sufficiently scalable to support additional transactions.** Regardless of the approach taken, the underlying infrastructure should be scalable to support future capabilities, new stakeholders and, eventually, other HIEs.

**Keep a local focus that reflects the unique makeup of payers and providers in the community.** A successful HIE does not occur in a vacuum. Project leaders must not only understand the unique makeup of stakeholders in the community, but consider carefully the implications for an HIE.





Two case studies from Massachusetts illustrate some of the challenges and best practices of HIEs.

### New England Healthcare EDI Network (NEHEN)

While most current HIEs began with the exchange of clinical data, NEHEN had its origins in the more effective exchange of eligibility and payment transactions. The goal was “all-payer EDI.” The initiative began in 1998 with three health systems and two payers exchanging eligibility verification transactions.

NEHEN exemplifies the principle of “focus then expand.” Capabilities were piloted and then added and by 2003 the exchange had added 14 more health systems, four more payers, four new transactions, and was interfaced with eight additional information systems.

Currently 55 hospitals, eight health plans and over 5,000 physicians use NEHEN. NEHEN also provides connectivity to Medicare, Medicaid and national payers. The current volume is 6 million transactions per month. Certainly NEHEN has achieved a critical mass of participants. Today, the exchange allows participants to use one system for every payment transaction with any health plan.

NEHEN is a member-owned, non-profit organization. The organization has been self-sustaining for a decade and has continually invested in developing new

capabilities. With the use of the NEHEN exchange, organizations have reduced their administrative transaction costs to less than one-tenth of their previous costs.

The business case for NEHEN members is clear. The administrative transactions are a business necessity, and electronic transactions are more accurate, timely and efficient for both the provider and the payer. At Children’s Hospital Boston, efficiency improved dramatically, allowing billing staff to reassign more than three full-time employees (FTEs) while improving cash collection to reduce outstanding accounts receivable balances.

### MA-SHARE

MA-SHARE, LLC was developed by the Massachusetts Health Data Consortium in 2003. The mission of MA-SHARE is to create a community utility that offers a portfolio of services to efficiently share clinical data across stakeholders.

Currently, MA-SHARE uses the CSC-designed Rx Gateway, which leverages the NEHEN infrastructure to provide a single point for eligibility and benefits checking, formulary, prescription history, and connection with pharmacies and pharmacy benefit management services. It was launched in November 2006 and currently serves more than 1,200 active prescribers, delivering more than 50,000 electronic prescriptions per month.

Use of e-prescribing has many benefits, including avoiding errors due to misinterpretation of handwritten prescriptions, as well as more timely communication of and easier compliance with formulary — saving money for both patients and payers.

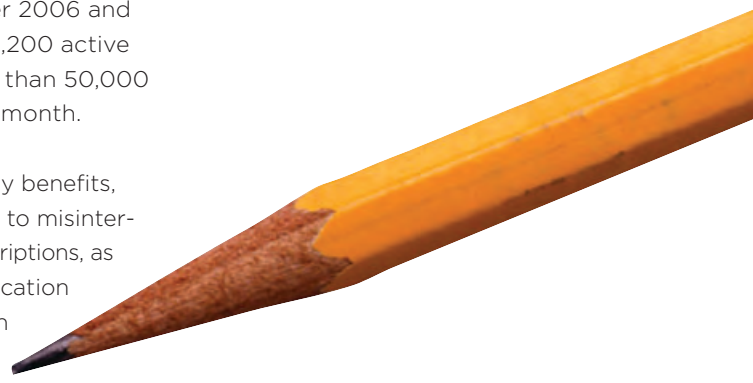
E-prescribing also saves time. At one large primary care facility, use of the Rx Gateway reduced the number of “call-in prescriptions” from 350 per day to 80. They estimate they have saved the equivalent of three FTEs.

Today, MA-SHARE is also piloting a solution for timely delivery of clinical documents among payers, providers and quality organizations. The pilot is proving that it is feasible to use a NEHEN-like infrastructure to deliver clinical documents from any healthcare entity to any other healthcare entity.

Many lessons can be gleaned from the experience of these and other initiatives across the country, but these lessons must be understood in the context of the local market conditions. Ultimately, the unique characteristics of the community dictate what will be optimal. ●

For a full version of this white paper, go to [www.csc.com/hie](http://www.csc.com/hie). To read more about the NEHEN infrastructure in place at MA-SHARE, visit [www.csc.com/mashare](http://www.csc.com/mashare).

“The HIE must ultimately result in higher revenue or reduced costs for major stakeholders.”



ERICA DRAZEN is a partner and JASON FORTIN is a senior research analyst with CSC’s Emerging Practices Group, the applied research arm of CSC’s Global Healthcare Sector. LAURANCE STUNTZ is a partner with CSC’s Global Healthcare Sector.



## **Worldwide CSC Headquarters**

### **The Americas**

3170 Fairview Park Drive  
Falls Church, Virginia 22042  
United States  
+1.703.876.1000

### **Europe, Middle East, Africa**

Royal Pavilion  
Wellesley Road  
Aldershot, Hampshire GU11 1PZ  
United Kingdom  
+44(0)1252.534000

### **Australia**

26 Talavera Road  
Macquarie Park, NSW 2113  
Australia  
+61(0)29034.3000

### **Asia**

139 Cecil Street  
#06-00 Cecil House  
Singapore 069539  
Republic of Singapore  
+65.6221.9095

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**CONTACT CSC WORLD:** [world@csc.com](mailto:world@csc.com)

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