

RHIOs and the Value Proposition: Value Is in the Eye of the Beholder

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The key to fostering successful data-sharing networks is understanding the benefits and costs from each participant's perspective.

Creating regional health data exchange networks is not easy, and organizations want to know the benefits before they get involved. Understanding that value proposition from different stakeholder perspectives is central to driving participation and fostering collaboration in the complex relationships that form these networks.

Understanding the variety of perspectives becomes increasingly important as growing momentum behind health information exchange (HIE) activity draws more organizations, and a wider range of organizations, to explore participation. A 2006 eHealth Initiative survey identified 165 HIEs of varying size and scope in the US, a number that has grown steadily since the group's initial survey in 2004.¹ Few if any are comfortably established. Despite greater state involvement, the sustainability of community-level efforts remains uncertain and beset with obstacles. Relatively few—approximately 20 percent in 2006—have advanced to a stage of development supporting the exchange of clinical data.²

The current movement is not the US healthcare system's first attempt at local and regional health data exchange. The regional health information organizations (RHIOs) of today share many common features with the failed community health information networks (CHINs) of the 1980s. Present RHIO initiatives have moved substantially beyond their CHIN predecessors, benefiting in good measure from IT advances in connectivity and data sharing.³

Still, factors that led to the downfall of CHINs loom large over RHIOs today—lack of stakeholder buy-in due to conflicting missions and poorly conceived objectives; perceived loss of control and lack of trust in the process; and lack of clarity over long-term financing.⁴ The value proposition for stakeholder participation in CHINs was unclear then, and it remains problematic for RHIOs today.

To foster greater discussion of this largely unexplored issue, the Agency for Healthcare Research and Quality (AHRQ) sponsored the National Institute for Health Care Management Foundation to convene a broad panel of national experts and leading regional stakeholders. In May 2006 the group engaged in a frank and open roundtable dialogue on the value proposition for RHIO participation from different stakeholder perspectives. The central question was: How can or does the electronic exchange of health information create value for stakeholders in the context of a regional HIE?

Around the Table

Conference participants at “The Value Proposition of RHIOs and other HIEs” dialogue included leaders from the following organizations, grouped by type:

Regional HIEs: HealthBridge (OH, KY, IN), Indiana Health Information Exchange, Inland Northwest Health Services (WA), Massachusetts eHealth Collaborative, Shared Health (TN), Taconic Health Information Network and Community (NY), Utah Health Information Network

Statewide HIE advisory boards: Florida, Tennessee, New York

Health plans: WellPoint, Arkansas Blue Cross Blue Shield, Aetna, Cigna, Intermountain Healthcare

Employers: General Motors, IBM

Hospital chain: Hospital Corporation of America

Federal agencies: Centers for Medicare and Medicaid Services, Agency for Healthcare Research and Quality, Office of the National Coordinator for Health Information Technology

Policy groups and other organizations: eHealth Initiative, Bridges to Excellence, Markle Foundation, *Health Affairs*, Center for Health Transformation, Center for Studying Health System Change, National Institute for Health Care Management

Balancing Act

[Roundtable participants](#) represented providers, payers, employers, and consumers, and scanning the roster indicates the challenges in balancing cost and benefit across the wide spectrum of potential HIE participants.

Organizers must understand and respond to the differing perspectives and needs of each stakeholder because HIEs require enormous trust and cooperation from their participants. Organizations must be willing to share data, use data provided by others, and help pay for the up-front and ongoing costs of the exchange.

To make that commitment, each organization must see a meaningful benefit. For example, health plans and employers are hesitant to make large investments in HIEs without seeing likely reductions in waste, such as eliminating duplicative imaging procedures and tests, or in hospitalizations.

“We struggle a lot with the value proposition because we’re often asked to make investments in our communities, particularly in this area,” said Bruce Bradley, director of healthcare strategy and public policy at General Motors. “A way to think about it that resonates with purchasers, in particular manufacturing-type purchasers, is the whole concept of waste. What can [HIEs] do about waste?”

Even stakeholders with lower costs require clear benefits. As a recent California HealthCare Foundation study points out, even when employers have led healthcare collaborations, such purchaser-driven initiatives have struggled when failing to engage providers.⁵ If the HIE does not enhance the provider’s practice at the point of care through improved access to hospital data, imaging data, and administrative savings, he or she will not participate.

“Even though we may say to the providers, ‘This is free,’ we better make sure we know what the [value] proposition is to that,” said Jana Skewes, president and CEO of Shared Health, a Tennessee HIE initiative. Failure to deliver value through information exchange that meets the needs of individual stakeholders will result in a lack of participation.

RHIOs can also create value clash between stakeholders, something that is often inevitable. One stakeholder’s value may be competitively threatening to another, making collaboration undesirable. For example, greater data sharing could lead to reductions in redundant testing and imaging; the resulting cost savings would be beneficial to health plans and employers, but they threaten the income of laboratories, hospitals and imaging centers, and certain specialists.

Taken further, the free flow of information has the potential to improve quality of care for consumers, but hospitals lose an important current strategy that ties clinicians and patients to their facilities through closed data systems and proprietary patient information. Losing this tie could have an adverse impact on a hospital’s market share.

Carolyn Clancy, director of AHRQ, posed the question, “How are we going to get to a place where...people can actually see and understand the value added of being able to exchange health information, even as they understand all too clearly the threats to the current way that they think about doing business?” For the healthcare marketplace to compete on quality rather than information ownership requires policy changes that support the realignment of financial incentives with quality and eliminate competitive barriers to the free flow of information through the healthcare system.

The tension between creating short-term and long-term value through HIE is another dimension to stakeholder value clash. RHIO functions that provide short-term return on investment (ROI) through administrative data exchange and improved

results delivery may be of greater value to some stakeholders than long-term quality improvement through enhanced outcomes, patient safety, and even expanded access to care. Balancing this tension among different stakeholders to ultimately benefit all stakeholders is key to broad stakeholder participation.

What You See Depends on Where You Sit

The benefits of regional health information exchange differ according to the type of organization. Participants on the panel summarized the value propositions for different stakeholders as follows:

Patients. Joseph Smith, vice president of private programs and CIO of Arkansas Blue Cross and Blue Shield, commented that from the patient perspective, the comprehensive view of his or her longitudinal history enables several potential benefits: improved care at the point of delivery (including reduced medical errors), improved overall coordination of care, and improved application of evidence-based medicine. HIE may also facilitate greater patient engagement in their healthcare through networked personal health records.

Physicians. For physicians, Smith and John Blair, president and CEO of Taconic IPA, noted that HIEs can streamline access to patient histories, improve the consistency and completeness of documentation, offer administrative savings, provide rapid access to test results, and enable data access outside clinical settings.

Health Plans. HIEs can provide health plans with administrative savings, quicker and improved access to medical records, and reductions in redundant testing. Charles Kennedy, vice president of clinical informatics health solutions at WellPoint, Inc., also highlighted the potential to perform widespread data capture for analysis of utilization rates and quality and performance measurements, which has the potential to reduce costs and improve quality of care.

Hospitals. Hospitals can also gain administrative savings while also benefiting from reductions in admission times and improvements in care delivery and efficiency. In discussing the experience in Indianapolis, J. Marc Overhage, CEO and president of the Indiana HIE, reported that “delivering synthesized useful medication histories in hospitals...reduces 12 minutes of nurses’ or pharmacists’ time for each admission.”

Employers. Bruce Bradley, director of healthcare strategy and public policy at General Motors, emphasized purchaser’s urgency in finding cost savings and the importance of focusing health IT that can directly improve quality of care and reduce preventable admissions. George Chedraoui, leader of IBM Global Well-Being and Health Benefits, echoed this sentiment and discussed the potential of HIE to improve transparency on cost and quality, which can educate consumers about value and ultimately reduce cost through increased preventive care and lower hospital admissions.

Public Health Agencies. Peter Greaves, senior enterprise architect of Hospital Corporation of America, pointed out that regional HIE is often cited as a benefit for public health departments and the government through its ability to aggregate surveillance data of disease and critical patient information during disasters or bioterrorist threats. However, this cannot be assumed unless the HIE architecture aggregates data in such a way that it is available during disaster scenarios, which Greaves noted is not the case in many current designs.

Fostering Trust through a Shared Vision

Clearly, everyone must benefit from their participation, and trust will be a necessary condition for successful and sustainable collaboration. Unfortunately, current market conditions, payment mechanisms, and a pre-existing culture of competing agendas and suspicion are not conducive to building trust within stakeholder groups (e.g., hospitals) or between them (e.g., payers and providers).

Trust is fostered out of a shared vision among partners. Successful RHIOs develop this through establishing a mission statement, creating a transparent governance structure, and maintaining fair and equitable leadership.

In discussing the experience of the MidSouth eHealth Alliance in Tennessee, Vicki Estrin of the Vanderbilt Center for Better Health said, “If there are issues, we surface them, bring them to the table, and put them out there [to] really discuss them. A lot of the meetings have been [focused on] hard discussions...but over time it created the environment in which if you can put

the difficult things on the table they will be discussed with respect and [we] in turn will move forth through a decision-making process.”

Engaging broad stakeholder participation is critical because it has proven difficult to influence the behavior of a given stakeholder group if it is not part of the decision-making process.⁶ Groups without a voice will not participate. Stakeholders want to know that decisions are open and that they have input in the final design. Presenting each stakeholder with the same information and educating each so that all understand the issues associated with each choice establishes trust over time and creates an environment in which a fruitful collaboration can occur.

A recent study by AHIMA’s Foundation of Research and Education found that lack of consensus on the role of state government and lack of coordination among state agencies were major barriers to HIE activity.⁷ Governmental leadership at the regional and state levels may be needed to develop a shared vision and reduce the trust barrier to regional HIE formation caused by competition.⁸

Comments by Antoine Agassi, director and chairman of the State of Tennessee eHealth Council, underscored the impact that strong government leadership can have. “We have a very engaged governor that understands healthcare and technology. His support is making a huge difference in the deployment of eHealth in our state.”

Does Value Equal Monetization?

David Brailer, former director of the Office of the National Coordinator for Health Information Technology, posed the following question at the conference’s start: “Is cost savings a necessary condition for demonstrating the HIE value proposition?” In doing so, he anticipated the expression of diverse stakeholder perspectives on the value proposition.

Brailer further asked, “What degree of uniformity, parallelism, or alignment should we expect RHIOs/HIEs to have?” This question also presaged some of the essential lessons learned from the conference, lessons that can be summarized by the old adage “value is in the eye of the beholder.” The following themes took shape around the value proposition.

The Value of Short-term ROI

For many stakeholders, short-term ROI is essential. When stakeholders lack committed funding from an external source, the natural, market-driven questions they ask are “What is my investment, and what financial return can I expect?”

HealthBridge and the Utah Health Information Network have demonstrated positive short-term ROI to their stakeholders by exchanging results data in the first case and administrative data in the second. They are counted among the few existing self-sustaining HIE models.

A second study conducted for the Office of the National Coordinator by the Foundation of Research and Education notes that architecture, data standards, and privacy models dominated the industry’s initial work on HIE and that financial sustainability has only recently been “elevated in a priority.”⁹ Yet, sustainability will prove increasingly important. The study’s authors observe that “any project that increases the cost of health care is not likely to succeed.”

In a further observation that touches on Brailer’s question about uniformity, the authors note that there is currently no single method for achieving sustainability. There may be no standard model, or “turnkey” RHIO solution, but financial sustainability will be an essential feature of any lasting effort at regional health information exchange.

The Government as Sponsor

To date, government has had a mixed role in financing HIEs. Many currently operating exchanges derive revenue from government grants, philanthropic contributions, and stakeholder fees. Most HIEs are built with a combination of the three, with as much as one-third of total revenues derived from government grants and philanthropy.¹⁰

Some evidence suggests that government involvement in financing does not recede as HIEs mature, but actually increases.¹¹ This leads some stakeholders to ask whether HIEs should be considered, to some degree, a public good like air, water, or national defense.

Transparency: The Value of Claims Data

The information a RHIO exchanges, its source, and how it will be used are critical issues that affect its value proposition and influence stakeholder participation.

Claims data may be an important early driver for HIE, demonstrating the value of participation to several stakeholder groups. Some argue that claims data do not capture true clinical diagnoses and are often fraught with errors and missing clinical information such as secondary diagnoses, over-the-counter medications, and test results. However, Jana Skewes of Shared Health emphasized that providers can benefit from such data by seeing care that they did not know their patients received.

Becky Cherney of the Florida Health Care Coalition reported that beginning with claims data motivated a significant amount of stakeholder participation in the central Florida RHIO.

The increased transparency on quality and cost that can be derived from claims data may lead to performance measurements and payment mechanisms that provide value across stakeholders. “The opportunity to improve quality and cost is precisely the reason to exchange data and not hide it,” agreed Carol Diamond of the Markle Foundation.

Ultimately, Success from Collaboration

The consulting company Gartner Group describes five phases that new technologies and concepts proceed through from initial hype to disillusionment to established productivity. Some in healthcare suggest that HIEs are currently at the peak of Gartner’s Technology Hype Cycle and that the success of the health IT movement will ultimately depend on how individuals respond to the drop-off in enthusiasm in the coming years.¹²

Improvements in technology have given the HIE effort better hardware, software, and network design. But issues of trust, governance, financing, and collaboration between competing stakeholders remain challenges. Technology policy experts acknowledge that complex technical problems remain to be solved, but ultimately the successful interoperability of regional data networks will depend more on the consensus and cooperation of people than of machines.¹³ As Brailer summed up, “You can’t legislate will.”

Notes

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