



Best Practices for Community Health Information Exchange

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VOLUME ONE



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Volume One

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Preface

Leigh Burchell

Leigh Burchell is the Director of the Center for Community Health Leadership.

When the Center for Community Health Leadership was established, one of its first initiatives was to create a thought leadership series focused on encouraging the collaboration and providing the guidance necessary to build successful, sustainable community health information exchanges (HIEs). Our guiding principle for the series is that a win-win HIE is not only attainable, but can show a measurable return as long as it is built to address and accommodate the views of diverse audiences.

The framework for this series, *Top Ten Success Factors for Community HIE*, provides guidelines for the creation of a community-based data exchange. Each success factor represents a pivotal point on the path to achieving community-wide information exchange. The *Best Practices for Community Health Information Exchange* then expands these success factors, offering prescriptive guidance to carry communities along that path.

This first volume of the *Best Practices for Community Health Information Exchange* lays the groundwork for transforming the concept of HIE into reality:

“Value Propositions for Community Health Information Exchange: Many Voices, One Vision” focuses on the importance of constructing an HIE in a way that accounts for and serves the individual needs of each stakeholder group, while still allowing them to share collectively in the benefits. A typical community will include healthcare organizations of various forms, including physician practices, hospitals, health systems, and long-term and home-care agencies, as well as individual providers, patients, payers and employers. Identifying the value propositions of each of these stakeholder groups creates the foundation upon which the plan for the community HIE should be developed. In other words, the success of a community-based exchange project is as much a feat of cooperation as it is one of technology.

“Common Goals for the Community HIE: Building a Roadmap” provides guidance on reaching consensus on a community vision and purpose and developing a set of goals to achieve them—both of which are critical elements of HIE success. A defined communal vision is essential to this stage and must reflect the overarching goals, consensus on priorities of community benefit, areas of potential conflict and areas of agreement related to the overall good for the community as a whole without forgetting the return expected by individual constituencies. This allows the establishment of goals that transcend differences between stakeholder expectations and place the focus on priorities that will benefit the community and serve as guardrails throughout the process.

“Staying on Track: Facilitating an Ongoing Discourse Among Stakeholders” stresses the importance of helping area participants remain focused and engaged as obstacles are encountered through a variety of mechanisms that encourage ongoing communication. Recruiting a strong leader who is capable of championing the HIE to the community, driving organizational progress and attending to disruptions that can threaten the initiative’s forward momentum is critical. The establishment of an Executive Steering Committee that is empowered to solicit input from top stakeholders is also wise, as the group will make decisions related to the creation of a framework for a well-articulated governance structure. As part of this process, the leadership should also conduct proactive, targeted outreach to ensure stakeholders are aware they have a forum wherein their issues and concerns will be heard and addressed, helping to solidify the collaborative spirit required to carry the initiative forward.

“Stakeholder Engagement: Transparency as a Retention Strategy” emphasizes taking a proactive, open approach to communication in order to maintain stakeholder engagement and help ensure financial sustainability and ongoing collaboration. Challenges are an inevitable part of any complicated process, including the creation of an HIE, but an open communication mechanism created early in recognition of that fact is one means of retaining commitment even during times of frustration. A transparent process that continually educates and seeks feedback from the area participants is capable of mitigating the impact of impediments that can weaken stakeholder commitment and ultimately contributes to the long-term success of the initiative.

“Establishing Governance: Focus on Sustainability and Community Inclusion” offers practical advice on creating an inclusive, neutral community-based governance structure capable of making the business decisions necessary to take the HIE from concept to reality. The strongest governance structures are simple, effective and adaptable, ensure the involvement of all constituencies in the process to foster a sense of engagement, and ultimately can help shape the long-term business model upon which the information exchange is built. Clearly defined policies, a committee structure that encourages outreach and a decision-making process with aligned stakeholder incentives are also key.

The second volume, anticipated for publication through the first quarter of 2008, will be produced with actionable strategies for how to effectively use and build upon the foundation for health information exchange established in Chapters 1 through 5:

- **Success Factor Six: Community Roadmap for HIE**
- **Success Factor Seven: Hands-On Business Model for HIE**
- **Success Factor Eight: Secure and Initiate HIE Contracts**
- **Success Factor Nine: Identify Internal and External HIE Resources**
- **Success Factor Ten: Measure Success and ROI**

Transforming community health information technology connectivity from theory to reality requires strong leadership and the shared experiences of those who have gone before. *Best Practices for Community Health Information Exchange* is the Center’s first contribution toward that successful revolution.

About the Center for Community Health Leadership

The Center for Community Health Leadership, launched by Misys Healthcare Systems in June 2006, facilitates the development of health information pathways by helping to build connected, prepared and responsible communities. These communities will improve the quality of care delivered to its patients and reduce costs in everyday care administration, as well as in crisis situations such as epidemics and natural disasters. The Center strives to transform the healthcare system within the selected communities via grants of Misys® software and contributions of hardware and services from industry partners. For more information on the Center for Community Health Leadership, visit www.misyscenter.com.



Value Propositions for Community Health Information Exchange: Many Voices, One Vision

Blackford Middleton, MD, MPH, MSc

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"Most Americans are deeply worried about the escalating cost, fragmentation, and mediocre quality of health care.... The Institute of Medicine report, Crossing the Quality Chasm, urged a national commitment to transforming care delivery to bridge the gulf between care as it is and care as it can and should be. With no national reform effort on the horizon to create an organized system of care and promote innovation, local communities and regions appear to be the only environment where this can begin to happen."¹

To benefit the community as a whole, a successful health information exchange (HIE) must be constructed in a manner that accounts for and serves the needs of each stakeholder group individually and allows all, collectively, to share in the benefit. As a result, the success of a community-based HIE is as much a feat of cooperation as it is one of organization.

While few would argue with the necessity of a unified community commitment, the act of getting stakeholders to the table to engage in discourse regarding the overarching and individual value propositions is the first accomplishment of the data sharing project. Doing so enables the community to strategically build its stakeholder links from a position of strength based on areas of consensus and eliminates the potential for the weakest link to fracture the chain and bring the entire HIE to a halt.

There are myriad opportunities for missteps during this initial value articulation stage, particularly if stakeholders—not all of whom are necessarily local—are overlooked, or the value they can potentially derive from the HIE is under- or overestimated.

For example, a typical community will include healthcare organizations of various forms, including physician practices, hospitals, health systems, and long-term and home care agencies, as well as individual providers, patients, pharmacies, payers and employers. Subsets of those stakeholder groups, such as laboratory service providers or pharmacy benefits managers (PBMs), may operate on a larger national or regional scale, which can make engagement in a community-based initiative more challenging.

Initiatives in states such as Arkansas, Connecticut, Indiana and Tennessee are repeatedly demonstrating that ensuring full stakeholder involvement in the HIE is paramount to success. Failure to account for the benefits potentially available to any individual stakeholder, for instance the laboratory service providers who would likely perceive high value in the initiative's ability to enable electronic results delivery, can result in their disengagement from the process and impact the success of the initiative down the road.

Success in this context can only be achieved by ensuring all interests are represented at the table, where they can engage in preventive mediation regarding areas of disagreement and either reach consensus or clarify an "agreement to disagree."

¹ E. Wagner, B. Austin and C. Coleman, *It Takes a Region: Creating a Framework to Improve Chronic Disease Care* (California HealthCare Foundation 2006).

A successful HIE requires the internalization of a common purpose, which in turn requires “every stakeholder to understand the value proposition for themselves, for other participants, and for the community at large.” The challenge, however, is to determine how to build breadth into that purpose without losing individual stakeholder value. The solution lies in the development of “propositions that highlight mutual benefit,” which will serve to capture the attention of stakeholders and lead to parameters for community involvement.²

Community Voices

Communities are not defined by geography—they are shaped by common aims and pursuits. Ultimately, the healthcare community is defined by those who share goals related to health and care. In this sense, every healthcare continuum is a system comprised of subjective community-based cultural values and objective stakeholder-based financial values. The concept of a community-based HIE is actually that of an infrastructure constructed to support cultural values through a system that is “a set of entities comprising a whole where each component interacts with or is related to at least one other component, and they all serve a common objective.”³

It is only through identification of values as they relate to that common objective that a community can define itself, as well as clarify the manner in which individual components, or stakeholders, relate to each other and to the common objective of the HIE. Through this process of self-definition comes the potential for the community and stakeholders to work together to overcome differences and progress toward a community-valued vision for the HIE. Without the critical first step of stakeholder identification and engagement, there is little chance of establishing a collective value proposition that is thrown with a wide enough net to include all parties, but also retains a pragmatic focus on the motivations of the individual participants.

To set the stage for community collaboration, a successful information exchange must be built in a manner that accounts for both differences and commonalities, that serves the needs and objectives of each stakeholder group individually, and allows all to collectively share in the benefit. Doing so “levels the playing field and allows the focus going forward to be centered squarely on implementing those HIE strategies that benefit the community first, yet still address individual stakeholder needs.”⁴

Clearly, there is an inherent reliance on the leadership involved in this process—leadership that must be strong enough to organize the interests of a diverse group of stakeholders around a common purpose and demonstrate the ability to achieve tangible results. Such an initiative also requires leadership that both understands and can capitalize on the characteristics that are shared by the most successful HIEs, which include:

- Governance by a diverse and broad set of community stakeholders;
- Development and assured adherence to a common set of principles and standards for the technical and policy aspects of information sharing, addressing the needs of every stakeholder;
- Development and implementation of a technical infrastructure based on national standards to facilitate interoperability;
- Development and maintenance of a model for sustainability that aligns the costs with the benefits related to HIE; and
- Use of metrics to measure performance from the perspective of patient care, public health, provider value and economic value⁵

An HIE may also share common goals of improved patient safety and quality of care, enhanced revenue cycle performance, reduced costs and inefficiencies, and improved communications across the care continuum.

² First Consulting Group, *Overcoming Ten Non-Technical Challenges of RHIOs* (Oct. 2006).

³ E. Wagner, B. Austin and C. Coleman 2006.

⁴ E. Wagner, B. Austin and C. Coleman 2006.

⁵ eHealth Initiative, *Connecting Communities Toolkit* (June 2007).

It is from these common goals that the ultimate value proposition will be derived.

Competing Motivations

The key to establishing the value propositions for a community-based HIE is to clarify the motivations for building the information exchange in the first place and identify areas of crossover, areas of no conflict without crossover, and areas of conflict that can be acceptable to the interested parties. The generic value-proposition for the HIE “may be understood as a return on investment (ROI), quality improvement and error reduction, improved access to care, enhanced research capability or other benefits.”⁶ The reality, however, is that competing priorities and interests may motivate parties to act in ways that challenge progress towards communal goals. “The completion in American healthcare...will fracture coalitions that don’t agree on their direction or are weakly led.”⁷ It is the role of any community connectivity initiative to begin a dialogue that charts a course for participant consensus. Cases such as the Indiana Health Information Exchange (IHIE), for example, have taught the market that examining areas of competition is preemptive to ongoing conflict. The First Consulting Group report on HIE tells us that the lesson learned from IHIE is for communities to “prioritize their opportunities across all categories. From supply chain management to patient clinical data, and medication histories to laboratory results, opportunities can be ranked in terms of importance and return on investment.”⁸

The key is to find a balance between the values stakeholders derive from participating in data sharing projects and the interests which compete with pursuing communal goals. For example, “while patients and payers may value the reduction in duplication of services and improvements in the coordination of care that typically result from a properly integrated HIE, healthcare organizations and providers may place a higher value on improved efficiencies in the transfer of services and cost containment and reduction.”⁹ In actuality, the process of identifying value priorities is complex, particularly when considering the relationship between stakeholders who receive the greatest value but are asked to pay the least for the benefits, and those who foot the bill. To prevent creating an imbalance that can disrupt progress incentives, a model should be established that provides an avenue for stakeholders to distribute costs fairly, as with the model established by IHIE, which charges fees for each diagnostic test result transmitted to physicians.

Additionally, the HIE leadership must be certain to define and acknowledge competing interests to ensure they do not impede progress. “Ultimately, priorities will depend on a balanced assessment of cost, readiness, value, and local demand.”¹⁰ It is these combined factors that will contribute to the ongoing experience of value as motivation, with expectations balanced against quality achieved.

Identifying Differences

The presence of strong vision is a central, neutral and potentially conciliatory foundation for building value in a situation of competing values. The problem is, everyone wants progress and nobody wants change.

Establishing commonality is a result of preventive conversation “to anticipate problems, grievances and difficulties between parties before the conflict may arise. This has potential applications in large and private sector organizations, particularly where they are subject to excessive change, competition and economic pressure.”¹¹ That is why it is critical for communications to be facilitated between stakeholders to identify and address disruptive factors and possible barriers to success at every level. This will allow for the formation of an effective, value-based governance structure, which is critical to success of the HIE.

⁶ J.S. Lee, *Regional Health Information Organizations and other Health Information Exchanges: The Value Proposition* (NIHCM 2007).

⁷ E. Wagner, B. Austin and C. Coleman 2006.

⁸ First Consulting Group 2006.

⁹ Center for Community Health Leadership, *Top Ten Success Factors for Community HIE Overview* (Aug. 2007).

¹⁰ First Consulting Group 2006.

¹¹ R. Charlton, *Dispute Resolution Guidebook* (Erskineville NSW: Star Printery Pty Ltd, 2000).

In fact, “maintaining ongoing communication among all stakeholders is the only way to effectively attend to any disruptions or obstacles that may arise throughout the process. Discussing differences in tolerance for such factors as competition, risk, fluidity and innovation helps improve the success of HIE. In order for the exchange of information to truly contribute to the common good—and yield a measurable improvement in patient quality and financial efficiency—it is imperative to keep communication open so that group conflicts are not allowed to impede progress.”

Identifying differences allows for the establishment of effective “leadership, stakeholder power, contextual conditions, collaboration, competition, trust, governance model and history.”¹² For example:

- In Tennessee, local communities developed a common vision to unify previously competing stakeholders¹³
- In Utah, the vision was crafted “to stimulate action...[by being] sufficiently broad to engage all parties, yet sufficiently focused to provide a useful stating point”¹⁴
- In Arkansas, a joint, new business model was developed so that no partner will gain at another’s expense¹⁵
- In Connecticut, educational sessions for outreach to community physicians resulted in significant buy-in¹⁶

It is important to keep in mind that any successful information exchange initiative will depend on “a coordinated set of behavior changes on the part of providers, insurers, and payers.”¹⁷ Stakeholder influence depends on stakeholder participation, and stakeholder participation results in increased value for all, including:

Community

- Patients
- Providers
- Hospitals and health systems
- Payers
- Employers
- Other stakeholders
 - Long-term care
 - Home care
 - Laboratory services providers
 - Radiology service providers
 - Public health (communicable disease reporting and biosurveillance)
 - Health services researchers

¹² Lee 2007.

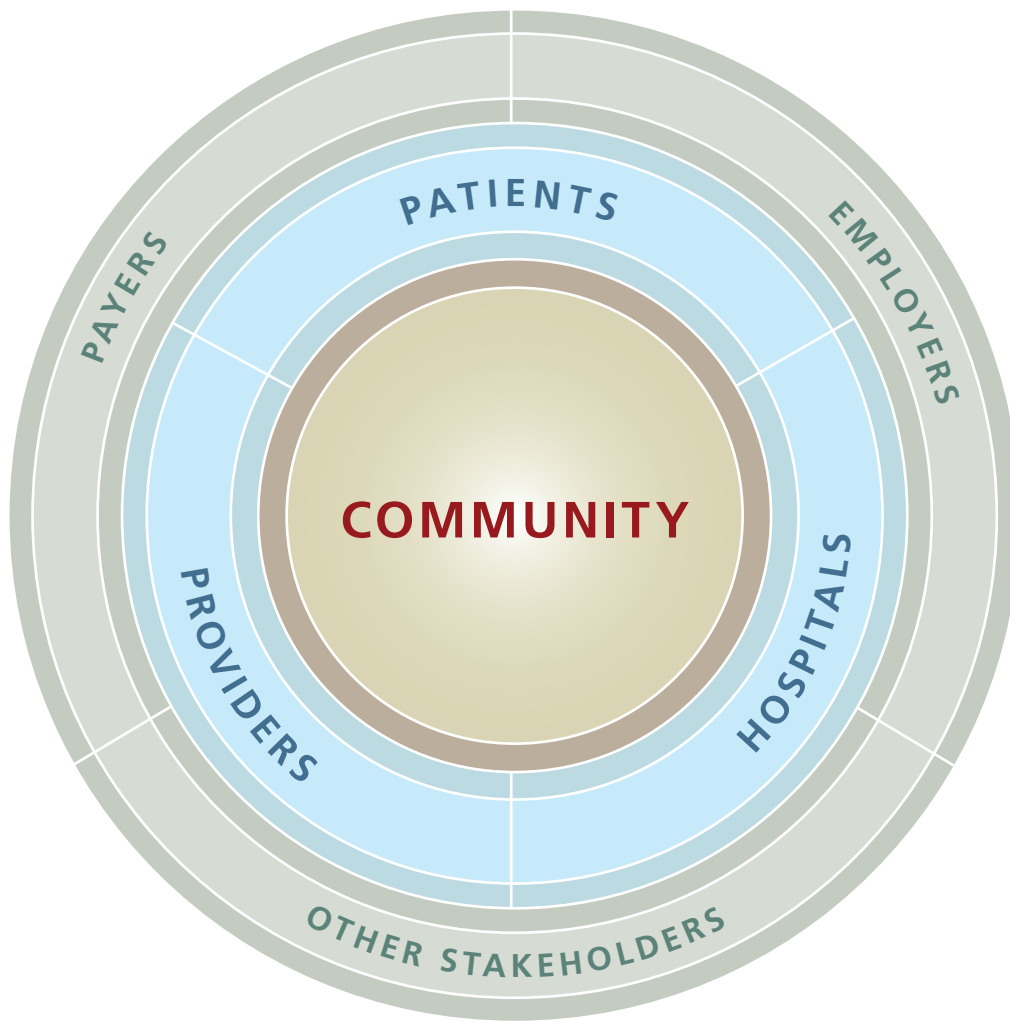
¹³ Lee 2007.

¹⁴ First Consulting Group 2006.

¹⁵ Lee 2007.

¹⁶ J. Walker, E. Pan, D. Johnston, J. Adler-Milstein, D.W. Bates, and B. Middleton, *The Value of Healthcare Information Exchange and Interoperability*, Health Affairs [Millwood] 19 Jan. 2005: W5-18.

¹⁷ E. Wagner, B. Austin and C. Coleman 2006.



COMMUNITY	PATIENTS	PROVIDERS	HOSPITALS	PAYERS	EMPLOYERS
Increase efficiency of transfer of services and claims processing	Improve care at the point of delivery	Access more accurate data	Reduce wait times in the ER department	Increase member satisfaction	Reduce costs by decreasing ER visits, preventable admissions and redundant testing
Reduce medical errors and adverse events, administrative costs, and time spent on patient intake	Improve engagement in care process (particularly through PHRs)	Faster and better documentation at the point of care	Increase efficiency of discharge planning and discharge earlier, when clinically appropriate	Decrease test duplication and repetitive diagnoses	Improve transparency on costs and quality
Faster, more accessible diagnostic results	Reduce therapy, medication and testing duplication	Reduce malpractice insurance rates	Increase revenue through conversion of chart storage space	Reduce time reviewing claims and disputes	Reduce absenteeism due to improved management of chronic conditions and worker's comp claim incidents
Improve quality and coordination of care	Shorten waiting times in both practices and ERs	Reduce time spent reviewing case notes and transcriptions	Enhance revenue cycle management through faster claims processing and reimbursement	Reduce prescription drug costs due to improved compliance & reduced duplications	Reduce costs through improving preventive care
	Access diagnostic test results, as well as medication refill requests, appt requests, etc. online	Improve revenue via the ability to see more patients		Track utilization rates, quality and performance measures	Reduce time reviewing worker's comp claims
		Convert paper chart storage areas into active exam room space		Reduce costs associated with chronic diseases through improved care management	Reduce premiums through cost savings realized by streamlining care processes
				Mine data to assess preventive care compliance and identify at-risk populations	Improve outcomes on claims appeals due to availability of complete records

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Seeking Value

It is evident that fragmentation and competition within the healthcare market means that “coalitions that want to improve care for populations must overcome these barriers.”¹⁸ Establishing the means to surmount such barriers requires engaging “diverse stakeholders in a frank and open discussion about the value proposition for participating in [HIE].” Ultimately, this requires that the HIE “look like, act like, and operate like a business when in fact the stakeholders come from many different industry sectors and are sometimes competitors. [Together these] organizations are tackling non-technical challenges related to governance, financial sustainability, meeting customer needs, and adherence to standards and government regulations.”¹⁹ There are, fortunately, progressive means by which to undertake such communications.

The dialogue on the value proposition of an information exchange for the National Institute for Health Care Management Foundation (NIHCM), led by the Agency for Healthcare Research and Quality (AHRQ), for example, was based on in-depth assessment of three critical questions:

- How does the electronic exchange of health information create value for stakeholders participating in HIE?
- What are the critical factors that lead to formation and sustainability of HIE?
- How do you see HIE developing over the next several years?

What they learned from answering those questions was that value was created not only through tracking a quantifiable return on investment (ROI), but also through the establishment of trust and quality improvement overall though the electronic dissemination of agreed-upon information in a manner that ultimately benefited all stakeholders.²⁰

According to the Center for Information Technology Leadership (CITL), an important consideration is that different levels of data exchange will satisfy different levels of value. Levels of data exchange can be defined as follows:

- Level 1: No use of IT to share information
- Level 2: Transmission of non-standardized information via basic IT; information within the document cannot be electronically manipulated (i.e. fax or personal computer-based exchange of scanned documents, pictures, or portable document format files)
- Level 3: Transmission of structured messages containing non-standardized data; requires interfaces that can translate incoming data from the sending system’s vocabulary to the receiving organization’s vocabulary; usually results in imperfect translations because of vocabularies’ incompatible levels of detail (i.e. email of free text, or PC-based exchange of files in incompatible/proprietary file formats, HL-7 messages)
- Level 4: Transmission of structured messages containing standardized and coded data; idealized state in which all systems exchange information using the same formats and vocabularies (i.e. automated exchange of coded results from an external lab into a provider’s EMR, automated exchange of a patient’s “problem list”)

To illustrate the differences in values derived between different levels of data exchange, consider that both free-standing and hospital-based outpatient clinicians use external laboratories. Interoperability between these providers would reduce redundant testing, delays and costs associated with a paper-based Level 1 system, and speed results reporting. These savings would produce an annual national benefit of \$8.09 billion at Level 2, \$18.8 billion at Level 3 and \$31.8 billion at Level 4.²¹

¹⁸ E. Wagner, B. Austin and C. Coleman 2006.

¹⁹ First Consulting Group 2006.

²⁰ Lee 2007.

²¹ B. Middleton, *The Value of Healthcare Information Exchange and Interoperability*, 2004 HIMSS Annual Conference and Exhibition, Orange County Convention Center, Orlando, FL 23 Feb. 2004.

The level of data exchange a community-based HIE should strive for depends entirely upon the value to stakeholders, the community's desire to achieve and the resources in place to deploy the infrastructure. Ultimately, the scope of the connectivity project should be based on the values derived by individual stakeholders and the community as a whole, as well as their ability to minimize competition and test the collaborative model.

The success of health information exchange is tied not only to the pursuit of the greater community good, but also to the ability to demonstrate individual stakeholder value. This is accomplished by establishing the community as a collaborative entity through the identification of differences, a clear comprehension of potential obstacles and distillation of a common set of stakeholder values.

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Common Goals for the Community HIE: Building a Roadmap

Michael Fleming, MD, FAAFP

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“The outcome of the Santa Barbara Project... suggests that other local efforts to create health information exchanges would do well to address the value question upfront, at the beginning of their work. Today, creating a sustainable business model — and particularly a model that will support the initial costs of constructing information exchange platforms and linking local providers and other entities — is one of the biggest challenges for nascent health information exchange efforts.”²²

Critical to the success of HIE is the ability to first reach consensus on a shared community vision and purpose, as outlined in Chapter One of the *Best Practices for Community Health Information Exchange*, and second to develop a set of common goals that achieve that vision. Without clearly defined goals that address the care needs of the community as well as the business needs of each stakeholder, the chances for success are slim.

Thus, identifying the improvements the HIE seeks to achieve and developing strategies to address any related barriers will ultimately be the foundation upon which a successful community-based HIE is built — a foundation that can lead to improved outcomes, guidelines to measure and achieve success, and the realization of multiple objectives, including reduced costs, improved revenues and enhanced efficiencies.

Ultimately, the initiative’s goals must reflect stakeholder consensus on the priorities of community benefit, address areas of potential conflict and specify that the overall good of the community as a whole is the ultimate measure of success. This approach can help transcend differences between stakeholder expectations and place the focus on those priorities that will most benefit the community as a whole.

A successful community-based data sharing project will focus on achieving the most important community goals, which typically relate to improved patient safety and quality of care. However, it will also focus on achieving individual stakeholder goals related to cost reductions, improved revenue cycle performance and increased productivity.

“Preventing errors and improving safety for patients require a systems approach in order to modify the conditions that contribute to errors. People working in health care are among the most educated and dedicated workforce in any industry. The problem is not bad people; the problem is that the system needs to be made safer.”²³

Defining the Goals

To build a roadmap for any HIE project, the first step is to identify and define the overarching community goal that the initiative is meant to achieve, then translate that into “sub-goals” that address individual stakeholder interests. Having these multiple goals exponentially increases the chances of HIE success by

²² Donald L. Holmquest, *Another Lesson From Santa Barbara*, *Health Affairs [Millwood]* 1 Aug. 2007: Web Exclusives.

²³ Institute of Medicine, *To Err is Human: Building a Safer Health System*, eds. Linda T. Kohn, Janet M. Corrigan, and Molla S. Donaldson (Washington, DC: National Academy Press, 2000).

ensuring the community and individual stakeholders derive value from the initiative and mitigating the risk of too narrow a focus.

Working from the assumption that quality is a universal goal that touches every stakeholder, the next step is to define what “quality” is as it applies to the community, the HIE and the individual stakeholders. Research addressing the definition of quality is deep and diverse, requiring careful evaluation by the governing body to identify that which most closely matches the unique needs of the community. There may also be a desire to create their own definition based on their intimate knowledge of the local healthcare system they are working to improve.

For example, one definition states, “Quality is doing the right thing, but only the right thing, at the right time for every patient.”²⁴

In this definition, the “right thing” includes following evidence-based practice and clinical guidelines and incorporating preventive care, including risk assessments, screening and early interventions. The fact that adults currently receive appropriate care in only about half (54.9 percent) of their medical encounters underscores the need for such focus.

...On average, Americans receive about half of recommended medical care processes. Although the size of the quality problem may continue to be debated, the gap between what we know works and what is actually done is substantial enough to warrant attention. These deficits, which pose serious threats to the health and well-being of the U.S. public, persist despite initiatives by both the federal government and private health care delivery systems to improve care.²⁵

The Institute of Medicine (IOM), on the other hand, defines quality as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”²⁶

IOM further outlines six “aims for improvement” to address key dimensions in which today’s healthcare system functions at lower levels than it should, to ensure that healthcare is:

- *Safe*: Avoiding injuries to patients from the care that is intended to help them
- *Effective*: Providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit
- *Patient-Centered*: Providing care that is respectful of and responsive to individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions
- *Timely*: Reducing waits and sometimes harmful delays for those who receive and give care
- *Efficient*: Avoiding waste, including equipment, supplies, ideas and energy
- *Equitable*: Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location and socioeconomic status²⁷

Additionally, the American Health Information Community (AHIC) Quality Workgroup defines the characteristics of the system with respect to the quality enterprise as:

- Receiving care
- Managing clinician-patient interactions
- Managing health of defined populations
- Coordination of care

²⁴ Michael Fleming, *The Future of Family Medicine*, The Francis P. Rhoades Memorial Lecture, Michigan Academy of Family Physicians Annual Scientific Assembly, Mackinac Island, MI 25 June 2002.

²⁵ Elizabeth A. McGlynn, et al., *The Quality of Health Care Delivered to Adults in the United States*, *The New England Journal of Medicine* 26 June 2003: 2635-2645.

²⁶ Institute of Medicine, *Medicare: A Strategy for Quality Assurance, Volume I*, ed. Kathleen N. Lohr (Washington, DC: National Academy Press, 1990).

²⁷ Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century* (Washington, DC: National Academy Press, 2001).

- Improving quality
- Measuring and reporting quality
- Reimbursement

AHIC acknowledges that there is a transformational power in utilizing these skeletal guidelines to establish a framework for the HIE process that has quality as its shared community goal:

In the future, stakeholders, including consumers, purchasers, providers, policymakers, researchers, accrediting and oversight bodies, will rely on transparent reporting of quality performance and quality improvement to inform their decision making about care. Information technology and the sharing of health information across a network of regional health information entities using data from electronic health records (EHRs), personal health records (PHRs), and strong clinical decision support (CDS) systems will assist providers in ensuring that the right care is delivered to the right patient—every time.²⁸

Community vs. Individual Goals

As stated previously, while achieving consensus on the overarching community goal is paramount for success, compatible goals must also be identified and defined to address individual priorities, needs and interests of the stakeholder groups within the HIE.

Again working from the assumption that the majority of stakeholder groups desire, in addition to quality, to achieve increased efficiencies, lower costs and improved revenues, the next step is to define each of those goals in a way that is meaningful to the stakeholders who seek to achieve them and relate them back to the shared community goal of quality.

In many ways, the definition of these goals may not be simply to provide more—and more expensive—care, but rather to provide better, more appropriate care utilizing the enhanced communications and accurate information made possible through the HIE.

Consider the case of a man with chest pains who undergoes multiple diagnostic procedures, a biopsy and evaluation by a cardiologist. The pain is eventually linked to his overhead, deltoid-impacting work on jet engines, rather than a heart condition. Had the basic question of his occupation been posed upfront, the cost of care would have been \$60, rather than the \$168,000 ultimately billed to his health plan, and the man's pain would have been alleviated much sooner.

Spending captures many aspects of local health care delivery systems, such as physician practice styles, composition of the medical workforce, and capacity constraints. Therefore, naïve policies that simply target spending could have the undesirable effect of reducing the quality of care in high-spending states even more. Also, the quality measures we use do not capture the totality of health care provision.²⁹

Clearly, focusing only on ways to reduce the cost of care will not adequately address stakeholder goals, nor will it tie back to the overarching goal, which in this example is quality. Instead, the definition of the cost/revenue/efficiency goals, which are so closely linked that it is possible to define them in tandem, must be based on the return on investment (ROI) each stakeholder can achieve through the information exchange initiative.

- In a physician practice, for instance, the HIE could result in significant time savings by increasing the number of patients requesting appointments or prescription refills online, or viewing lab orders and results electronically. Keeping patient information online and submitting transactions to electronic point-of-care charting will reduce or eliminate the need for transcription services. Data sharing between medical organizations also has the potential to reduce the time spent on patient

²⁸ AHIC Quality Workgroup, *Executive Summary of the End State Vision*, 31 Jan. 2007, 21 Aug. 2007 <http://www.hhs.gov/healthit/ahic/materials/qual_vision_execsum.pdf>.

²⁹ Katherine Baicker and Amitabh Chandra, *Medicare Spending, The Physician Workforce, and Beneficiaries' Quality of Care*, *Health Affairs [Millwood]* 7 April 2004: Web Exclusives.

intake, and the time patients spend in waiting rooms. Thus, from the physician stakeholder perspective, the goal of reduced costs and improved revenues will be achieved through savings in time, overhead, human resources and materials, as well as through the ability to see more patients.

- For hospital stakeholders, goals might be defined as a reduction in time spent on patient intake and shorter wait times in Emergency Departments. The HIE could result in a reduction in medication errors due to more complete information at the point of care, and streamlined communications of orders and results that can lead to earlier discharges, when medically appropriate, which save the hospital money in payment models that are based on per episode vs. length of stay.
- Payers may define this goal as a reduction in time spent reviewing claims disputes due to improved documentation or a reduction in utilization levels through the elimination of duplicative tests, repetitive diagnosis, insufficient care for chronic disease and unnecessary prescriptions. Employer stakeholders, on the other hand, will see ROI through a reduction in the amount of time spent managing claims appeals, reductions in Emergency Department visits by employees with chronic conditions—which also results in costs related to lost productivity—and improved management of workers compensation claims.

A common thread runs throughout these various definitions of stakeholder-specific goals: the technology deployed as part of the exchange initiative should ultimately result in the kinds of workflow automation and integration that “allows healthcare organizations to respond to changing business, financial and compliance requirements by automating common tasks throughout the organization—including revenue cycle projects, interactions with web sites, integrating new applications, systems and devices, and electronically monitoring and managing user activity.”³⁰

As such, when establishing definitions for individual stakeholder goals and relating them back to the overarching community value, organizers would do well to follow the lead of the Agency for Healthcare Research and Quality (AHRQ) and focus not just on the deployment of IT, but on the marriage between health IT and the way in which work is done in healthcare.

“Health IT is one part technical, and two parts culture and work process change,” and offers a chance to design new and better workflows and review work patterns that have not really been examined in the past.³¹

Designing the Roadmap

Once the community and individual stakeholder goals have been defined and consensus has been reached, it is time to establish the roadmap for achieving those outcomes. More often than not, this phase will again require the identification of barriers, including stakeholder competition and issues of trust and confidence, particularly in terms of the data that will be exchanged.

“To achieve comprehensive community buy-in, it is important to address such issues as potential areas of competition between stakeholders and differences in regulatory and compliance requirements. This levels the playing field and allows the focus going forward to be centered squarely on implementing those HIE strategies that benefit the community first, yet still addresses individual stakeholder needs.”³²

The exchange of data is the core component of the HIE, as data will ultimately result in the workflow and care improvements that will achieve the established goals, as well as measure the overall success of the initiative.

As such, one of the first issues that must be addressed when designing the roadmap for achieving the shared and individual stakeholder goals is the level of trust and confidence each stakeholder has

³⁰ Brian Thiel, *Connecticut Hospital Improves Workflow Efficiency Through ‘Scripting,’* [HealthLeaders News](#), 24 July 2007.

³¹ Carolyn M. Clancy, *Health Information Technology, Quality of Care, and Evidence-based Medicine: An Interlinked Triad*, Annual Symposium, American Medical Informatics Association, Washington, DC 25 Oct. 2005.

³² Center for Community Health Leadership, *Top Ten Success Factors for Community HIE Overview* (Aug. 2007).

concerning the data that is being exchanged. In general, the healthcare system tends to be insular in nature; the concept of sharing information is anathema. Unless these issues are addressed early on, the HIE will not succeed.

Because the exchanged data, after it is de-identified for privacy, will ultimately be used by providers to measure their performance against their peer groups and by the community to measure the success of the HIE, it is imperative that the governing foundation set policies for data collection, access and ownership that all stakeholders can agree to.

There are two prevailing models for collection and management of the data exchanged in an HIE:

- Centralized: The entity that runs the HIE also stores patient data on its own servers.
- Federated: Each HIE stakeholder/participant stores information on its own system and grants access to the other participants as appropriate.

Each model must be carefully considered when establishing policies for data collection, ownership and management. The centralized model, for example, is considered to be the most simple to set up. It offers consistency, quick access and can be brought to market faster because most databases with clinical data are not web-enabled. However, that same centralized model carries higher hardware and operational costs and can be difficult to manage because of the multitude of participants. Additionally, providers sometimes have concerns about the data they consider to be theirs being housed elsewhere.

The federated model, on the other hand, offers a greater assurance of privacy, is backed by proven working examples, and may be easier to gain provider buy-in because the politics of storing and accessing data are less of an issue. The downside is that there are potential problems displaying data in a user-friendly manner because of differing protocols, and there can be delays in accessing the data.³³

Achieving consensus on how the data will be exchanged and managed is critical to attaining the level of confidence and trust that is necessary for stakeholders and participants to view the results culled from it as valid. It also sets the stage for the next step in designing the roadmap—establishing the guidelines, benchmarks and quality measures necessary to achieve the information exchange initiative's goals and measure its success.

Quality, cost, revenues and efficiency go hand-in-hand within a community-based data sharing project and require the establishment of quality measures and guidelines, such as those related to preventive and chronic disease management, that will form the basis for a plan to achieve these shared goals. The plan should incorporate embedded guidelines for care that may involve the use of evidence-based medicine to ensure compliance with care guidelines.

By deploying evidence-based guidelines across the HIE, providers can utilize them in their day-to-day practice to achieve a higher level of efficiency in the provision of care. They will also be better able to track and measure patient compliance with the most common preventive measures, thus realizing improved quality and outcomes.

A key component of any solution...is the routine availability of information on performance at all levels. Making such information available will require a major overhaul of our current health information systems, with a focus on automating the entry and retrieval of key data for clinical decision making and for the measurement and reporting of quality. Establishing a national baseline for performance makes it possible to assess the effect of policy changes and to evaluate large-scale national, regional, state or local efforts to improve quality.³⁴

To achieve the shared goal of quality and the stakeholder goals of improved efficiency, enhanced revenues and reduced costs, the organizers of an HIE should identify a set of measures based on the unique characteristics of their community and create a set of guidelines to address those issues, i.e. diabetes, cardiovascular disease, hypertension, asthma, etc., that are most critical to their population. By

³³ Dagmara Scalise, *Which Way RHIO?*, Hospitals & Health Networks, June 2006.

³⁴ Elizabeth A. McGlynn, et al. 2003.

identifying those elements of healthcare that are most costly for their unique region, the constituencies can then utilize existing resources, such as the National Guidelines Clearinghouse, to extract the specific data points needed to develop quality measures.

The AQA Alliance, a collaboration between the American Academy of Family Physicians (AAFP), American College of Physicians (ACP), America's Health Insurance Plans (AHIP) and AHRQ, has also developed a set of starter data that organizations can incorporate to help them establish the right quality measures and care guidelines for their community.

This data can then be used to establish an HIE administrative structure that overcomes stakeholder differences and achieves goals. For example, increased efficiencies in the care process will lead both directly and indirectly to enhanced revenue for the practices involved. Additionally, when providers can be convinced to share implementation tips and best practices, they will realize increased efficiencies and reduced costs much sooner.

Finally, by achieving consensus on the goals of the HIE, creating policies to resolve conflicts over the management and exchange of information, and establishing guidelines to improve care and measure outcomes, individual stakeholders will be empowered to monitor their individual levels of achievement and identify areas for improvement.

The end results will be an HIE that addresses both the shared community goal and the individual stakeholder goals, and does so in a demonstrable way.

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Staying on Track: Facilitating an Ongoing Discourse Among Stakeholders

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“Ongoing efforts at building trust and collaboration are necessary as...development progresses. There will be issues that arise along the way in the ongoing...development that will require the continued need to refocus the group on the benefits and the need to collaborate. Also, as new stakeholder groups appear these must be integrated into the organization. In short, consensus, trust, and collaboration are vitally important and need to be worked on and nurtured continually.”³⁵

Establishing a set of clearly defined common goals that achieve the shared community vision and purpose of the HIE, as outlined in Chapter Two of the *Best Practices for Community Health Information Exchange*, necessitates opening a dialogue between community leaders to achieve consensus on the priorities of community benefit; how the initiative can meet the business needs of each stakeholder; intended outcomes; guidelines to measure success; and how to best address areas of potential conflict and realize multiple objectives.

However, transcending the differences between stakeholder expectations and retaining the focus on the priorities that will most benefit the community as a whole requires not just an initial conversation but an ongoing discourse among stakeholders regarding values, expectations and conflicts. It requires strong leadership and stakeholder champions capable not only of advancing awareness and understanding of the HIE's goals and objectives, but also to effectively attend to any disruptions or obstacles that may arise throughout the process.

“To transform competition into collaboration, leaders will need to diffuse win-lose scenarios. Dialog and patience will help stakeholders and groups focus on core HIE principles they all truly share in their quest to exchange data in the region. This process will build trust and cooperation, which creates collaboration between them and encourages a future state of regional HIE growth and sustainability.”³⁶

Capable, Credible Leadership

Facilitating ongoing discourse among stakeholders and overcoming obstacles and objections requires a dedicated champion to take the reins and drive the initiative forward. Because they will be responsible for organizing a diverse group of stakeholders into a well-articulated governance structure capable of making the decisions necessary to achieve tangible short- and long-term results, HIE leaders must be passionate, knowledgeable, innovative and diplomatic.

“Look at any successful organization; at its helm is an effective leader who can be described with words like strong, intelligent, decisive and determined. Those who serve as champions of RHIOs must possess all of these qualities—and more, and in very large measure, because of the dynamics of the stakeholder

³⁵ Healthlink, *Regional Health Information Organization (RHIO): Frequently Asked Questions* (Sept. 2005).

³⁶ Brian E. Dixon and Susan D. Scamurra, *Is There Such a Thing as Healthy Competition? Strategies for Managing Competition between Developing Regional Health Information Organizations*, HIMSS 07 Annual Conference and Exhibition, Ernest N. Morial Convention Center, New Orleans, LA 27 Feb. 2007.

groups involved. RHIOs are comprised of highly diverse participating members who often have competing interests.”³⁷

These competing interests often hold stereotypes, such as the belief that providers are practicing irresponsible care rife with errors, that payers are overcharging employers and reimbursing providers too little, or that employees want to pay nothing but receive everything. The stereotypes carry with them a lack of trust, which must be overcome for the initiative to succeed, and a belief that what benefits one stakeholder will not benefit another.

“These powerful complexities require a leader who possesses large measures of persuasiveness, diplomacy, business-sense, tenacity and charisma...Individuals capable of shouldering the responsibilities of a RHIO are rare. Identifying the right person for the job is the primary key to success.”³⁸

Identifying a strong leader capable of playing the dual, often contradictory, roles of HIE champion and organizational driver, cannot be left to chance, a lesson the Santa Barbara County Care Data Exchange (SBCCDE) learned too late.

Once considered a model for emerging information exchange projects, SBCCDE’s board of directors voted in December 2006 to cease operations, despite having finally built a basic infrastructure and beginning to provide some data to clinical end users. Reasons for the failure have been exhaustively analyzed, with most concluding it was due primarily to lack of a compelling business case, distorted economic incentives, vendor limitations and software delays—all of which contributed to poor momentum and credibility.

A final, significant failure was the assumption by the two key drivers of the initiative, the California HealthCare Foundation (CHCF) and CareScience, that community leadership would grow over time and strengthen the effort.

“But CHCF’s largesse and CareScience’s expertise engendered relatively passive community participation. SBCCDE technology, governance, and administrative structures; expertise; business cases; and momentum arose externally, not ‘organically’ at the local level. CareScience had the most decision-making authority; it served as the program manager, software vendor, governance organizer, and often the public face and champion of the project. Participants did not have enough interest in the SBCCDE or financial ‘skin in the game’ to counterbalance and provide a reality check for CareScience’s assumptions and decisions.”³⁹

SBCCDE is a cautionary tale about leadership selection. The program manager was CareScience’s CEO, David J. Brailer, MD, PhD, who would later become the first National Coordinator for Health Information Technology. Despite what few would argue was a stellar pedigree for the position, Dr. Brailer and others have since admitted that, in addition to the passivity the funding promoted, the leadership lacked vision.⁴⁰

A strong leader must also be capable of resolving conflicts between stakeholders that can cause an initiative to implode. That was the lesson the Oregon Business Council learned in August 2007, when the work underway by the Health Data Exchange Group the council formed to bring a RHIO to Portland, Ore., came to a standstill.

Despite having reached a number of key agreements, including the governance structure and business model, hospital stakeholders could not support a business plan developed by a consultant on behalf of the group. That plan, which was projected to save the community \$17 million a year in part from the elimination of duplicate testing, would have cost participants \$3.4 million over a five-year budget period, plus in-house operating costs of up to \$150,000 a year for participating hospitals. The initiative’s leadership was unable to negotiate a compromise that would have moved the project forward.

³⁷ John Smaling, *A Dose of RHIOlity*, *Health Management Technology*, Dec. 2005.

³⁸ Smaling 2005.

³⁹ Robert H. Miller and Bradley S. Miller, *The Santa Barbara County Care Data Exchange: Lessons Learned* (Aug. 2007).

⁴⁰ Colleen Egan, *Many Lessons To Be Learned From Santa Barbara Data Exchange*, *iHealthBeat*, 3 Aug. 2007.

The project chairman has said that despite the failure to reach an agreement, the business council workgroup made great strides. “We have reached every one of the milestones we set in front of us...The one remaining milestone to overcome is the cost. For a hospital, it’s a difficult decision. They look at this and say for every test that’s done there’s a revenue stream. A duplicate set of tests increases revenue somewhere in the system...This is a long-term process...We’re talking about changing a culture in health care that has been very control oriented to one that would be more patient centered. Culture doesn’t change quickly.”⁴¹

For both the Health Data Exchange Group and SBCCDE—as well as other HIEs that have faltered—the hard lesson has been that clearly defining the value proposition, building trust, and resolving technical and business issues requires strong, passionate leadership capable of rallying forces and quashing conflicts to allow the initiative to achieve and sustain a forward momentum.

Establishing an Executive Team

Even the strongest leader cannot champion the initiative and facilitate an ongoing discourse among stakeholders on their own. They need the support that comes from a well-articulated governance structure designed to start the initiative out on the right foot and keep it there as the HIE grows and matures.

Industry-based guidelines for defining the full governance structure are provided in Chapter Five of the *Best Practices for Community Health Information Exchange*. However, the first step is to establish an Executive Steering Committee or other neutral organization to be the sponsor of the HIE.

To avoid allowing competitive forces to sideline an HIE project, the Executive Steering Committee must represent all stakeholder factions and be empowered with initiating the framework for making the many decisions that will ultimately define and guide the project. “One of the lessons about governance is that it should be consistent with the mission and the purpose for pursuing interoperability in the first place.”⁴²

A properly constructed Executive Steering Committee with clear objectives and expectations allows divergent stakeholders to start immediately on the path of working toward a common goal, rather than as individuals toward what are often competing goals. Further, by involving top stakeholder decision makers in determining the final governance structure, consensus and buy-in can be achieved.

If those driving the development and growth of the HIE understand the dynamics of competition and design the governance model accordingly, they will be better able to manage it in a way that sustains collaboration among all stakeholders at the outset.

Because participants come together for different reasons, the Executive Steering Committee must incorporate the strengths of each stakeholder organization and provide the appropriate level of consideration to each group’s incentive for participation.⁴³

It is this governing body that will ultimately be responsible for determining the governance model that fits the unique circumstances of the initiative at hand, as well as establishing the realistic and achievable goals that help foster the dialogue necessary to keep stakeholders engaged and the process moving forward.

For example, the Arizona Health-e Connection established an Executive Steering Committee comprised of 43 diverse members representing state agencies, private employers, not-for-profit foundations, higher education institutions, healthcare associations, health insurance companies, hospital systems, federal agencies and a county health district. The diversity of committee members and their focus on moving the initiative forward enabled them to coordinate the efforts of more than 300 stakeholders to create a statewide roadmap within six months.

⁴¹ Peter Korn, *Record-sharing stalls*, [Portland Tribune](#), 10 Aug. 2007.

⁴² First Consulting Group, *Overcoming Ten Non-Technical Challenges of RHIOs* (Oct. 2006).

⁴³ First Consulting Group 2006.

The statewide implementation activities resulting from the Arizona Health-e Connection Steering Committee and Roadmap have placed Arizona in the top six percentile of states in the area of e-health achievement. A not-for-profit organization, with a board comprised of a broad base of private and public stakeholders, has now been established to move the implementation activities forward.⁴⁴

Members of the North Dakota Health Information Technology Steering Committee, which is a statewide collaborative involving public-private entities who are committed to achieving the vision and mission by driving the statewide HIT/HIE initiative, serve under a clear-cut set of expectations. Each is expected to bring the perspective of the facility, organization or sector they represent to all Steering Committee discussions and decisions; facilitate communication back to their constituency with regard to the vision, mission, goals, intent and activities of the HIT Steering Committee and subcommittees; and keep the statewide interests of the vision and mission foremost in decisions and votes.⁴⁵

Many HIE Executive Steering Committees go a step further by establishing subcommittees to represent the views of individual stakeholder groups that would also be responsible for communicating their unique perspectives back to the full committee. This system ensures that individual stakeholders will have a forum to express their concerns and issues and can be confident that those views will be presented to the Executive Steering Committee and given the proper consideration.

This committee structure can also help eliminate group conflicts on issues that might impede progress, such as measuring and sharing improvements in patient quality and financial efficiency, as well as measuring productivity, revenue enhancement and expense reduction. Ensuring that individual stakeholder views and concerns are adequately conveyed to the leadership will advance the collaborative spirit of the initiative and facilitate identification of the most efficient ways to achieve the HIE's common goals.

For example, the North Carolina Healthcare Information and Communications Alliance (NCHICA) cites balancing its members' various interests as one of its foremost priorities and challenges. It credits much of its success to its collaborative approach to leadership, which includes representatives from employers, industry, professional associations, academic health centers, hospitals, medical groups and specialty societies. It has also "engaged key physicians who understand the relationship between quality and technology and incorporated these physicians into a leadership team that spreads awareness of the project and garners support for the program."⁴⁶

Structured Communication and Outreach for Continued Engagement

With the governance structure taking shape, the next step toward facilitating an ongoing discourse among stakeholders is to identify ways to ensure that the interests and perspectives of all stakeholder groups are represented and conveyed to the group as a whole.

The reality is that stakeholders are often direct competitors. If left unaddressed, the appearance of a conflict of interest can inhibit the sharing of data and information about business practices. However, these conflicts can often be set aside if stakeholders understand that there are greater opportunities to be realized.⁴⁷

"Discussing differences in tolerance for such factors as competition, risk, fluidity and innovation helps improve the success of HIE. In order for the exchange of information to truly contribute to the common

⁴⁴ Arizona Health-e Connection, Application for the National Association of State Chief Information Officers 2007 Recognition Awards for Outstanding Achievement in the Field of Information Technology, 7 Sept. 2007 <<http://www.nascio.org/awards/nominations/2007/2007AZ2-Health%20Connection%20Recognition%20Award%20Application%202007.pdf>>.

⁴⁵ North Dakota State Office of Rural Health, *North Dakota Health Information Technology Steering Committee*, 3 Sept. 2007 <<http://www.med.und.edu/depts/rural/sorh/hit/members/>>.

⁴⁶ Avalere Health LLC, *Evolution of State Health Information Exchange: A Study of Vision, Strategy, and Progress*, Jan. 2006, 6 Sept. 2007 <http://www.avalerehealth.net/research/docs/State_based_Health_Information_Exchange_Final_Report.pdf>.

⁴⁷ First Consulting Group 2006.

good—and yield a measurable improvement in patient quality and financial efficiency—it is imperative to keep communication open so that group conflicts are not allowed to impede progress.”⁴⁸

One approach is to establish a formal process and structure to facilitate ongoing communication, which can resolve conflicts and prevent backtracking to individual goals if a stakeholder feels shut out of the process. It levels the playing field so that the issues and concerns of any one stakeholder group are not given more weight than those of others.

An excellent example of how an imbalance in power can impede progress is what took place between Yale-New Haven Hospital and the Hospital of Saint Raphael at the onset of the establishment of a local HIE in New Haven, Conn.

Yale-New Haven Hospital and the Hospital of Saint Raphael have been long-time competitors for patients and physician loyalty. The Hospital of Saint Raphael, as the smaller of the two hospitals, initially saw the data sharing network as a possible competitive differentiator. However, as the project gained traction and local physicians became engaged, the two hospitals were asked to set aside competitive differences and secure a means of finding common ground.

While the competition between the two health systems will continue in the future, the HIE initiative has been one means by which the hospitals have seen the value in working toward a common goal.

Establishing an Outreach Committee to provide a voice for all stakeholder groups is a key strategy for recognizing and responding to competitive and other issues that threaten progress. This committee should work toward establishing proactive communication strategies that utilize best practices, lessons learned and case studies gleaned from other community HIEs as tools for education, conflict management and reaffirmation of stakeholder commitment.

While the Outreach Committee may report to the Executive Steering Committee, it should be allowed enough independence to enable it to:

- Identify potential alliances and partnerships, including those that may not fit neatly into previously defined stakeholder groups
- Identify and implement the activities needed to motivate those partners to begin working collaboratively on addressing key issues that arise throughout the process in an equitable manner

“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. 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.”⁴⁹

Tailoring and Targeting the Message

The Outreach Committee should operationalize on its mandates by taking a proactive approach to communication that serves to open and maintain a dialogue with stakeholders who might otherwise be overlooked or who may not be willing to work through a formal chain of command.

This approach can take several forms, such as face-to-face meetings with individual stakeholder groups where needs, wants and concerns can be aired in a noncompetitive environment. Getting participants together in the same room to confront developing problems through the exchange of ideas and solutions is the best way to retain consensus and remain on track when challenges begin to arise.

⁴⁸ Center for Community Health Leadership, *Top Ten Success Factors for Community HIE Overview* (Aug. 2007).

⁴⁹ Sarath Malepati, Kathryn Kushner and Jason S. Lee, *RHIOs and the Value Proposition: Value Is in the Eye of the Beholder*, *Journal of AHIMA* March 2007: 24-29.

Particularly in the case of controversial issues, a proactive approach invites discourse and provides the leadership with the opportunity to help conflicting stakeholders step back and refocus on identifying a solution that allows the initiative to move beyond any impasse that can stop the forward momentum.

Communication strategies should emphasize the opportunity to achieve individual goals via a joint focus on community goals, even where it requires setting aside competitive interests in favor of the greater good. In other words, “building genuine new community bridges can diffuse win-lose scenarios and lead to the realization of widely held community goals.”⁵⁰

More important than the format of proactive communication strategies is the content. Because the end goal should be the effective conveyance of value propositions to all stakeholders, it is critical to understand and address their unique issues and concerns.

For example, research conducted by the eHealth Initiative suggests that the more consumers learn about the creation of secure HIEs, the more they support these initiatives. The HIE message that tends to resonate the most with consumers is that of having access to information in an emergency medical situation, followed by access to medical records when out of state and access to medical records when visiting a doctor.

As such, outreach activities targeting consumers are most effective when they focus on security, how the HIE works, patient permission, who has access, and benefits to both patient and physician. Because consumers overwhelmingly trust their physicians most to deliver them information about secure HIE, it is also highly effective to engage physician champions to lead consumer-facing outreach efforts.⁵¹

Employers, on the other hand, are most concerned about the cost of health benefits and achieving long-term, sustainable savings. Since there are a number of “aggressive and motivated” employer-sponsored initiatives with a local and national presence, as well as private and public sector “value-based” purchasing initiatives, health information exchange as a tool for measuring cost and quality is “not a foreign concept to the more sophisticated employer. Developing an understanding about the way employers see the intersection between quality and cost is essential,” as is recognizing and acknowledging the stewardship role employers play in the selection of health benefits and the business relationship they have with health plans. Taking all this into consideration is key to any successful employer-focused outreach activity.⁵²

Consultants and Compromise

Building community bridges and tailoring the content of outreach activities to focus on unique stakeholder issues and concerns can often be effectively aided by the enlistment of a neutral third party. Many HIEs have found that bringing in an outside consultant or moderator with no ties or biases facilitates more effective, efficient communications among competing stakeholders.

Identifying an individual with solid listening and negotiating skills is essential to the communication process, as they are in the best position to discover new grounds for agreement and identify areas of commonality that will help achieve consensus. A focus should be retained on continued capitalization on the individual differences in stakeholder strengths and expertise that combine to make a stronger information exchange project.

Finally, to successfully manage negative effects of a competitive healthcare business framework and prevent escalation of issues that may threaten the HIE’s progress, a comprehensive plan should be developed that establishes formal and informal, but always regular, lines of communication. The plan should include provisions for active monitoring of stakeholder communications and, most importantly, allow room for compromise.

⁵⁰ Dixon and Scamurra 2007.

⁵¹ eHealth Initiative, *A Majority of Consumers Favor Secure Electronic Health Information Exchange* (2 May 2007).

⁵² eHealth Initiative, *Guide for Engaging Employers in Health Information Exchange Initiatives* (Jan. 2007).

Fostering an ongoing, open dialogue throughout the HIE process allows differences to be resolved quickly and amicably, before they have a chance to weaken the initiative's momentum. Ultimately, "the opportunity to improve health care across the community through shared information far outweighs the risks of collaboration."⁵³

⁵³ Dixon and Scamurra 2007.

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Stakeholder Engagement: Transparency as a Retention Strategy

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"We are on the cusp of enormous change in health and healthcare, both technologically and culturally. And change of this magnitude is never easy. It is always disruptive. It replaces existing paradigms and creates uncertainty. But the level of difficulty should not dissuade us from progress. We must have in healthcare the same level of technological advancement that we embrace in other sectors of society. Getting there will most assuredly upset comfortable routines. It will force entrenched stakeholders to change. And yet it is absolutely necessary, because in the end it will save lives and save money.

...As industry stakeholders come together in communities across the country, we will find answers to the pressing questions of financing, interoperability, privacy and security, cultural change, and health management. Such a system will indeed improve consumer health, reduce costs, and build a brighter future for America."⁵⁴

Every facet of the healthcare community—patients, providers, payers, employers and all others—has a stake in the success of the HIE. As such, taking a proactive approach to not just securing, but also maintaining, stakeholder engagement is critical to the initiative's long-term success.

Ongoing stakeholder engagement in an HIE project ensures financial sustainability and fosters the collaboration necessary to achieve both shared and individual goals. It helps overcome cultural resistance to what is, at its core, a significant transformation in the healthcare process, and it strengthens advocacy activities to ensure the public and policymakers are aware of both the benefits of the HIE and activities underway at the community level.⁵⁵

Challenges, however, are inevitable. Disagreements will arise; conflicts of interest will emerge; and differences in tolerance for such factors as risk, competition and innovation can threaten the forward momentum of any data sharing project.

Consider the case of the Western New York Clinical Information Exchange (WNYCIE), an HIE that supports electronic prescribing and results reporting between two HMOs and four hospital systems. The project grew out of initial discussions in 2003 within three different community organizations that were focused on different parts of the regional healthcare system. Despite somewhat different visions, goals and priorities, all three were working toward a single, interoperable network system.

However, negative competition soon emerged, necessitating the implementation of numerous communication strategies to identify and neutralize the issues to retain stakeholder engagement. These included:

- Co-populating boards to support open communication and work toward consensus
- Shared participation in activities of other groups even as individual groups continued working on their own projects
- Establishment of an independent group to allow for ongoing discussions of similarities and

⁵⁴ Center for Health Transformation, *Accelerating Transformation through Health Information Technology: Summary of Findings from the CHT Connectivity Conference* (Nov. 2005).

⁵⁵ Center for Health Transformation 2005.

differences, supported by a facilitator who organized the meetings and served as a neutral third party to assist with maintaining an open dialogue

- Establishment of an oversight committee with representatives from all three groups, as well as representatives recruited from other community stakeholder groups, that held multiple forums to promote ongoing discussions and resolve disagreements, which in turn allowed each group to continue independent activities while staying focused on the overall HIE goals

Those group venues and committees were deployed whenever negative competition emerged and, as they evolved, resulted in each group broadening their stakeholder base. “This ever-widening net of stakeholders helped to forge agreements and mutual influence among the groups. In Western New York, each subsequent committee broadened and strengthened the stakeholder base and reinforced the continued success of this strategy.”⁵⁶

As seen in this example, a strategic communications plan designed for process transparency can mitigate the impact of impediments that can weaken stakeholder commitment and threaten forward momentum. A well-constructed plan will also define the structure of and direction for regular dissemination of information and open, ongoing communication to maintain that transparency.

Without it, the road to long-term viability will be rocky—and littered with former stakeholders who, frustrated by a lack of information or sense of the initiative’s accomplishments, have disengaged from the exchange entirely.

Planning for the Inevitable

An effective strategic communications plan will leverage existing areas of consensus and establish a structure for communicating progress and resolving the conflicts that are sure to arise.

This was the approach taken by the Western North Carolina Health Network (WNCHN), a collaboration of 39 hospitals, 13 county health departments and other providers. Since 1995, hospitals and healthcare systems that served western North Carolina have been working together to implement cost-effective, collaborative opportunities, setting the foundation for trust and positive relationships. Several facilities in the network also utilize the same information system.⁵⁷

In establishing the network, organizers were able to leverage the relationships and trust that already existed among its network members to identify areas for natural collaboration, such as group purchasing and patient quality care initiatives, and areas where the sense of competition was much stronger. In those areas, they found ways to compromise. For example, they found that all participants were willing to share their data as long as the technical architecture allowed each organization to retain control over their own data and store it themselves.^{58,59}

By incorporating those elements of the initiative upon which consensus has been reached—such as Western North Carolina’s compromise over data control—into the larger strategic plan for the HIE, a baseline is created against which stakeholders can measure success. These elements can also be utilized as a means for monitoring competitive areas and mediating any disputes or reversals by stakeholders. The plan should also include a predefined set of milestones and a process for communicating when those milestones are reached.

It is important to note that while the strategy should account for all key areas of consensus, it must also be fluid in order to accommodate future elements that can impact stakeholder engagement and progress.

⁵⁶ Brian E. Dixon and Susan D. Scamurra, *Is There Such a Thing as Healthy Competition? Strategies for Managing Competition between Developing Regional Health Information Organizations*, HIMSS 07 Annual Conference and Exhibition, Ernest N. Morial Convention Center, New Orleans, LA 27 Feb. 2007.

⁵⁷ Western North Carolina Health Network, *About the Network*, [Western North Carolina Health Network](http://www.wnchn.org/wnchn.asp), 5 Sept. 2007 <<http://www.wnchn.org/wnchn.asp>>.

⁵⁸ First Consulting Group, *Overcoming Ten Non-Technical Challenges of RHIOs* (Oct. 2006).

⁵⁹ Meditech, *Western North Carolina Health Network Steps to the RHIO Forefront*, [Meditech Customer Achievements](http://www.meditech.com/AboutMeditech/pages/WESTERNNORTHCAROLINA.htm), 5 Sept. 2007 <<http://www.meditech.com/AboutMeditech/pages/WESTERNNORTHCAROLINA.htm>>.

The plan should also establish a means for 'testing the stakeholder waters' on potentially controversial issues to help build a base of information and opinions from which the initiative can draw when it comes time for the governing body to make critical decisions on matters that affect the future of the HIE.

For instance, technology decisions must be made with existing stakeholder systems in mind. But if formal discussions on technology take place too early in the process, it can shift focus away from identifying the HIE business model, governance structure or community value proposition—the establishment of which should actually drive and come before technology decisions. However, by introducing the topic through various communication channels defined in the plan, valuable input can be collected for later use.

The Santa Barbara County Care Data Exchange (SBCCDE) learned this lesson the hard way. Santa Barbara failed, in part, due to a lack of effective communications between project leaders and stakeholders that led to the deployment of technologies that did not address the needs of the end users—a failure that transparency and an open discourse between stakeholders might have avoided. David Brailer, former National Coordinator for Health Information Technology at the Department of Health and Human Services and founder of SBCCDE, offered the following analysis:

The developers of the Santa Barbara Project, including myself, were obsessed with the latest technology, devices, connectivity, and many other technical variables. There was a strong interest in applying peer-to-peer Internet methodologies (for example, Napster-like information sharing) to health care information. This resulted in an over-engineered, overly complicated product that had little regard for how physicians and consumers would use it. Human factors, workflow, and how information fit into the broader goals of the community were not considered. In other words, this was a typical 1990s health IT project. The gap in the Santa Barbara project between the technical imperative and the users' needs was never closed.⁶⁰

The same holds true for expansion of services. Once initial services have been deployed, they must be allowed time to generate returns before further service expansions should be considered. However, by floating the idea of what services are potentially to be rolled out in the long term whenever stakeholders are gathered, or conducting periodic surveys or focus groups, the leadership can begin to gain a better understanding of the direction stakeholders would like to see the HIE go.

Another benefit to this approach is that it can also give them insight into how quickly stakeholders are expecting to realize a return on their investment (ROI). This is important, because while ROI does not appear to be a critical factor in the decision to participate in an HIE and surveys indicate that most stakeholders do not expect any substantial return in the short term, the same cannot be said for the long term.⁶¹

A strategic approach which recognizes that gathering information is often as crucial as disseminating it will be well-positioned to foster stakeholder retention by helping the HIE leadership stay attuned to the short- and long-term expectations and desires of individual stakeholder groups.

Creating Transparency

Ultimately, transparency from the very beginning of the project is critical to retaining stakeholder engagement. The best way to achieve transparency is to centralize information, then build active communication channels to disseminate it in multiple ways, such as 'self-service' access to status updates and bidirectional mechanisms to communicate stakeholder-specific benefits, foster the exchange of ideas and negotiate compromise.

An example of centralizing information is the resource center planned by the Kansas Health Policy Authority (KHPA). The center will be responsible for coordinating and tracking the day-to-day activities of

⁶⁰ David J. Brailer, *From Santa Barbara To Washington: A Person's And A Nation's Journey Toward Portable Health Information*, *Health Affairs [Millwood]* Sept./Oct. 2007: Web Exclusives.

⁶¹ Deloitte Center for Health Solutions, *Health Information Exchange (HIE) Business Models: The Path to Sustainable Financial Success* (2006).

statewide HIE efforts to ensure interoperability between HIEs over the long term, and it will be charged with soliciting input from and seeking the advice of the leadership and workgroup members.

It will also “assist in the removal of common obstacles across the regional HIEs and resolve conflicts between regional HIEs to facilitate equitable and appropriate data sharing for the benefit of patients” through activities that include:

- Offering education on national initiatives and standards
- Acting as a forum for obtaining the input of Kansas HIE initiatives to national standard-setting bodies
- Developing, maintaining and making available a knowledge base of information to assist HIE projects by collecting data and lessons learned
- Developing a reference guide which provides guidance to individuals and organizations undertaking the formation of a regional HIE
- Developing and implementing an education plan to inform key stakeholders about the HIE, recent developments and outcomes
- Developing a marketing and communications plan to raise awareness among stakeholders on the purpose and benefits of HIE, including community meetings, literature and communications campaigns⁶²

Particularly for bidirectional activities, variety in settings and formats is key to ensuring that each stakeholder group is touched. For example, one-on-one meetings with individual stakeholders is an excellent way to reach large participants, such as a major hospital system or health plan, while town hall meetings and community forums are ideal for reaching multiple stakeholder groups or conveying HIE updates and progress reports to the community at large.

More focused meetings with select stakeholder groups are useful when the participants are influenced by peers or stakeholder champions. Physicians, for example, respond well to programs that are conducted in conjunction with hospital systems, medical societies, quality improvement organizations and health plans, as well as direct visits and phone calls.⁶³

It is also critical to identify and recruit community leaders from the industry to advocate for the initiative. Find local physicians, hospital administrators, pharmacists and other providers who are trusted and will champion the project—their words will resonate far more with fellow providers than someone perceived as an outsider.

“The role of messaging to physicians and peer influence cannot be understated as a critical factor for success in engaging clinicians. Part of the messaging and peer influence process is the use of a physician champion. In addition to identified physician champions, there is a tremendous influence realized with ‘unofficial’ strong supporters that become the strong network for physicians throughout the community.”⁶⁴

The Arizona Health Care Cost Containment System Health Information Exchange (AHCCCS) is a good illustration of how bidirectional, audience-specific communication mechanisms can play a key role in retaining—and even expanding—stakeholder engagement.

⁶² Kansas Health Policy Authority, *Kansas Health Information Technology/Health Information Exchange Policy Initiative Final Report*, Feb. 2007, 5 Sept. 2007 <<http://www.khpa.ks.gov/QandI/Docs/Final%20State%20of%20Kansas%20Report.pdf>>.

⁶³ eHealth Initiative, *Improving the Quality of Healthcare Through Health Information Exchange: Selected Findings from eHealth Initiative’s Third Annual Survey of Health Information Exchange Activities at the State, Regional and Local Levels* (25 Sept. 2006).

⁶⁴ eHealth Initiative, *Guide for Engaging Clinicians in Health Information Exchange Initiatives* (Jan. 2007).

AHCCCS held a series of focus groups comprised of physicians, psychologists, nurse practitioners, physician assistants, patient advocates and health plan leaders to help the leadership better understand current practices; identify desired capabilities and data points for an HIE system; identify barriers; and determine how providers could move forward with a new HIE solution. They also convened workgroups to identify next steps, create a roadmap for HIE implementation and select an appropriate technology to be deployed under the project.

As a result, AHCCCS engaged and has retained stakeholders from across the state and is maintaining its commitment to involve physicians in all aspects of planning. Physician involvement has been particularly successful in “articulating problems with the current system, identifying necessary information to effectively treat patients, and describing the ways in which they would like to receive this information. Program officials recognized early on that physician reluctance is a major barrier to HIT adoption. As such, AHCCCS is committed to maintaining provider involvement at all stages of planning. Interviewees indicated that provider outreach will continue throughout implementation to foster support of the HIE project within the physician community.”⁶⁵

As important as bidirectional communication mechanisms are to retaining stakeholders, they cannot provide the full extent of on-demand information that many stakeholders expect in a transparent organization. As such, it is important to also deploy ‘self-serve’ information channels.

The Northern Sierra Rural Health Network, for example, supplemented its regional and community meetings with video teleconferences, email messaging and an HIE website.⁶⁶ Others publish newsletters and establish intranets for secure stakeholder communication.

Finally, the power of the press should never be underestimated when it comes to advancing the understanding of and support for the HIE, whether it is in the form of news releases announcing significant milestones, public service announcements, participation in talk shows or interviews with reporters. Indeed, the media is a critical component of any strategic communications plan, as securing positive coverage will not only convey key messages to a wide audience, but will also broaden the initiative’s reach and raise its credibility.⁶⁷

Long-term stakeholder engagement can be a primary factor in whether an HIE succeeds in achieving sustainability or falters when complications arise. As such, a special emphasis must be placed on creating and maintaining transparency in the process, and ensuring the communications structure and delivery mechanisms are in place to feed stakeholder needs for information upon which to base ongoing support.

⁶⁵ Avalere Health LLC, *Evolution of State Health Information Exchange: A Study of Vision, Strategy, and Progress*, Jan. 2006, 6 Sept. 2007 <http://www.avalerehealth.net/research/docs/State_based_Health_Information_Exchange_Final_Report.pdf>.

⁶⁶ Northern Sierra Rural Health Network, *Implementation Plan for Health Information Exchange*. Presentation to the NSRHN Annual Membership Meeting, Chico, CA 27 April 2007.

⁶⁷ eHealth Initiative, *Connecting Communities Toolkit* (June 2007).

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Establishing Governance: Focus on Sustainability and Community Inclusion

Richard Bakalar, MD

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"An effective governance structure provides the necessary framework for making the many decisions that define and guide the RHIO effort. Because participants come together for different business reasons, it is not surprising that governance models also differ. Someday the industry may arrive at a common roadmap for defining tax treatment, legal identity, organizational structure, charters for the board of directors, and inclusion of stakeholders. But until then, each RHIO must determine which solution best fits its circumstances."⁶⁸

The long-term sustainability of a community-based HIE requires a well-articulated governance structure capable of harnessing leadership and moving the initiative into an operational reality. The structure should be simple, yet effective and adaptable, and consistent with the overriding mission and purpose for establishing the HIE.⁶⁹

The model structure provides an ongoing forum for the potentially competitive constituents of the governing body. An effective governance structure will be able to carry the HIE forward through the inclusion of representatives from all areas of the community. Industry learning indicates that communities will be well-served to pursue governance structures that are both inclusive and neutral.

A successful governance structure will also incorporate the business model upon which the HIE is based and lessons learned from other community-based information exchanges, which can provide a retrospective view of the past to avoid repeating mistakes in the future.

Linking to the Financial Model

The most effective governance structures tend to be those that are tied to the business and financial models under which the HIE intends to operate.

Typically, business model selection is based upon a range of variables, including tax status and incentives, governance and control factors, and whether the HIEs are focused more on coordination, solution development or infrastructure implementation. For instance, while some HIEs exist specifically to foster the sharing of clinical data, others are focused on providing services such as electronic prescribing or results reporting.

"It is expected that each community will explore the different types of HIE business models and pick the one(s) that offers them maximum benefit and return—especially the greatest chance of early sustainability."⁷⁰

⁶⁸ First Consulting Group, *Overcoming Ten Non-Technical Challenges of RHIOs* (Oct. 2006).

⁶⁹ First Consulting Group 2006.

⁷⁰ Deloitte Center for Health Solutions, *Health Information Exchange (HIE) Business Models: The Path to Sustainable Financial Success* (2006).

Four general categories of business models have emerged:

- **Not-for-profit:** Tax-exempt status can help reduce funding challenges and provide special tax credits. However, it also requires operating under strict conflict of interest rules, can create issues with access to capital, limits lobbying activities and carries heightened executive compensation scrutiny.^{71,72}
- **Public utility:** Created and maintained with the assistance of federal or state funds, and provided with direction by the government.⁷³
- **Physician/payer collaborative:** Created for/by certain physicians and payers within a geographic region. These can be either for- or not-for-profit; the key is the collaboration between and mutual benefits for participating payers and physicians.⁷⁴
- **For-profit:** Created with private funding and having firm return on investment (ROI) targets, for-profit initiatives seek to achieve financial benefits from their transactions and typically have solid start-up funding.⁷⁵

Additionally, HIE initiatives typically rely on a combination of three types of revenue sources. The business model can both impact and be impacted by the revenue source, as variations in income classification often depend upon legal and accountancy advice, statutes and regulations, form of incorporation, and IRS determination:

- **Contributed income:** Cash or in-kind resources such as grants from governments and private philanthropy, as well as in-kind grants such as facility usage. In fact, 84 percent of revenue in start-up HIEs falls within this category.⁷⁶
- **Earned income:** Payments received for services or privileges, such as transaction fees and membership/subscription fees representing volume-based pricing and flat pricing, respectively. Transaction fees make up 8 percent of total income in production HIEs, while membership fees accounted for 28 percent of total income.⁷⁷
- **Loans, other repayable assets and investor proceeds:** Cash and in-kind resources that were loaned and must in some way be repaid or that were received from investors in exchange for equity ownership of the organization. Investor proceeds in exchange for equity are not available to 501(c)(3) tax-exempt organizations. However, not-for-profit organizations may participate in for-profit enterprises that, subject to very specific and detailed limitations, may partner with investors.⁷⁸

The earned income model, particularly in the form of a combination of membership and transaction fees like the one employed by the Utah Health Information Network (UHIN), appears to hold the most promise for long-term financial sustainability. Founded in 1993, UHIN has been self-sustaining from its inception by charging a membership fee to providers and transaction fees to payers. This has allowed UHIN to cover all operational costs for its administrative data exchange and positioned it to expand services to include the electronic exchange of clinical information through a secure Internet gateway.⁷⁹

In many ways, it is the funding model that plays the greatest role in determining the most effective governance structure. For example, if the HIE is funded through grants and/or stakeholder contributions, the best approach may be to establish a governance structure in which the HIE is steered by classes of

⁷¹ Deloitte Center for Health Solutions 2006.

⁷² William S. Bernstein and James R. Schwartz, *Governance and Regulatory Issues*, Presentation to the CalRHIO Governance Committee, Oakland, CA 19 July 2005.

⁷³ Deloitte Center for Health Solutions 2006.

⁷⁴ Deloitte Center for Health Solutions 2006.

⁷⁵ Deloitte Center for Health Solutions 2006.

⁷⁶ Michael Christopher and Martin Jensen, *Sustainable RHIO Funding and the Emerging Business Model: The 2007 Survey of Regional Health Information Organization Finance* (Sept. 2007).

⁷⁷ Christopher and Jensen 2007.

⁷⁸ Michael Christopher, *RHIO Financial Models*, 17 April 2006, 14 Sept. 2007 <http://www.informatics-review.com/wiki/index.php/RHIO_Financial_Models>.

⁷⁹ Avalere Health LLC, *Evolution of State Health Information Exchange: A Study of Vision, Strategy, and Progress*, Jan. 2006, 6 Sept. 2007 <http://www.avalerehealth.net/research/docs/State_based_Health_Information_Exchange_Final_Report.pdf>.

stakeholders designated by their level of involvement, possibly with different levels of voting rights based upon their contributions.

Alternatively, if the HIE is funded through transaction or subscription fees, a public utility model that provides governance for public accountability of private businesses may be the most appropriate structure. However, if financing is coming from private investment, a board of directors is often the best governing model to follow.⁸⁰

By mapping the governance structure to the business model, the final governing body will incorporate the strengths of each stakeholder organization and provide the appropriate level of consideration to each group's incentives for participating in the HIE.

An Inclusive, Neutral Structure

In addition to relating back to the business and financial models that will drive the HIE, the governance structure should be inclusive of key stakeholders, yet still maintain a high level of neutrality. An inclusive, neutral governing body is better able to maintain a clear focus on shared community goals while avoiding or mitigating potential conflicts among stakeholders.

This is important, as HIEs are typically made up of diverse organizations that must come to agreement on critical—and potentially divisive—issues such as protocols for patient identification and data transfer, data standards, rules for authentication, and access and data maintenance. “One of the critical success factors for a governance structure is to involve the key stakeholders in a forum that develops a neutral environment of win-win for all.”⁸¹

Three popular options for the governance model are all-inclusive membership, classes of membership and independent/self-perpetuating.

Under the **all-inclusive model**, each participating provider and other interested parties, such as payers, self-funded employers, regional health authorities and public health agencies, are invited to join. In some instances, membership on the governing board is limited to those who make a financial investment as part of their commitment.

The classes of **membership model** has categories of interested participants divided into “classes,” which then select one or two representatives for the governing board. The initial class representatives can be selected by the Executive Steering Committee (see Chapter Three of the *Best Practices for Community Health Information Exchange*) or by members of each individual class. This model is ideal to support fee-based membership as a source of funding. However, differences among membership groups may impede decision making progress.

Finally, the **self-perpetuating model** typically starts with the Executive Steering Committee selecting the initial board members. Terms may be staggered and subjected to limits, and a nominating committee would be responsible for proposing board candidates on an ongoing basis. The advantage of this model is that it is large enough to be representative of all stakeholders but is still manageable. The drawback is that the limited size often necessitates other means of ensuring inclusive participation.⁸²

Whichever governance model is determined to be the best fit for the individual HIE, special attention must be paid to ensure it is *truly* inclusive. For example, a special emphasis should be placed on including physicians who represent multiple types of medical specialties. This is important not only because physician adoption of the HIE is critical to its long-term success, but because physicians control the longitudinal patient record, which is the cornerstone of the HIE and the fundamental future of healthcare.

⁸⁰ Deloitte Center for Health Solutions 2006.

⁸¹ Healthlink, *Regional Health Information Organization (RHIO): Frequently Asked Questions* (Sept. 2005).

⁸² Bernstein and Schwartz 2005.

The responsibility of physician representatives as part of the governance structure should be to inform, advise, watch behavior change and track medical compliance—all of which relate back to the success of the initiative.

Also, because healthcare workflow is a multidomain challenge, the governance structure should include representatives from all domains, which are most often defined as:

- Clinical, which includes physicians, nurses, ancillary service providers and other allied health professionals
- Technical, representing IT professionals and medical device experts
- Operations, including clinical and technical support and help desks
- Administration, which encompasses workflow, admissions and IT management
- Financial, which incorporates reimbursement and funding

Other key representatives to consider include patients, employers and payers, as well as individuals who bring specific expertise to the structure, such as government agencies, health information management professionals, health law attorneys and privacy experts.⁸³

Ultimately, the governance model should be populated with representatives who are capable of making the decisions necessary to ensure the HIE is able to adapt to “changing market dynamics and... overcome new obstacles as they provide more and varied services to their customers.”⁸⁴

Creating Structure

Once the formal governance model has been determined, a hierarchy of committees, subcommittees and advisory groups should be established under the direction of the Executive Steering Committee defined in Chapter Three of the *Best Practices for Community Health Information Exchange*.

Typical standing committees include Audit, Business/Finance, Governance/Nominating, Compensation and Operations, which are charged with overseeing specific functions required to keep the HIE moving forward toward long-term success.⁸⁵

Many HIEs also establish a separate Community Advisory Board, which encompasses the Outreach Committee defined in Chapter Three but expands its outreach responsibilities to include engagement of the public at large. It is also responsible for development of a decision-making process that aligns incentives and ensures adherence to the strategic roadmap from the clinical, financial and social perspectives by addressing the needs of those organizations that tend to provide the most financial support for the least immediate benefit.

For example, hospitals pay for electronic health records that sometimes offer limited value and, in many cases, no continuity of care, and have low physician usage levels after implementation. In this case, patients stand to be the real benefactors of the technology investment, but they make little or no contribution to the HIE. “This creates an imbalance between those who pay for the system and those who benefit. In order to keep incentives in line, the remaining stakeholders, such as providers and payers, can find ways to pass on some of the operating costs in the form of fees or surcharges.”⁸⁶

It is the responsibility of the Community Advisory Board to identify ways to balance out these inequities to ensure all stakeholders will realize benefits in the long term.

Another key subcommittee is a physician advisory group that is specifically focused on clinical issues, such as what type of data should be shared. This is critical to ensuring physician adoption of the HIE and

⁸³ Robin Blair, *RHIO Nation, Health Management Technology*, Feb. 2006.

⁸⁴ Deloitte Center for Health Solutions 2006.

⁸⁵ Bernstein and Schwartz 2005.

⁸⁶ First Consulting Group 2006.

helping patients feel comfortable that the clinical issues related to data exchange have been thoroughly discussed and vetted. Other committees to consider include a regulatory committee to manage issues pertaining to Stark and anti-kickback laws, antitrust laws, and privacy and security laws, as well as quality/oversight, public relations and marketing, incentives, and consumer participation/patient advocacy^{87,88}

Keeping Focus on the End Game

Ultimately, the responsibility for achieving the 'end game' of the HIE lies with the governing body. As such, it must fully represent all facets of the community, and it must be structured in a way that allows the HIE to achieve community and stakeholder goals, as well as widespread provider adoption. Without that, its efforts have "been reduced to an academic exercise."

If an HIE "is to ever break out of the 'demonstration project' box, it must be *inclusive*. If it's a 'community project,' then it needs to involve the whole community or at least be structured so that everyone in the community can participate if they elect. If the vast majority of providers in the community are unable to participate in a RHIO, then they will take no ownership of it."⁸⁹

A very real risk that should be recognized and considered is the natural tendency for the largest organizations that are investing the most in the project to inadvertently develop a structure that offers only proprietary interoperability. In this case, the vast majority of providers in the ambulatory environment who deliver the bulk of patient care in the community are left out. A clear contingency plan to help avoid this problem is to include healthcare professionals from organizations of all sizes and financial contribution to the program in the initial design.

Success requires a community-based governance model that represents every facet of the healthcare community and strikes a balance between benefits and contributions while remaining neutral to prevent politicization at any stage of development.

⁸⁷ Bernstein and Schwartz 2005.

⁸⁸ Heather B. Hayes, *RHIO confidential: Experts offer advice for creating a foolproof privacy and security plan for sharing patient information*, Government Health IT, 10 Sept. 2007.

⁸⁹ ProviderLink Incorporated, *Designing RHIO's that Work: Five Pillars for Broad Provider Adoption* (July 2005).

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