Hospitals as the Drivers of HIE

Hospitals that are technologically connected to their community will be well positioned to become the nexus of the community-based “accountable care organization” of the future.

Hospitals face many business and patient care challenges in today’s highly fragmented health care delivery environment. Information technology (IT) figures prominently in both dimensions; while sometimes regarded as part of “the problem”, IT employed properly can provide compelling business and patient care solutions.

Take health information exchange (HIE), for example – a complex, multi-faceted issue that has dramatic implications for patient care, and which is fundamentally dependent upon IT. As physicians, hospitals teams, and other care providers struggle to keep up while trying to provide the best care possible, they face a difficult task coordinating care across multiple settings with a lack of shared information about patients.

Hospitals have long served a central role in connecting local health care communities and are now uniquely positioned to extend this role by leveraging and extending their current IT investments. Hospital IT can empower the clinical decisions physicians working within the hospital and its associated facilities make daily; provide support to those physicians wishing to make patient referrals to the hospital; help the hospital meet government regulations and capture ARRA stimulus dollars. Furthermore, as the drive towards community adoption of “accountable care organizations” (ACO) accelerates, and the drive towards a reduction of typical hospital-provided services increases, those hospitals that are best connected to their community will be well positioned to become the nexus of the community-based ACO of the future.

In short, it makes compelling business and clinical sense for hospitals to serve as the hub for HIE at the community level – which is the geography that matters most, since the vast majority of health care is delivered locally. (It is important to distinguish hospital-centric community HIE from the notion of a “RHIO”, or Regional Health Information Organization, which today is largely a concept in search of a business model; few RHIOs currently have a sound financial foundation.) In addition to the practical patient care benefits of such information exchange, extending the community hospital IT infrastructure to enable local HIE helps hospitals build even stronger bonds with physicians working directly for the hospital, as well as independent physician practices, creating greater physician affinity with the institution.

Health Care Reform and “Meaningful Use”

While health care reform has been addressed and discussed at the federal level with ARRA, HITECH, and the Health Care Reform Bill, the ability to resolve health care fragmentation resides within each health care community. Health care reform,
like health care itself, is local. As those involved in care delivery well know, care communities can be very different. Urban settings may have multiple hospitals, clinical and specialty facilities within a few blocks of each other and most of their patients; while residents in rural areas may be 60 miles from the nearest hospital.

Health care connectivity is a key element framed by national and local reforms, but connectivity is not enough. As Dr. David Blumenthal, National Coordinator for Health IT, says:

“…HITECH’s goal is not adoption alone but “meaningful use” of EHRs — that is, their use by providers to achieve significant improvements in care. The legislation ties payments specifically to the achievement of advances in health care processes and outcomes.”

“Meaningful Use” is about empowering physicians to have more efficient and productive interactions with patients. The goal is to provide safer, more effective and efficient care by enabling physicians to connect and communicate with the right person about the right patient at the right time with the right information.

Obstacles to “Meaningful Use”
While the goal of “Meaningful Use” sounds straight-forward, its achievement faces a number of obstacles.

1. While patient care remains local, the information about patient care is scattered across different providers within the community, making it difficult for physicians to receive real-time access to critical information about patients at the point of care.

2. Patient care is provided in a variety of settings across the community -- including hospitals, outpatient centers, long-term care centers, physician practices, and home care -- each of which can have one or more existing systems. Patient history and information is tracked in a variety of legacy systems including HIS’s, EMR’s, paper, and other systems. Simply moving to new systems comes with both a financial cost and a time cost for physicians, hospitals, and other providers.

3. Protecting health information and empowering patients to participate. Patient-centered care means ensuring that information is communicated securely between systems and with informed patient consent.

4. Simply transferring patient information from site to site is not enough to achieve “meaningful” use. The key to meaningful use is insuring that the information is integrated into physicians’ workflows as they make clinical decisions. Information should empower increased collaboration (knowing who to talk to).

5. As the government becomes more involved (both State and Federal), it is difficult to understand and follow all the regulations, incentives, and demands for the sharing of information.

“Meaningful” Connectivity
Hospitals that wish to achieve “Meaningful Use” should look for a “meaningful connectivity” solution that addresses all the various challenges by:

1. Connecting to information across the community in real-time, providing the latest, most complete patient health information available which physicians and patients need to make key clinical decisions about care.
2. Integrating with current systems and/or provide access for those without systems today. Any solution should meet current system investments both inside and outside the hospital where they are rather than requiring an expensive rip and replace policy.

3. Being secure and enabling patient consent models for sharing information. All constituents involved in patient care are sensitive to the privacy and security needs of patient health information. Any solution selected must support multiple security and trust models within the local community.

4. Integrating information into physicians’ workflow including support for collaborating with other physicians in a patient’s circle of care. A solution which simply moves health information from system to system will not meet the critical goal of exchanging health information which is supporting physician/patient interactions.

5. Supporting compliance with current and future government regulations. There are a myriad of regulations and incentives which are changing in health care. Any solution must support compliance with these while empowering physicians to focus on delivering care.

Connecting the Care Community
Where do you start to create effective HIE? The following chart provides an idea of how hospitals can think about a “Meaningful Connectivity” initiative based on providing the most value from a care efficiency and physician affinity perspective.

At the center of HIE is the patient’s health record. Building value into an HIE involves starting with those care settings which most need access to that health record and can contribute patient experience information back into that health record, providing all constituents in the community the most complete picture possible of each patient. Building out from access to a patient’s experience, HIEs need to insure the relevant information from each patient’s health record is integrated into each constituent’s (especially physicians’) workflow. The combination of access and integration into daily workflow best enables patient information to play a key role in informing clinical care decisions at the point of care.

1. **Start where you are** – Start within your hospital/acute care setting, connecting the many disparate systems therein to provide a complete view of each patient’s experience within the hospital. Insure the information from various hospital information systems and devices are integrated into the workflow of physicians working in the hospital to maximize care efficiency, physician affinity, and the experience a patient has within the hospital. Any solution(s) employed here should take into account current investments in infrastructure and meet government regulations and incentive programs such as ARRA “Meaningful Use”.

2. **Add practice settings where patient care occurs most** – After connecting the systems within your acute care facility, the next area where value can be achieved is connecting those physician offices and specialty care settings within the community, starting with those practices where the most patient experience is occurring. These can include physicians affiliated with the hospital or physicians whose patients are treated at the hospital. The technology environment in each of these settings
can vary greatly, ranging from those with an EMR or EHR solution to those still working on paper. While ARRA reports that 50 percent of U.S. physicians have some sort of EHR, only 25 percent have something resembling a basic system. Each practice will be different, and any technology employed in building out a community-based HIE should allow for EMR/EHRs which meet industry exchange standards (e.g. IHE, CCD, CCR), those which don’t yet meet those standards, and those practices which do not have a system in place. Any solution chosen should also connect to each of these various practices at a reasonable cost, and integrate directly into each physician’s workflow in order to make the information useful.

3. Enable patient participation – Involving patients in the HIE can empower patient participation in health care decisions and plays a key role within most community-based HIEs. “Patient participation” means giving patients direct access to their health information (via PHRs, patient portals, or print-outs), and control over third-party access to their health information (i.e. “patient consent”).

4. Integrate other acute care settings – Integrating with additional acute care settings and care settings outside the community can provide greater flexibility for patients to receive care. This can be very important in communities where facilities may provide different levels of care or specialties (e.g. a Level 1 Trauma Center or Cancer Care Center).

5. Engage public health – Providing the ability for the entire community to have access to information such as disease surveillance is a key aspect of current government initiatives and incentive programs such as ARRA. Any HIE must consider how it will connect with state-based HIEs and eventually NHIN.

While there is much discussion today about Health Information Exchanges and the technology needed to connect everyone together, hospitals are well-positioned to leverage their current IT investments and understanding of clinical workflow within the community to serve as the nexus of community-based HIEs and the associated ACO. The principles herein are intended to provide a way for thinking about how hospitals can serve as a hub for community-based HIEs, helping the community quickly achieve value by connecting various constituents in an order that provides the best view of each patient’s experience, and that integrates critical information into the workflows used in various care settings so it informs provider-patient clinical decisions.


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