12 Things You Should Know About Health Information Exchanges

Developed by the FY15 Health Information Exchange Exchange Committee

The FY15 HIE Committee reviewed existing research and conducted their own scan into HIE challenges and uncovered a number of common issues related to HIE implementations that are important to know. Below is the brief description and summary of those 12 items:

1. **HIEs must make astute selection of one or more vendors in order to deliver services successfully.** For example, the market is dominated by 12 major HIE vendors and a number of smaller competing vendors. HIEs have to select the best vendor or vendors who can offer experienced consulting services and support staff plus offer a solution suite to meet their stakeholders’ needs. A poor vendor selection at the early stage of an HIE implementation can be fatal to its success.

2. **Federal standards for HIEs are not yet solidified.** The lack of common standards and interoperability have hampered implementation of HIEs and increased integration costs into existing Electronic Health Records (EHRs).

3. **HIEs usually face a multi-vendor vs single-sourced HIE option.** This is a natural result of the rapidly changing technology landscape and lack of cost-effective clinical data technology expertise in the market. No one vendor dominates the market with all the requisite skills and solutions needed to supply solutions to HIEs. For example, HIEs that start with the Direct or secure email solution as a Health Information Service Provider (HISP), and shift to a query model may find their vendor is more capable in one technology than the other. Also, the selected vendor may require sub-contracting with another third party consulting firm to provide qualified resources to meet HIE implementation timeframes.

4. **Integration costs to existing back-end EHR systems complex and usually underestimated.** Lack of standards, available hospital and facility IT resources, etc., all lend to longer integration times and costs.
HIE project implementations are usually matrixed to various stakeholder organizations. As a result, HIE integration is not a primary responsibility of the stakeholder’s IT organizations but a “side of the desk job” or “best effort.” This results in HIE data integration delays, additional costs, and start/stops on HIE project rollout.

5. **Legal costs and time to create data sharing agreements or (DURSAs) are directly proportional to the number of distinct end shareholders slowing the implementation of HIE rollout.** Sharing data is a challenge for just two parties to complete. Add three, four or more parties, and the time to complete a cohesive DURSA agreement across all HIE use cases can be lengthy as well as costly..

6. **HIEs value propositions align well in support of ACOs but also can compete with localized roll-outs of ACOs by hospital systems.** The competing technology use cases and demand for the same data has a tendency to erode the HIE value in the short run. For example, if an HIE is in an environment that has many hospital systems, there may be a propensity for those hospital systems to form one or more ACO alliances. The ACOs will include separate data sharing and quality care initiatives with their respective payer or insurance firms as well. As a result, that HIE may discover any additional data sharing between those hospitals in the ACO as competing for the same resources and data integration requirements needed to stand up the ACO entity.

7. **A viable sustainability financial model post federal, state and local grants is required to eliminate imminent HIE collapse due to lack of funding.** This is a fundamental premise of the success of all HIEs. Without a viable sustainable financial model, all HIEs will fail and fail quickly once the public funding stops.

8. **Integrating the HIE technology solution into the workflow of the attending physician or care manager is a critical success factor but very difficult to achieve.** This barrier is one of the most challenging for all HIEs. The better the technology integration and planning for the identified use cases, the higher the chance that the HIE will be used as the source for interactions between caregivers, doctors, hospitals, etc. sharing patient information. HIEs who are not viewed as a value-add in the healthcare delivery and management
chain will have failed in their mission to improve community health and meet meaningful use objectives.

9. Creating the critical mass of information required to become a source of useful analytics for HIEs takes time and costs putting HIEs at risk as the “go to” source for health information vs in-house alternatives. This is similar in nature to Barrier 8 with a slight difference. HIEs have to gain a level of information that can be used for health analytics. Reaching this level of historical and broad depth of clinical data can take time. If the HIE remains just a “router” of information, at some point, it will not be long-lived. That is, simply pushing email messages from one point to another provides great initial value when no other alternative exists between providers. However, the long term value is gained by maintaining historical clinical data on the community served by the HIE. The faster this repository of information is available, the better the position of the HIE as a service to the health quality of the community which it serves. Therefore, achieving critical mass of clinical data for service to the HIE stakeholders is a key success factor for HIEs and their longevity.

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10. Technology maturity of HIE vendor offerings is still fragmented, based on multiple architectures, and not “platform” focused in order to provide an HIE “ecosystem” to all participants including the patient (most important). There is no SAP or Saleforce.com vendor for the HIE community. Companies such as NANT Health have the ability to provide this integrated platform service but are yet unproven in the marketplace. Most HIE vendor offerings are fragmented and focused on specific technology offerings. For example, most vendors bolt-on solutions with other vendor offerings as required. Typically, integration of mobile devices, providing patient access to and from their solution
11. Consolidation of vendor EHR systems with newer products offering seamless data integration is competing with HIEs’ key value-proposition of “connecting the docs.” The shift in market presence by one or two EHR vendors may be the biggest threat to HIEs. For example, a firm such as Epic can become the “de-facto” standard in the industry by its sheer market presence. Therefore, Epic may make HIEs redundant by providing interoperability and ease of data sharing “out of the box” vs. one-off via a third party integration with an HIE system. In the future, one successful monolithic vendor within an HIE community may make the need for an HIE redundant and obsolete.

12. HIEs can be viewed as providing duplicative information or solutions as in the case of offering patient portals or related patient information directly to the consumer. For successful HIEs, layering in access to patient clinical data may be viewed as competitive to some of their stakeholder offerings. For example, patient portals between hospitals and HIEs clearly can overlap and be confusing for the consumer. HIEs must play the niches that vary widely from region to region and by the respective communities they serve. In some cases, an HIE’s set of capabilities and offerings in one region may make little or no sense in another region or locale.

For more information, please refer to the blog post authored by Greg Barnowsky, Chief Architect at Independence Blue Cross [here](#).