

## Advancing Health Information Exchange in Washington – Next Steps January 27, 2010

### I. Introduction

Since 10/2/09 OneHealthPort has been acting as Washington State’s lead health information exchange (HIE) organization. In partnership with the Health Care Authority (HCA) we have been tasked with three broad responsibilities:

- Lead initial development of HIE in a manner that will comply with Washington state law - SSB 5501, now part of the Revised Code of Washington, Chapter 41.05
- Satisfy the requirements and objectives of the Federal HITECH grant
- Attract private and public sector stakeholders to invest and participate in HIE.

To achieve these ambitious goals with the limited resources available and a very tight timeline, we have narrowed the focus for the first phase of our work to the following:

- Design the first phase of the “thin layer” that comprises shared components of statewide HIE
- Identify and establish the initial governance arrangement for the statewide HIE
- Complete the strategic and operational plans required for the federal HITECH grants

The purpose of this document is to share with the community the progress we have made over the first few months of work. Specifically we will highlight:

- The findings from our requirements gathering
- A recommended approach to shared statewide HIE and governance
- Our current understanding of the status of HITECH
- Next steps

Our objective is to get this information in the hands of all interested parties so we can get feedback, make any needed modifications and move forward in a timely manner.

### II. Requirements Gathering

In Late November and early December of 2009 we gathered community input on requirements for governance and shared infrastructure. In defining and structuring the requirements gathering process we made the following assumptions:

- Enterprise applications and infrastructure were out of scope, we would focus on the thin layer of “connective tissue” between enterprises.
- Unlike some aspects of HIT or HII, we believed this thin layer of HIE appealed to a more narrow slice of health industry information technology professionals. As such, we targeted our conversation to this group, rather than the mass market.
- Time was short and we did not have the luxury of multiple passes at the requirements question. We needed to use an expedited and efficient approach the first time through.
- There have been a number of HIE requirements gathering efforts in Washington State and elsewhere. The findings are well known. We made a deliberate decision not to repeat the “mom and apple pie” requirements that are broadly shared (e.g., HIE must be widely available, self-sustaining, highly secure, etc.).
- To express requirements for shared infrastructure we created two buckets; shared services and data types. With services, the suggestion was that rather than use a functional description (e.g., “match patient records”) we use a technical description (e.g., “master person index”). This was somewhat controversial but we believed it worked best for the audience, the objectives and the timelines in place.

- In addressing governance requirements we believed there was more nuance than in the technical requirements area. For this reason we facilitated a more unstructured and open discussion on this subject.
- We believed it was critical for community members to consider HIE as something they would pay for and participate in rather than a theoretical concept of something to be funded with other people’s money. As such, our requirements gathering needed to emphasize relative cost, prioritization and personal/organizational investment.
- It was vital to have an open and transparent process. Rather than convene a more exclusive steering committee or Board, it was important to give all interested parties the opportunity to participate on an equal basis.

To gather the input we held public meetings in Seattle, Wenatchee and Spokane. We had one webcast and we also invited interested parties to share their perspective on our website if they could not make either meetings or the webcasts. Overall we had over 100 people participate from across the state. The audience included a wide geographic spread and a diverse mix of individuals and organizations. However, our initial assessment that a more health industry centric and technically focused group would engage generally proved true.

For shared services and data types we gave each organization that participated money to “spend” and asked representatives to prioritize their preferences by “voting” their dollars. The findings from the process below describe the percentage of total dollars each service/data type received from the voters:

- Shared service capabilities – The Hub was the clear favorite and a Master Person Index/Record Locator Service (MPI/RLS) was the clear number two priority. Standards and security policy finish third and fourth respectively with data transformation not far behind in the fifth position. Repository, directory services and secure messaging finished in the bottom three. Detailed findings are below:

Hub	MPI/RLS	Standards	Policies	Data Transform.	Repository	Directory	Secure Message
26%	20%	14%	12%	12%	7%	6%	3%

- Data Types – Lab and encounters were clustered pretty closely together in the top two. Meds, discharge summaries, images, allergies and ADT comprised another cluster in third through seventh place. Orders, eligibility, immunizations and unstructured data rounded it out as the lowest priority cluster. Patient demographics were not included in the voting but were mentioned by some as a data set of interest. Detailed findings are below:

Lab	Encounters	Meds	Discharge	Image	Allergy	ADT	Orders	Eligibil.	Immuniz.	Unstructured
15%	15%	12%	11%	10%	10%	10%	6%	5%	4%	2%

- **Governance** – A number of business requirements were identified as being important for any HIE governance model including:
  - The ability to take business risk, deliver services, meet customer needs
  - Be representative of multiple constituencies involved with HIE
  - Be led by the private sector with public sector participation
  - Be able to ramp up quickly in the initial phase and evolve as needed over time

A blended model appeared to be the most viable way to meet this broad spectrum of needs. The collective input of the community was that the ideal governance model would facilitate the participation of state government, enable broad-based community oversight and support the efficient delivery and operation of shared HIE services.

In addition to the specific findings above, we also gathered the following more anecdotal findings related our sense of the stakeholders we spoke with during the requirements gathering process:

- The conversations with the community were well attended, open and engaged but somewhat “theoretical” in nature. In general, when queried about the process the feedback we received was positive and confirmed our assumptions and approach.
- We encountered more well established positions and preferences on the governance questions than the technical aspects of HIE. On governance our sense was that there were strong sentiments about specific minimum requirements. With shared infrastructure there was a thoughtful conversation and preferences expressed. However, the predominant sentiment was more focused on general requirements – modest cost, complement don’t replace existing enterprise investments and make sure it will address “meaningful use” requirements for providers .
- While HIE is of great interest among the small policy making and informaticist community it is not a top priority for most in the market during these difficult times. Not surprisingly, enterprise infrastructure and applications are far more prominent on most agendas.
- While not the top priority, there is a desire to see state wide HIE progress in this market. The confluence of public and private sector “carrots and sticks” linked with industry progress offers the most fertile environment for HIE we have encountered. We often heard some version of the comment “we’ve reached the limits of our own investments to solve this problem, we are really hopeful you bring us a good solution that we can adopt.”
- Bottom line; to evolve from the theoretical requirements conversation and take advantage of the interest in moving forward we need to progress to the solution stage and offer enterprises real choices in order to advance the conversation.

### **III. Recommendations**

Our recommendations for the shared HIE components and governance model are derived from community feedback on business requirements, the legislative requirements defined in SSB 5501, the expectations of ONC relative to the HITECH funding opportunity our knowledge of local market conditions and our HIE experience. In reviewing the specific recommendations it is critical to first understand our view of the strategic HIE context in Washington state.

Washington state has a number of health information initiatives in place and several others in various stages of development ranging from almost live to early in the planning stage. These efforts span a wide variety of settings and focus. There are enterprise deployments, integrated delivery system initiatives, geographic community programs, vendor sponsored projects and public sector efforts. Some of these programs focus primarily within an enterprise. However, there are also a variety of inter-enterprise initiatives that are engaged in health information exchange to some degree. The participants in these efforts believe the initiatives deliver value, and they are committed to the projects and the specific

investments they have made in technology. However, none of the projects claim to have solved the “whole” problem. No one we spoke with identified their work as providing the HIE solution for the entire state. The implications of this environment for our HIE work is as follows:

- There will not be a single unitary model for HIE in Washington state any time soon. Instead, HIE in Washington state will progress by linking, strengthening and leveraging existing capabilities. The state-wide solution must fit comfortably within the partially developed HIE market on the ground today
- State-wide HIE is a lower priority than existing enterprise and community efforts, it must be relatively easy and affordable for participants to connect to the state’s HIE
- Functionality in both the governance and technical area will evolve. The next step should be seen as the initial step designed to grow and morph over time in accordance with changing needs.
- To avoid confusion and definitional debates about models and terms it is important to distinguish our work from other HIE efforts. The HIE work addressed in this document is distinguished from other efforts in the following ways:
  - This effort will be identified as “shared” and “state-wide” in focus
  - This effort will be the sole HIE activity sanctioned by HCA in their capacity under SSB 5501 and the HITECH requirement for a single state coordinated HIE (e.g., to help providers meet “meaningful use” requirements)
  - This HIE effort will be the sole recipient of HITECH HIE grant funds

#### A. Shared HIE Components

We are recommending the first phase of the shared state-wide HIE be focused on the following components:

- *A hub for secure exchange of HL7 and EDI messages.* The hub provides a single point of connection for all trading partners. The hub will manage certificate exchange and entity and user authentication.
- *A record locator service (RLS) and a master person index (MPI).* The RLS points to locations for patient records, the MPI facilitates matching of patient identities.
- *A provider directory.* The provider directory identifies health care professionals for information trading partners.
- *Policies, standards and contractual framework.* Common privacy, security and data policies and standards will be needed to support the hub and MPI/RLS. In addition a common contractual framework will be needed to support global HIE.
- *Data transformation will occur at participating enterprises not at the hub.* Data transformation must occur for the HIE to function. Our recommendation is that transformation is better done at the enterprise level, it will not be centrally provided.
- *Data priorities will be established by a critical mass of early adopters.* We have more work to do on prioritizing data types. The data requirements exercise produced less clear cut findings than in the other areas. HITECH and 5501 give us a fair amount of flexibility in selecting initial data sets. The decision to perform data transformation at the enterprise rather than centrally also reduces the need to tightly focus on one or two initial data sets. The answer to the data question will likely depend on which enterprises are willing to “go first,” what their data priorities are and where willing trading partners can be found. It will also be important to distinguish between those who prioritize receipt of a given data set and those who prioritize sending that data set.

We believe the deployment of this capability will rely on early adopters and organizations willing to take a leadership role. Flexibility will be important as organizations and communities will find various ways to use this shared capability. These enterprises and communities will likely move in different directions and at a different pace. Some will use the capability extensively, others less so or not at all. This means the initial offering must be modestly priced and highly scalable to evolve with market demand. The nature of the capability being deployed and the availability of the federal grants makes this more “loosely coupled” model feasible. There are basically two ways to acquire this capability (we have ruled out the build option):

- Purchase an “all-in-one” system that can be rolled out incrementally
- Purchase “best of breed” capabilities for a Hub and MPI/RLS separately

To help assess the optimal purchase approach and gain a better sense of vendors and pricing we are pursuing two tracks. We have contracted with a nationally known independent consulting firm to assess the national market and we are conducting our own assessment of potential local solutions. Our objective is to have a well defined and specific recommendation for how best to acquire the recommended services for consideration and action by the new HIE governance group.

## B. Governance

Our governance recommendations are guided by three important understandings:

- Realistically, there is no opportunity to pass legislation related to HIE governance in the 2010 session. In addition, there is little interest in establishing new public sector Boards and Commissions, quite the contrary the bias is to sunset many of those that exist today. The initial HIE governance solution is going to have to be built upon the foundation of the current lead organization/HCA model.
- We have had a number of conversations with community members relative to OneHealthPort’s current and future role in HIE governance and our perceived strengths and weaknesses. Under our current arrangement we are charged with providing a recommendation on the governance question. We are also obviously conflicted in any discussion of our ongoing role. We have discussed this issue with HCA in its role as oversight agency. We have decided to present the recommendation below and continue the discussions between OneHealthPort, HCA and the community around this specific alternative.
- The crux of the governance challenge and opportunity is the blended set of requirements we uncovered in our community conversation. One key requirement is to be able to assume business risk, potentially contract across multiple vendors and deliver the shared services to the community. This type of functionality is more likely to be found in a business entity such as OneHealthPort. A second key requirement is to provide representation across a broad range of constituencies. This type of functionality is more likely to be found in a qualified not-for-profit. The third key requirement is private sector leadership, coupled with engagement with the state. This points to the continuation of HCA’s oversight role. Our recommendation is built on the balance of these three core requirements.

The governance recommendation involves three organizations:

1. OneHealthPort will continue as lead organization with the following key operational responsibilities:
  - Lead the overall HIE effort, assume business risk and drive adoption
  - Design, purchase and deploy all shared HIE services
  - Develop a business model and pricing for HIE services
  - Create needed policies around privacy, security, standards, etc.
  - Report to the legislature with the other two organizations

2. A qualified not-for-profit would be designated as the community oversight entity. This entity would constitute a representative oversight group which would have the following key responsibilities:

- Review and approve pricing for all “utility” services
- Review and approve privacy and security policies
- Assess and report on consumer and industry access to shared HIE
- Monitor HCA’s administration of the HITECH grant, be positioned to receive future HIE grants
- Report to the legislature with the other two organizations

3. HCA would continue as the state’s oversight agency with the following key responsibilities:

- Administer the HITECH grant
- Resolve disputes between the operational and community oversight organizations
- Write regs if needed in future years (based on recommendations from operational, oversight orgs)
- Report to the legislature with the other two organizations

We have surfaced the following considerations relative to this model:

- Either HCA decides it does not wish for OneHealthPort to continue in the lead role, or OneHealthPort does not wish to continue. In this case we would recommend that the operating and oversight organization be folded into a single organization. In this case, the combined organization could not oversee its own utility pricing and that function would move to HCA.
- A qualified not-for-profit cannot be found. In this case, we would recommend that HCA’s role and the oversight organization roles would be combined. Presumably HCA would then constitute a representative advisory Board to guide its oversight work.
- It is possible that state law will require the oversight of a utility service (e.g., there is only one and its usage is required by most if not all industry participants) be performed by a state agency. If so, we would recommend that the pricing model oversight reside with HCA and that the oversight organization provide guidance on this issue.

We believe SSB 5501 confers the necessary authority to proceed with this model. If OneHealthPort remains in the lead role and the community feedback is supportive of this model, then OneHealthPort as Lead HIE Organization with oversight and assistance from HCA would conduct a procurement and select the community oversight organization. If OneHealthPort does not remain as Lead HIE Organization, then HCA with assistance from OneHealthPort would select the new Lead HIE Organization/Oversight entity.

### C. Business Model

It is too early, with too many unknowns to make specific recommendations on a business model. However, the general model would look something like this:

- Shared HIE Components: The Hub and MPI/RLS have capital and operating costs. Simplistically, the HITECH grant funds would be used to address the capital costs and as much as possible cover all vendor related expenses. The operating costs would be borne by the operating entity and recovered through some form of usage related charge to participating enterprises. This distinction is critical. We believe utilization will ramp up slowly over time. As such, we do not believe we could collect enough revenue at market rates to cover the costs of the vendor and an operating entity.

- **Governance:** The operating entity will cover its costs through its own resources and utilization fees. Initially the oversight entity costs will be covered by HITECH funds. Going forward, the oversight entity will seek grant funds to support its operating costs. If necessary, the oversight entity will also be supported by a portion of the operating fees. Initially, HCA will cover its HIE related costs with HITECH funds, going forward HCA will use appropriated funds to support its work.

#### **IV. HITECH Status**

HCA has the lead role in terms of engagement with the Office of the National Coordinator (ONC) on the HITECH program. HCA has reported to us that ONC has missed their initial funding date of 1/15/10 and at this time has not definitively established a new funding date for the grant. In the interim, OneHealthPort and HCA have agreed to continue to fund necessary project costs that we had hoped would be funded through the grant. With the slipping of the funding date, HCA and OneHealthPort have modified the project plan and targeted 5/15/10 as the new completion date for the operational and strategic plans for HITECH, and the hand-off to the new governance model. HCA will continue to closely monitor the situation and we will adjust accordingly.

#### **V. Next Steps**

Our next step on the shared state-wide HIE project is to solicit community feedback on the recommendations. We will continue with our open model and solicit this feedback through two webcasts. The first webcast scheduled for Tuesday, February 9<sup>th</sup> from 9 am – 11 am will be focused on the shared technical components and the second webcast focused on governance is scheduled for Wednesday, February 10 from 1 pm – 3 pm. This document will form the basis of both conversations. To sign up for the webcasts, please go to [www.onehealthport.com/HIE/index.php](http://www.onehealthport.com/HIE/index.php)

Based on the feedback we receive we will consult with HCA and make any needed modifications to our recommendations. We will then finalize our recommendations, report back to the community and move to implementation. On the governance side, this will involve moving forward with a procurement of some type. Announcements will be posted on both HCA and OneHealthPort web sites.

For the technical components we will be pursuing two tracks. First, we will be assessing the vendor market and evaluating alternatives. Second, we will be setting up one-on-one meetings with enterprises interested in being early adopters and participating in the state-wide HIE. To make progress we must migrate from large group conversations about the concept to individual conversations about purchase and connection. It is not our intent to proceed with a procurement until the new governance model is in place. That new governance model will execute the procurement for the shared HIE capabilities. We would anticipate that early adopters will play an important role in guiding that procurement process.

\*\*\*\*\*

We hope you will participate in the upcoming community discussion of these recommendations. And, we hope some of you will agree to assume a leadership role and become early adopters of the state-wide shared HIE. We look forward to working with you going forward.