



OneHealthPort

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# Washington State Health Information Exchange

## Strategic and Operational Plans

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July 6, 2010

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## I. Foreword

Washington State is pleased to have the opportunity to enter into a State Health Information Exchange (HIE) Cooperative Agreement with the Office of the National Coordinator (ONC). Governor Gregoire designated the Washington State Health Care Authority (HCA) as the recipient of the Cooperative Agreement funds and Richard Onizuka, Ph.D., the HCA's Director of Policy, as the State Government Health IT Coordinator. In April 2009, the Washington State Legislature passed Substitute Senate Bill 5501 (attached in appendix) designed to accelerate the secure electronic exchange of high value health information within the state. SSB 5501 directs the HCA to designate a private sector organization to lead implementation of the act. In October 2009, the HCA designated OneHealthPort to serve as the Lead HIE Organization. The HCA determined that OneHealthPort's lead role would apply not only to SSB 5501, but also in support of the Cooperative Agreement with ONC. In this capacity, OneHealthPort has worked collaboratively with the HCA to prepare these Strategic and Operational Plans in fulfillment of the requirements of the Cooperative Agreement.

In assessing how best to complete the strategic and operational plans and carry out the requirements under the Cooperative Agreement, OneHealthPort and the HCA decided on the following approach:

- Combine the plans into a single document and clearly note the distinctions between the strategic and operational components.
- Limit redundancy by modifying the order of the sections and establishing baseline components early on that can be referenced in subsequent sections.
- Begin with an executive summary to introduce key concepts and organizations.
- Keep the main body of the report concise, and supplement the summary information with detailed appendices where appropriate. Detailed information is provided in the body of the report, where it aids significantly in understanding the subject matter and/or flow. Otherwise, detailed descriptions are found in the appendix.

This approach is the most effective way to organize the work, tell our story and comply with the ONC requirements. We look forward to working with the ONC and our other partners to implement the plans described in the following sections.

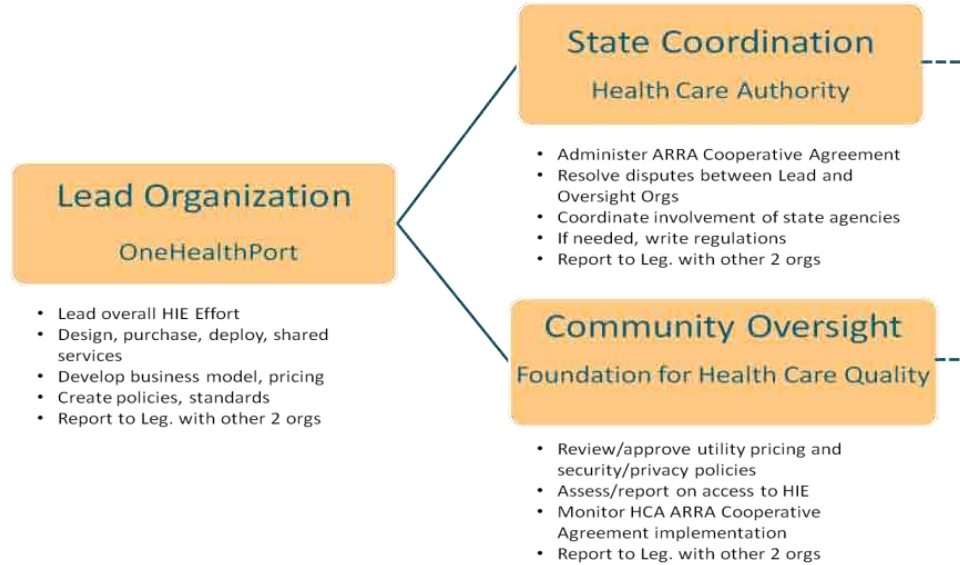
## II. Executive Summary

The work we are about is improvement of patient and population health. At the federal, state and local level, in the public and private sectors, the goals are to make patient care safer, communities healthier, and the delivery of health services more efficient and effective. The key players in bringing this change about are those who deliver, receive and pay for health services. All other stakeholders are in service to these individuals, organizations and systems. Health Information Exchange, the ability to share information efficiently across organizational and geographic boundaries, is a necessary-but-not-sufficient condition to bring about this desired future state. The Washington State HIE will not be all things to all people. The HIE will be optimized to link, to leverage, to support, and to accelerate the important work of those who, by their own actions and investments, demonstrate a commitment to building a better-performing health services delivery system.

**The Environment** – Washington has a variety of Health Information Technology (HIT) and Health Information Exchange (HIE) initiatives in communities and organizations across the state. Electronic Health Record (EHR) adoption appears to be above average compared to the nation as a whole, and there is an active interest in Personal Health Records (PHR). While no community or organization has met all its HIE needs, there is a significant electronic health information infrastructure that serves as a foundation for statewide HIE. Medicaid, Public Health, other state agencies, the Regional Extension Center, the Beacon Community grantee, the Community College Consortia, and various Federal organizations are all collaborating with the HIE under the leadership of Richard Onizuka, Ph.D., State Government Health Information Technology (HIT) Coordinator and Director of Policy at the Washington State Health Care Authority (HCA).

**Governance** – The Washington State HIE governance model, illustrated in Figure 1. will be led by OneHealthPort, a private sector health information technology management organization. The effort will be overseen by the Foundation for Health Care Quality, a community not-for-profit organization. The HCA will coordinate the work of the public sector and other American Recovery and Reinvestment Act (ARRA) programs while providing any additional oversight needed by the Foundation and OneHealthPort.

Figure 1: Washington State HIE Governance Model



**Technical Architecture** – The Washington State HIE architecture, illustrated in Figure 2, is a “thin-layer” model built to harness and leverage the existing HIT/HIE capabilities in the state. The modest scope of the HIE also enhances sustainability of the HIE and reduces privacy and security barriers to information exchange.

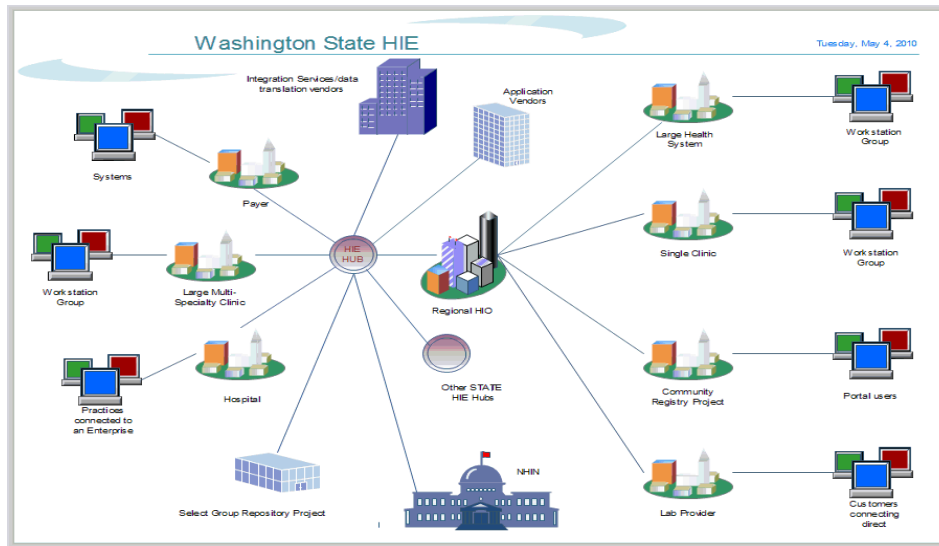
The shared services to be centralized in the HIE include:

- Hub for secure exchange of HL7 and X12 transactions
- Master Person Index (MPI) to match patient identities
- Record Locator Service (RLS) to find where patient data resides
- Provider Directory to identify and locate trading partners
- Standards and conventions to support trusted and efficient exchange
- Management organization to operate the HIE

The services to be decentralized and offered in the marketplace by other parties include:

- Data repository for storing patient information
- Data transformation to edit and translate information
- Applications for viewing, storing and using information

Figure 2: Washington State HIE Architecture - "Thin-layer" Model



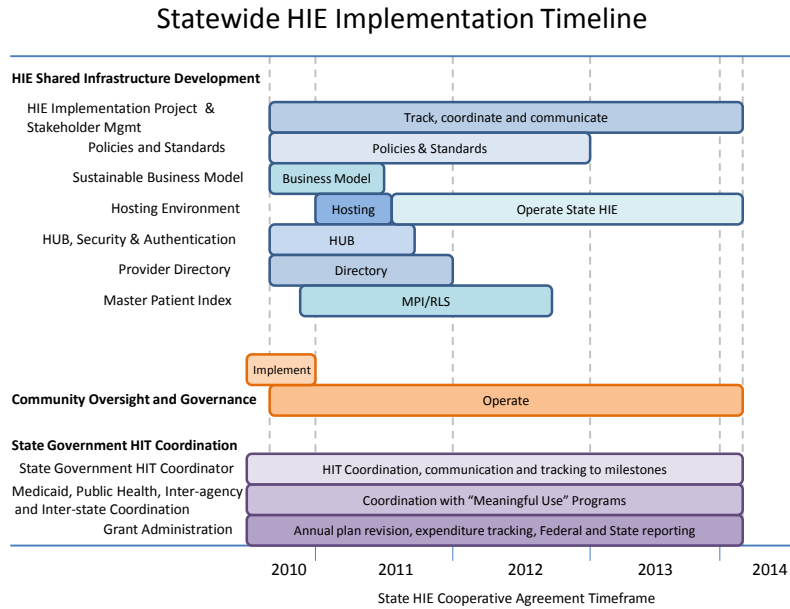
**Finance** – OneHealthPort is donating its time during the planning phase of the project: only out-of-pocket expenses and outside professional fees are being reimbursed with ARRA funds. After implementation, the sustainability model for the HIE is based on customers finding sufficient value in the HIE that they will use and pay for its services. Service development and deployment fees listed below will likely be paid to the shared services vendors in a manner that encourages early adoption and ongoing usage. Additional funding will support related planning and coordination activities with Medicaid, Public Health and other key players. A summary of the initial financial model is presented below. This model, particularly the service fee component, will be revised and enhanced as more work is completed on the Hub, MPI/RLS and other services.

Figure 3: Statewide HIE Initial Cost Estimate

Statewide HIE Initial Cost Estimate	2010	2011	2012	2013	TOTAL
<b>OneHealthPort</b>					
Planning Phase - Reimbursements	\$612,000				\$612,000
Service Development & Deployment	\$500,000	\$2,935,000	\$1,260,000	\$930,000	\$5,625,000
Implementation - Professional Services	\$143,000	\$594,000	\$545,398	\$375,500	\$1,657,898
Indirect Costs	\$12,474	\$67,122	\$36,972	\$31,032	\$147,600
<b>Sub-total</b>	<b>\$1,267,474</b>	<b>\$3,596,122</b>	<b>\$1,842,370</b>	<b>\$1,336,532</b>	<b>\$8,042,498</b>
Private Sector In Kind Match	\$0	\$0	\$48,602	\$218,500	\$267,102
<b>Community Oversight Organization</b>	<b>\$50,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$200,000</b>	<b>\$650,000</b>
<b>HCA</b>					
Planning Phase	\$387,944				\$387,944
Implementation Phase	\$150,696	\$686,262	\$686,262	\$686,262	\$2,209,482
<b>Sub-total</b>	<b>\$538,640</b>	<b>\$686,262</b>	<b>\$686,262</b>	<b>\$686,262</b>	<b>\$2,597,426</b>
State Funded Matching	\$480,655	\$525,603	\$525,603	\$525,603	\$2,057,464
<b>TOTAL ARRA Federal funding</b>	<b>\$1,856,114</b>	<b>\$4,482,384</b>	<b>\$2,728,632</b>	<b>\$2,222,794</b>	<b>\$11,289,924</b>
TOTAL Matching	\$480,655	\$525,603	\$574,205	\$744,103	\$2,324,566
<b>TOTAL State HIE Project</b>	<b>\$2,336,769</b>	<b>\$5,007,987</b>	<b>\$3,302,837</b>	<b>\$2,966,897</b>	<b>\$13,614,490</b>

**Operations** – An initial detailed project plan has been developed, although it is very preliminary in nature due to open questions surrounding service delivery. The plan will be revisited and updated on a regular basis as HIE evolves. A high-level summary of the project plan is listed below.

Figure 4: Statewide HIE Implementation Project Plan Summary



**Legal Policy** – A key benefit of the thin-layer architecture is the opportunity to minimize the security and privacy complications that must be traversed by the HIE. The parties that operate applications and host data, as opposed to the HIE, will be principally responsible for the related data governance and access management issues. The legal and policy infrastructure for the Statewide HIE is centered on a standardized Subscription Agreement between OneHealthPort and participating organizations, supplemented by a set of required policies. The legal framework will use and build on existing standards; especially HIPAA and strong Washington State law, rather than creating new standards. This approach allows for trustworthy, secure HIE participation, protection of privacy and avoidance of unnecessary barriers.

### III. Introduction

The work we are about is improvement of patient and population health. At the federal, state and local level, in the public and private sectors, the goals are to make patient care safer, communities healthier, and the delivery of health services more efficient and effective. Ideally, the progress is measured in expanded access, improved health status, better outcomes and a slowing of the rate of cost increase. Key players in bringing this change about are those who deliver, receive and pay for health services. All other stakeholders are in service to these individuals, organizations and systems. Health Information Exchange, the ability to share information efficiently across organizational and geographic boundaries, plays a small but important role in enabling this change. It is a necessary, but not sufficient condition to bring about the desired future state. In this context, as we crafted our basic strategic direction, debated how best to deploy HIE, and wrestled with the question of scarce resources, we made two important decisions that have shaped the essential character of the Washington State HIE.

- **Leverage those who are already engaged and invested.** By its very nature, HIE is a collaborative activity. It bridges gaps across organizations, domains and information silos. HIE also requires an initial investment on the part of all interested parties to participate. To exchange information electronically, participants must first have data in electronic form and an application to store and view the information. Similarly, most health care performance improvement efforts are collaborative in nature. It is not a coincidence that terms like “Medical Home,” “Accountable Care Organization,” and “Coordination of Care” all denote some form of systemization and sharing across traditional boundaries. Performance improvement also requires investment, commitment, and a willingness to change. In this context, the Washington State HIE is optimized for the individuals and organizations that “put skin in the game,” who demonstrate by their actions an interest in connecting to others, sharing information and improving patient care and community health. Our HIE is designed to leverage their investments and to harness their energies, skills and commitment. We will not attempt to be all things to all people. We do not believe the HIE itself can or should be the organizing agent for change. Nor do we believe the HIE has much to offer or will benefit isolated individuals who have not invested in HIT and are not participating in an organized effort to improve the health of their patients and communities.
- **Solve the business problem.** While HIE is both a business and a policy problem, many observers have commented that the failure to develop robust statewide HIEs in Washington State and elsewhere is at heart a business failure. This school of thought posits that the fatal flaw in most HIE efforts is the inability to define a compelling business case. Based on our lengthy experience, we share this perspective. And we believe this bias is correctly reflected both in the ONC’s emphasis on sustainability and the Washington State Legislature’s decision to designate a private sector organization to lead the HIE effort. Designing, launching and maintaining a statewide HIE is first and foremost a business problem to solve. Only when it is solved does the HIE become a valuable tool to address clinical, administrative and public policy concerns. The design decisions guiding the initial phase of the Washington State HIE will make establishing a

sustainable business model a major priority. This strategy is manifest in our emphasis on understanding and meeting the needs of the critical mass of public and private sector organizations that are prepared to pay for and use the HIE. The focus on sustainability will not occur in a “policy vacuum”. The short-term approach is grounded in the achievement of long-term public policy goals, while the day-to-day decision making will be closely monitored and overseen to ensure the public interest is served.

The model defined by this guiding philosophy is well suited to the current environment. The ONC recently described the challenges it faced in trying to disburse funds rapidly in support of meaningful use without having the luxury of first finishing the development of its own internal infrastructure. One result of this process has been some “course corrections” as ONC conducts its own rapid improvement process.

OneHealthPort and the HCA are very familiar with the challenges facing the ONC, and we are very supportive of the general approach. We too feel the need to simultaneously design the ship, build it and sail it. This means we need to balance the immediate needs of the business side with the longer-term policy concerns. It also means we need to be aggressive and take action now, without always having a precise sense of the path ahead. Our goal is to achieve the well-defined shorter-term objectives, largely around meaningful use, while being directionally accurate in regard to longer term strategies.

Our work is guided by these initial operating principles:

1. The desired objective is improved patient and population health; the technology is only a means to achieve this end.
2. Committed and organized leadership in the public and private sectors will be engaged to drive business success that is sustainable over the long-term.
3. The means to adapt, innovate, and maintain progress will be developed and institutionalized.
4. Substantive short-term “wins” will be prioritized
5. In Washington State, the HIE will not do it all: the combined capabilities and infrastructure of the health care community will be leveraged to achieve the goals of the program.

This practical approach results in strategic and operations plans that are more detailed in some areas than in others. In some respects we are well underway, while in other areas we can identify the direction, but not much more. We have strong commitment with some partners, while other partners are preoccupied with trying to plan, build and act in a compressed time frame. In the sections that follow, OneHealthPort and the HCA have distinguished where our approach is well developed and where it is in a more formative stage. We greatly appreciate the ONC’s patience, tolerance for uncertainty and the agency’s non-prescriptive approach.

## IV. General Topics

A. Strategic Plan: This section of the strategic plan discusses key topics including 1) an Environmental Scan, 2) Coordination with Medicaid, 3) Coordination with Medicare and other Federally Funded Programs, and 4) Participation by Federal Care Delivery Organizations

### Environmental Scan

An environmental scan was performed during January through April, 2010, to assess HIE readiness and HIT adoption across Washington State. Key health care organizations and HIT leaders from all regions of the state were interviewed to help us learn about the current “state of HIT.” Qualitative information was gathered on an informal basis. The findings from this scan should be viewed as a “sense” of the respondents’ perspective on HIE readiness and HIT adoption in their communities. It is not a formal qualitative or quantitative survey, although work is progressing on development and deployment of such a survey at the time of this writing.

The following areas were discussed during the interviews:

- Adoption of HIT and readiness for adoption of HIT
- Current HIE capabilities and readiness
- High-value electronic data exchange
- Telehealth, telemed, and broadband capabilities
- Specific interaction with Medicaid, Department of Health, and federally funded programs

Information collected from the interviews was summarized by region and is presented in the *Environmental Scan Summary Document – May 2010* that can be found in the Appendix.

### Adoption of HIT and Readiness for Adoption of HIT

The level of EHR adoption in Washington State appears to be heavily influenced by four factors: the presence of a more competitive market, sponsorship by local enterprises, the presence of a more organized system of care and/or the prevalence of a single vendor solution. The presence of any of these four factors is consistent with higher levels of EHR adoption in a community. In communities where these four factors are not present, EHR adoption appears lower. In general, Washington State has higher than average levels of EHR adoption. In both the low and high EHR adoption communities, EHR use appears to be at the lower end of functionality. Utilization of full EHR functionality is the exception, not the rule.

The Washington State HIE has not been designed to drive adoption of the underlying EHR/HIT infrastructure. Our efforts will be targeted at supporting information exchange for those already engaged in making the migration from paper to electronic systems. Findings from the scan indicate that

there is a rich opportunity for the HIE to leverage the existing “electronic community.” It also indicates that there will continue to be portions of the state that are less able to benefit from the work of the HIE because they lack the necessary technology to participate.

### Current HIE Capabilities and Readiness

The interviews revealed various levels of HIE readiness and data exchange by region, by provider and by data type. Much of the current HIE is typically supported through point-to-point interfaces and was implemented in many cases to solve specific local trading partner needs. Not surprisingly, HIE adoption and readiness is correlated with EHR adoption. Few regions across the state have high functioning HIEs in place and none have solved the whole problem. Even for the most highly developed HIEs, participating providers report that electronic data sharing is still uneven and incomplete. This finding highlights the opportunity for the Statewide HIE to improve on the point-to-point connectivity model with a more efficient Hub design.

Many of the existing HIEs evolved from a “cross-community” exchange of data elements driven by either a specific vendor or a large enterprise that hosts and staffs the HIE. Based on our interviews, the current HIEs are largely seen as facilitating transactional exchange as opposed to systemically improving the overall performance of the community’s health system and/or local population health care outcomes. However, several communities are seen as moving in this direction. We do not believe the HIE itself is the right entity to apply information in support of performance improvement. But we will assess mechanisms that the HIE might apply to enable performance improvement and support other broader trends in the local market place.

### High-Value Electronic Data Exchange

In the more “high functioning” HIE/HIT communities, much of the existing exchange appears to revolve around interfaces linked to ancillary providers, such as lab, imaging, and pharmacy vendor systems. Information typically flows into the EHR as opposed to moving between EHRs. Immunization information exchange appears to follow a similar pattern. Washington State has a fully functional, state-sponsored immunization registry, with HL7 capabilities, over 100 one-way HL7 interfaces, and 13 bidirectional interfaces. EHRs are more ready to export data than to import it, according to the experience of CHILD Profile staff. As such, the data flow tends to be “one-way.”

A very limited number of communities have achieved impressive adoption rates of e-prescribing. In these cases adoption appears to be the result of intensive efforts by the sponsoring vendor. Workflow issues, an ambiguous business case and data completeness issues continue to retard the adoption of e-prescribing in the broader community. We believe the HIE can help expand the current data flows and encourage more “two-way” exchange. While it is unlikely the HIE can solve work flow issues, we have and will continue to try and improve data completeness by encouraging more local organizations to populate the existing medication exchange infrastructure.

### Telehealth, Telemed, and Broad Band Capabilities

Washington State has been actively advancing telehealth and broadband technologies for several years. The effort has been targeted in the more rural areas of the state. A number of organizations including the Washington State Department of Information Services and the Association of Washington Public Hospital Districts (AWPHD) have led the effort. These organizations have secured significant grant funding to accomplish their objectives. The HIE is engaged in conversations with AWPHD and is exploring ways to leverage existing and planned broadband and telehealth capabilities within the larger HIE framework.

### Specific Interaction with Medicaid, Department of Health, and Federally Funded Programs

A topic of high interest in many of the interviews conducted for this scan was the EHR Incentive Payment Programs for Medicaid and Medicare and how to meet “meaningful use” criteria. Organizations with more sophisticated EHR systems are preparing to make the modifications needed to meet “meaningful use” measures. Small to mid-size provider groups are concerned about their ability to meet the criteria and/or adopt HIT. Providers and organizations are also concerned about the requirements needed to comply with the public health reporting and HIE requirements for “meaningful use.” The overarching theme during these conversations was interest in compliance, but not at the expense of existing HIT investments.

Health care communities that share health care service areas with the Department of Defense (DOD) and Veteran’s Administration (VA) medical facilities expressed great interest in data sharing. This is particularly important as these communities often provide “overflow” care for the enlisted and veteran populations. The key barriers mentioned to achieving data exchange across the care continuum were legal constraints and government privacy and security regulations at DOD and VA. The HIE is not positioned to address all of the providers’ concerns about “meaningful use” (e.g., the requirements defined in regulations, the need to purchase and adopt an EHR, etc.) However, a top priority of the HIE is assisting providers interested in meeting “meaningful use” requirements to exchange information across enterprises.

### Other Observations

- Washington State does not currently have a credible way to measure EHR adoption and to gauge progress in this area. Similar issues exist in measuring “meaningful use” and the advancement of the Statewide HIE. Work is underway to develop tools to address some of these shortcomings.
- Not all EHRs are created equal. In addition to measuring adoption, it is important to distinguish the nature of the EHR being adopted.
- Washington State has a statewide immunization registry that is highly functional and widely adopted. Over 90 percent of about 1,200 practice sites administering immunizations to children

are enrolled and contribute data on a regular basis. Many family practice clinics also are enrolled, and the registry contains millions of vaccination records for individuals of all ages. Currently, the CHILD Profile system has HL7 real-time or HL7 batch one-way data exchange with over 100 practice sites using 13 different EHR products. Two products (13 practices) have bidirectional exchange with the registry. The registry has a waiting list of providers eager to connect their EHRs with the system. The main barriers are lack of readiness on the EHR side, the cost to providers of an EHR interface, and limited staff resources on the CHILD Profile team. The Hub to be offered by the Statewide HIE should accelerate progress in this area.

- Many providers across the state currently make use of a robust, cross-system identity management and authentication system. This capability will be leveraged in the advancement of the Statewide HIE.
- The major hospital systems and large medical groups in the state are all EHR adopters, and each is well positioned to share data with the Statewide HIE. These community HIT leaders were recruited to participate in the development of the HIE. Their support is critical to the initial HIE implementation and sustainability.
- Smaller, rural hospitals and provider practices are far more inconsistent in their level of EHR adoption and HIT use. Many will be challenged to meet the “meaningful use” and eligibility criteria necessary for participation in the EHR Incentive Payment Program.

#### Medicaid Coordination

The HIE project, in collaboration with state Medicaid, will identify opportunities to leverage resources and jointly plan activities that will integrate the HIE Strategic and Operational Plans with the state Medicaid HIT Plan and the Electronic Health Record (EHR) Incentive Payment Program. This effort includes coordination in three key areas:

- Current assessment of the HIT landscape in Washington State
- Development of an envisioned future state and plan for State Medicaid HIT activities
- Implementation of the Electronic Health Record Incentive Payment Program

#### Current Assessment of the HIT Landscape

The environmental scan performed for the Statewide HIE was conducted in coordination with State Medicaid. The information from the scan provides insight on the status of HIT use by region, and highlights key areas of overlap and integration. The scan also uncovered areas where more work needs to be done, such as:

- How the Statewide HIE aligns with the existing Medicaid Management Information System (MMIS), as well as interoperability with public health databases for the purposes of supporting “meaningful use”

- Medicaid and non-Medicaid providers' HIT adoption status, EHR type, capabilities, and readiness for "meaningful use"
- Medicaid's role in working with the Regional Extension Center to encourage EHR adoption and participation in the incentive program

#### Development of State Medicaid HIT Plan

State Medicaid, in coordination with the HIE project, is in the early phases of developing a five-year HIT plan. The purpose of the plan is to develop a common vision for:

- Medicaid's MMIS integration with future HIT/HIE initiatives
- The EHR Incentive Payment Program deployment across the statewide health care community
- Changes to the MMIS to accommodate the future vision of the Medicaid Information Technology Architecture (MITA) framework 2.0
- Identifying/meeting unique needs of rural providers and patients
- A HIT roadmap to guide Medicaid's participation in existing or planned federal, regional, statewide, and local HIT/HIE initiatives.

Key points of intersection include the MMIS integration with the Statewide HIE, and the role the Statewide HIE and the public health agencies will play in assisting providers to meet "meaningful use" criteria for the EHR Incentive Payment Program. Work to identify how best to address these intersection points is currently underway with completion scheduled for fall. Final options will be incorporated into the State Medicaid HIT Plan as well as updated in the State HIE Strategic and Operational Plans.

#### Implementation of the EHR Incentive Payment Program

The Statewide HIE will play an important role in giving eligible providers an option to meet meaningful use criteria with respect to electronic health information sharing. Once the Center for Medicare and Medicaid Services (CMS) releases the final rules for "meaningful use," the HIE, the public health laboratories informatics team at the Department of Health and the Washington and Idaho Regional Extension Center (WIREC) will work closely with State Medicaid to develop a shared approach to implementation. This approach will address how to implement the CMS rules for identification of eligible providers, options for eligible providers to meet the "meaningful use" criteria, and establishment of measures and methods to monitor Medicaid and non-Medicaid providers' use of certified EHR technologies in a meaningful way.

The Statewide HIE is jointly developing a longitudinal provider survey instrument with State Medicaid and the WIREC to measure EHR adoption, readiness for adoption, and ability to meet "meaningful use" criteria. The survey instrument is scheduled for testing in July, execution in late summer and analysis of survey data in the fall.

## Medicare and Federally Funded Program Coordination

The Statewide HIE has identified a variety of federally funded programs that might relate to our work in Washington State. The programs listed below represent those identified as first priorities for collaborative outreach. As the Statewide HIE project advances into later phases of implementation, other programs will be assessed for engagement opportunities.

- **Medicare** – Early discussions with State Medicaid regarding the EHR Incentive Program implementation surfaced the need to learn more about Medicare’s plans for rollout of their incentive program. This high-priority activity has been incorporated in the project plans for State Medicaid and the HIE projects. Initial contacts have been made with CMS Region X to explore next steps in this important collaboration.
- **Epidemiology and Laboratory Capacity (ELC) Cooperative Agreement Program (CDC)** – Representatives from the Washington State Department of Health are providing information to the HIE project with respect to this public health reporting responsibility and the linkage of this work and proposed ELC supplement(s) to the public health “meaningful use” reporting criteria. They are also monitoring policy and position statement work underway at the CDC in support of the HIE and meaningful use efforts.
- **The Washington State Department of Health (DOH)** – The DOH seeks to further their implementation of various projects at the state Public Health Laboratories (PHL) and to be prepared to satisfy the stage 1 “meaningful use” criteria. All proposed activities have already been initiated by DOH, but new funding will provide the project with full-time dedicated staff members and thus a significantly accelerated project timeline. For this project, DOH will conduct the following activities: implement all of the laboratories into the centralized Laboratory Information Management System (LIMS), to include all test types and operational procedures; conduct a review of the LOINC and SNOMED codes for all tests; for each laboratory, program the LIMS system to be able to send HL7 messages to the DOH electronic laboratory reporting system; and conduct quality assurance activities to make sure that the electronic laboratory reporting is as good as the traditional paper reporting. Once this project is completed, the Washington State Public Health Laboratories will be fully implemented into a single centralized LIMS, will be reporting 100 percent of their laboratory results to public health electronically, and will have made sure that the quality of their reporting is accurate and reliable.
- **Enhancing the Interoperability of Electronic Health Records (EHR) with the Washington State Immunization Information System (IIS) (CDC)** - This proposed project will improve the completeness of immunization histories in the IIS available to clinicians and public health, improve the timeliness of immunization data submission to the IIS, improve the quality of IIS coverage assessments, and improve the data available to other public health systems. This new project would allow Washington State to build on existing successes and experiences, while

providing resources to develop new strategies for overcoming known, as well as newly identified, barriers to successful electronic data exchange using HL7 messaging standards.

- **Indian Health Services and Tribal Activity** – In February, the HCA convened an information-gathering session with various tribal entities across the state. The purpose of the session was to gain understanding of tribes' current HIT activities, future plans for HIT adoption and expansion and opportunities for collaboration, particularly with respect to funding Indian Health Services obtained through the ARRA legislation. Tribes were invited to participate in the Statewide HIE efforts through the stakeholder processes established for all interested parties.

The HIE has also initiated discussions with Federal Care Delivery Organizations. Two key federal care delivery organizations are partnering with the HCA and OneHealthPort to advance statewide HIE in Washington State. Representatives from these organizations are participating in the HIE Leadership Group and are providing advice and recommendations for the initial phase of technology implementation.

- The Madigan Army Medical Center (MAMC) of the Department of Defense at Joint Base Lewis-McChord has been a long-term partner in Washington's State's HIT initiatives. MAMC has worked in a parallel capacity with the HCA's Health Record Bank (HRB) pilot communities and rolled out an HRB model for enlisted personnel. MAMC is also a high priority information trading partner for a number of private sector organizations in the Tacoma area.
- The Seattle Veterans Administration (VA) is another Federal Care Delivery Organization with a long history of innovation and collaboration. Representatives from the VA's health informatics team participated in privacy/security and HIT infrastructure work groups and were key representatives on a 42-member Health Information Infrastructure Stakeholder Advisory Committee for Washington State's early forays in HIT. The VA is also engaged in a variety of initiatives to exchange information with priority trading partners in the public and private sector.

B. Operating Plan: This section of the operating plan discusses key topics including 1) Coordination with Other States, 2) Coordination with Other ARRA Programs

#### Coordination with Other States

Coordination of inter-state HIE activities is in the early planning phases. Conversations with neighboring and regional states have revealed the following:

- States are currently focused on *intra*-state HIE activities (planning and implementation) and are heavily engaged in garnering the support of stakeholders to participate in community and statewide HIE efforts.
- *Intra*-state efforts are surfacing policy issues that will require research, discussion and recommendations for next steps within state boundaries, before advancing across state lines.

- *Inter*-state policy and legal issues need to be addressed in the near term because of the implications for care communities located on state boundaries that are trying to participate in more than one HIE initiative.

Washington State, along with Alaska, Idaho, Oregon and California agreed to arrange quarterly check-in calls, starting in summer 2010, to share progress, identify policy and legal barriers to successful HIE implementation (on both intra- and inter-state fronts), determine dependencies among state activities and discuss next steps for establishing a more formal process of inter-state coordination.

Washington State is also making progress on international information sharing. In October 2009, the Secretary of the Washington State Department of Health and the Minister of Healthy Living and Sport of the Province of British Columbia signed a memorandum to further the goal of sharing public health information. The Memorandum of Understanding facilitates the sharing of health information to permit prompt and effective identification of infectious disease and other agents hazardous to public health in the Pacific Northwest region of North America. Opportunities to use the Statewide HIE to support this effort are being monitored by the Washington State Department of Health liaison to the Statewide HIE project.

#### ARRA Program Coordination

In addition to providing oversight for the Statewide HIE, the State Government Health Information Technology (HIT) Coordinator is also coordinating the other ARRA-HITECH programs in Washington State. The eHealth Collaborative Enterprise (eHCE) Project Team was created to serve in this role. The team holds bi-weekly meetings where ARRA program participants share updates, surface issues and identify ways to expedite HIE implementation.

The State Government HIT Coordinator communicates aggregated information to ONC about these programs and overall progress on ARRA-HITECH activities underway in Washington State. The Coordinator also provides updates to stakeholders through public HIT Forums and bi-monthly newsletters as well as updates to Washington State legislators, policy-makers and staff. ARRA-HITECH programs currently underway in Washington State include:

#### *Washington and Idaho Regional Extension Center (WIREC)*

The WIREC is a collaboration of organizations led by Qualis Health, the Medicare Quality Improvement Organization (QIO) for Washington and Idaho that works with target provider populations to:

- Disseminate information about “meaningful use”
- Provide links to information about the EHR Incentive Payment Program from CMS
- Provide technical assistance and coaching for EHR adoption, establish and maintain networked IT communities to share learning, and provide peer-to-peer networking for “meaningful use” of HIT and certified EHR technology

Key coordination provided by the State Government HIT Coordinator includes collaboration with State Medicaid, public health and the Statewide HIE for the EHR Payment Incentive Program; and collaboration with the workforce training program for HIT professionals to provide trained resources for provider organizations.

#### Community College Consortia to Educate Information Technology Professionals in Health Care

This ten-state consortium led by Bellevue College, headquartered in Bellevue, Washington, is coordinating efforts to train IT professionals in:

- Practice workflow and information management redesign
- Clinician/practitioner consulting
- Implementation support and management
- Technical/software support and user training

In Washington State, Bellevue College will implement ONC-developed HIT curricula and subcontract with other Washington community colleges to do the same. Bellevue College is planning to implement a newly created, ONC approved certificate for Ambulatory Practice Office Managers. Through recommendations from the State Government HIT Coordinator, Bellevue College is working closely with the WIREC and Swedish Medical Center to provide internships to students, and seeking employer engagement to facilitate job placement for program graduates.

#### TeleHealth/TeleMed/Broadband

Several activities are underway in Washington State to advance broadband to rural hospitals, clinics and Public Health Districts.

- In March, an \$84.3 million grant was awarded from the Department of Commerce's National Telecommunications and Information Administration's (NTIA) Broadband Technology Opportunities Program (BTOP) to the Northwest Open Access Network (NoaNet). This investment will allow NoaNet to deliver new and enhanced broadband capabilities to some of the more remote regions of the state by adding 830 miles of fiber and eight new microwave sites to their existing high-speed network. Among other benefits, the project plans to directly connect the Jamestown S'Klallam Tribal Center, library and clinic with the Shoalwater Tribal Center and clinic, as well as connect the Makah Tribal Center and clinic.
- The Washington Telehealth Exchange coordinated by the Association of Washington Public Hospital Districts is evaluating proposals for the first phase of the Rural Health Care Broadband Pilot Program initiated by the Federal Communications Commission. The first phase of this pilot entails design of the network infrastructure to connect providers for telehealth, telemedicine and the exchange of electronic clinical data. The Washington Telehealth Exchange is working with the Statewide HIE to coordinate efforts as these projects move forward.

The State Government HIT Coordinator, in cooperation with the Washington State Department of Information Services is serving in an information sharing and coordinating capacity for communities and organizations interested in participating in these efforts.

#### Beacon Community of the Inland Northwest (BCIN)

Inland Northwest Health Services (INHS) of Spokane, Washington, was awarded a Beacon Community Grant from ONC in May 2010. INHS, the HCA, OneHealthPort and WIREC are all working constructively to coordinate and integrate the work of the Beacon community with the larger HIE effort and ARRA efforts. The State Government HIT Coordinator, the CEO of OneHealthPort and the Director of the WIREC all serve as members of the steering committee for this program. The steering committee will play a critical role in providing guidance for all project activities, assuring the needs of all stakeholders are represented, and enabling the coordination of the BCIN work with other HITECH activities, including the Washington and Idaho Regional Extension Center and the state Health Information Exchanges in Washington and Idaho. Similarly, leaders from INHS are involved in various capacities with the HIE project, OneHealthPort and WIREC. As the HIE, the Beacon Community and WIREC mature their work, all parties will seek opportunities to share technology, other resources and lessons learned.

#### Coordination with Other ARRA Programs

As other ARRA-HITECH funding program announcements are made and grants are awarded to Washington State, the State Government HIT Coordinator will establish a similar coordination and communication model to assist the programs in obtaining and sharing important information to support their efforts and leverage the resources and learning of programs currently underway.

## **V. Governance**

A. Strategic Plan: This section of the strategic plan discusses key topics including 1) Collaborative Governance, 2) The State Government HIT Coordinator, and 3) Methods to Ensure Accountability and Transparency

Washington State's approach to HIE governance is driven by past experience, recent state legislation and current market realities. In both the public and private sectors, Washington State has a long history of engagement and collaboration dating back twenty years to the beginning of health information exchange efforts and continuing through to the present day. In 1990, Washington State participated in the Hartford Foundation's Community Health Management Information System (CHMIS) program. CHMIS was the first systematic effort to deploy a health information infrastructure across enterprises for the purpose of acquiring data in support of quality measurement and management. In 1993, the Washington State Legislature passed a comprehensive health care reform bill that included a provision

to create a statewide health information system, the Health Services Information System. In the mid-'90s, Washington State participated in a variety of Community Health Information Networks (CHINs) and in the late '90s, several firms in the state were active in the "dot.com" era of HIE.

While these early efforts ultimately proved unsuccessful, a great deal of experience was gained in shared health information initiatives, a strong collaborative ethic was nurtured and each succeeding effort departed from a higher point on the learning curve. The governance model used for the current HIE effort is derived from some of the hard lessons learned in past initiatives.

There are four organizations, and one piece of state legislation that play a prominent role in the collaborative HIE governance model for Washington State. Each entity has an important role to play in the HIE structure, each represents a number of other key constituents, and each contributes a share of the most essential element for all successful HIE initiatives – leadership.

#### The HCA

The HCA is a cabinet-level agency responsible for managing and purchasing health benefits for more than 400,000 Washingtonians, including state and public employees and low-income individuals. The HCA has long been a source of public policy innovation and entrepreneurship. Since its creation in the late 1980s and affirmed with recent legislation, the HCA has played a central role in the Governor's health improvement and health reform efforts. The agency oversees a mix of health care programs and provides leadership and coordination for numerous state and federal legislative and federal grant initiatives:

#### Health Care Programs

- Basic Health is a state-sponsored program that provides affordable health care coverage to low-income Washington residents.
- Community Health Services (CHS) promotes access to quality and affordable health care for the uninsured, underinsured, and the tribes.
- The primary purpose of Health Technology Assessment is to ensure medical treatments and services paid for with state health care dollars are safe and proven to work.
- The goal of the Prescription Drug Program is to develop an evidence-based program to identify preferred drugs for use by the participating programs (Uniform Medical Plan, Labor & Industry, and Medicaid); make prescription drugs more affordable to Washington residents and state health care programs; and increase public awareness regarding the safe and cost-effective use of prescription drugs.
- The state of Washington, through the Public Employees Benefits Board (PEBB) program, provides medical, dental, life, and long-term disability coverage (and offers optional insurances)

through private health insurance plans to eligible state and higher-education employees as a benefit of employment.

- The Uniform Medical Plan (UMP) is a self-insured, preferred provider health insurance plan available to PEBB enrollees worldwide.
- Today, more than ever, people need access to health care coverage. More than 160,000 Washingtonians are waiting for Basic Health or have lost Basic Health coverage. The Washington Health Program offers residents access to health care coverage.

#### State and Federal Legislative and Grant Initiatives

- HCA facilitates and co-convened (with the Puget Sound Health Alliance) a multi-payer, medical homes payment reform initiative, as directed by statute, aimed at developing and piloting reimbursement mechanisms in support of this innovative care delivery model.
- The HCA provides analysis and activity coordination and implementation support for federal Health Care Reform to the Governor's Health Care Cabinet.
- The Health Insurance Partnership is a program funded by a federal State Health Access Program grant that provides subsidized health insurance options for small businesses in Washington State. Low-income participants and their dependents can receive a subsidy to help pay their health insurance premiums from the federal grant.
- For the past five years the HCA has led several efforts to explore ways to advance the use of Health Information Technology. Using a public/private collaboration model and with guidance from the Health Information Infrastructure Advisory Board (HIIAB), in 2006 HCA produced an early roadmap for health information technology advancement in Washington State. Efforts in this time span have also included provider adoption of electronic medical records, health information infrastructure development, and pilots for consumer-centric health record banks.

Based on its skilled work force, diverse experience and familiarity with HIT/HIE issues Governor Gregoire designated the HCA to head up the state's ARRA work in the electronic health information arena. Recently, The Governor has also proposed to merge HCA with the state's Medicaid program, in order to consolidate the state's health care purchasing leverage. This consolidation further strengthens the agency's capacity to oversee HIE activities in Washington State. HCA also houses the public sector point person for HIT/HIE in state government, Richard Onizuka, Ph.D., the State Government HIT Coordinator. His deputy, Juan Alaniz is also an HCA employee.

#### The Washington Healthcare Forum

The Washington Healthcare Forum is a coalition of doctors, hospitals, health plans and state associations that have joined together to improve the health care system. The Forum devises creative, cost effective solutions to increase the efficiency of the health care financing and delivery system. The Forum's mission is to:

- Streamline and simplify health care financing and delivery across the state
- Advance a public dialogue on sustainable solutions to challenges facing the health care system

Leaders of the organization initially identified two key areas to decrease non-productive work between providers and health plans: administrative simplification and electronic solutions for the secure exchange of information. The Forum works with public officials and community leaders to provide its perspective on public policy issues and to devise solutions to the problems of health care cost, quality and access.

The Forum is an essential piece of the leadership puzzle in that it aggregates CEO leadership across a critical mass of the health care industry. The Forum has the unique ability to take the “if” question off the table about whether major enterprises will participate in the HIE and allow the focus instead to be on how to make progress on HIE. The Forum Board is a “who’s who” of Washington State health care leaders including:

Scott Armstrong  
President & CEO  
Group Health Cooperative

Leo Greenawalt  
President & CEO  
Washington State Hospital Association

H.R. Brereton (Gubby) Barlow  
President & CEO  
Premera Blue Cross

Ken Hamm  
President & CEO  
First Choice Health Network

Don Brennan  
Chair

Jonathan Hensley  
President  
Regence Blue Shield

Don Brunell  
President  
Association of Washington Business

Rod Hochman, M.D.  
President & CEO  
Swedish Health Services

Richard Cooper  
CEO  
Everett Clinic

Gary Kaplan, M.D.  
Chairman & CEO  
Virginia Mason

Diane Cecchettini, R.N.  
President & CEO  
MultiCare

Tom Fritz  
President & CEO  
Inland Northwest Health Services

Tom Curry  
Executive Director & CEO  
Washington State Medical Association

Sydney Zvara  
Executive Director  
Association of Washington Health Plans

John Fletcher  
Vice President/CEO - WA, MT Region  
Providence Health System Washington

## OneHealthPort

OneHealthPort is a Health Information Technology Management Organization incubated by the Forum and incorporated as an independent Washington State for-profit corporation in 2002. The company was founded by seven Forum stakeholders that elected to capitalize OneHealthPort and assume an ownership role. The OneHealthPort investors are a mix of leading northwest health care companies including:

- The Everett Clinic
- First Choice Health
- Group Health Cooperative
- Health Services Northwest (a Swedish Health Services and Providence Health & Services joint venture)
- Premera Blue Cross
- Regence Blue Shield

OneHealthPort was created to assume operating risk and take shared health information services to market. The decision to structure this entity as a for-profit rather than the more traditional not-for-profit Regional Health Information Organization (RHIO) model was predicated on Washington State's experience with grant-funded HIE initiatives in the past – when the grant goes away, so does the service. The founders of OneHealthPort envisioned the company delivering mission critical services to their enterprises and others. They believed it was vital for the company to be self-sustaining over the long term. Their belief was that to be self-sustaining, the company had to run itself “like a business,” and offer services that a critical mass of enterprises would pay for and use. Sustainability was embedded in the company's operating model from the start.

In this context, OneHealthPort's initial effort was a common security service designed to simplify and protect access to provider portals. OneHealthPort deployed the security service to its first customer in 2003. The service was rapidly adopted in Washington State and across the northwest, with more than 35,000 provider organizations and more than 85,000 individuals within those organizations enrolled in the security service today. The service supports over 500,000 secure visits to provider-facing portals each month. Over the course of the last three years, OneHealthPort has complemented the security service with the deployment of additional offerings including:

- A browser-based claim tool targeted at smaller practitioners with well over a million electronic claims processed to date

- A medication information exchange that provides authorized access to medication history and detailed formulary information on 60- 70 percent of privately insured patients in Washington State
- A National Provider Identifier (NPI) database with over 17,000 local entries

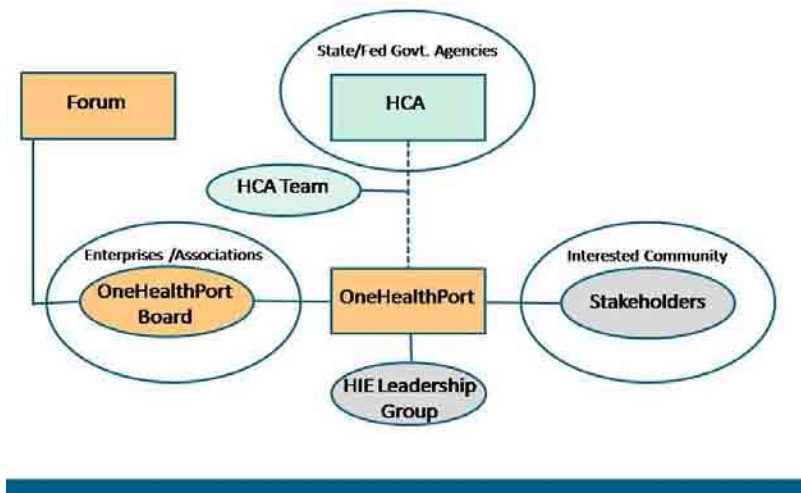
OneHealthPort complements these commercial ehealth services with strategic services focused on process improvement, administrative simplification and health information exchange. The patient process over the last eight years to build a successful and sustainable commercial ehealth business puts OneHealthPort, with the support of the Forum, in a fortunate position to be able to assist the state in implementing legislation designed to improve the efficiency and effectiveness of the health care system.

Substitute Senate Bill (SSB) 5501

The HCA, the Forum, and OneHealthPort were brought together to address HIE through the passage of SSB 5501 by the Washington State Legislature in April 2009. The Act was designed to accelerate the secure exchange of high value data sets (see appendix). The bill is not prescriptive in terms of technology or operational approach. From a governance perspective, SSB 5501 directs the HCA to designate a private sector organization to lead implementation of the bill. The HCA is positioned to provide oversight of the work of the private organization.

In response to the ARRA funding opportunity, the HCA decided to extend the Lead Organization model to also support the ARRA HIE work. On October 2, 2009, HCA designated OneHealthPort as the Lead HIE Organization for Washington State. This designation effectively created the governance model below for the initial planning phase of HIE.

Figure 5: HIE Governance Model for Initial Planning Phase



Roles and responsibilities in this model are as follows:

- The HCA serves as the state coordinating body and is a party to the State HIE Cooperative Agreement. Richard Onizuka and his team work closely with the Governor, Medicaid, the State Department of Health, and other state agencies and principal grantees of the ARRA, including the REC (Qualis Health), the Beacon Community (INHS) and The Workforce Training and Development entity (Bellevue College). The HCA also oversees the work of OneHealthPort as the HIE Lead Organization. An HCA project team works very closely with OneHealthPort on the HIE initiative.
- OneHealthPort leads the implementation of HIE and has multiple accountabilities. Like any other company, OneHealthPort is accountable to its Board. The OneHealthPort Board serves as an operating Board and takes its strategic guidance from the Forum. This tie forges a key link between the strategic private sector leadership of the Forum CEOs and the Statewide HIE initiative. Two CEO members of the Forum, Rick Cooper and Ken Hamm, sit on the OneHealthPort Board, with Rick Cooper as the Board Chair. In addition to its Board accountability, in accepting the Lead Organization role OneHealthPort agreed to be accountable to the larger stakeholder community of interested HIE participants. It is this larger stakeholder community that guides the HIE requirements definition and key design decisions.
- The HIE Leadership Group is comprised of senior executives from approximately 30 health care organizations that OneHealthPort has identified as comprising critical mass for HIE in Washington State. In addition, OneHealthPort has identified each of these organizations as being likely early adopters of the initial HIE service offering, the Hub. These organizations include hospitals, practices, health plans, public payers, public health and ancillary care providers. The senior executives invited to serve on the group are in most cases CIOs. They will have a major influence on their organizations' decision to participate in the HIE (See appendix for a complete listing of HIE Leadership Group members.) As OneHealthPort shifts its focus from high-level requirements to the selection process for a specific vendor, we have tasked the HIE Leadership Group to guide us in the development of the technical and financial specifications. Our goal with this group is for them to embrace the HIE and make it "theirs." We are confident that if we meet the specific needs of the HIE Leadership Group, we will have critical mass for a functioning and sustainable HIE in Washington State.

Along these lines, in the fall of 2009, OneHealthPort, with support from the HCA, conducted an extensive outreach effort to query interested stakeholders about requirements for shared services and governance. We tapped into a large stakeholder community the HCA and OneHealthPort had worked with over the past several years in their respective HIT and HIE initiatives. We used in-person meetings, web casts and online surveys to solicit feedback. The findings from the shared services process will be described in the following section. Key findings from the governance process included a number of business requirements that were identified as being important for any HIE governance model. These findings could be summarized as follows:

- 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

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. Essentially, a blended model appeared to be the most viable way to meet this broad spectrum of needs.

Based on this feedback, the HCA and OneHealthPort decided to continue with the basic Lead Organization model, but strengthen the private sector role. An RFP was issued for a qualified not-for-profit to serve as the Community Oversight Organization. Recently, the Foundation for Health Care Quality was selected as the Community Oversight Organization. The Foundation is the fourth organization featured in the governance model:

#### The Foundation for Health Care Quality

The Foundation is a well-established 501(c) (3) organization that has long focused on shared health information needs in the state. The Foundation is governed by a diverse Board of public and private sector representatives. Under the Community Oversight Organization arrangement, the Foundation will empanel a new operating Board to oversee the work of the Lead Organization. It is important to distinguish that the Foundation is not a co-leader. Consistent with stakeholder preference for a private sector community oversight, the Foundation will review and act on specific elements of the Lead Organization's work. The role of the oversight organization is to help ensure the private Lead Organization is operating in the public interest. Specifically, the Foundation will review and act on the following:

- The pricing model developed by the Lead Organization for HIE shared services
- The privacy and security policies for the HIE
- Accessibility of the HIE

On July 1, 2010, when the Foundation begins to operate in this capacity, the HIE governance structure will take the form illustrated in Figure 6 below.

Figure 6: HIE Governance Structure - Implementation Phase



The governance structure that emerged from the legislative and community process is well suited to the tasks at hand and takes advantage of existing community assets. It also reflects an architectural view that is consistent with the facts on the ground in Washington State and speaks to the experience gained in the past few years. Washingtonians have learned that a consensus-oriented not-for-profit does a better job of building trust and representing diverse constituencies than it does of delivering product to market. Conversely, a business entity does a better job of delivering services at a cost effective rate than it does at representing broad community interests. Finally, a state entity is better suited to marshal public sector resources and oversee the overall market than it is to deliver business services or represent private community interests. The Washington State HIE governance model is a “best of breed” approach. We are confident it will efficiently, effectively and equitably accomplish its tasks.

#### Accountability and Transparency

The concepts of transparency and accountability are a high priority for the Washington state HIE Governance model:

- **Representative organizations** – Each of the four major participating organizations - the HCA, the Forum, OneHealthPort, and the Foundation - represent one or more important constituencies. The HCA brings together public sector agencies, the Forum and OneHealthPort represent purchasers and the health industry, and the Foundation represents all of above - in addition to

other diverse constituencies. Each organization serves as an important communication channel for its component constituencies. The end result is that key potential customers of the HIE are well informed and engaged in leadership roles.

- **Public accountability** – SSB 5501 requires the HCA and lead private organization to report to the legislature on its progress and communicate regularly with all interested participants. The first such report was delivered in November 2009; the next one is due December 1, 2010.
- **Transparent process** – The Memorandum of Understanding between the HCA and OneHealthPort requires open and transparent operation. The two organizations have implemented this approach in their outreach to the community for requirements, the posting of findings, work products, and notices on their web sites, solicitation of comments and feedback, and the online availability of work group products. The guideline for both organizations relative to the Statewide HIE is “no secrets.”
- **Formal oversight** – Both SSB 5501 and the Memorandum of Understanding between the HCA, OneHealthPort and the Foundation establish specific, formal oversight mechanisms. The Foundation has oversight and approval over key elements of OneHealthPort’s HIE operation, including pricing, security/privacy and access. The Foundation also monitors the HCA’s administration of the HIE cooperative agreement. The HCA has responsibility for adjudicating any disputes between the Foundation and OneHealthPort, and enforcing the Foundation’s performance of its oversight role.

B. Operating Plan: This section of the operating plan discusses the key topic of Ongoing Development

As the HIE evolves, the Governance Model will evolve with it. This ongoing development process will occur in several dimensions:

- **The Community Oversight Organization** – The Foundation for Health Care Quality (FHCQ) will begin the process of building the Oversight Organization. This will include hiring staff, appointing a Board, establishing a business infrastructure to support the organization and implementing the operating model. As the Oversight Organization rolls out, the Foundation and OneHealthPort will develop and refine their relationship. Ideally, staff from the oversight organization will work closely with OneHealthPort so they can get up to speed quickly and will understand conclusions reached and the rationale employed. It is important for both organizations to establish a relationship based on openness, respect and collaboration. To be effective, the Oversight Organization will need to engage with OneHealthPort to understand the issues, while at the same time retain its independence as an oversight body. This will require a deft touch and a period of time to find the right approach.

- **The HIE Leadership Group** – In the initial phase of the HIE, the Leadership Group and its technical advisory groups will be the primary venue for community engagement in the operational aspects of the HIE. OneHealthPort and the Leadership Group participants will have to find the right blend of executive engagement from senior leaders and more detailed input from technically knowledgeable staff. This blend will likely change as the HIE matures and the nature of the issues addressed by the Group changes accordingly. The makeup of the Leadership Group may also change as participation in the HIE goes beyond the early adopters and becomes more mainstream. OneHealthPort has significant experience that will be helpful in constituting, leading and assessing work groups to ensure they are representative, well run and focused on the right tasks.
- **The HCA** – The HCA has recently undergone a major organizational change in “merging” with Medicaid. As with any such consolidation, this will be a very challenging exercise. However, the blending of the two organizations should aid the work of the HIE, as both the HCA and Medicaid play crucial roles. On the Medicaid side, the responsibility for the larger “meaningful use” role will be new territory for the agency. They will need to interact with providers as more than just a payer. Similarly, as the coordinator, Richard Onizuka and his team will have to develop partnerships among state agencies that are used to acting independently. In addition, the HCA will need to strengthen relationships with its Federal partners. Partnering is certainly not new to the HCA. They will be well served by past experience forging the new relationships required to coordinate the Statewide HIE.
- **Legislation** – SSB 5501 established a direction and a model. As the HIE moves forward, the Legislature will need to continually assess progress and determine if its public policy objectives are best served through the Lead Organization model or if modification to the governance approach embedded in SSB 5501 is necessary. The Legislature will likely be making this assessment across several dimensions. Is the HIE in place? Is it moving information? Is it sustainable? Is the HIE enabling system-wide improvement? Is governance effective, fair and transparent? Are the core constituencies engaged and properly represented? Ensuring that public accountability and regular reporting occur as required will be vital in allowing the Legislature to keep the guiding legislation current and relevant.

## VI. Technical Architecture

A. Strategic Plan: This section of the strategic plan discusses the key topic of Architecture

The Statewide HIE technical architecture will always be a work in progress. The health care system will evolve, business needs will shift and technology will change. Particularly for a collaborative undertaking where change takes more time than in a typical private enterprise setting, it's important to avoid a sense of finding "the" solution, and remain willing, and even eager, to adapt and evolve. In this context, the architecture presented below should be considered the starting point and the initial phase.

The design of Washington State's HIE technical architecture was driven by three major considerations:

- Previous lessons learned about the primacy of the business case
- The requirements put forth by community stakeholders
- Alignment with key policy objectives embedded in federal and state legislation

The design exercise is essentially understanding, refining, blending and applying these three drivers.

### Business Case

The business face of this effort is the view most private sector constituents will look toward. OneHealthPort has heard from several key stakeholders some variation of the theme, "this has to make business sense for us or my organization won't play." Follow-up discussion almost always leads to the conclusion that the business case for broad based HIE is neither black nor white; it's gray. For each potential value proposition, there is both an attractive component and an element of uncertainty. Past experience, present realities and deeply felt preferences around the HIE business case dictate the following requirements:

- **Leverage existing investments** – The HIE must add value to existing enterprise investments, not seek to replace these investments. As described earlier, Washington State has a number of local health information organizations and enterprises with HIT/HIE capabilities already in place. We see this as an advantage and an opportunity, not competition.
- **Scalability** – The market for clinical HIE is immature. There is great hope for the future, but the expectation should be conservative: volume will build slowly. The technical components must be able to start small and scale up to meet demand as industry interest and readiness expands.
- **Flexibility** – In Washington State, enterprises that are likely to participate in the Statewide HIE have a wide range of capabilities, sophistication and need. In the course of our research, while we did not find an HIO or enterprise that had fulfilled all of their HIE needs, it became clear that diverse participants will use different elements of the HIE in different ways and at a different pace. One size does not fit all.

- **Modest cost** – Even the most enthusiastic proponents of HIE will prioritize their enterprise infrastructure and applications higher than the Statewide HIE. Budgets are tight, and because of the “gray” business case, the “R” in ROI is questionable; as such the “I” needs to be of modest size.

The core requirement dictated by business case concerns can be summarized in three words : less is more.

### Community Stakeholder Requirements

There are a limited number of options available to HIE designers. Depending on how terms are defined and capabilities lumped or split, we believe there are nine major components that must be present over the long term for HIE to occur. Figure 7 below illustrates these core components.

Figure 7: Core Components of HIE

## HIE Components

<p><b><u>Hub</u></b> Secure exchange of transactions/files</p>	<p><b><u>Master Person Index (MPI)</u></b> Match patient identities</p>	<p><b><u>Record Locator Service (RLS)</u></b> Find patient records</p>
<p><b><u>Applications</u></b> Access and manage patient data (e.g., EMR)</p>	<p><b><u>Data Repository</u></b> Store/aggregate data</p>	<p><b><u>Data Transformation</u></b> Translate data to conform to standards</p>
<p><b><u>Directory Service</u></b> Identify and locate providers/entities</p>	<p><b><u>Standards &amp; Policies</u></b> Common frameworks for exchange</p>	<p><b><u>Organization</u></b> Manage and operate shared functions</p>

High-level design questions revolve around phasing and whether to provide components centrally or on a distributed basis. In looking at the table above, we believe the last three boxes - directory services, standards/policies and the management organization - must be central components of the HIE at initiation. It is hard to imagine operating an HIE without these core elements. The choices of centralization vs. decentralization, and phasing, really relate to the other six elements.

OneHealthPort presented this choice to the community stakeholders in the context of “less is more.” OneHealthPort emphasized the need to pay for all shared capability. The stakeholders were not asked what they wanted. Rather, they were asked what they needed and what they were prepared to pay for and use. To highlight the true nature of this choice, we gave stakeholders a fixed sum of dollar bills and required them to spend the money on the components they most valued. Results of the exercise dictated a clear preference for a limited set of shared services that should be offered by the HIE, as opposed to those services likely to be offered in the market by other interested parties.

Shared services to be centralized in the HIE:

- Hub for secure exchange of HL7 and X12 transactions
- Master Person Index to match patient identities
- Record Locator Service to find where patient data resides
- Provider Directory to identify and locate trading partners
- Standards and conventions to support trusted and efficient exchange
- Management organization to operate the HIE

Services to be offered in the marketplace by other parties:

- Data repository for storing patient information
- Data transformation to edit and translate information
- Applications for viewing, storing and using information

Three different views of the Washington State “Thin-Layer” HIE are presented below:

Figure 8: View 1 of Washington State “Thin-layer” HIE

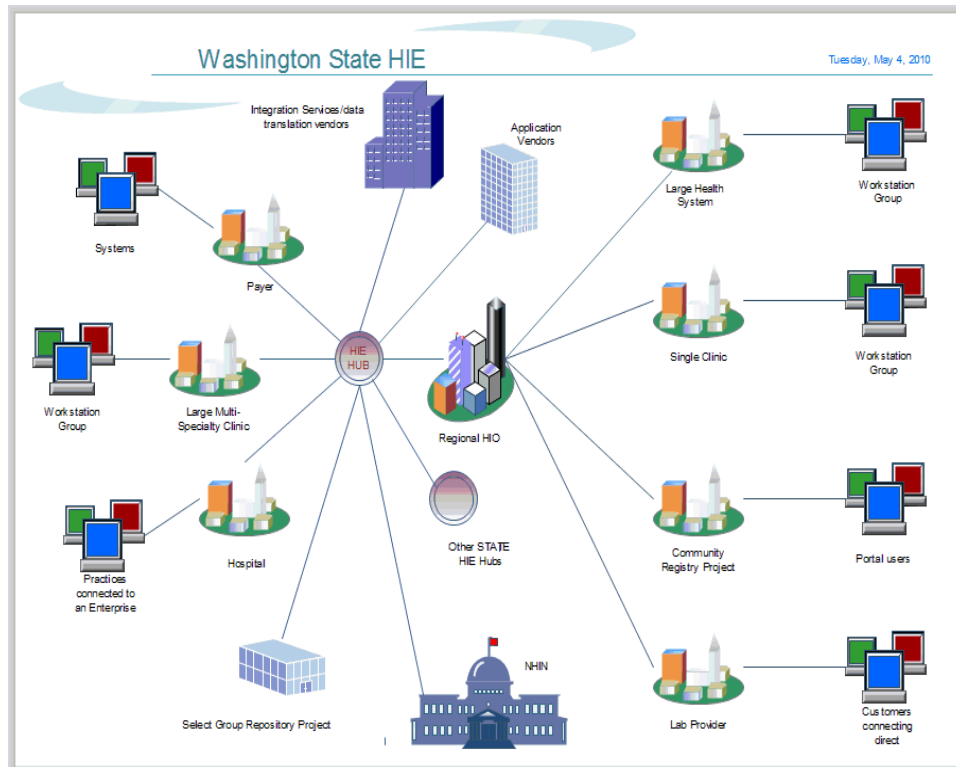


Figure 9: View 2 of Washington State "Thin-layer" HIE

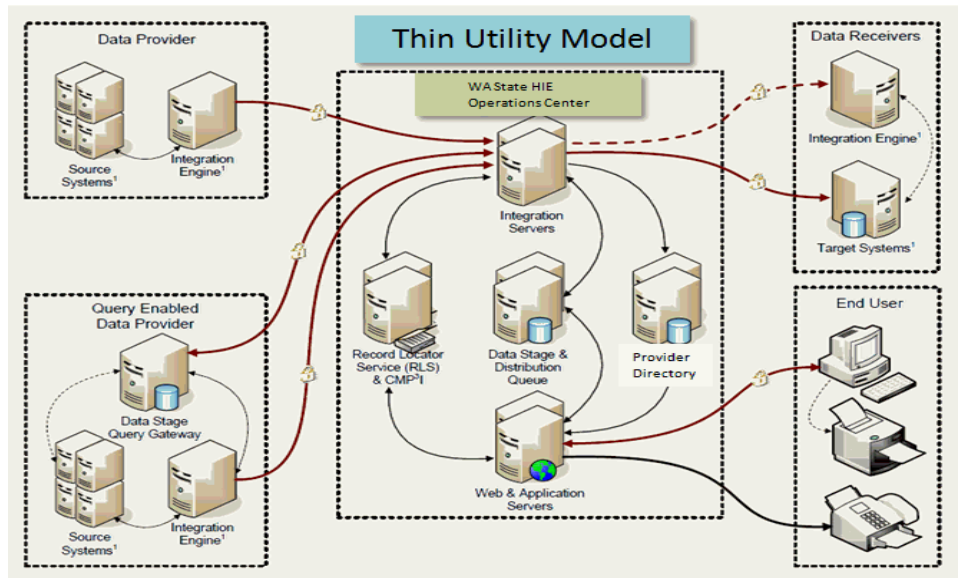
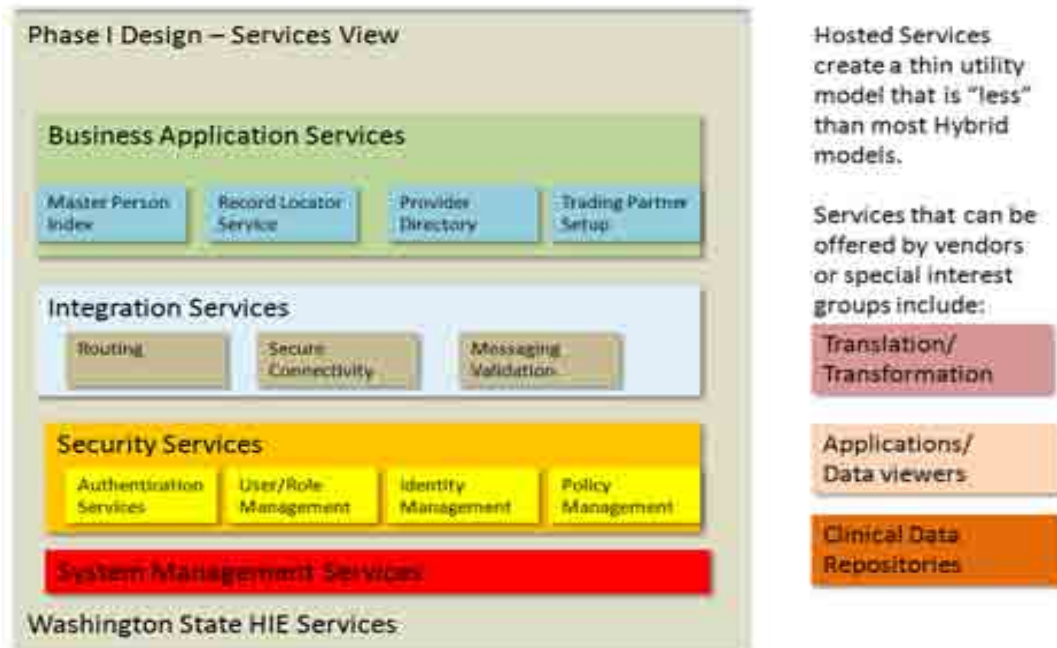


Figure 10: View 3 of Washington State "Thin-layer" HIE



## Key Policy Objectives

The importance of the business case and the emphasis on the business view by most in the private sector does not diminish the importance of the policy objectives. Blending the direction embedded in SSB 5501 and the State HIE Cooperative Agreement surfaces the following key policy requirements for the technical architecture:

- **Improving performance** – Proliferating more boxes and wires is not the objective. Applying HIE to produce better results is the goal. The HIE must support better care management and coordination by increasing the availability of high value data for providers, patients and payers.
- **Patients and Providers** – The HCA has focused significant attention on patient-facing applications. The agency currently sponsors three pilots of patient-facing Health Record Banks. SSB 5501 directs the agency and Lead Organization to ensure the HIE serves both consumer- and industry-facing applications. While the application itself is out of scope, the HIE must be capable of supporting the exchange needs of patients and providers.
- **Meaningful use** – The critical short term focus of the ARRA HIE program is to support the elements of “meaningful use” that require inter-enterprise exchange. The design must ensure deployment of at least basic capability by early 2011 to support “meaningful use” requirements.
- **Privacy and security** – The nature of the HIE Thin-layer Design (i.e., no applications and no data ownership) reduces some of the usual security and privacy concerns for the HIE. However, protecting privacy and security of patient data remains vitally important.
- **Standards based** – The march toward interoperability is predicted on broad-based adoption of national standards and movement away from proprietary approaches.

B. Operating Plan: This section of the operating plan discusses key topics including 1) HIE Components 2) Standards, 4) Meaningful Use 5) NHIN

## Shared Service Components

With the exception of the management organization, OneHealthPort which is described in the Governance section, each of the proposed shared HIE services is described below in more detail.

### Secure Hub

The purpose of the Hub is to support and enable secure exchange of HL7, X12 and other similar transactions. OneHealthPort had extensive discussions with stakeholders about specific use cases for the Hub. High-level use cases for the Hub developed with stakeholders input are summarized in the appendix. In the aggregate, these use cases encompass key priorities for ARRA and SSB 5501 to support the achievement of “meaningful use” for interested providers.

The following list provides the data exchange priorities surfaced in the use cases:

- Admission, discharge, transfer and patient demographic details from hospitals to health plans
- Admission, discharge, transfer and patient demographic details from hospitals to primary care/consulting physicians
- Eligibility, benefits, claim status checking
- Medication histories in emergency departments and hospitals
- Lab results delivered to physicians and clinics (and reportable conditions to Public Health Agencies)
- Medication histories and drug formularies to eprescribing applications used by physicians
- Clinical messaging service to provider portals
- Emergency department hospital discharge summaries to physicians and clinics
- Chart summaries to emergency departments and hospitals
- Chart summaries to physicians and clinics
- Radiology reports to emergency departments and hospitals
- Radiology reports to physicians and clinics
- Reporting to registries
  - Immunization reporting to state registry
  - Biosurveillance tracking via a regional registry
  - Electronic submission of notifiable conditions to public health agencies
- Matching patient records – master person index
- Matching provider records – provider directory
- Finding patient records – record locator service
- Chart summaries and results reporting to patient health records

The high level use cases suggest the following basic business requirements for the Hub service:

- Enterprise business-to-business (B2B) gateway solution
  - Secure messaging
  - HIPAA compliance, 21 CFR Part 11 compliance, HITSP compliance
  - Highly scalable to very large enterprises
  - Push and pull options
  - Batch and real-time transactions
  - Web services and the full gamut of B2B gateway standards and protocols
  - Proven technology supporting large volumes in health care industry today

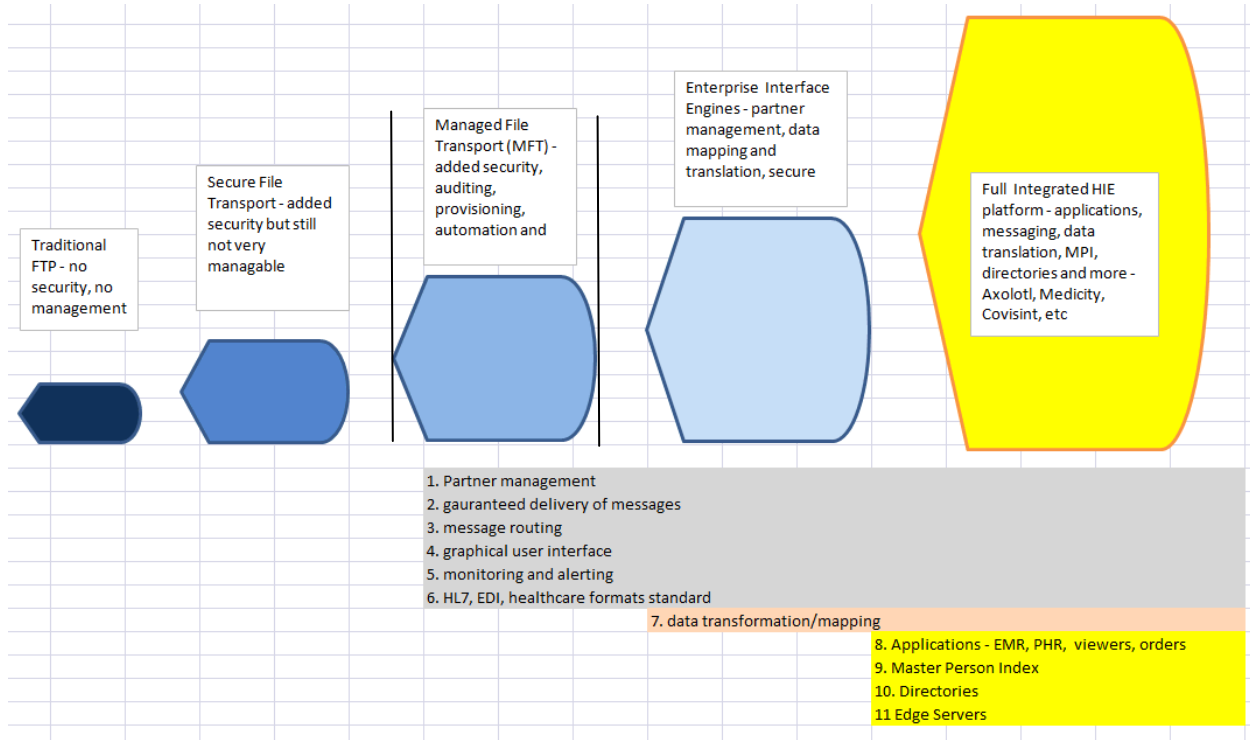
- Governance for secure messaging
  - Intelligent content-based routing out-of-the-box
  - Support for EDI, XML, HL7, CCD, any document format
  - Automated routing for simple administration of HIE
- Security with flexibility
  - Encryption with FIPS 140-2 libraries (HITECH Requirement)
  - Certificate management
  - Secure transport over TLS/SSL & SSH
  - Support for LDAP
- Management tools
  - Tracking and visibility of messages - auditing of all transactions
  - Activity monitoring and reporting tools
  - Easy integration options for monitoring, reporting, alerting
  - Automated HIE provisioning tools – trading partner setup
  - Billing/reporting trading partner transactions

OneHealthPort assessed the Hub business requirements and debated the buy/build decision. In consultation with stakeholders, OneHealthPort decided to pursue a buy strategy to acquire the Hub capability. This decision was guided by the following considerations:

- **Risk** – the risk of a build was seen as greater than a buy
- **Experience** – there are a number of mature commercial Hub solutions that appear to meet the requirements. The version 1.0 of a Hub we would build will be competing with second, third and fourth generation offerings from experienced vendors.
- **Time to market** – the Hub plays a critical role in supporting the inter-enterprise exchange requirements for “meaningful use.” An experienced vendor can deploy the Hub service more rapidly than we could deploy a newly built offering.
- **Operating cost** – if we build it, we have to operate it, and we do not believe we can rapidly achieve the same level of economy or skill as experienced vendors.

The continuum below describes OneHealthPort’s analysis of different classes of vendor offerings that would meet the Hub business requirements:

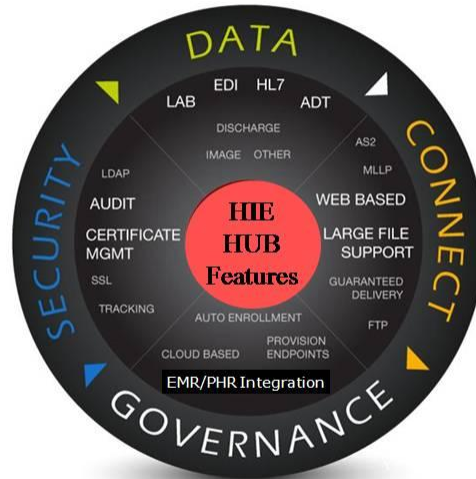
Figure 11: Hub Continuum for Washington State HIE



The sweet spot on the Hub continuum for Washington State is Managed File Transport (MFT). MFT provides the capabilities required without the carrying cost of all the additional services that are out of scope. The Hub is the key service capability that the HIE will provide in 2011 to enable providers who are otherwise willing and able to meet meaningful use requirements to satisfy their inter-enterprise information exchange obligations. The figure below demonstrates the central role of the MFT Hub in powering the HIE.

Figure 12: Managed File Transport Hub Role

## HIE Data Exchange – HUB



Service Oriented Architecture allows addition of components as needed over time.

1

### Master Person Index (MPI)

It is clear that the vast majority of potential HIE participants believe an MPI is critical. The core MPI capability is central to most visions of HIE – comprehensive information about the patient where and when it's needed. To fulfill this vision, the ability to match patients (i.e., distinguish between patients with similar names) is essential. However, unlike the Hub conversation, which proceeds easily, from service concept to detailed specifications to product purchase, the MPI is a more nuanced and complex service. The MPI design is complicated by the following considerations:

- **Cost** – The MPI is expensive technology to purchase and can also be expensive to operate.
- **Need** – While everyone believes they will need it “someday,” it is not clear how many organizations are prepared today to take advantage of a community MPI. The early phase of information exchange may well be “pushing” known patient data, rather than searching for unknown patients. For example, most stakeholders do not believe the MPI is required to support their initial meaningful use requirements.

- **Policy** – A significant level of community consensus is required before the MPI goes operational. Policies and conventions related to MPI use, liability and privacy will all have to be developed.
- **Model** – There are a variety of ways to deploy an MPI – federated, centralized and leveraging of an existing MPI implementation, to name a few. Or, to take a different approach, a state could, issue its own unique patient identifier changing the way the MPI functions. While the correct choice is not obvious, the cost, policy and operational implications of this decision are profound.
- **Interactions with enterprise MPIs** – Many large enterprises already have an MPI to help reconcile patient identities across their own disparate systems. It is not clear how best to integrate and interoperate enterprise MPI's and the community MPI.

In light of these considerations, OneHealthPort and its stakeholders will conduct a more detailed assessment before finalizing the design of the MPI and its role in the overall architecture. This assessment should be complete by fall 2010. At that time, design decisions will be made and the appropriate next steps related to the MPI will be taken.

#### Record Locator Service (RLS)

Much of what was said above about the MPI applies to the RLS. In some respects, the record locator involves fewer operational choices and alternatives. However, the RLS imposes additional costs and potentially burdensome requirements for participating enterprises. It also raises some significant privacy concerns. Once again, the assumption is that the RLS is a necessary component to meet the long-term objectives of patient-centered health information exchange. It is the sequencing of the Hub, MPI and RLS that needs to be resolved. As such, at the conclusion of the MPI assessment, a similar assessment process will be undertaken in regard to the RLS.

#### Provider Directory

In addition to its work supporting HIE, OneHealthPort is the Lead Organization for the state's administrative simplification legislation, SSB 5346 (see appendix). One key requirement of SSB 5346 is the development and deployment of a uniform electronic solution for collecting the provider data required to support credentialing and privileging. All hospitals, health plans, public payers and licensed practitioners will be required to use the system. OneHealthPort is tasked with developing, deploying and operating what is now called the Provider Data Service. OneHealthPort is well into the process. A vendor, Medversant, has been selected, contracts are being executed with hospitals, and plans and the system will go live in July of 2010.

Ultimately this Provider Data Service will become a very comprehensive and rich provider directory that includes all licensed practitioners and is used and financially supported by all hospitals, health plans and public payers. OneHealthPort will be repurposing the Provider Data Service created under SSB 5346 to serve as the statewide HIE provider directory. The directory will be linked to the Hub to assist participating organizations to identify and locate their information exchange partners.

The provider directory will also assist organizations engaged in quality measurement activities. As quality measurement organizations attempt to aggregate data from multiple sources, they encounter a variety of issues related to attribution and identifiers. OneHealthPort has used some prior directory service offerings to assist local organizations involved in quality measurement, and we anticipate ongoing use of the provider directory in this manner.

#### Standards and Conventions

As indicated above the Hub will transact HL7, X12 and other standard data sets. The Washington State HIE will not be performing data transformation centrally. Each participant will be responsible for delivering a compliant standard transaction to the Hub. We assume many larger enterprises will perform this function internally. Others may outsource the work to one of the qualified vendors currently operating in Washington State. We assume smaller enterprises will likely rely on their application vendors to be compliant. In all cases, it will be important for the HIE to clearly define the standards required. The Washington State HIE is firmly committed to the use of national standards where available. Our role will be to adapt the "optional" elements of national standards for the preferred local implementation. As referenced earlier, OneHealthPort has significant experience in forging consensus on the use of national standards for local ecommerce. OneHealthPort currently operates a process designed to develop consensus best practices that has proven itself over the last seven years. This process has forged agreement on common policies, processes, and local implementations of national standards. Included this extensive body of work are:

- Local implementation guides for X12 transaction sets
- Privacy and security policies and information sharing agreements adopted and used by over 35,000 health care organizations and 85,000 individuals within those organizations today
- Best practices for workflow innovation and information processing

OneHealthPort will employ these same skills and experience to develop and maintain the policies, standards and conventions required to support the technical architecture. This process will parallel the rollout of services. For example, policies to support the Hub will have first priority. It is assumed the following policies, standards and conventions will be required to support the first phase of service deployment related to the Hub:

- Information sharing agreement
- Privacy and security policy related to identity management and authentication
- Naming conventions
- Adoption of standards

## Meaningful Use

As of this writing, “meaningful use” regulations are still being finalized. The Washington State HIE is not offering applications of any type. Therefore, we cannot assist providers who do not otherwise acquire EHR and PHR capability. However, for those who do acquire clinical applications, the use cases listed above and in the appendix demonstrate how the HIE can potentially assist providers to meet the “meaningful use” requirements that involve information exchange outside the enterprise. As of today, that could include the following provider requirements and similar ones for hospitals\* (note the numbers are listed as they appear in the CMS descriptions):

- 12. Report ambulatory quality measures to CMS or the States (can be manually submitted in 2011, and must be electronically submitted in 2012).
- 13. Send patient reminders for preventive/ follow-up care for at least 50% of patients age 50 and over.
- 15. Electronic insurance eligibility checking (from public and private payers) for at least 80% of patients.
- 16. Electronic claims submission (to public and private payers) for at least 80% of claims.
- 17. Provide patients with an electronic copy of their health information within 48 hours (including diagnostic test results, problem list, medication lists, and allergies) for at least 80% of patients requesting electronic copies.
- 18. Provide patients with electronic access to their health information (including lab results, problem list, medication lists, allergies) for at least 10% of patients.
- 20. Demonstrate the capability to electronically exchange clinical information (problem list, medication list, allergies, diagnostic test results, etc.) by performing at least one test of transmission.
- \*21. Demonstrate the capability to provide electronic submission of reportable lab results, to public health agencies and actual submission where it can be received (\*Hospitals only).
- 23. Demonstrate the capability to submit electronic data to immunization registries and actual submission where required and accepted, by performing at least one test of transmission to immunization registries.
- 24. Demonstrate the capability to provide electronic syndromic surveillance data to public health agencies and actual transmission according to applicable law and practice, by performing at least one test of transmission to public health agencies.

## Nationwide Health Information Network (NHN)

The Washington State HIE is assessing the various opportunities to leverage NHIN. As both statewide HIE and NHIN progress, we will continue to evaluate how NHIN fits in with the HIE framework. At this point, we have made the following tentative decisions:

- **NHIN Direct** – The HIE does not intend to offer or promote NHIN Direct. We do not believe it is the optimal solution for secure messaging. Obviously, individual enterprises in the community may decide, on their own, to use the service.
- **NHIN Connect** – Based on the risk assessment described above, our decision is to purchase, rather than build the Hub component. As such, we are unlikely to pursue NHIN Connect as the primary solution. However, to the degree a vendor picks up NHIN Connect and commercializes it, we would entertain a proposal from such a vendor as part of the Hub procurement. In addition, we envision using the Hub to connect interested local enterprises with federal agencies and others already connected to NHIN. INHS, the state Beacon Community grantee, is going to pilot a NHIN connection to exchange information with the Social Security Administration. We plan to study and learn from their pilot. Based on how it succeeds, the HIE may leverage the INHS connection for the larger community to link to federal agencies. Two federal organizations of high importance in the local health care community are the VA and Madigan Hospital (US Army). We will explore NHIN connections with both organizations.

## VII. Finance

A. Strategic Plan: This section of the strategic plan discusses the key topic of Sustainability

OneHealthPort has extensive experience with operating a sustainable, collaborative ehealth business. Principals in OneHealthPort also have extensive prior experience with a number of failed business models in the ehealth space. In devising the business model for the Washington State HIE, a series of core principles developed through both positive and negative experiences were used to guide our work:

1. **Customer revenue driven** – In the market, sustainability is all about delivering value to customers. The ultimate indicator of value in the market place is what someone will pay for. OneHealthPort and the HCA believe that revenue from paying customers must be the foundation for the HIE's business model.
2. **Needs vs. wants** – In a customer revenue-driven model, it is critical to understand the distinctions between needs and wants. A want is something a customer would like to have “someday, somehow,” particularly if someone else is paying for it. A need is an urgent business requirement of sufficient value that the customer will pay for it today. In a future looking

undertaking like statewide HIE, it is very common to get long lists of wants disguised as needs. In the course of its stakeholder work, OneHealthPort is being very aggressive in pushing stakeholders (potential customers) to clearly define their needs.

3. **Marginal operating costs** – Getting the HIE business off the ground is sometimes difficult if a new entity has to be created because the HIE is burdened with all the entity's fixed start up costs. The Washington State HIE will benefit from leveraging OneHealthPort's existing operational footprint. Instead of having to support the full costs of an operating entity, the HIE will only have to support marginal operating costs.
4. **Start modestly** – Adoption always takes more time than assumed. Marketing multiple services simultaneously also distracts and confuses potential customers. Ideally, the initial service offering is lower in cost, easier to implement, and addresses a clearly felt need by significant numbers of early adopters. For the Washington State HIE, the initial offering is the Hub.
5. **Speed to critical mass** – In the many-to-many world of health care information exchange, getting to critical mass has three very important benefits. First, adoption increases exponentially when an organization knows that by connecting it can reach the major portion of its book of business. Second, in most operating models, volume equals profitability and lowers the unit cost of delivering a service. Third, getting to critical mass rapidly not only provides financial benefits; it gives the initiative an aura of success. Sales become much easier for a service viewed as successful and broadly adopted than for an untried or stale offering.
6. **Incentives** – One way to accelerate adoption by a critical mass is to offer incentives for early adopters as a component of the pricing model. This tactic may be particularly well suited to this initiative where the ARRA funds are available as a potential subsidy. We believe we will have to operate the HIE in a competitive market where customers have multiple alternatives. The availability of the ARRA funds may allow us to reduce our capital and initial operating costs, and thereby allow us to offer more competitive pricing than might otherwise be possible.
7. **Market clout** – While we do not believe mandates are an effective long term strategy for building a sustainable service, there are opportunities for major enterprises, both public and private, to use purchasing clout to accelerate adoption of the HIE.
8. **Broad definition of statewide HIE** – In discussing the cost and revenue required to support HIE, it is critical to distinguish between the entirety of the information infrastructure likely to emerge in Washington State and the thin-layer that will be the shared operating component of the Statewide HIE. In the model we have proposed, the significant bulk of the information infrastructure will be provided by health care organizations, vendors, individuals and public agencies. Therefore, we have not attempted to calculate the ultimate cost of HIT/HIE in Washington State. Our financial modeling is confined to the thin-layer of services that will be offered by the Statewide HIE operation.

These principles will guide the additional financial planning that lies ahead for the HIE. The Hub will be the first service deployed. The procurement process will identify a vendor, resolve certain operational questions (e.g., how much of the Hub will be operated directly by the vendor and how much by OneHealthPort) and allow us to develop a specific pricing model for the service. This approach will be repeated with the MPI/RLS service and other components. Over and above the service delivery aspects of our work, is the ongoing administration of the ARRA Cooperative Agreement and the planning, accounting, and evaluation components of that effort. An initial financial plan has been prepared and is described in the Operating Plan. Particularly, in the early phases of the HIE, this financial plan will be regularly refined based on the experience gained.

B. Operating Plan: This section of the operating plan discusses key topics including 1) The Initial Cost Estimate and 2) Management Controls  
Initial Cost Estimate

We have prepared an initial cost estimate for the duration of the four-year ARRA HIE program. As indicated previously, this estimate is preliminary in nature. Much of the course of the HIE’s finances over the next four years will be dictated by the vendors selected to deliver the shared services, their approach to pricing, the nature of the operating model and the pace of adoption. None of these key variables are yet known. As such, we have prepared our preliminary estimate based on our best assumptions. Even so, the level of detail is limited. The only way to develop even this initial model is to focus on a higher summary level. OneHealthPort and the HCA are committed to regularly revisiting this plan and updating it as soon as more information is known about the services component.

The full estimate is in the appendix. Listed below in Figure 13 is a summary of the initial cost estimate:

Figure 13: Summary of HIE Initial Cost Estimate

STATEWIDE HIE INITIALCOST ESTIMATE		2010	2011	2012	2013	TOTAL
<b>OneHealthPort</b>						
Planning Phase - Reimbursements		\$612,000				\$612,000
Service Development & Deployment		\$500,000	\$2,935,000	\$1,260,000	\$930,000	\$5,625,000
Implementation - Professional Services		\$143,000	\$594,000	\$545,398	\$375,500	\$1,657,898
Indirect Costs		\$12,474	\$67,122	\$36,972	\$31,032	\$147,600
<b>Sub-total</b>		<b>\$1,267,474</b>	<b>\$3,596,122</b>	<b>\$1,842,370</b>	<b>\$1,336,532</b>	<b>\$8,042,498</b>
Private Sector In Kind Match		\$0	\$0	\$48,602	\$218,500	\$267,102
<b>Community Oversight Organization</b>						
		\$50,000	\$200,000	\$200,000	\$200,000	<b>\$650,000</b>
<b>HCA</b>						
Planning Phase		\$387,944				\$387,944
Implementation Phase		\$150,696	\$686,262	\$686,262	\$686,262	\$2,209,482
<b>Sub-total</b>		<b>\$538,640</b>	<b>\$686,262</b>	<b>\$686,262</b>	<b>\$686,262</b>	<b>\$2,597,426</b>
State Funded Matching		\$480,655	\$525,603	\$525,603	\$525,603	\$2,057,464
<b>TOTAL ARRA Federal funding</b>		<b>\$1,856,114</b>	<b>\$4,482,384</b>	<b>\$2,728,632</b>	<b>\$2,222,794</b>	<b>\$11,289,924</b>
TOTAL Matching		\$480,655	\$525,603	\$574,205	\$744,103	\$2,324,566
<b>TOTAL State HIE Project</b>		<b>\$2,336,769</b>	<b>\$5,007,987</b>	<b>\$3,302,837</b>	<b>\$2,966,897</b>	<b>\$13,614,490</b>

In reviewing the summary above is it important to recognize some key considerations:

- For the initial phases of work OneHealthPort is donating its services. OneHealthPort is not charging any of its overhead costs to the ARRA funds. The reimbursements in the planning phase are for out-of-pocket expenses incurred by the company to execute the program work. These expenses are primarily for outside professional services and meeting related costs.
- In the services deployment phase, the funds are earmarked to support the cost of the shared services. Depending on the operating model selected these costs may arise entirely from the shared services vendors or these costs may also support some of OneHealthPort's operating expenses. The intention is to support these costs in a manner designed to incent early adoption and ongoing usage of the HIE services.
- The implementation-related professional services are consulting and legal services that will be required in the implementation phase.
- Indirect costs for OneHealthPort reflect that under Washington State law tax is assessed on revenue, not profit. As such all the expenses reimbursed to OneHealthPort are considered revenue and will be subject to Business and Occupations tax. This indirect item supports OneHealthPort's tax-related costs for these reimbursements.
- The Community Oversight Organization costs reflect initial estimates for the Foundation to provide this service to the community. These costs will be refined as the Foundation, the HCA and OneHealthPort gain more experience in how best to conduct the oversight operation.
- HCA's expenses reflect the ongoing costs of planning, coordination, accounting and ARRA program administration. These costs also support all the work of Richard Onizuka and his team in executing the State Government HIT Coordinator role.

## Management Controls

While it is difficult to identify the precise approach to management controls in the absence of clarity on the operating model, the list below highlights the various types of controls that will be used. Some of these controls are discussed in other sections.

- **Financial controls** – The HCA will have primary responsibility for financial controls on the ARRA funds. The HCA has experience in handling and accounting for federal grant dollars. The agency has put in place a team described in the operations section to develop and maintain rigorous accounting practices in compliance with ARRA requirements. The HCA has also clearly communicated to contractors and sub-recipients the record keeping and billing practices that will be expected for all those who receive ARRA funds. It is also likely that OneHealthPort will be responsible for shared services contracting. OneHealthPort is experienced in this role and has

established accounting and data practices to control and account for service delivery costs, fees and customer billing requirements.

- **Project Management controls** – Project management controls are described in the operations section that follows.
- **Policies** – Policy development and controls are described in multiple sections. In general, policies will be developed using a facilitated, consensus-based process led by knowledgeable professionals. These policies will be regularly reviewed by customers, staff and other stakeholders. The Community Oversight Organization has specific responsibility for ongoing review and approval of select operating policies. Similarly, regular reports will be made to the Legislature on key policy issues.
- **Operational** – The precise nature of the operational controls will be heavily dependent on the service delivery model. OneHealthPort has extensive experience with Service Level Agreements, support operations, secure hosting, network operations and other related disciplines. OneHealthPort is prepared to hold the shared services vendor accountable for operating performance, deploy its own operational controls or manage a blended operation. Specific operational controls will be defined in conjunction with the HIE Leadership Group and its related Technical Advisory Groups as a component of the Hub procurement.
- **Assessment and Monitoring** – The HCA will be responsible for developing and implementing a formal assessment process of the entire program. However, the whole governance model, work group process and customer focused nature of the HIE is designed around checks and balances, ongoing oversight/monitoring and continuous quality improvement. Specific practices in this regard will be refined as the program proceeds and the nature of the services being delivered and key performance metrics becomes clearer.

## VIII. Operations

A. Strategic Plan: This section of the strategic plan discusses the key topic of Implementation Approach

### Implementation

OneHealthPort is a mature service delivery organization. The company has significant and successful experience in collaborative ehealth service delivery. OneHealthPort has employed a variety of service delivery models. It is anticipated that the service delivery model for the Hub will likely be the collective purchase of a vendor offering. Figure 14 below, describes the general collaborative approach OneHealthPort will use to operationalize its work in support of the Statewide HIE.

Figure 14: Statewide HIE Development – Collaborative Work Flow



For the Hub, this process will play out as follows:

- Staff develops draft straw man requirements for the Hub
- The HIE Leadership Group delegates to a technical advisory group (TAG) the tasks of working with staff to finalize specifications and generate an RFP. It is important to note Medicaid, Department of Health, the HCA, and staff from the Foundation for Health Care Quality all participate in the Leadership Group and the technical advisory group. Their inclusion is designed to ensure the Hub not only meets the needs of private sector enterprises, but also Medicaid and Public Health. HCA and the Foundation are engaged to ensure policy alignment and full transparency.
- The draft recommendations will be made available for any interested stakeholder to review via the web site
- Stakeholder recommendations will be incorporated in a final draft that will be approved by the TAG
- Staff will then distribute the RFP and conduct the procurement process
- Immediately after the issuance of the RFP, the standards/conventions process will be convened to develop the key policies, agreements and standards required for the Hub service

- The TAG will prepare an initial review of the responses. The HIE Leadership Group will be reconvened to guide staff in a final review of the responses and the selection of the successful bidder
- The final recommendation for the award of the Hub business from the HIE Leadership Group will be reviewed with the OneHealthPort Board and the HCA to ensure all parties are comfortable proceeding with the technical approach and the pricing model of the recommended vendor
- The award will be made and contract negotiations will proceed, simultaneously deployment planning will begin and pre-sales to key early adopters will begin
- Upon finalization of the agreement, implementation of the Hub will take place
- Community wide sales and marketing efforts for the Hub will rollout

B. Operating Plan: This section of the operating plan discusses key topics including 1) Staffing, 2) Project Management, 3) Project Schedule and 4) Project Risks and Mitigation Approach

The discussion of the operations component of the Washington State HIE plan is complicated by the different entities engaged, the intended evolution of the HIE over time, and the distinctions between the ARRA program activities and the more comprehensive operation of the HIE “business.” At this stage of the project, we have elected to blend the activities into a single staffing plan and project schedule. As work progresses and we update the plan, we will likely sharpen the distinctions between the different activities and entities involved.

#### Staffing and Project Management

The HIE project manager has a comprehensive approach to project management based on routine project management practices and the Project Management Institute’s (PMI) methodologies. This starts with the creation of a comprehensive project plan, including the project purpose, approach to scope management, a detailed work breakdown structure, a comprehensive schedule, risks/mitigation strategies and definitions of project processes, including but not limited to issues logs, budget tracking and stakeholder management.

We began the project with a kick-off meeting with many of the different stakeholders across the state. Our reporting process provides monthly reporting of progress based on a detailed project schedule and an executive dashboard. We also have updated information that is used weekly by the core project team. Our project timelines will be compared to budget estimates so that we can generate status reports in relation to expected progress.

As the Lead Organization, OneHealthPort is accountable for HIE project management and risk mitigation activities. The HIE team is led by OneHealthPort CEO Rick Rubin, with support from OneHealthPort Vice President of Business Development and Product Management Sue Merk, and coordination by the HCA’s HIE Deputy Project Manager Kelly Llewellyn. The state HIE team includes contract and consulting

members engaged under the sub-recipient, as well as the HCA staff and consultants. On a weekly basis, the HIE team meets to review project metrics (timeline, budgets and deliverables) and also addresses any issues that require the team's attention. The Statewide HIE has a designated project manager responsible for tracking the HIE project, administering the project management tools and preparing reports to OneHealthPort and to the HCA.

The HCA formed the eHealth Collaborative Enterprise (eHCE), a work group within the HCA that is responsible for coordinating statewide activities related to the federal HITECH Act and state health information infrastructure activities. The eHCE is under the leadership of the State Government HIT Coordinator. The following outlines the roles and responsibilities of the State Government HIT Coordinator and the eHCE, for statewide HIE planning and implementation:

#### *State Government HIT Coordinator*

- Coordinate and guide strategic direction for Statewide HIE
- Assure HIE Community Oversight Organization is formed and accountable
- Serve as the liaison and Washington State official for the State HIE Cooperative Agreement with ONC
- Provide oversight of OneHealthPort as needed

#### *HITECH, Medicaid, Public Health and State Agency Coordination*

- Coordinate with Medicaid, Public Health and related "meaningful use" incentive programs
- Coordinate with other HITECH activities in the state including the Regional Extension Center and the Beacon Community
- Convene and coordinate across state agencies
- Monitor federal standards and policy-setting bodies

#### *Grant Administration*

- Account for HIE project milestones, timelines, performance measures, expenditures, matching funds and ARRA reporting
- Provide reimbursement from ARRA program funds to the HIE Lead Organization as outlined in Sub-recipient Award Approval(s)
- Provide periodic reporting to Washington State, ONC, and ARRA

Some of the key participants in the planning and implementation process are identified below:

- **Project Sponsor:** Richard Onizuka, Ph.D. Richard is the Washington State Government HIT Coordinator and is primarily accountable for State HIE Planning and Implementation to ONC.

Based on their experience and expertise Richard and the eHCE are well suited to administer the grant funds related to this project and also be the primary interface to ONC, Medicaid, Public Health and other state agencies.

- **Team Leader:** Rick Rubin. Rick is the CEO of OneHealthPort and is well know across Washington State as an experienced collaborative HIE leader. Rick will provide high-level project leadership, industry stakeholder management and accountability. Rick will serve as the primary point of contact for communication with Richard Onizuka and to the eHCE project team, who will in turn, report status to the ONC. Rick will ensure that the HIE team is adhering to the project management activities and that risks are assessed and mitigated.
- **Senior Technical Leader:** Sue Merk. Sue is the overall technology and operations officer with OneHealthPort. Sue will manage the HIE architecture, system development and deployment activities. In addition to controlling the Statewide HIE technical design, Sue will also be the day-to-day sub-recipient manager who holds vendors accountable for meeting deliverables as defined in the various contracts that we anticipate for the HIE project.
- **Health Care Industry Consultant and Technical Adviser:** Howard Thomas. Howard has worked with OneHealthPort since its inception and also with the HCA on HIE-related work for four years. Howard is well known by many of the state's health care organizations. Howard is assisting us with stakeholder management, technical design/integration with local systems and various project strategies. Howard is also an experienced project manager and has been a key content adviser on all aspects of this project.

As noted above, the HCA has created a coordinating body, eHCE to monitor and coordinate across all of the ARRA and HITECH areas. The eHCE will receive routine updates from OneHealthPort regarding the HIE project. Key leaders of the eHCE are identified below:

- **The eHealth Collaborative Enterprise Project Manager:** Juan Alaniz. Juan is responsible to Richard Onizuka for monitoring the work of the Lead Organizations in each of the ARRA/HITECH areas, and also monitoring the establishment and functioning of the Governance Body we select for the HIE. Additionally, Juan is working with community stakeholders on consumer-facing health information exchange. Juan also serves as the Deputy State Health Information Technology Coordinator.
- **HCA Senior Project Delivery Manager:** Anne Wahrmund. Anne provides project delivery expertise and support to the HIE. Anne has been extensively involved in developing the overall HIE project plans. Anne has responsibility for project management monitoring for all of the initiatives within the eHCE project, administering and maintaining the project tools described in the HIE project management plans, providing overall project and budget planning/tracking, preparing ONC status reporting and creating and maintaining project roadmaps and dashboards for eHCE executive communications.

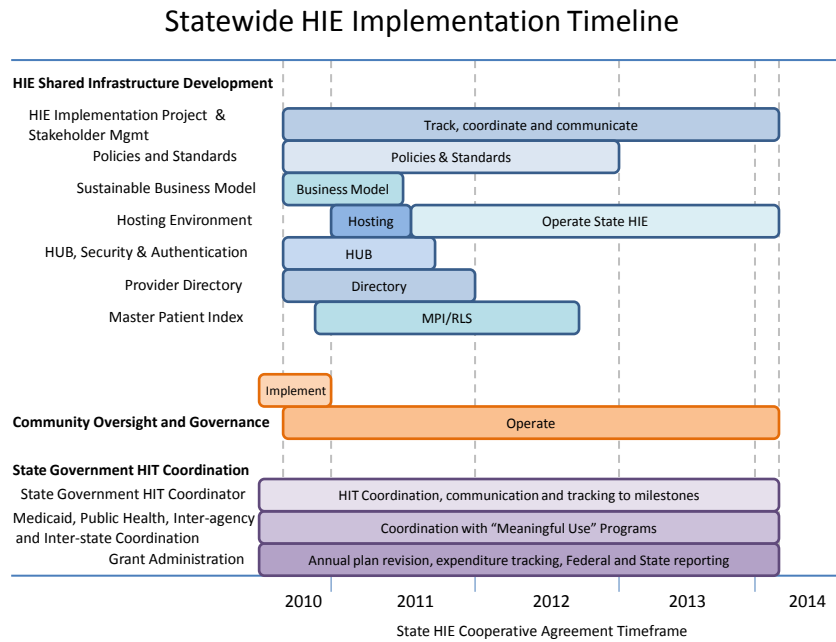
- **HCA Deputy Project Manager:** Kelly Llewellyn. Kelly has worked on many different projects within the HCA and has been involved in the HCA's HIT projects over the last four years. Kelly is the integral link between OneHealthPort and eHCE to assure coordination of the HIE implementation project and other HITECH activities with Medicaid and Public Health. As part of the eHCE project team, Kelly assures coordination between the Washington State HIE project and the Medicaid and HIE activities of neighboring states.
- **HCA Communications Specialist:** Heather Masters. Heather coordinates overall communications to the broader stakeholder community and to consumers regarding all eHCE program areas. Heather also repackages regular HIE project progress reporting and communications to a broad statewide stakeholder audience.
- **Federal Grants and Budget Specialist:** David Donnell. Dave is new to the team and will have primary responsibility for ARRA reporting, accounting and administration. Dave will be responsible for compliance and compliance training for team members.

In addition to these core HIE project team members, the HIE team also collaborates with other individuals in the health care industry, government and the broader community.

#### Overall Project Schedule

The detailed Project Schedule for the planning phase is provided in the appendix. Below in Figure 15 is a summary description of the major tracks of work, key tasks and subtasks of the project. We have placed a higher degree of emphasis on the work that will be completed over the next nine months and will be updating our detailed work plans later in 2010 and providing ONC with a refreshed plan in early 2011. We have provided a basic overview of the work that we currently envision to be completed over the next four years to enable and implement the statewide Health Information Exchange.

Figure 15: Statewide HIE Implementation Timeline



#### Project Risks and Mitigation Strategies

A detailed listing of potential risks and preliminary mitigation strategies is provided in the appendix. As we design our project plans, we simultaneously assess the project risks and incorporate mitigation strategies into the plan as necessary. We intend to conduct ongoing risk assessments throughout the course of the project. To date, the following generic risks have been identified:

- Business model related risks** – The most important risk in this category is related to critical mass adoption and sustainability. Our risk mitigation approach involves the engagement of the critical mass organizations through their participation in the HIE Leadership Group. The Leadership Group involves CIOs of the major critical mass organizations across the state. They are involved in refining business requirements and assessing vendor offerings, and they will also be involved in the design and review of the business model. We believe with their ongoing involvement we have a higher degree of assurance that this business risk can be mitigated.
- User adoption related risks** – The major risk here is not being prepared to deliver the services required by given users. We have mitigated this risk by relying heavily on stakeholder input to guide priority setting. We will continue with this approach as we add additional services and assess how well we are meeting user needs. In addition, by prioritizing the transactions that will be required for meaningful use, we believe the HIE has an increased probability of meeting users’ priority needs.

- **Leadership related risks** – With any statewide effort there can be many perceived and real leadership conflicts. With our governance design, we believe we have mitigated some of these leadership risks, although we have introduced other complexities. It will be vital for the leadership of the HCA and OneHealthPort to maintain a high degree of communication and coordination to avoid conflicting messages. Our process for weekly communication should help mitigate this concern. Additionally, it will be important to clearly define roles and maintain a good understanding of who is “leading” and who is “following” in each key area. Vigilance in regards to role definition and scope will be an important success factor.
- **Stakeholder management and communications related risks** – We have deployed an initial approach for stakeholder outreach. It will be important to regularly test and improve the efficacy of our communications approach. Regular meetings and periodic surveys are the best mitigation strategies to control this risk.
- **Design/architecture related risks** – Balancing the long-term requirements and short-term goals can make the architecture challenging. We believe that our initial architecture is extensible to additional functionality and this requirement will be important to define during our vendor procurement process. The long-term extension of the architecture is a critical element to other notable risks, especially those involving HIE adoption and a sustainable business model.
- **Scope/budget/timeline related risks** – Agreeing to a long list of “wants” and ignoring the need to prioritize can bring a project of this scale to a halt. We have mitigated this by being very pragmatic in our scope setting and involving the user community in setting these priorities. A related risk involves dependencies and contingencies inherent in projects of this nature. For example, our timeline is heavily dependent on the ONC approving this plan within the established time frame. Monitoring the use of the resources against a defined plan and milestones will allow the project leadership to have a clear understanding of these risks on an ongoing basis. Our project management approach is the key to mitigating these risks.
- **Multiple HIE initiatives related risks** – ONC and other federal agencies have funded a number of HIE/HIT initiatives with overlapping agendas. It will be critical to avoid wasting public dollars, confusing the market and retarding interoperability by deploying redundant technology. We have attempted to mitigate this risk by forging strong links and communication channels across these initiatives and ensuring the State Government HIT Coordinator is engaged and aware of the potential overlap. However, it will also be critical for the ONC to assist in managing this risk by giving clear direction and supporting complementary rather than competing efforts.

In addition to these broadly stated risks and mitigation strategies, there are always smaller project risks and issues that must be managed before they become larger and more problematic issues. We have been using a detailed project issues log to aggressively monitor the project risks/issues and the mitigation steps for each. We intend to maintain this project management discipline going forward.

## IX. Legal Policy

A. Strategic Plan: This section of the strategic plan discusses key topics including 1) Privacy and Security, 2) State Laws, 3) Trust Agreements

Washington State benefits from extensive work on privacy, security and other legal issues affecting HIE that have been accomplished in a number of public, private and academic settings. Washington's legal HIE strategy will build on this experience and is intended to be flexible enough to allow adaptation to, and by, existing HIE arrangements. A key benefit of the thin-layer architecture is the opportunity to minimize the security and privacy complications that must be traversed by the HIE. The parties that operate applications and host data, as opposed to the HIE, will address the related data governance and access management issues. In doing so, the HIE and its participating organizations will be leveraging existing law and practice rather than charting new approaches.

### Trust Agreements

The Statewide HIE's legal and policy infrastructure is centered on the establishment of standardized Subscription Agreements between OneHealthPort and participating organizations under the oversight of the Foundation for Health Care Quality. In alignment with the thin-layer architecture, this will be a "light" legal infrastructure, intended to allow HIE participants to join and engage in HIE among themselves on a flexible basis, rather than imposing a preconceived top-down structure. Legal requirements will use and build on existing standards, especially HIPAA and strong Washington State law, rather than piloting new standards. Legal obligations will be implemented through Subscription Agreement provisions supplemented by a set of required policies intended to ensure legal compliance and trustworthy, transparent HIE participation, without creating unnecessary or inappropriate barriers to HIE.

Contract strategies similar to this proposed model have emerged as one of the promising alternatives for enabling HIE. One of the HIE solutions proposed by several states in the Health Information Security and Privacy Collaboration (HISPC) was development of a model contract for HIE. The NHIN Cooperative includes a workgroup, which has also developed a Data Use and Reciprocal Support Agreement ("DURSA") that is intended as the basis for a comprehensive agreement governing the exchange of health data, through the NHIN.

Washington has considerable experience with HIE contracting, including a number of contracts that informed the DURSA. For example, the Robert Wood Johnson HealthKey program developed a Template for a Comprehensive Health Care Information Protection Agreement intended as an online form allowing HIE participants to contract into a many-to-many health information exchange arrangement. This model was used as the basis for HIE between the Washington State Department of Health and Community Health Plan of Washington. Other well-known contract strategies in Washington include the CHILD Profile agreement for access to and use of immunization information; the Clinical Outcomes

Assessment Program information sharing agreements for joint analysis of outcomes information; and a number of private vendor and regional network and RHIO agreements.

One of the most widely used information sharing contracts in Washington State is deployed by OneHealthPort. The OneHealthPort contract infrastructure establishes a basic set of obligations for subscribers and for OneHealthPort as a vendor, and otherwise lets the parties to HIE manage their own obligations and risks. This infrastructure is significant, not only as a model, but as an opportunity. As will be discussed, one of the generally accepted requirements for HIE identified in Washington is a common identification and authentication solution, something OneHealthPort already operates. The subscription model will work for the HIE as well, and OneHealthPort can serve as a central contract management authority. The Subscription Agreements in turn can provide not only access to the shared services, but obligations to comply with the generally accepted requirements applicable to HIE, and for legal compliance and risk management within the participant's perimeter.

Appropriate characterization of the HIE participants, as HIPAA Covered Entities or Business Associates, will be necessary to ensure contracts are compliant with HITECH and HIPAA. However, this characterization and contract implementation should be considered more an opportunity to define specifics in the parties' relationships than an obstacle to HIE. Contract language which characterizes participants on a functional basis – depending on whether they are acting as Health Care Providers or other Covered Entities, or they are acting on behalf of Covered Entities as Business Associates – will allow for flexible participation under appropriate terms.

The key concept behind Washington State's strategy is that each participant is responsible for compliance and risk management within its own legal and operational perimeter, whether it is a Covered Entity or a Business Associate. As operator of the HIE, OneHealthPort will be responsible for its appropriate functioning and for legal compliance in that role. However, it will not be responsible for "policing" participants, except to the extent that termination or suspension of HIE participation may be appropriate for a participant's breach of contract. From a legal point of view, OneHealthPort will serve as a kind of sophisticated directory service and transmission conduit, rather than a highly directive HIE association. HIE participants will share health information electronically using the HIE under the same legal standards and principles which already apply when they share the same kind of information by fax, couriered hard copy or existing electronic approaches.

This strategy allows for organic, demand-driven HIE growth, without requiring time-consuming legislative or regulatory action. It also enables interstate HIE which many health care organizations already engage in on a less-formal basis since there are no prohibitions on interstate HIE in federal or Washington State law and interstate variations can be managed by contract addenda. Over time, as experience and expanding HIE activity disclose new issues and solutions, the contracts can be amended. Given state and community oversight, this contract infrastructure will provide a trustworthy framework for HIE, driven by the needs and goals of the participants.

## Privacy and Security Law in Washington

Washington State has two principal, and a number of secondary, laws affecting the privacy and security of health information. These laws were extensively analyzed and compared to HIPAA and other federal law in the course of the Washington HISPC and summarized in a number of readily available resources.<sup>1</sup> While a number of these laws present ambiguities, and a few overlap and perhaps conflict, none present issues that cannot be resolved by contract or policy.

Washington's principal health information laws are its Health Care Information Act, Revised Code of Washington chapter 70.02 (RCW 70.02) and the health information privacy regulations applicable to health insurance payers pursuant to Washington's Patients' Bill of Rights and the federal Gramm-Leach-Bliley Act (WAC 284-04-500). RCW 70.02 was developed as a uniform law by the National Council of Commissioners of Uniform State Laws (NCCUSL), and adopted in Washington in 1993. WAC 284-04-500 was based on model provisions developed by the National Association of Insurance Commissioners (NAIC) and was promulgated in 2001.

While RCW 70.02 was not successful as a uniform law – the only other state to adopt it was Montana – it has provided a set of requirements which anticipated HIPAA to great extent, including information practice notices; limitations on disclosure of information and individual authorization requirements; individual rights of access, copying and amendment; and information safeguards. RCW 70.02 was amended in 2005 to conform more specifically to the HIPAA Privacy Rule. WAC 284-04-500 is less detailed and more general than RCW 70.02 and is consistent with HIPAA. Washington State health care providers therefore have nearly two decades of experience with RCW 70.02, while payers have nearly a decade of experience with WAC 284-04-500.

RCW 70.02 and WAC 284-04-500 cover all information related to health care that can be associated with an individual, which is called "health care information" under the former and "health information" under the latter, and is in both cases essentially coextensive with PHI under HIPAA. RCW 70.02 expressly includes genetic information, and Washington law also affords greater privacy and security protections to particularly sensitive information including alcohol and drug abuse treatment, mental health, and HIV/AIDS and certain sexually transmitted diseases in particular. Washington's age of consent for release of information is established as the age at which an individual may consent to treatment, which is presumptively 18 but may vary for some conditions. Washington courts have also recognized common law privacy rights, and while the case law is very limited in general, it is not inconsistent with other Washington law or HIPAA.

Washington State privacy and security law may be more clearly consistent with federal law than that of many states and the community may be more certain of its requirements than in some other states.

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<sup>1</sup> Including a comprehensive update to the Washington State Hospital Association's Washington Health Law Manual currently in production, co-authored by John R. Christiansen.

Nonetheless, different organizations have adopted different policies for disclosure of information based on their own interpretations or risk considerations. Under the contract strategy, such organizations will not be required to adopt different standards, but instead may determine the types of information they are willing to disclose and not willing to disclose through the HIE, if doing so conflicts with their own standards. Trading partners who find this problematic may seek to negotiate a resolution and the lessons drawn from the situation may inform the HIE policies and practices of other participants.

Unlike HIPAA, Washington law identifies no standards for safeguarding health information. Washington does have a security breach notification statute which applies to unencrypted personal information under a limited definition and, therefore, to some extent overlaps and must be reconciled with the HITECH breach notification requirements. However, HIPAA's own standards are principally risk-based, and experience indicates it is generally possible to implement safeguards that are consistent with both HIPAA and overlapping state law by "defaulting high" to the more rigorous or more protective requirement.

B. Operating Plan: This section of the operating plan discusses key topics including 1) Policies, 2) Oversight, 4) Federal Alignment, and 5) Compliance

#### Policies

For most purposes, HIE participants will be responsible for their own compliance, including privacy and security within their own perimeters. Since HIE, by definition, involves transmission across perimeters, there are necessarily some standards both parties to transactions must accept and comply with. In the course of the Washington HISPC, the privacy, security and legal experts who analyzed the laws and the policies and practices used for HIE by Washington health care organizations developed a consensus that there is a minimum set of policies and operational and technical requirements necessary for HIE to ensure the secure disclosure and transmission of personal health information and the protection of individual privacy. These generally accepted standards, the Privacy and Security Solutions Core Set, will be developed and implemented as part of the establishment of HIE governance and will align with the "thin-layer" approach to HIE services. The Core Set includes:

- User/Entity Authentication
- Access and Authorization
- Use and Disclosure
- Transmission Security and Exchange Protocols

Additional domains may be addressed if and when they are identified as necessary or valuable by HCA or the Community Oversight Organization.

OneHealthPort will rely on generally-accepted and "best of breed" policies and frameworks in these domains as the foundation for the policy set development and implementation effort. This resource will

be supplemented, enhanced and refined through the collaborative model described previously. A key component of this model is the feedback loop. The field of security and privacy is changing on a regular basis due to technological advancements, evolving legal precedent, and a dynamic policy environment. The collaborative process ensures that the policy framework is constantly being assessed and updated.

## Oversight

Oversight of the HIE privacy and security framework will occur on multiple levels:

- **Stakeholder Input** – As work group members, HIE users and other affected parties will be engaged in policy development and modification.
- **Community Oversight** – By contract, the Foundation for Health Care Quality as the Community Oversight Organization will approve all privacy and security policies as they are created or modified. Once every 24 months, and in response to significant events or changes in law or technology if necessary, the Foundation will review the ongoing status of the HIE privacy and security policies.
- **Legislative Accountability** – Each year OneHealthPort, the HCA and the Foundation are required to formally report to the Legislature on the progress of the HIE including the privacy and security component.

These oversight mechanisms are in addition to federal and state requirements under existing law.

## Federal Alignment

The Washington State HIE legal and policy strategy adheres to the eight HIE principles of the HHS Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health Information as follows:

*Individual Access and Correction:* HIPAA and Washington State law both require that health care organizations provide individuals with access to, and the ability to obtain copies of, their records. In addition, individuals can request correction or amendment of their protected information. Under the Washington HIE strategy the primary obligation to provide such access will remain with the health care organizations, which have a relationship with the individual as the individual's health care provider or payer, as required by current law. Also, as provided by current law, Covered Entities receiving an access request will be required to obtain information held by other HIE participants on their behalf and to pass on any amendment. This requirement will be specified by contract, which may be supplemented by policies to enable efficient, reliable access.

*Openness and Transparency:* Openness and transparency considerations apply at three levels: Governance, organizational and transactional. The Washington strategy addresses all three.

- OneHealthPort will provide opportunities for review and comment on material decisions, and the various governance parties will seek opportunities to educate the public and stakeholders about HIE issues and participation
- At the enterprise level, Covered Entities are required to publish notices of information or privacy practices under both HIPAA and Washington law. A variety of notice forms such as newsletters or other types of announcement, may be appropriate and encouraged as HIE develops.
- At the transaction level, HIPAA and HITECH require an accounting of disclosures to individuals upon request, including disclosures by Business Associates. While this requirement is not comprehensive it does strike a balance between the burden of tracking and the need for openness which is legally appropriate for all types of HIE. While it may become desirable to consider additional tracking as experience with HIE is gained, at this stage adding new requirements would likely tend to discourage HIE without creating a matching benefit.

*Individual Choice:* Under HIPAA and Washington law, individuals are not required to specifically authorize or consent to disclosures of protected information for certain fundamental purposes, principally treatment, payment and health care operations. While it is clearly desirable to ensure that protected information is not disclosed without authorization where required, it is not clear that authorization should be required for disclosure of information for an already authorized *purpose*, if the only reason is that the disclosure is through an electronic *medium*. For example, individual authorization for disclosure of information on hard-copy records by copying those records and sending them by courier or fax is not required, even though they may be subject to disclosure for unauthorized or improper reasons. Especially since the Washington strategy does not rely on centralized databases or repositories of clinical or patient information, but leaves such information distributed among the Covered Entities and Business Associates which are legally responsible for it anyway, it is not clear that any material benefit would be gained by an additional authorization or consent requirement. For purposes where authorization is required it will be the responsibility of the HIE participant seeking to make the disclosure to either obtain an appropriate authorization or not make the disclosure.

*Collection, Use and Disclosure Limitations:* HIPAA and Washington law already provide comprehensive limitations on, and conditions for, collection, use and disclosure of protected information. Each participant will be required to comply with such restrictions by law or by Business Associate Contract, and in some cases, both. The Subscription Agreement and policies will require that parties to HIE agree on appropriate defined restrictions (including, but not limited to restrictions required to comply with HIPAA's "minimum necessary" rule). However, at this early stage imposing predetermined limitations in addition to existing requirements would create a barrier to HIE without delivering any clear benefit.

*Data Quality and Integrity:* While existing law does not provide specific standards for data quality and integrity, it is clearly essential to have complete, accurate, current information for diagnostic, treatment, payment and other important decisions with important implications for individuals and organizations. This requirement exists already as a matter of due diligence and prudent management and operations

for all organizations which will participate in HIE. Under the Washington strategy, this is an obligation, which each participant must fulfill within its own perimeter, to ensure any information it discloses is of adequate quality and integrity to meet professional standards and allow the recipient to rely upon it in making important decisions. While the quality and integrity of data in transmission will not be subject to review and analysis on that level, the data will be protected against alteration or monitoring and audit trails will be implemented to ensure that the source of data and any alterations that might occur despite safeguards can be identified.

*Safeguards:* As discussed, under the Washington strategy, each HIE participant will be responsible for protecting information within its own legal and operational perimeter. OneHealthPort is responsible for protecting the HIE, including any information associated with it, or in transmission through it.

*Accountability:* The Washington strategy does not create any new regulatory or enforcement authority, but depends on an infrastructure of contractual obligations under community and governmental oversight. While neither the oversight organization, nor OneHealthPort will conduct assessments of nor otherwise police participants, OneHealthPort will monitor the HIE and will be able to terminate participants for misuse or violation of Subscription Agreements or required policies. Internal compliance “within the perimeter” will be the responsibility of each participating organization, as it is under existing law.

## Compliance

The Washington State strategy does rely on legal sanctions for enforcement of HIPAA and Washington State law requirements, which are not incorporated through the Subscription Agreement and associated policies. Currently, these sanctions are usually the only enforcement mechanism for these laws for all organizations which engage in HIE using any medium, electronic or otherwise. While it is appropriate to establish additional enforcement mechanisms to protect the HIE, it is not clear it would be appropriate to develop a supplemental enforcement infrastructure covering other areas. Certainly, it would tend to be a barrier to HIE participation and inconsistent with the flexibility and organic development contemplated by the Washington strategy.

One enforcement mechanism worth noting is security breach notification. Both HITECH and Washington State law provide for notice of security breaches affecting protected information and apply to Covered Entities, Business Associates and entities which are neither but do experience a security breach affecting personal information. The establishment of appropriate security breach response and notification policies and procedures, by contract supplemented by policy, will necessarily entail reporting requirements between participants and notice to potentially affected individuals as well as mitigation processes.

## **X. Conclusion**

The HCA, OneHealthPort and all the participating stakeholders are committed to advancing HIE in Washington State. The strategic and operating plans describe an exciting and practical vision that we believe is achievable in our state. While the plans are preliminary in nature, we have amassed key leaders, established a proven process, organized critical mass in our market, and developed a sustainable HIE design to support improvement of patient and population health. We look forward to working constructively in partnership with ONC over the next several years to implement our vision of Statewide HIE.

## **IX. Appendices**