

Introduction

This document describes New Hampshire's Health Information Exchange Planning and Implementation (NH HIE PI) project and includes the following sections:

1. Current State
2. Proposed Project Strategy
3. Required Performance Measures
4. Project Management
5. Evaluation
6. Organizational Capability Statement

1. Current State

New Hampshire Landscape Summary

New Hampshire has approximately 1.3 million residents. The healthcare system is comprised of twenty-six acute care hospitals, thirteen of which are critical access. It also has two free-standing rehabilitation hospitals, one state owned and operated psychiatric hospital and a Veterans Administration facility.

There are no county or other public hospitals. It has ten Community Mental Health Centers, nine Federally Qualified Health Centers (FQHCs), one FQHC-Look-A-Like, eleven county nursing homes, 60 private nursing homes, one state owned and operated psychiatric nursing home, 80 home health and hospital organizations, 1,500 licensed primary care practitioners, an equal number of nurse practitioners, 2,500 specialists, and 200 pharmacies.

Based upon interviews with stakeholders, on the ground observations, and some survey work, New Hampshire is a highly electronic state in terms of Electronic Medical Records (EMR) adoption and inpatient clinical systems. All 26 hospitals except one have an inpatient clinical system, several have implemented computerized physician order entry (CPOE), all FQHCs have EMR, the majority of primary care practitioners outside of the FQHCs have EMR (due to hospital ownership), and likely more than half

of specialists have EMR. Our largest provider, Dartmouth-Hitchcock Medical Center is currently converting from a homegrown EMR to a CCHIT-certified platform. Several FQHCs have deployed patient portals as has one of the largest integrated delivery systems in the state, providing secure message, appointment scheduling, medical record access, medication refill requests, and other functions. These EMRs, however, are generally not connected outside of the delivery network.

Additionally, significant increases in deployment of ePrescribing and telemedicine technologies have occurred within the past few years. New Hampshire is also part of the \$25M FCC grant for rural healthcare broadband infrastructure investment covering Maine, Vermont, and New Hampshire.

However, given this progress in the core clinical application implementation, New Hampshire has no statewide or regional clinical health information exchange entities. It is verified that many providers do share information electronically (i.e., hospital laboratory results being sent to a Federally Qualified Health Center's EMR), but it is being done in a point-to-point manner versus with an exchange entity. Many facilities "share" data by providing view access via license extension from one provider to another. The level of interoperability is unknown, but assumed to not be high because different delivery networks are using different systems.

Provider Technology Survey

The University of New Hampshire is undertaking a survey of New Hampshire providers (FQHCs, CMHCs, Nursing Homes, Home Health and Hospice, Primary Care, Specialists) this fall to attempt to determine what types of technologies are in place. The New Hampshire Hospital Association has already conducted a survey earlier this year but results have not been released. The goal of these surveys is to be able to provide a future resource center with a list of providers who need assistance and to provide the HIE efforts with a baseline for its future activities.

Strategic Plan for Health Information Technology and Exchange Strategic Plan Initiative

The survey mentioned above is being conducted in response to a recommendation made in January 2009's Strategic Plan for Health Information Technology and Exchange. This plan was requested under Executive Order by Governor John Lynch and was completed in 2008. The plan was developed by a multi-stakeholder group facilitated by the New Hampshire Citizen Health Initiative that is managed by the University of New Hampshire. It is expected that components of this plan will be incorporated into the new plan under this grant. The plan did not come to consensus on a governance model, nor the need for a state-level HIE entity. Instead it focused on local, community exchange as the first step with later, cross-community integration; an incremental approach.

ONC Domain Progress

New Hampshire is in the beginning stages of laying the groundwork for increased capacity and structure for health information exchange. It has developed an initial strategic plan, assembled the key stakeholders, and made connections with other states within our region.

Although each of the domain areas was discussed during the Strategic Plan effort, little specific progress has been made to date in the ONC's five domains:

1. Governance Capacity - To date, New Hampshire has not developed a governance capacity to support this effort and as such has not made specific progress in this area.
2. Finance Capacity - To date, New Hampshire has not developed the finance capacity to support this effort and as such has not made specific progress in this area.
3. Technical Infrastructure Capacity - To date, New Hampshire has not developed a health information exchange infrastructure and as such has not made specific progress in this area.
4. Business and Technical Operations Capacity - To date, New Hampshire has not developed a health information exchange infrastructure and as such has not made specific progress in this area.

5. Legal and Policy HIE Capacity - New Hampshire participated in all phases of HISPC. The final phase included all New England states and comparison of privacy and security policies with the purpose of harmonization was completed. Discussion of possible governance structures occurred during the development of the initial statewide strategic plan for HIT / HIE. A series of state laws were enacted by the New Hampshire Legislature and signed by Governor Lynch in the last five years pertaining to health information technology and exchange, although these laws do not provide a mandate for interoperability or HIE.

Intentions to Leverage Regional HIE Efforts

New Hampshire has a unique opportunity to leverage existing regional efforts to advance health information exchange. To our west, Vermont Information Technology Leaders has been developing an exchange capacity for several years and has launched pilot activities. To our east, Maine HealthInfoNet has developed the infrastructure and recently launched their health information exchange using a centralized infrastructure model. To our south, Massachusetts has established three regional HIE pilots. New Hampshire's health care providers, employers, and patients cross these borders daily. For example, forty percent of Dartmouth Hitchcock Medical Center's patients are Vermont residents.

Vermont and Maine

As New Hampshire has no existing statewide health information exchange infrastructure, discussions are underway to leverage what has been developed in Maine and Vermont. The three Northern New England states are very similar in terms of population size and demographics. Discussions with both Vermont and Maine and will continue during the HIE planning process.

During the development of the New Hampshire Strategic Plan for Health Information Technology and Exchange, representatives from both Maine and Vermont provided overviews of their states' efforts. This was accounted for in our plan.

Given that Maine and Vermont have existing health information exchange infrastructure, New Hampshire will work with both states to determine how best to leverage it. Funding could be applied to connecting New Hampshire providers with either/both exchanges, based upon geographic location or other preferences.

Massachusetts

New Hampshire will also explore partnering with Massachusetts and, at a minimum, seek to integrate with Massachusetts due to the high frequency of New Hampshire residents seeking medical treatment in Massachusetts. For example, New Hampshire residents make roughly 28,000 visits to Massachusetts emergency departments each year.

State Progress Detail

New Hampshire has made progress towards state-wide electronic health information exchange for several transaction types.

- Electronic eligibility and claims transactions
 - There is no statewide, centralized entity for electronic eligibility and claims transactions. Providers individually connect directly to the payer's functionality or else utilize a clearinghouse to do so.
- Electronic prescribing and refill requests
 - In January 2008, according to Surescripts, New Hampshire had 325 prescribers connected to their network. This has risen to 908 prescribers in September 2009. This connection means that the providers are certified for specific functions including prescription transmittal and refill requests.

- According to Surescripts, in 2008, 3% of New Hampshire's prescriptions were routed electronically. This translates to nearly 150,000 prescriptions transmitted and 34,500 prescription refill requests.
- Electronic clinical laboratory ordering and results delivery
 - Some of New Hampshire's hospital labs have electronic ordering capabilities and some are electronically delivering results to internal and external organizations. An accurate inventory of these practices has not been undertaken in New Hampshire.
- Electronic public health reporting (immunizations, notifiable laboratory results) - As is the norm for state health departments, New Hampshire supports many small "silo" applications that were usually developed for the purpose of supporting surveillance for a single disease state. More recently, New Hampshire has participated in the CDC PHIN initiative, and efforts are underway to use an integration engine to pull data from siloed systems and use it to create well formed HL-7 messages that can satisfy comprehensive disease reporting. The following details the current electronic public health reporting mechanisms:
 - Communicable disease reporting- The New Hampshire Electronic Disease Surveillance System (NHEDSS) is an implementation of a vendor-developed NEDSS-compatible application in an Application Services Provider (ASP) model. New Hampshire continues to track and monitor 69 reportable conditions with data generated by NHEDSS. NHEDSS can accept ELR from the New Hampshire public health laboratories (and is moving towards receiving ELR from other clinical laboratories). However, NHEDSS is only capable of creating an enhanced NETSS export with supplemental data. Other communicable diseases (TB, STD and HIV) data are not reported to CDC through the NHEDSS system. TB data was reported using TIMS through December 2008 and via eRVCT using PHIN standards in September 2009. STD data is reported through the STDMIS system, and HIV data is reported via eHARS.

- Syndromic surveillance – The Automated Hospital Emergency Department Data system (AHEDD) is used to collect emergency department data from hospitals and was originally designed for early detection of bioterrorism and naturally-occurring health risks. AHEDD includes: Secured electronic data exchange, real-time health data collection, automatic surveillance and alerting, early detection of emerging health threats, and rapid investigation and follow-up. Syndromic data collected include over half a million patient-specific encounters are loaded in this data repository, which includes chief complaint, gender, date of birth, patient type, disposition, as well as abstracted encounter diagnoses.
- Lead Poisoning Surveillance – New Hampshire does collect some data electronically, including child demographics and blood lead levels. However, not all data are reported electronically, and at present the state lacks an integrated system to receive and manage these data.
- Cancer Registry – New Hampshire contracts with Dartmouth College who in turn receives cancer data from acute care hospital pathology labs, physician offices, nursing homes, and out of state cancer registries. Data are submitted via web-based applications or file upload to secure sites. After passing through a QA process, encrypted data are provided to New Hampshire DHHS via a password protected CD. The data are then available to researchers who meet certain research, privacy and security protocols.
- Immunization – New Hampshire does not support an immunization registry, but is interested in a modern type of registry, one that New Hampshire can get directly through mining EMR.
- Quality reporting capabilities
 - There is no statewide, centralized quality exchange.
 - The State DHHS has specific patient safety indicator reporting requirements.

- Many providers participate in PQRI programs where quality measures are reported
- Many providers participate in insurance company pay-for-performance programs where quality measures are reported
- The DHHS Office of Medicaid Business and Policy regularly produces health care quality reporting that compares members enrolled in Medicaid, the State Child Health Insurance Program, and the commercially insured, through its NH Comprehensive Health Care Information System. While based on administrative claims data, the work of the project has built experience in DHHS in development and application of national standard health care quality reporting.
- Prescription fill status and/or medication fill history
 - This information is not provided by Surescripts or collected by other publicly reporting entities.
- Clinical summary exchange for care coordination and patient engagement.
 - This information is currently unavailable.

2. Proposed Project Summary

Introduction

It is impossible at this time to present a specific, detail project plan for New Hampshire to implement an electronic health information exchange capability at this time. We do not have a true Strategic Plan, and in fact do not have consensus among HIE stakeholders regarding what, how and who – what a state-wide HIE should be, how it should be created, operated and financed and who would participate. In order to progress towards implementing an exchange, stakeholders need to define their HIE value propositions and requirements and address the issues and concerns. Described below is a framework that will allow New Hampshire to create an HIE Strategic Plan and then an Operational Plan in compliance with HITECH State HIE grant requirements. Implementation details are very unknown since we don't know if we are

building our own HIE, replicating one by using one from another state, or using one or more other state's HIE capability.

Our approach also recognizes that an HIE can only be effective if there are EMR systems in use and connect to an HIE. Thus we consider HIT (EMR) adoptions an important part to our HIE project.

The New Hampshire HIE Planning and Implementation project consists of four phases.

- Project Initiation Phase
- Strategic Plan Phase
- Operational Plan Phase
- Implementation Phase

These four project phases are primarily sequential. Each builds upon the former's work. The approach of each phase is dependent upon the work results of the previous phase. Thus our approach described below is more specific and detailed for the earlier phases. Our approach is subject to change as we learn more and make decisions through the process.

Project Initiation Phase

The Project Initiation Phase is currently in process. It consists of project planning and preparation activities, including:

- Complete the HITECH State HIE Cooperative Agreement application process
- Establish a project Steering Committee and Leadership Team
- Engage Stakeholders
- Establish an Office for Health IT within the New Hampshire Department of Health and Human Services

- Complete Survey of health information technology and exchange current capability, plans and interest among New Hampshire health care providers
- Perform a review of HIE capacity in neighboring states
- Perform a high spot review of leading HIE vendor options available and in use today
- Inventory related projects and initiatives within New Hampshire and in neighboring states that this project should coordinate and collaborate with
- Establish Sub-Teams to address the domains of the Strategic Plan
- Perform an RFP process to select Consulting Partner
- Perform High-Level Review of Legislative Needs to Promote Adoption of HIE

The primary milestones and deliverables of the Project Initiation Phase are:

- Project Charter
- Value Propositions and Requirements for Each Stakeholder Group
- Directory of Healthcare Providers in New Hampshire
- Survey Results of health information technology and exchange current capability, plans and interest among health care providers within New Hampshire
- Summary of HIE Capacity in Neighboring States
- Summary of Leading HIE Options Available in the Market
- Inventory of Related Projects
- Preliminary Sub-Team Charters
- RFP to select a Consulting Partner
- Staffed Office for Health IT including the State HIT Coordinator
- List of Legislative Changes Needed for Adoption of HIE

Sub-Teams will be formed from the project's Stakeholder group. They will engage others to accomplish their objectives. The specific sub-teams needed will be determined during the Project Initiation Phase. Current thinking is that the sub-teams will include teams to address the HITECH HIE domains included in the Strategic and Operational Plans as well as teams to address other focus areas. Possible sub-teams are described in the Project Management section of this document below.

While it is planned to begin the formation of these teams during the Project Initiation Phase, the sub-teams will not begin their work until the Strategic Plan Phase of the project.

A Project Kickoff has been scheduled for November 2, 2009, to present and discuss the NH HIE PI project's Project Charter. All project team members have been invited. (See Project Management section below for description of project team members.)

The Project Initiation Phase will end when the HITECH funding is awarded and accepted. Thus the Project Initiation activities are NOT within the scope of HITECH funding. The project Initiation Phase is pre-project work to enable a quick start and rapid execution of the planning and implementation phases of the NH HIE PI project.

Strategic Plan Phase

The Strategic Plan Phase will begin when the HITECH funding is awarded and accepted, and is anticipated to take four months. A Consulting Partner will be acquired to provide HIE planning expertise, facilitate stakeholder discussions, lead sub-team efforts and create deliverables.

The primary activities of the Strategic Plan Phase are:

- Determine HIE Model for New Hampshire – buy, build or reuse; functional architecture

- Support HIT Adoption – ensure establishment of Regional Extension Center for New Hampshire; work with Regional Center
- Coordinate with Medicaid HIT Plan and Implementation – determination of meaningful use for HITECH incentives; Medicaid HIT HIE objectives; coordination of overlapping planning needs (e.g., surveys, focus groups, etc.)
- Coordinate with Medicare and Federally Funded, State Based Programs
- Coordinate with Public Health – CDC and PHIN; objectives for public health use of HIE
- Coordinate with other ARRA Programs – broadband; other
- Address all legal / policy matters – privacy and security, state laws, policies and procedures, HIE trust agreements
- Define HIE Governance Model
- Determine HIE Financial Model for Sustainable Operation
- Determine HIE Technical Architecture
- Develop Consulting Partner Contract
- Perform Required Financial Accountability and Reporting
- Create Communication Plan – define methods, tools and techniques to inform all stakeholders of HIE activities; request feedback; enable dialogues
- Create Communication Schedule – schedule and track communications
- Create NH HIE Strategic Plan
- Approve NH HIE Strategic Plan

The primary milestones and deliverables of the Strategic Plan Phase are:

- HIE Model for New Hampshire
- Establishment of a Regional Extension Center for New Hampshire
- Medicaid HIT Plan and Implementation Coordination and Support Summary

- Medicare and Federally Funded, State Based Programs Coordination and Support Summary
- Public Health Coordination and Support Summary
- ARRA Programs Coordination and Support Summary
- Privacy and Security Summary
- State Laws Analysis and Recommendations
- HIE Policies and Procedures Summary
- HIE Trust Agreements Summary
- HIE Governance Model Summary
- HIE Financial Model for Sustainable Operation Summary
- HIE Technical Architecture Summary
- Consulting Partner Contract
- Financial Reporting (details to be determined)
- Communication Plan
- Communication Schedule
- NH HIE Strategic Plan

Operational Plan Phase

The Operational Plan Phase will begin after the Strategic Plan is approved by the project Steering Committee and is planned to take four months. The purpose of the Operation Plan is to describe how the Strategic Plan will be executed.

The primary activities of the Operational Plan Phase are:

- Create Project Schedule – detail activities and tasks against time line.
- Coordinate with other ARRA Programs – including Regional Extension Centers, workforce development initiatives, broadband mapping and access

- Coordinate with other States – this could include developing collaborative agreements in anticipation of using or interfacing with HIEs operating in other states
- Develop HIE Governance Model
- Create HIE Business Plan – detail cost estimates, staffing plans, transaction estimates, finding estimates, financial policies / procedures / controls
- Adopt and Support Standards for Interoperability and Integrate with Certifications
- Develop HIE Technical Architecture
- Develop HIE Business and Technical Operations Plan – utilization of neighboring states’ HIEs; strategies to combine with and/or integration with other HIEs
- Develop Legal / Policy Requirements – privacy and security, state laws, policies and procedures, HIE trust agreements; privacy and security harmonization
- Create NH HIE Operational Plan
- Approve NH HIE Operational Plan

The primary milestones and deliverables of the Operational Plan Phase are:

- Project Schedule
- ARRA Programs Updates – describe progress with Regional Extension Centers, workforce development initiatives, broadband mapping and access
- Collaborative Agreements with other State and/or other related documents
- HIE Governance Model - elaborated
- HIE Business Plan
- HIE Technical Architecture - elaborated
- HIE Business and Technical Operations Plan
- Legal / Policy Requirements
- NH HIE Operational Plan

Implementation Phase

The Implementation Phase will begin after the Operational Plan is approved by the project Steering Committee. It is expected to take 12 – 24 months to implement an initial HIE capability depending upon the HIE Model to be implemented. The total time to implement a complete HIE capability covering all healthcare providers and transaction types will take several years. Joining a neighboring state's or states' HIE can be implemented faster than selecting and implementing an independent solution. The activities will also be different depending upon the HIE Model selected. The project team wishes to use the knowledge and expertise of the HIE consulting partner to develop an approach to implementing an HIE.

A phased implementation approach is planned. Phase in will be by provider group / provider and by data exchanged. The first implementation phase will be a proof of concept / pilot.

Anticipated Barriers

The primary anticipated barriers that will challenge our rate of progress and success at implementing an HIE include:

1. State Privacy / Security Laws – Although New Hampshire has made some progress over recent years to promote storing and exchanging electronic health information, more work is needed to advance the possibility of HIE. New Hampshire's laws are more restrictive than national privacy laws. There are some within the state legislature who regard the risks of privacy and security violations too great to bear. A strong Policy/Legal – Privacy/Security Sub-Team to work with the legislative leaders and members of the public will be necessary to overcome this barrier.
2. State Legislative Changes – Numerous legislative changes are regularly proposed that would change the rules regarding HIE privacy and security. Rapid and frequently changing rules will be difficult for EMR and HIE providers to implement. Modifications made in response to changes in New Hampshire's rules will not be a vendor priority and could be more costly if New

Hampshire is the only state requiring such rules. A strong Policy/Legal – Privacy/Security Sub-Team to work with the legislative leaders will be necessary to overcome this barrier.

3. Stakeholder Consensus – During New Hampshire’s HIT HIE Strategic Plan effort in 2008, stakeholders did not share common views and opinions often or quickly. While all supported HIT and HIE for New Hampshire – they varied on the what, how, who and when. Strong sub-team leadership with ample time to organize, facilitate and drive stakeholder discussions is needed to come to consensus. This is expected to be supplied by a highly qualified and effective Consulting Partner.
4. Funding – There is little support for any public or private funding of an HIE within New Hampshire. The State, like many states, faces a fiscal crisis over the next 3 - 4 years. New revenue sources are very challenging to implement in New Hampshire, a state which has no income tax or sales tax. Health plans and hospitals have not expressed any interest in funding an HIE. The HIE project team and the Financial Sub-Team in particular will need to demonstrate economic and other value to funding sources while also seeking low cost, multi-party, funding options.

Privacy and Security Requirements for Health IT

New Hampshire recognizes the importance of privacy and security associated with health information technology and will establish a mechanism to ensure that the privacy and security of an individual’s health information will be maintained, including the governance, policy and technical mechanisms that will be employed for health information exchange. Options being considered include the establishment of a team member or Sub-Team to focus on privacy and security across all Sub-Teams and domains, the hiring of an independent expert to perform that role, or requiring this focus from the Consulting Partner. The New Hampshire Privacy Officer and Security Officer are members of the project team, as are members of the State legislature who are focused on this area.

In addition, we will consider the privacy and security provisions of the ARRA, HIPAA Privacy Rule, HIPAA Security Rule, Confidentiality of Alcohol and Drug Abuse Patient Records Regulations, and the HHS Privacy and Security Framework into the State Strategic and Operational Plans. We will also collaborate on privacy and security policies with neighboring states to the extent necessary to facilitate HIE across state boundaries.

Communication Strategy

A member of the project's Leadership Team is assigned the responsibility to develop and manage the execution of a project Communication Plan. The Communication Plan will follow our standard format and consist of the following sections:

- Introduction
- Communication Objectives
- Communication Principles
- Communication Audiences and Approach
- Communication Strategy
- Communication Schedule

A Communication Plan for DHHS's ACCES: Front Door project has been included in our application submission as an example of a Communication Plan. The ACCES: Front Door project redesigned the way clients access health and human services in New Hampshire.

Community-Based Organizations Involvement

Our project team includes members from several DHHS agencies which work with and support the community-based organizations that deal with medically underserved populations and the needs of special populations including newborns, children, including those in foster care, the elderly, persons with

disabilities, persons with Limited English Proficiency (LEP), persons with behavioral health problems, persons with substance use disorders, and those in long term care.

- Office of Medicaid Business and Policy (OMBP)
- Division of Public Health Services (DPHS) – WIC Program
- Division of Children, Youth and Families (DCYF)
- Division of Juvenile Justice Services (DJJS)
- Bureau of Elderly and Adult Services (BEAS)
- Bureau of Drug and Alcohol Services (BDAS)
- Bureau of Behavioral Health (BBH)
- Bureau of Developmental Services (BDS)

Furthermore, the DHHS executives who oversee these agencies are members of the project's Steering Committee.

This representation on the project team coupled with the inclusion of this focus in our project's objectives as documented in our Project Charter will ensure that these community-based organizations are involved and represented in our project.

Incorporating the Interests of Key Stakeholders

The funding opportunity requested the involvement of the following stakeholder groups:

- Health care providers, including providers that provide services to low income and medically underserved populations
- Health plans
- Patient or consumer organizations that represent the population to be served
- Health information technology vendors

- Health care purchasers and employers
- Public health agencies
- Health professions schools, universities and colleges
- Clinical researchers
- Other users of health information technology such as the support and clerical staff of providers and others involved in the care coordination of patients

These stakeholder groups have been included in our project team and project governance structure. See Project Management section below.

3. Required Performance Measures and Reporting

Overview

New Hampshire notes that successful applicants are required to provide detailed information on the specific methodologies, tools and strategies that will be used by the state to collect all data, including reporting requirements and performance measures as needed, to meet the reporting requirements of the GPRA, this award notice, and ARRA. By submitting this application New Hampshire asserts that it will meet these requirements, and further asserts that any performance measures developed will be treated as ongoing reportable requirements once the implementation phase of the project begins.

Methodologies, Tools and Strategies Defined

An explanation of the specific methodologies, tools, and strategies that will support the NH HIE effort is provided in the following paragraphs. Following the explanatory paragraphs are a series of tables, aggregated by domain, that list each reporting requirement along with its associated methodology, tool(s), and strategy.

Methodologies – Direct observation or verification is the methodology of choice. New Hampshire will deploy standard statistical methods to compare observed versus expected results. Other standard statistical tests will be used to determine the significance of changes in rates or utilization over time. In instances where it is not possible to quantify changes, New Hampshire will rely on generally accepted qualitative measures such as focus group results, expert opinion, and/or best profession judgment to track project progress.

Tools – For the purpose of this application, New Hampshire defines “tools” as written or electronic instruments such as questionnaires, surveys, checklists, or pre and/or post tests. Tools will be developed that are specific to each reporting requirement and performance measure. The term “tools” may also apply to specific tests of statistical significance.

Strategies – Reports on requirements will be based, whenever possible, on quantitative and reproducible methodologies such as inferential statistics or absolute counts. In situations where complete counts are not feasible, New Hampshire will endeavor to sample in such a manner (random or stratified-random) as to assure validity of results. As part of its data collection strategy, New Hampshire will make an effort to gain up-front agreement with its partners as to the appropriateness of data collection in order to assure acceptance of, and compliance with, data collection requirements.

Reporting Requirements Summary Tables

Tables 1 through 5 summarize the specific steps New Hampshire will take to meet its reporting requirements under this cooperative agreement.

Table 1: Summary of Reporting for the Governance Domain

Reporting Requirements	Method	Tools	Strategy
What proportion of the governing organization is represented by public stakeholders?	Descriptive statistics	Direct count	Quantitative
What proportion of the governing organization is represented by private sector stakeholders?	Descriptive statistics	Direct count	Quantitative
Does the governing organization represent government, public health, hospitals, employers, providers, payers and consumers?	Descriptive statistics	List of governing organization participants by stakeholder type	Qualitative
Does the state Medicaid agency have a designated governance role in the organization?	Direct observation	Governing organization charter	Qualitative
Has the governing organization adopted a strategic plan for statewide HIT?	Direct observation	Governing organization minutes and other documentation	Qualitative
Has the governing organization approved and started implementation of an operational plan for statewide HIT?	Direct observation	Governing organization minutes	Qualitative
Are governing organization meetings posted and open to the public?	Direct observation	Compilation of posting notices	Qualitative
Do regional HIE initiatives have a designated governance role in the organization?	Direct observation	Governing organization charter	Qualitative

Table 2: Summary of Reporting for the Finance Domain

Reporting Requirements	Method	Tools	Strategy
Has the organization developed and implemented financial policies and procedures consistent with state and federal requirements?	Direct comparison	Overrunning organization records	Qualitative
Does organization receive revenue from both public and private organizations?	Direct calculation	Governing organization records	Quantitative
What proportion of the sources of funding to advance statewide HIE are obtained from federal assistance, state assistance, other charitable contributions, and revenue from HIE services?	Direct calculation	Governing organization records	Quantitative
Of other charitable contributions listed above, what proportion of funding comes from health care providers, employers, health plans, and others (please specify)?	Direct calculation	Governing organization records	Quantitative
Has the organization developed a business plan that includes a financial sustainability plan?	Direct observation	Governing organization records	Qualitative
Does the governance organization review the budget with the oversight board on a quarterly basis?	Direct observation	Governing organization minutes	Qualitative
Does the recipient comply with the Single Audit requirements of OMB?	Direct observation	Audit results	Qualitative

Reporting Requirements	Method	Tools	Strategy
Is there a secure revenue stream to support sustainable business operations throughout and beyond the performance period?	Direct observation	Governing organization records	Qualitative

Table 3: Summary of Reporting for the Technical Infrastructure Domain

Reporting Requirements	Method	Tools	Strategy
Is the statewide technical architecture for HIE developed and ready for implementation according to HIE model(s) chosen by the governance organization?	Direct observation	Survey/questionnaire	Qualitative
Does statewide technical infrastructure integrate state-specific Medicaid management information systems?	Direct observation	Review of technical documentation	Qualitative
Does statewide technical infrastructure integrate regional HIE?	Direct observation	Review of technical documentation	Qualitative
What proportion of healthcare providers in the state are able to send electronic health information using components of the statewide HIE Technical infrastructure?	Descriptive statistics	Survey/questionnaire	Quantitative
What proportion of healthcare providers in the state are able to receive electronic health information using components of the statewide HIE Technical infrastructure?	Descriptive statistics	Survey/questionnaire	Quantitative

Table 4: Summary of Reporting for the Business and Technical Operations Domain

Reporting Requirements	Method	Tools	Strategy
Is technical assistance available to those developing HIE services?	Direct observation	Governing organization charter	Qualitative
Is the statewide governance organization monitoring and planning for remediation of HIE as necessary throughout the state?	Direct observation	Governing organization strategic and operating plans	Qualitative
What percent of health care providers have access to broadband?	Direct observation	Survey/questionnaire	Quantitative
What statewide shared services or other statewide technical resources are developed and implemented to address business and technical operations?	Direct observation	Survey/questionnaire	Qualitative

Table 5: Summary of Reporting for the Legal/Policy Domain

Reporting Requirements	Method	Tools	Strategy
Has the governance organization developed and implemented privacy policies and procedures consistent with state and federal requirements?	Direct observation	Self-Declaration	Qualitative

Reporting Requirements	Method	Tools	Strategy
How many trust agreements have been signed?	Direct observation	Survey	Quantitative
Do privacy policies, procedures and trust agreements incorporate provisions allowing for public health data use?	Direct observation	Governing organization documentation	Qualitative

Performance Measures Summary Table

The following measures are applicable to the implementation phase of the cooperative agreement. They will be subject to revision based on anticipated ONC guidance.

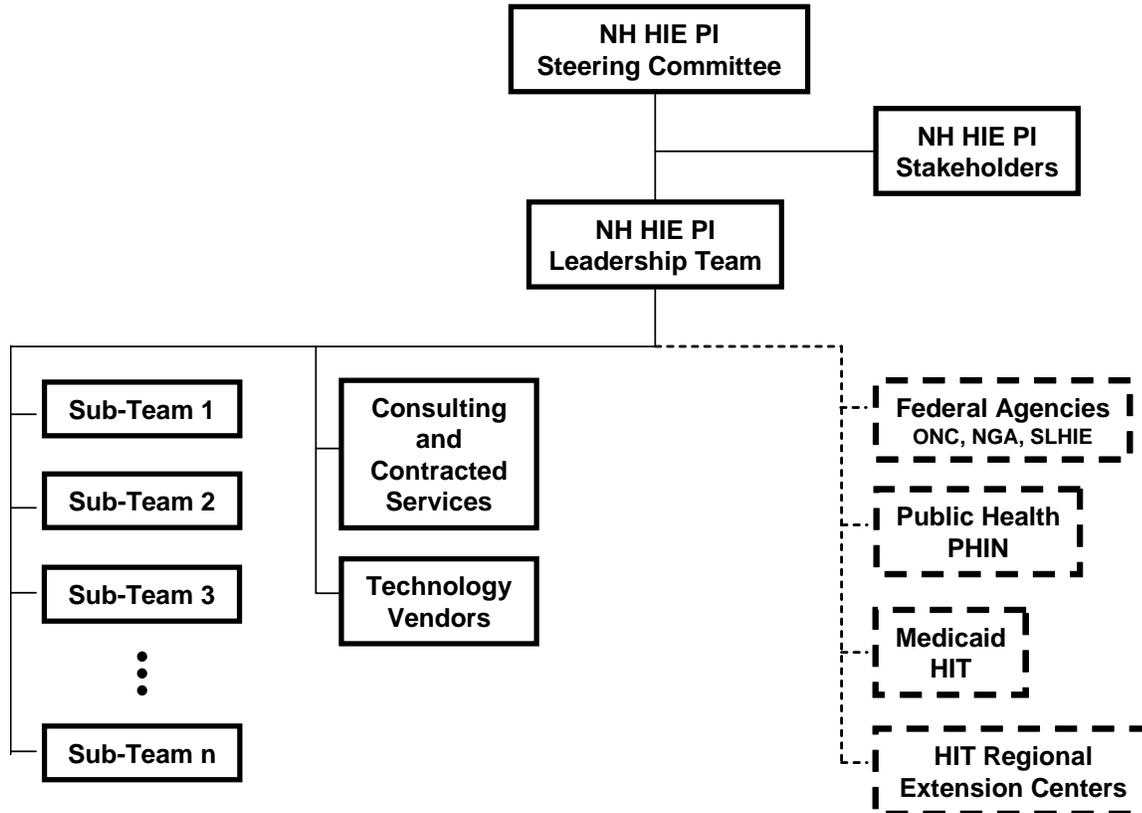
Table 6: Summary of Performance Measures

Performance Measure	Method	Tools	Strategy
Percent of providers participating in HIE services enabled by statewide directories or shared services.	Direct observation	Survey/questionnaire	Quantitative
Percent of pharmacies serving people within the state that are actively supporting electronic prescribing and refill requests.	Direct observation	Survey/questionnaire	Quantitative
Percent of clinical laboratories serving people within the state that are actively supporting electronic ordering and results reporting.	Direct observation	Survey/questionnaire	Quantitative
Number and percent of providers using of electronic prescribing	Direct observation	Survey/questionnaire	Quantitative
Number and percent of treating providers that exchange of clinical summaries among treating providers	Direct observation	Survey/questionnaire	Quantitative
Immunization, quality and other public health reporting	Direct observation	Governing organization documentation	Quantitative
Eligibility checking	Direct observation	Governing organization documentation	Qualitative

4. Project Management

Project Governance

The project governance model for the NH HIE PI Planning and Implementation Project is shown and described below.



Steering Committee

The NH HIE PI Steering Committee oversees the work performed within the project. The Steering Committee membership includes Nicholas Toumpas, the DHHS Commissioner, and his Policy Team, as follows:

- Mary Ann Cooney, DHHS Deputy Commissioner
- Kathleen Dunn, NH Medicaid Director
- Nancy Rollins, DHHS Associate Commissioner, Division of Community Based Services
- Jose Montero, NH Public Health Director

The DHHS Commissioner is the Executive Sponsor for the project and the highest decision making authority for the project.

The Steering Committee has the following responsibilities:

- Receives progress reports during periodic Steering Committee meetings
- Is appraised of and addresses the project's critical needs, risks and issues
- Provides overall direction and guidance
- Defines and approves changes to project scope and approach
- Approves all key decisions and deliverables
- Eliminates roadblocks elevated by Leadership Team

Stakeholders

The Stakeholders represent the groups / organizations which are impacted by, or can impact, the outcomes of the project. They include those entities associated with the funding, design, implementation, use and operation of the HIE.

DHHS Stakeholders include representatives from the following DHHS agencies:

- Office of the Commissioner
- Office of Medicaid Business and Policy (OMBP)
- Division of Public Health Services (DPHS)
- Division of Children, Youth and Families (DCYF)
- Division of Juvenile Justice Services (DJJS)
- Bureau of Elderly and Adult Services (BEAS)
- Bureau of Drug and Alcohol Services (BDAS)

- Bureau of Behavioral Health (BBH)
- Bureau of Developmental Services (BDS)
- New Hampshire Hospital (NHH) and Glencliff Home (GH)
- Office of Business Operations (OBS)
- Office of Operations Support (OOS)
- Office of Improvement, Integrity and Information (OIII)
 - HIPPA Privacy Officer
 - HIPAA Security Officer

Other public Stakeholders include representatives from the following New Hampshire governmental agencies:

- NH Governor's Office
- NH State Legislature
- NH Department of Information Technology (DoIT)
- NH Insurance Department (NHID)

Private Stakeholders represent the following stakeholder groups:

- Hospitals – large integrated networks, regional, small critical access
- Community Health Centers (FQHCs and look a likes)
- Rural Health Centers
- Community Mental Health Centers
- Behavioral Health Practitioners
- Nursing Homes
- Physicians and other practitioners
- Pharmacies

- Health Plans
- Healthcare / Clinical Researchers
- Health care purchasers
- Patients / Consumers

The Stakeholders have the following responsibilities for the project:

- Represent their group's interests in the project
- Provide a communication channel between the project and the group they represent
- Review all project deliverables and decisions; provide feedback and input
- Participate on a Sub-Teams

The initial selection and acceptance of Stakeholder representatives has been completed. All Stakeholders, along with the rest of the project team, have been invited to attend a two-hour Project Kickoff to explain the purpose, scope objectives, approach, deliverables, project governance and more related to the project.

Leadership Team

The Leadership Team has the day-to-day responsibility for the project's success. The Leadership Team determines the project's approach, deliverables and processes. It plans and directs the work performed within the project. It approves all decisions and deliverables, and promotes key decisions and deliverables to Steering Committee for approval. It addresses and resolves project needs, risks and issues and escalates to Steering Committee as needed. It is accountable for compliance with federal grants and other regulations. It oversees and directs sub-teams, consultants and contracted services and technology vendors. It coordinates with other federal and state entities and projects.

The team consists of a Project Director, a Project Manager a Project Analyst and a Financial Analyst.

Project Director

- Has primary responsibility for the project, including financial accountability
- Leads Leadership Team
- Presents status updates to Steering Committee and Stakeholders
- Presents deliverable to Steering Committee for approval and to Stakeholders for review, feedback and input

Project Manager

- Overall responsibility for quality and timeliness of deliverables, status reporting, risk and issue management
- Responsible for project plan, schedule, quality and timeliness of deliverables, status reporting, risk and issue management
- Responsible for coordinating and integrating work of all sub-teams, consultants, contracted services and technology vendors
- Responsible for coordinating and integrating work of other related projects and initiatives

Project Analyst

- Supports Project Director and Project Manager as needed.
- Creates and maintains Project Communication Strategy, Plan and Schedule
- Creates and supports the creation of project deliverables
- Assists with administrative tasks such as
 - Scheduling and organizing meetings
 - Creating meeting minutes
 - Maintaining Project Documentation Library

Financial Analyst

- Responsible for budget, financial tracking and financial reporting, including ARRA §1512 Reporting
- Manages RFP, contracting, and purchasing
- Assists sub-teams on financial related matters

The Leadership Team role will be initially provided by the project Formation Team, as follows:

- William Baggeroer, DHHS Chief Information Officer
- Brook Dupee, Chief, Bureau of Public Health Informatics, DHHS Division of Public Health Services
- Andrew Chalsma, Chief, Bureau of Data and Systems Management, DHHS Office of Medicaid Business and Policy
- Shanthi Venkatesan, Administrator – Finance/ARRA, DHHS Office of Business Operations
- Patrick Miller, Research Associate Professor, University of New Hampshire, NH Institute for Health Policy and Practice

The Formation Team was created to form the NH HIE PI project and created this Project Narrative along with the other Cooperative Agreement Application documents.

An **Office of Health IT** (OHIT) reporting to the DHHS Chief Information Officer, William Baggeroer, is being formed and should be in place by January 2010. It will be staffed by three full-time positions new to DHHS and funded in part with HIE Cooperative Agreement funds.

- State HIT Coordinator
- Project Manager
- Business Analyst

These three positions will fill three of the four Leadership Team roles on a full-time basis.

- NH HIE PI Project Director role will be filled by the OHIT State HIT Coordinator
- NH HIE PI Project Manager role will be filled by the OHIT Project Manager
- NH HIE PI Business Analyst role will be filled by the OHIT Business Analyst

The NH HIE PI Financial Analyst role will be filled on a part-time basis by an existing DHHS financial manager. Every effort will be made to fill the OHIT positions by the start of the Strategic Plan Phase of the project.

William Baggeroer will serve as the interim State HIT Coordinator until that position can be filled.

Sub-Teams

Each sub-team will define its mission in a Team Charter and assign responsibilities accordingly. Team Charters may include the following items:

- Team's purpose, scope and objectives
- Approach and Deliverables
- Roles and Responsibilities
- Schedule / Timeline

Possible sub-teams include:

- HIE Model – what should the HIE for New Hampshire be; should neighboring state's HIE be utilized; what is the scope / phase in of providers
- HIE Financial Model for sustained operations

- HIE Business, Operational and Governance Model – which model? Government led, public utility, private sector with government participation
- HIE Security / Privacy –harmonizing privacy laws across bordering states, engage HIPAA expertise
- Legislative Team – engage state legislative leaders; define and facilitate legislative changes
- Technical Team – develop and recommend HIE technical models
- Communications Team – create and deliver communications about the project

Sub-Teams will be lead by project team members including stakeholders and the Consulting Partner.

Membership will come from the Stakeholders who are members of the project team and others as needed and requested by the sub-teams.

Consulting Partner

New Hampshire DHHS does not have sufficient resources or expertise to conduct the planning portion of the NH HIE PI project. State budget reductions have made it very difficult to assign DHHS staff to leadership and deliverable creation roles. Leveraging the knowledge of an HIE experienced consulting firm is critical to the project’s success. The Consulting Partner’s responsibilities include:

- Provide expertise to define HIE planning effort
- Lead and/or facilitate sub-teams
- Write sub-team deliverables with sub-teams
- Write Strategic Plan and Operational Plan with Leadership Team and Stakeholders

Other Contracted Services

In addition to a Consulting Partner, New Hampshire DHHS expects to need contracted services to augment the DHHS staff assigned to the project. Examples of the type of services these contractors might perform include:

- HIT HIE knowledge expert – includes integration with HIT HIE resources (non-profits, other states, etc.), survey, research, statistics
- Project management assistance
- Technical assistance
- Project evaluation
- Administrative assistance

Technology Vendors

HIE vendors will be engaged early in the project to educate the project team as to what HIE is and what it does. Once an HIE Model is determined, including making the buy/build/reuse decision, an RFP process may be initiated to select the best solution for New Hampshire.

Project Control

Project tracking and reporting will be performed by the Leadership Team.

A Project Charter is being prepared that will define and communicate the project's key elements such as purpose, scope, objectives, approach, deliverables, timeline, etc. The Project Charter will be delivered to all project team members at a Kickoff Meeting scheduled for November 2, 2009. A project phase plan will be created at the beginning of each phase of the project to define the activities and task to be performed when and by whom. Leadership Team will review progress to plan on a weekly basis and inform the Steering Committee and stakeholder groups on a periodic basis – monthly, bi-monthly or

quarterly as needs dictate. The Leadership Team will also report to the ONC and other federal and state agencies as requested.

5. Evaluation

New Hampshire understands the requirement to perform a project evaluation to insure that the project is successful and that the funding opportunity requires that at least 2% of the project budget be allocated to this. This may be accomplished by hiring an independent external program evaluation expert as a contractor to fulfill this role.

As requested by the ONC in a conference call which discussed this funding opportunity's application process, we will wait for future guidance before determining the specific evaluation approach to take.

6. Organizational Capability Statement

As suggested by January 2009's Strategic Plan for Health Information Technology and Exchange, New Hampshire DHHS is the most appropriate entity to lead the state's efforts in planning and implementation of a statewide health information exchange. DHHS, the largest agency in New Hampshire state government, is responsible for the health, safety and well being of the citizens of New Hampshire. DHHS provides services for individuals, children, families and seniors and administers such programs and services as Medicaid, public health, mental health, developmental disability, and substance abuse. (See DHHS organizational chart below). This is accomplished through partnerships with families, community groups, private providers, other state and local government entities, and many citizens throughout the State who help make New Hampshire a special place in which to live. While the responsibilities of DHHS are broad, New Hampshire's small size makes for a department where various components can work together to a common goal like the development of a statewide HIE.

The mission of DHHS is “to join communities and families in providing opportunities for citizens to achieve health and independence.” The development of a statewide HIE directly supports this mission. The guiding principals by which DHHS carries out its broad mission will directly inform how it will carry out the planning and implementation of a statewide HIE. These principals at an operational level include: fiscal responsibility; development of high quality and efficient workforce and management systems; open communications with staff, consumers, providers and other stakeholders; and an information rich research and analytic capacity to inform development of effective solutions. DHHS also has guiding principals for service provision that will guide planning and implementation of the statewide HIE. These service provision principals include being: planned, delivered and coordinated at the local level to the greatest extent possible; responsible to the individual needs of each person and/or family; prevention focused; and evidence and outcomes based.

As an agency that already coordinates with all of the providers that will be involved with the HIE through its Medicaid and public health activities, and already has a focused understanding that individuals are key stakeholders, DHHS is uniquely positioned in New Hampshire to lead the effort to plan and implement the HIE.

In addition to its existing involvement with providers and patients, DHHS has responsibility for several large information systems for managing cases and transactions and for analysis and reporting, including: the state’s Medicaid Management Information System (currently being redeveloped using MITA principals); Medicaid Decision Support System (for Federal, financial, and analytic reporting); a centralized program eligibility determination system covering, Medicaid, transitional assistance, food stamps, aid to the permanently and totally disabled, needy blind, and elderly, other programs; a DHHS Enterprise Data Warehouse for analysis and reporting on departmental services as well as public health surveillance and reporting; the New Hampshire Comprehensive Health Care Information System for collection and analysis of an all payer/all service database of health care claims and reporting on health

care cost, utilization, and quality; and public health reportable disease registries and automated real-time emergency department visit surveillance.

As described above, the HIE planning and implementation efforts will be lead and coordinated in a new Office of Health Information Technology, which is managed by the State HIT Coordinator. This Office will report to the DHHS Chief Information Officer (CIO), William Baggeroer (resume attached). The CIO reports to the Department's Commissioner and exercises oversight for the overall performance of DHHS's computer-based management information systems, services and related initiatives. The CIO also oversees the strategic and tactical direction of management information systems to meet the Department's business objectives and serves as a member of the Commissioner's senior management team.

In addition to the leadership of the CIO and the new Office of HIT, overall guidance of the project will be the responsibility of the project's Steering Committee. Given the intra-departmental important nature of the project, the Steering Committee will be made up of the DHHS Commissioner and Deputy Commissioner (who is also responsible for most human services programs), the Medicaid Director, the Associate Commissioner and Director of Community Based Services (responsible for mental health, long term care, developmental disabilities, and drug and alcohol services), and the Director of Public Health Services (marked in red in the DHHS Organizational Chart). The involvement of the senior management of DHHS responsible for policy decisions, and the management structure of DHHS will ensure project collaboration between the program areas that will inform the development of, and eventually benefit from, the HIE. In addition to the Steering Committee, other staff from throughout DHHS will participate in HIE planning and implementation as stakeholders in the project (e.g., Medicaid Medical Director, Chief of Behavioral Health, HIPAA Privacy Officer, Chief of Public Health Informatics, etc.).

As mentioned above, New Hampshire has no specific financing model developed for sustaining the technical operations of a statewide HIE. Sustainable financing will be a key determination made in the planning phase of the HIE project.

Conclusion

The New Hampshire Department of Health and Human Services is grateful for the opportunity to advance the implementation of a statewide health information exchange to serve the citizens of New Hampshire. Please contact us if you have any questions or require clarification of any of the material included within this project narrative.

State of New Hampshire

Department of Health and Human Services

