

PROJECT ABSTRACT

Project Title: Minnesota e-Health Connect
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As the adoption and meaningful use of electronic health records and other health information technology have expanded over recent years, Minnesota has positioned itself well to achieve the goals of secure, electronic statewide exchange of health information. The Minnesota e-Health Connect project will build upon and integrate technical, operational, policy, legal and business infrastructure already developed through the investment of public and private stakeholders in Minnesota. An integrated statewide approach to health information exchange will improve the health and health care of Minnesotans by facilitating and expanding the secure, electronic movement and use of health information among organizations according to nationally recognized standards.

The Minnesota e-Health Connect project will build upon the previous five year effort of the Minnesota e-Health Initiative, a public-private collaborative whose vision has been to accelerate the adoption and use of health information technology through adoption of standards for health information exchange, privacy and security policy development, and support of providers in achieving adoption and effective use. This existing organizational and policy infrastructure will continue to guide Minnesota's efforts to build a statewide information exchange.

The goals of the Minnesota e-Health Connect project are to:

- Develop and implement strategic and operational plans for HIE across the five critical domains outlined by the funding opportunity announcement.
- Develop a mechanism for formal state designation and oversight to ensure that HIOs fulfill the needs of providers in achieving meaningful use.
- Develop necessary technical infrastructure to facilitate meaningful use.
- Implement strategies and outreach initiatives to connect providers to state designated HIOs.
- Coordinate and evaluate Minnesota's progress in facilitating and expanding the secure, electronic movement and use of health information among Minnesota health care stakeholders through the State HIE Cooperative Agreement program and other HIT programs supported by state and federal funds.

Minnesota e-Health Connect project will develop and implement strategic and operational plans for statewide health information exchange (HIE) by:

- Garnering stakeholder support through the Minnesota e-Health Initiative and the Minnesota e-health advisory committee infrastructure.
- Ensuring accountability and development of Minnesota HIE capacity over time by working with stakeholders to identify the appropriate model of governance for HIE in Minnesota.
- Building upon an existing statutory framework to enable HIE and establishing a process for state designation of HIOs.
- Maximizing the limited funding available to support HIE by minimizing duplication in costs associated with infrastructure development and building upon the existing HIE infrastructure.

Minnesota e-Health Connect will serve the public interest as Minnesotans experience improved health care quality, increased patient safety, reduced health care costs, improved population and public health, and ready access to the information necessary for individuals and communities to make the best possible health decisions.

**STATE HEALTH INFORMATION EXCHANGE
COOPERATIVE AGREEMENT PROGRAM**

MINNESOTA PROJECT NARRATIVE

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**STATE HEALTH INFORMATION EXCHANGE
COOPERATIVE AGREEMENT PROGRAM**

MINNESOTA

PROJECT NARRATIVE

CURRENT STATE OF HEALTH INFORMATION EXCHANGE IN MINNESOTA

Electronic health information exchange (HIE) in Minnesota is underway through a variety of approaches.

Often the data exchange mechanism that is used depends upon the type of data that needs to be exchanged. The primary approaches to HIE in Minnesota currently include:

- Health information organizations (HIO) acting as electronic data intermediaries; and
- Health care providers and hospitals engaged in efforts to connect directly either through vendor driven solutions or direct interfaces with other local providers in the community health system.

Connections are also being established on a transaction by transaction basis as needed to meet specific needs for exchange; such as:

- Direct web interfaces and electronic messages to exchange immunization data; and
- Connections to intermediaries that facilitate e-prescribing transactions.

Minnesota currently has one operational health information organization that has active participation by both public and private stakeholders. The HIO offers a service package that currently includes medication history transactions and a record locator service; other meaningful use transactions are expected to be available in November 2009.

The Minnesota e-Health Connect Project will coordinate these disparate methods and facilitate an integrated statewide approach to health information exchange that incorporates and builds upon the investments made to-date by: the Minnesota Health Information Exchange (MN HIE), the Minnesota Department of Human Services (DHS-State Medicaid Agency), MDH, other State Agencies, Community Health Information Collaborative (CHIC), Medicare, the Minnesota VA Medical Center (VAMC), counties, private and public health care providers, and community health system programs.

Key Health Information Exchange Entities

Minnesota has a rich tradition of collaboration and many of the following community organizations have been leaders in working on various aspects of health information exchange:

The Minnesota e-Health Initiative, a public-private collaborative, established in 2004 under the direction of the Commissioner of Health and guided by a Legislatively-chartered Minnesota e-Health Advisory Committee. The Committee consists of 25 members representing a broad range of stakeholders charged with advising the Commissioner on matters related to e-health. This well-respected body is trusted by the health community, and will continue to facilitate the planning process that will generate consensus and community support for successful implementation of strategic and operational plans for comprehensive electronic exchange in Minnesota. Representation on the committee includes:

1. Consumers
2. Academics/Informatics
3. Health plans
4. Large hospitals
5. Small hospitals
6. Local public health agencies
7. Nurses
8. Physicians
9. Long term care
10. HIT vendors
11. Clinic managers
12. Laboratories
13. Pharmacists/pharmacies
14. Health care purchasers & employers
15. Expert in clinical guideline development
16. Quality improvement organization
17. Professional with expert knowledge of HIT
18. Training/Education/Health Professional Schools
19. Community Clinics/FQHCs
20. Minnesota Department of Administration
21. Minnesota Department of Commerce
22. Minnesota Department of Health
23. Minnesota Department of Human Services (Medicaid)
24. Minnesota Health Information Exchange (MN HIE) - (ex-officio)
25. Community Health Information Collaborative (CHIC) - (ex-officio)

A diagram illustrating the Minnesota e-Health Initiative's relationship to MDH and the Commissioner of Health, Recovery Act and HITECH programs, and Minnesota health care stakeholders is included as Attachment A.

The Minnesota Department of Health (MDH) is the State agency charged with leading the Minnesota e-Health Initiative, and has been designated by Governor Pawlenty and the Minnesota Legislature as the official State agency responsible to apply for the State Health Information Exchange Cooperative Agreement Program on behalf of the State of Minnesota. In addition, MDH is the lead agency responsible for policy development surrounding Minnesota health reform efforts. MDH's primary function is to carry out the State's commitment to public health and employs a variety of programs and strategies in the pursuit of its mission to protect, maintain, and improve the health of all Minnesotans. MDH's direct role in health information exchange includes the statewide immunization registry, which exchanges immunization data among health care providers, public health agencies, and schools in all 87 Minnesota counties. The MDH is also involved in HIE programs such as the public health laboratory and disease surveillance monitoring for conditions such as H1N1 novel influenza.

The Minnesota Department of Human Services (DHS) is the state agency responsible for administering the Minnesota's public health care programs, including the Medicaid program. They are recognized as leaders in efforts to establish innovative information systems and the enterprise architecture necessary to support the needs of the program through the Medicaid Information Technology Architecture (MITA) initiative and the development of the state's Medicaid Management Information System (MMIS). As a founding partner of the Minnesota Health Information Exchange, DHS played a significant role in shaping the development of electronic health information exchange capacity in Minnesota toward a comprehensive, integrated solution through MN HIE.

The Minnesota Health Information Exchange (MN HIE) is a not-for-profit organization established in 2007 by key stakeholders in Minnesota, including payers, providers and state government – Aware Integrated Inc. (Blue Cross Blue Shield of Minnesota), Fairview Health Services, HealthPartners, Medica, Minnesota Department of Human Services, and UCare. MN HIE was established as a state-wide secure network designed to safely share patient-specific clinical and administrative information among health care organizations in Minnesota and adjacent counties in bordering states. It is the largest health

information exchange in this area of the country and the one that is currently operational. MN HIE has sought to lay the foundation of a fully functioning and comprehensive HIO that leverages published national standards to facilitate the secure, consistent, and successful exchange of patient health information between participants (payers, providers and public health) both within the MN HIE exchange, and long-term with other HIOs and their participants in compliance with federal and state privacy laws.

Release #1. Deployed in November 2008, Release #1 includes a Secure Patient Directory (SPD) that contains key demographic information for patient search capabilities on more than four million Minnesotans, medication history access for patients identified in the SPD, patient consent processing, and a patient opt-out provision. Consistent with state law, patient consent is required to exchange clinical information in non-emergency situations over the MN HIE network.

Release #2. Scheduled for implementation in November 2009, Release #2 provides new service offerings that include exchange capabilities for immunization records, lab results, patient eligibility, continuity of care documents (CCD), patient clinical summaries, and will offer additional security enhancements and personal health record (PHR) data transfer capabilities.

MN HIE has developed a four-year plan to evolve the HIO's capacity to support the short and long-term objectives articulated by the Office of the National Coordinator, including fully supporting providers in achieving meaningful use. MN HIE's plan for comprehensive data exchange identifies a ten-step series of services releases that will allow health care providers to exchange meaningful use required transactions at least six months in advance of the requirement going into effect (see Attachment B).

The Community Health Information Collaborative (CHIC) is a non-profit organization, established initially to facilitate information exchange among providers in the northeast region of Minnesota. They have been successful in developing strong connections with health care providers in this region, and have initiated efforts to work with providers in northwestern Wisconsin to address issues related to interstate HIE. CHIC was one of 14 exchange organizations chosen to demonstrate clinical data exchange with the

National Health Information Network (NHIN), and they are beginning to expand this work to assessments and metrics. CHIC has a long history of providing training and support to more than 425 sites across the region that currently access the Minnesota immunization registry.

The Administrative Uniformity Committee (AUC) is a multi-stakeholder committee supported by the MDH to develop agreements among Minnesota payers and providers on standardized administrative transactions to reduce administrative costs. The AUC is charged with advising MDH on the implementation of uniform billing and coding requirements that call for all payers and providers to exchange select, high-volume administrative transactions electronically, using a single detailed standard.

Current Status in Achieving Statewide HIE

Data are available on EHR adoption, use and interoperability and related types of HIT in Minnesota from a variety of sources. The following summary includes available information from: Minnesota-specific HIT surveys; review of other existing data sources, including ongoing national surveys and one-time or regional studies; discussion with Minnesota e-Health workgroup members and collection of information from subject matter experts. Minnesota-specific information on adoption and utilization metrics is used when available. For some domains where data were not available and where national-level data are considered to be appropriate, the Minnesota estimates are based on national data.

Electronic prescribing, refill requests, prescription fill status and/or medication fill history: In 2008, approximately 10% of Minnesota providers and prescribers and 53% of Minnesota pharmacies were electronically prescribing with transactions done by electronic data interchange. Additionally, 807,910 or 3.6% of all eligible (new and refill) prescriptions were electronically routed in Minnesota, representing an increase from the 258,019 or 1.6% of eligible prescriptions routed electronically in 2007. National statistics from Surescripts indicate that providers requested and received medication history for approximately 1.8% of all patient visits in 2008, and MN HIE data show that their medication history service is being accessed approximately 550 times per month by providers at one Twin Cities hospital.

Data are not currently available on the use of the fill status notification, however recent comments from Surescripts have indicated that the transaction has rarely been used up until this point.

Electronic eligibility and claims transactions: Data from Surescripts indicates that in 2008, Minnesota providers submitted 1,030,386 eligibility requests, for which 322,510 responses were available indicating a 31.30% response rate. Claims transactions submitted during the same time period for new and refill prescriptions are assumed to be 807,910 or 3.61%. The Minnesota Department of Health (MDH) reports that in 2006, Minnesota health plans paid over 56 million claims, of which 83% (approximately 46.5 million) were submitted electronically (Based on data provided by the Minnesota Council of Health Plans).

The Minnesota Department of Human Services reports that in FY 2009, Minnesota's Medicaid Management Information System (MMIS) processed approximately 23 million fee-for-service claims, of which approximately 97% (22.2 million) were processed electronically. Effective July 20, 2009, all fee for service claims must be submitted electronically through the MN-ITS system, the DHS billing system for Minnesota Health Care Programs (MHCP) claims and other transactions. In addition MMIS currently processes more than 98% of all claims in under two days.

Electronic clinical laboratory ordering and results delivery: There are approximately 174 clinical laboratories in Minnesota. Primarily, laboratories are using automation and HIT, but only approximately 11% are able to use current standards for electronic exchange. At least eight Minnesota labs are reporting electronic data on communicable disease surveillance. Modernization will require improving interoperability and exchange using HL7, LOINC, SNOMED and other standards.

Electronic public health reporting - Immunizations: The Minnesota statewide immunization registry (MIIC) reports that of 804 primary care provider sites [public & private providers including those participating in MnVFC (Minnesota Vaccines for Children Program)], 87% are enrolled in the program.

Approximately 76% submitted data regularly within the past six months. While the enrollment rate is high in the MIIC program, Minnesota is striving to achieve the federal goal of 95%. For the time period September 1, 2009, through October 5, 2009: 550,487 total immunizations were entered into MIIC. Of those, 82% came from electronic sources; 18% from direct data entry. Of the 82% from electronic sources, 62% were incorporated from flat file format loads, 15% from HL7 batch files, and 5% from HL7 transactions submitted in real-time.

Electronic public health reporting - Reportable Diseases:

Electronic reporting of reportable disease conditions: Approximately 50 case reports each day are received by the web-based “blue-card” system (manual web-based entry). Included in the web-based reporting data are two hospitals which upload case reports extracted from their EHR systems.

This accounts for 1% of all the case reports received. All web-based case reports received are sent in flat file format; the use of standards like HL7 transactions are planned, but not yet implemented.

Electronic reporting of laboratory results for reportable conditions (infectious diseases & lead):

Infectious disease surveillance program at Minnesota Department of Health (MDH) receives approximately 10,000 lab results per month through ELR (Electronic Lab Reporting). This estimate also includes lead reporting (both positive and negative results), which is a reportable condition in Minnesota. These electronically received results are reported from 6 laboratories (2 public labs and 4 private labs). Listed below are the details related to format of reporting and frequency (noted frequency includes multiple reports which are then parsed by disease condition):

Private Labs		Frequency of Messages
Lab 1	HL7 V.2.3(z)	1 per week
Lab 2	HL7 V.2.3(z); changing to HL7 2.3.1	2 or 3 per week
Lab 3	HL7 V.2.3(z); changing to HL7 2.3.1	1 or more per day
Lab 4	HL7 V.2.3.1	1 or more per day
Public Labs		
MDH Public Lab	Delimited	1 per day
Ramsey County Public Lab	Delimited	1 every other week

This estimate of electronic lab reporting accounts for approximately 10% of total lab reports received by MDH related to surveillance of infectious diseases and lead. It is important to note that currently only 6 laboratories are capable of doing electronic reporting (ELR). The goal would be to get 100% of labs in Minnesota and reference labs to report results electronically.

Local public health departments: Most of the 91 local public health departments in Minnesota use one of three major systems, however the data sets are not standardized and the systems are not interoperable within departments or between state and other local departments. Data collected in a Minnesota Department of Health survey of local public health (LPH) departments in 2004, generated an 85% response rate and indicated that local public health agencies have approximately 1200 data sets, 1300 total applications used (4-51 per agency), and 380 locally created (homegrown) applications for managing the diverse datasets necessary to deliver public health services. About two-thirds of the reporting agencies use one of the following applications: CHAMP (31), CareFacts (4), or PH-DOC (19); only 2% of those used comply with standards for exchange. The local public health departments need to have a comprehensive, integrated information system operating on national standards to achieve HIE with partners outside of local health departments. Progress on this activity has been slowed by the lack of national standards, limited funding and the need to define the core information system functions necessary to support public health.

Quality reporting capabilities: Minnesota's health reform law requires MDH to develop a uniform system for publicly reporting quality measures for all Minnesota physician clinics and hospitals. Minnesota Statutes 62U.02 require physician clinics and hospitals to begin submitting quality data in January 2010 on a set of measures to be publicly reported beginning in July 2010. This is a significant evolution from the voluntary reporting structure that currently exists in Minnesota. MDH expects that health care providers' increased implementation of electronic health records will significantly increase the value of the Minnesota Statewide Quality Reporting and Measurement System. Electronic health records will allow more sophisticated clinical outcome measures, which are better risk adjusted for diverse

populations and severity of illness. Electronic health records will also simplify the collection and reporting of quality measures. MDH is working with physician clinic and hospitals to implement the statewide reporting system with Minnesota Community Measurement, which is an independent, community non-profit whose mission is to accelerate the improvement of health by publicly reporting health care information. According to Minnesota Community Measurement, clinics reporting data from their electronic health records for 2008 dates of service included 218 sites which submitted through direct data submission using an EHR, and 97 sites submitted partially using an EHR.

Clinical summary exchange for care coordination and patient engagement: Minnesota Statutes §256B.0751, subd.2, directs MDH and DHS to develop and implement standards of certification for health care homes (aka medical homes) for state health care programs. MDH and DHS published a proposed rule on July 6, 2009, to carry out these directives by developing and implementing standards that facilitate consistent and ongoing communication among the health care home and the patient and family, and provide the patient with continuous access to the patient's health care home. *The proposed rule implies a deep reliance on the effective use of EHRs and health information exchange as providers seek to be certified (or re-certified) as health care homes.* Specifically, the rules stipulate that designated clinic staff, on-call providers, or phone triage system representatives have continuous access to:

- Participants' medical record information including the participant's contact information, personal clinician's or local trade area clinician's name and contact information and designated enrollment in a health care home.
- The participant's racial or ethnic background, primary language, and preferred means of communication;
- The participant's consents and restrictions regarding the release of medical information, including release of information to specific family members; and
- The participant's diagnoses, allergies, medications related to chronic and complex conditions, and whether a care plan has been created for the participant.

The proposed rules further require health care homes to collect information about participants' cultural background, racial heritage, and primary language and describe how the applicant will use this information to improve care. Health care homes will be required to use an electronic, searchable patient registry that enables the health care home to manage health care services, provide appropriate follow-up, and identify gaps in patient care; and specific quality measures will have to be reported to demonstrate continuous improvement in the quality of the patient's experience, the patient's health outcomes, and the cost-effectiveness of services.

The use of continuity of care document (CCD) or other standards for exchange of clinical summaries is currently limited, but increasing in Minnesota. The Minnesota e-Health Advisory Committee has recommended the use of these and other standards statewide, these are published in the companion guides included in Attachment D.

Broadband capacity and access: Minnesota's health care providers have achieved some capacity and access to broadband services necessary to connect to MN HIE, transmit radiologic images, and access services currently available. For Minnesota's rural providers, in addition to transmission of data, the broadband capacity must support access to health care by supporting live telehealth services. A current project underway using FCC Rural Health Care Pilot funds has set the standard for accommodating exchange and telehealth for small hospitals and clinics as a T-1 connection delivering 5 Mb connection, with administrative network security policy and operational requirements for data transport that meets federal and state HIPAA security and privacy requirements. No current statewide data exists to identify Minnesota's health care provider broadband needs, capacity and access.

The Minnesota Ultra High-Speed Broadband (MUHSB) Taskforce was authorized by the Minnesota Legislature in 2007 to make recommendations by November 1, 2009, to the Governor and Legislature regarding the creation of a statewide high-speed Internet access goal and a plan for implementation by 2015 to achieve high-speed broadband for all citizens, educational institutions, healthcare institutions,

community-based organizations, and government institutions. The Minnesota Department of Health's Office of Rural Health and Primary Care provided testimony to the task force regarding health care provider needs for health information exchange. The MUHSB Taskforce undertook an extensive geographic broadband mapping project, resulting in an interactive online map that shows service availability at the census tract level (see Attachment C). The mapping does not target health care provider capacity specifically, however, it will identify gaps in service geographic availability that will inform health care broadband planning efforts in the future.

State Plan Status & Plans to Expand through HIE Program

Significant investments and progress have been made in the development of infrastructure to enable health information exchange; however, there are important issues that need to be resolved in each of the five critical domains to enable health information exchange within Minnesota and ultimately across state lines. Minnesota has a State Plan that is partially consistent with planning guidance. The current State Plan is included as Attachment D. Through the State Health Information Exchange Cooperative Agreement Program, Minnesota will update its Strategic Plan to specifically address HIE development, and develop an Operational Plan to detail how the plan will be executed to enable statewide exchange. The updated State Plan, consistent with the FOA requirements, will be submitted within three months of the start date of the anticipated award.

Current Status Across the Five Domains

Governance capacity. Considering the possible models of governance for exchange in the State Alliance for e-Health's 2009 report, Minnesota's existing health information organizations are operating as private sector-led organizations with government collaboration, most similar to the third model described. While the Minnesota Department of Human Services is a founding partner and board member of MN HIE, there is limited government oversight of health information organizations in Minnesota beyond the state privacy laws. As it stands today, MN HIE and CHIC are governed by boards that provide strategic

direction and oversight to business planning and operations. MN HIE's board includes representation from payers, providers and state government. CHIC's board comprises member hospital, clinic and other provider representatives.

The Minnesota e-Health Connect project will support the development of a more refined governance structure to manage fully the implementation, deployment and sustainability of health information exchange in the State. The Minnesota e-Health Advisory Committee, a collaborative forum that includes all of the stakeholders needed to achieve the project's goals for statewide exchange, accountability and public transparency, will play a leadership role in convening stakeholders to resolve key issues related to governance and make recommendations that will inform the development of the necessary legal and policy framework related to the governance and oversight of HIOs in Minnesota.

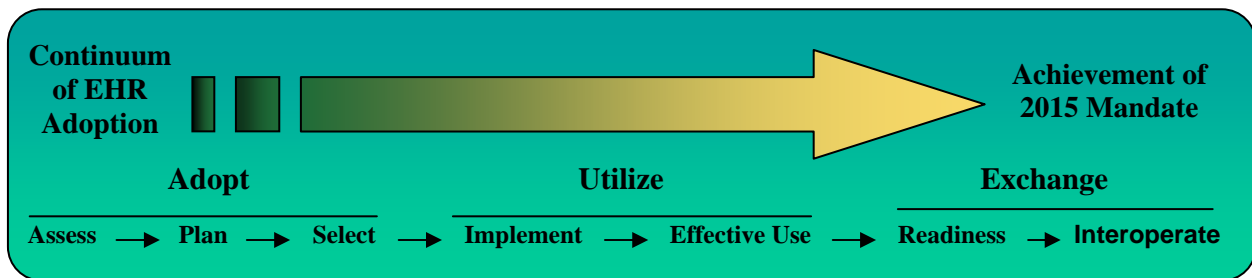
Legal and policy HIE capacity. Governor Pawlenty and the Minnesota Legislature recognize that more effective use of health information—including the timely exchange of information—is needed to improve the quality and safety of care, and help control costs. To assist in meeting these critical goals, Minnesota enacted three mandates that drive the use of electronic health records (EHRs) and other health information technology (HIT).

Interoperable EHR Mandate. In 2007, the Governor signed the **first e-health mandate**: *“By January 1, 2015, all hospitals and health care providers must have in place an interoperable electronic health records system within their hospital system or clinical practice setting. The commissioner of health, in consultation with the Minnesota e-Health Advisory Committee, shall develop a statewide plan to meet this goal, including uniform standards to be used for the interoperable system for sharing and synchronizing patient data across systems.”* This mandate applies to all providers who deliver health services in the state of Minnesota and the facilities in which they practice, to ensure that the benefits of e-health apply across the entire continuum of care.

The 2008 Statewide Plan developed by the Minnesota e-Health Initiative identified seven major steps in adopting, implementing and effectively using an interoperable EHR (see Figure 1). The seven steps can, in turn, be grouped into three major categories:

- Adopt, which includes the sequential steps of Assess, Plan and Select.
- Utilize, which involves implementing an EHR product and learning how to use it effectively.
- Exchange, which includes readiness to exchange electronically with other partners, and implementing regular, ongoing exchange between interoperable EHR systems.

Figure 1: Minnesota Model for Adopting Interoperable Electronic Health Records



Administrative Uniformity. The **second mandate** enacted in 2007 (Minnesota Statutes, section 62J.536) requires all health care providers and group purchasers (payers) to electronically exchange three administrative transactions using a single, standard data content and format:

- Eligibility and benefit information
- Claims (billings)
- Payment remittance advices

The rules apply to an estimated 60,000 physicians, hospitals, dentists, chiropractors, pharmacies, and other health care providers providing services in Minnesota, as well as over 2000 insurance carriers and Third Party Administrators (TPAs) licensed or doing business in the state, and other payers. The Minnesota Department of Health (MDH) is developing and implementing the rules in consultation with the Minnesota Administrative Uniformity Committee (AUC) through an open public process that has included several public comment periods. The goal of the effort is to reduce administrative costs and

burdens associated with the more than 55 million health care claims and other routine health care business transactions exchanged each year. MDH estimates that when fully implemented, the rules will reduce those administrative costs throughout the state's health care system by more than \$60 million a year. The rules for eligibility for a health plan transactions (ANSI ASC X12 270/271) became effective in January 2009, and for health care claims or equivalent encounter information transactions (ANSI ASC X12 837 Professional; 837 Institutional; 837 Dental, and NCPDP 5.1 for pharmacy claims) on July 15, 2009. Rules for the health care payment and remittance advice transactions (ANSI ASC X12 835) take effect later this year, on December 15, 2009. With the implementation of the rules, 2009 represents an important milestone in Minnesota's efforts to bring about greater use of HIT and more standard, efficient health care business transactions.

e-Prescribing Mandate. In 2008, a **third mandate** was signed into law and will become effective January 1, 2011. The mandate requires all providers, group purchasers, prescribers, and dispensers must establish, maintain, and use an electronic prescription drug program. This program must comply with the applicable standards for transmitting, directly or through an intermediary, prescriptions and prescription-related information using electronic media. (Minnesota Statutes, section 62J.497). Minnesota's law applies to *all* prescriptions and *all* professionals authorized to prescribe in Minnesota; unless otherwise prohibited by federal law. This means that any person or organization involved in prescribing, filling prescriptions or paying for prescriptions, including communicating or transmitting formulary or benefit information, must do so electronically using specified standards by January 1, 2011.

Privacy and Security. From 2005 to 2008, under the guidance of the Minnesota e-Health Advisory Committee, the MDH Minnesota Privacy and Security Project (MPSP) received contracts with the Health Information Security and Privacy Collaboration (HISPC). This project completed a comprehensive review of laws and practices that impeded the electronic exchange of health data. The project identified the most significant privacy and security issues and gaps facing organizations in implementing the electronic exchange of health information and developed solutions to address these gaps. This work resulted in the

2007 re-codification and update of the Minnesota Health Records Act to support secure and confidential electronic exchange of health information. Before the re-codification, Minnesota health care providers were required to obtain and submit a signed paper consent form with another health care provider prior to exchanging health information even for treatment. The new law provides a mechanism that allows consent to be exchanged electronically and eliminates the need for a paper based system. It also updated the assignment of liability associated with inappropriate requests or disclosures of health information. The Minnesota Health Records Act specifically describes the requirements for establishing and implementing a Record Locator Service (RLS), which allows health care providers to locate patient health information from other participants in the HIO. The statute provides a framework that addresses how the RLS is established, initially populated with patient information, policies and procedures for who may access an RLS, auditing requirements, requirements for patient consent and opt-out provisions, liability for negligent or intentional violations of the requirements associated with RLSs.

Minnesota has a number of integrated delivery networks serving patient populations that extend into neighboring states, making secure and confidential multi-state sharing of electronic health information of high importance. The HISPC work in Minnesota and our border states will serve as a foundation for bridging differences in our state privacy and security laws and frameworks.

Technical infrastructure capacity: MN HIE currently provides services that allow providers to look up patients, access medication history, and manage patient consent consistent with Minnesota and federal privacy and security laws. MN HIE is developing the capacity to exchange immunization records, lab results, patient eligibility, Continuity of Care Documents (CCD), and making enhancements to security. These services are scheduled to be released in November 2009. Beyond the services currently offered and scheduled for release, MN HIE has developed an initial ten-release plan, budget and timeline for achieving the functionality necessary to support the exchange requirements put forth in the National HIT Policy Committee's recommendations for defining meaningful use, which is described in the proposed project strategy below.

In addition to the work of MN HIE, there are other regional organizations that have been actively involved in HIE demonstration projects. CHIC has developed a personal health record, participated in clinical data exchange demonstration with NHIN, and is developing a record locator service.

Important groundwork for HIE capacity was also set in place through legislation that established the Minnesota EHR grant and loan program, which specifically required community collaboration and preparation for health information exchange. The grant program enabled the development of policies and procedures that have created a foundation of understanding among health providers in the communities that accessed these funds, and a higher level of readiness for statewide health information exchange. The communities that received the funding have identified local connections to directly exchange health information.

Business and technical operations capacity. Significant resources have been invested by the private and public sectors through MN HIE to implement business services and technical operations capacity needed for exchange in Minnesota. Nonetheless, Minnesota needs greater resources to add operational capacity to meet the expectations of meaningful use and to connect and synchronize existing efforts. Examples of Minnesota's current investments in business and technical operations by MN HIE include:

- Procuring vendor contracts to maintain systems operations and development of exchange services related to medication history and immunization data.
- Implementing formal project management to oversee the development of the technical infrastructure.
- Instituting change management procedures to document changes during the implementation process.
- Implementing a help desk to provide on-going support to subscribers.
- Creating policies and procedures for privacy and security, including documents required under the Minnesota Health Records Act and HIPAA for the management of patient consent.

Finance capacity. The private and public sectors have invested significant resources through MN HIE in the development and operations of the technical services previously outlined. In addition to paying for the technical infrastructure for the services identified above, the MN HIE founding partners' original investment totaling more than \$6 million supported the development of a business plan, governance structure, technology requirements, and evaluation of potential funding models. The founding partners have each committed to invest an additional \$6 million over the course of the next four years to support efforts to achieve statewide HIE. Currently, MN HIE has 175 Minnesota health care providers connected and actively using exchange services. In order for MN HIE to achieve financial sustainability, it is essential that they develop and execute a comprehensive strategy to get a critical mass of Minnesota providers connected and utilizing HIE services. MN HIE's business plan will require further review and validation by stakeholders during the statewide strategic planning process to ensure that it enlists broad support and participation by all Minnesota health care providers.

PROPOSED PROJECT SUMMARY

Minnesota e-Health Connect Project

Project Rationale. The funding provided through the cooperative agreement program will support Minnesota e-Health Connect, a project to enable Minnesota to develop and implement strategic and operational plans for HIE. The rationale for the Minnesota e-Health Connect project is centered on the following principles:

- Minnesota will be most successful in garnering stakeholder support to advance HIE by leveraging the use of the Minnesota e-Health Initiative and the Minnesota e-health advisory committee infrastructure that has proven successful in developing consensus on strategic and policy issues and has developed trust among community stakeholders to advance e-health priorities.
- Minnesota will be able to ensure accountability and the development of HIE capacity over time to meet the needs of Minnesotans by working with stakeholders to identify the appropriate model of

governance for HIE in Minnesota and by building on the existing statutory framework to enable HIE and establish a process for state designation of HIOs.

- Minnesota will be most successful in maximizing the limited funding available to support HIE by minimizing duplication in costs associated with infrastructure development and building upon the existing HIE infrastructure. The proposed project strategy attempts to achieve this by:
 - Investing public dollars once for the development of a single HIE service.
 - Maximizing the State's investment in HIO/HIE made to-date.
 - Ensuring a coordinated and integrated approach with Medicaid and state public health programs to enable HIE.
 - Supporting efforts that have a private and public commitment to funding and sustainability.

Use of Funds. The funds provided through the cooperative agreement program will support:

1. Development and implementation of strategic and operational plans for HIE across the five critical domains outlined by the funding opportunity announcement.
2. Development of a mechanism for formal state designation and oversight to ensure that HIOs fulfill the needs of providers in achieving meaningful use.
3. Development of necessary technical infrastructure to facilitate meaningful use: MN HIE has already developed an initial plan, budget and timeline for achieving the functionality necessary to support meaningful use requirements.
4. Implementation of strategies and outreach initiatives to connect providers to MN HIE, or any other state designated HIOs.
5. Coordination and evaluation of the State HIE Cooperative Agreement program with other HIT programs supported by state and federal funds, including but not limited to HIT regional extension centers, the HITECH Medicaid Incentives, HIT workforce initiatives, broadband access initiatives, and rural health programs and initiatives.

Overall approach to develop and finalize a statewide plan for HIE in Minnesota. The Minnesota e-Health Connect project will serve to coordinate disparate programs and facilitate an integrated statewide

approach to health information exchange that builds upon the current infrastructure developed through the investment of public and private stakeholders in Minnesota. The project will rely on existing infrastructure for policy development, including strategic and operational planning, that has been provided over the course of the last five years by the Minnesota e-Health Initiative.

Stakeholder engagement: Minnesota e-Health Initiative. The Minnesota e-Health Initiative has launched **four workgroups** for 2009-2010 that will assist in the development of various aspects of the strategic and operational plans for HIE. In addition to enabling more broad participation by interested stakeholders, the workgroup structure enables specific expertise to be focused and engaged in addressing issues and overcoming barriers to HIE in Minnesota. The workgroups charged with supporting the development and implementation of strategic and operational plans for HIE are: (1) Exchange and Meaningful Use; (2) Standards and Interoperability; (3) Privacy & Security; and (4) Outreach and Communications. The workgroups will be engaged to address issues across the five critical domains. Letters of support from key stakeholders are included as Attachment E.

Five Critical Domains: Governance, Legal/Policy, Technical, Business, Finance

Governance. MDH and the Minnesota e-Health Advisory Committee provided an initial review of the three proposed governance models outlined in the National Governors Association (NGA) report *Preparing to Implement HITECH: A State Guide for Electronic Health Information Exchange* in September 2009. The committee expressed general consensus that the ideal Minnesota model would likely be found in approaching HIE as a public utility with an appropriate level of state oversight that would be determined through the work of the Minnesota e-Health Initiative and its supporting workgroups. It is likely that the model for HIE in Minnesota will be identified between Model 2 and Model 3 as outlined in the NGA report.

The *Exchange & Meaningful Use Workgroup* has been charged with convening stakeholders to work toward consensus and providing detailed recommendations on this governance model. Specifically the group will be asked to provide recommendations on a state designation process that includes the minimum requirements that an HIO must meet to become designated and the oversight mechanism to ensure that those requirements are met and maintained. Specifically, the group will :

- Review the various forms of exchange currently occurring in Minnesota;
- Recommend which methods of exchange and transactions should be subject to state designation and oversight;
- Recommend definitions for key terms, including: electronic health information exchange, health information organization, state designated HIO, and interoperable electronic health records;
- Recommend required criteria to be a state designated HIO engaged in health information exchange to support meaningful use; and
- The roles and responsibilities of the entity charged with overseeing HIOs.

In developing the minimum requirements for HIE and the criteria for state designation as an HIO, the workgroup will be asked to collaborate with and take into consideration the recommendations of the other Minnesota e-Health Initiative workgroups. The recommendations formed by the Exchange and Meaningful Use Workgroup will be used to inform the development of the strategic and operational plans as well as legislation that can be introduced in 2010 to establish the statutory framework for HIE in Minnesota.

The Minnesota e-Health Connect project, under the guidance of the Minnesota e-Health Initiative and direction of the Minnesota Office of Health Information Technology (OHIT), will lead the development of a governance structure to meet the statewide needs. OHIT will oversee the development of a statewide approach for exchange and the coordination and implementation of statewide exchange efforts across all state government projects related to health information technology. The Minnesota e-Health Initiative's foundation of broad stakeholder participation and history of consensus building will provide the best

forum to allow Minnesota to meet the need for rapid and thoughtful action to frame the statewide concept for exchange.

Legal and policy HIE capacity. The re-codification in 2007 of the Minnesota Health Records Act enacted the changes necessary to facilitate electronic exchange of health information; however, a number of providers need assistance in understanding and implementing the law. The Minnesota e-Health Connect project will provide the resources necessary to provide education and outreach that is needed to ensure compliance and support Minnesota providers in getting connected for HIE.

In addition to supporting the formalized structure, policy and statutory framework for the oversight and governance of exchange organizations in Minnesota, this project will also establish the legal and policy framework for the exchange of health information across state lines, beginning with Wisconsin. Specific efforts to will be made to unify data sharing and legal agreements by building on the existing efforts of Minnesota's health information organizations. This funding will allow us to establish uniform subscription agreements, privacy and security policies and procedures, standard templates for consultant agreements, non-disclosure agreements, data exchange and support agreements, business associate agreements and master technology service agreements. The project will also provide for collaboration and solidification of policy, privacy and security requirements for interstate and inter-organizational health information exchange, including: data sharing, laws, regulations, and adaptation to health information security by organizations involved in exchange of personal health information.

The *Privacy & Security Workgroup* has been charged with making recommendations on mechanisms to ensure compliance with state and federal privacy & security requirements for health IT. The workgroup will also support providers and health care stakeholders in the implementation of privacy and security criteria established to qualify as a "meaningful user" of an EHR under the HITECH Act. The workgroup will be facilitating the development of statewide responses to rules and guidance developed pursuant to the HITECH Act. The group is further tasked with ensuring the privacy and security needs of Minnesota

Medicaid, consumers, providers and health care stakeholders are fully considered in the development of the statutory framework for HIE and the development of informational/educational resources and tools.

The Minnesota Office of Health Information Technology (OHIT) will work with state agencies in border-states to schedule joint meetings of stakeholder leadership to address legal and policy issues surrounding inter-state health information exchange. This project proposal includes funding that will enable us to focus on resolving issues to enable HIE with Wisconsin in 2010, and focus specific attention on the other border-states in subsequent years of the project. During the strategic and operational planning process, the Minnesota e-Health Advisory Committee will assist in determining the order in which state discussions are initiated.

Technical infrastructure capacity. Minnesota will use this project to ensure that Minnesota's exchange capacity fully meets the requirements of meaningful use. This project will integrate, enhance, and expand existing exchange mechanisms that support administrative transactions (e.g., eligibility claims, and remittances), clinical transactions (e.g., e-prescribing, lab orders and test results, and care coordination), and other required reporting (e.g., outcome and quality reporting). These enhanced services will significantly expand providers' and others' ability to share information and coordinate patient care, and will ensure that the technical infrastructure is secure, reliable, standards based, and supports core services statewide to maximize interoperability.

The *Standards & Interoperability Workgroup* will provide on-going review and feedback on nationally recognized standards, implementation specifications and certification criteria necessary to facilitate and expand the secure electronic movement and use of health information among organizations in Minnesota, and provide feedback to the National HIT Policy and Standards Committees on proposed criteria for meaningful use to reflect the needs of the Minnesota health care community. In addition to making recommendations regarding the development of statewide strategic and operational plans for HIE related to standards, implementation specifications and certification criteria, the group will provide

recommendations to the Minnesota regional extension center on resources and actions that will help increase implementation of these standards to assist Minnesota providers in meeting the requirements of meaningful use.

MN HIE has developed its initial plan, budget and timeline for achieving the functionality necessary to support meaningful use. Funding provided through the Cooperative Agreement will be used to build upon MN HIE's initial investments in the development of technical infrastructure to support statewide HIE. MN HIE's plan outlines details of subsequent releases intended to evolve its capabilities to support both the national strategy described in the funding opportunity announcement, as well as address the needs and requirements of State of Minnesota and its providers. MN HIE has indicated their commitment to modify this plan as necessary to meet future statutory requirements for state designation, and to annually provide an updated comprehensive plan that identifies how they will acquire additional functionality required to fully support meaningful use. The details of the initial plan, timeline and budget are included in Attachment B of this application, and reflected in the required budget documents.

Business and technical operations capacity. Because Minnesota is moving toward a model for HIE that will be managed largely by the private sector with an appropriate level of government oversight, the details of which are still to be determined, Minnesota will initially utilize contracts to ensure that MN HIE meets specified best practices related to business and technical operations capacity. Criteria that Minnesota will consider when identifying best practices are standards developed by the National Institute of Standards and Technology (NIST), the Electronic Healthcare Network Accreditation Commission (EHNAC), and the Certification Commission for Health Information Technology (CCHIT). Ultimately, through the *Exchange and Meaningful Use Workgroup*, specific criteria related to business and technical operations (e.g. procurement, development, formal project management, systems maintenance, change control, outcome measures, and reporting) will be outlined for inclusion in the statutory criteria for state designation.

Finance capacity. Finance capacity will be a primary point of discussion as the Exchange and Meaningful Use Workgroup begins to identify the required criteria for state designation. The group will be taking into account the needs of the state in ensuring that state designated HIO business plans are sustainable over time, provide for future development necessary to support meaningful use, and include a fee structure that will support participation by a broad range of providers, payers, public health agencies, and other stakeholders. The workgroup will be providing advice on specific criteria for inclusion that will address such items as management of finance policies, pricing strategies, market research, public and private financing strategies, financial reporting, business planning and audits. During the strategic and operational planning process, the Minnesota e-Health Advisory Committee will assist MN HIE in identifying the appropriate mechanism to enable them to review their current business plan with Minnesota health care stakeholders, and identify the appropriate mechanism to gather on-going feedback from their users.

Barriers anticipated and project strategy to overcome barriers

Barriers to provider participation: awareness, marketplace myths, and competing priorities.

While the significant investments on behalf of public and private stakeholders have been made to begin building the technical infrastructure to support exchange, there has been limited participation by Minnesota providers and it is not clear at this time whether the business model for MN HIE is financially sustainable. A variety of reasons for the lack of provider participation have surfaced that will need to be addressed in the development of a strategic and operational plan for HIE in Minnesota.

Project strategy: targeted outreach and expansion of services. The development of a comprehensive strategy for outreach related to HIE will (1) make providers aware of the opportunities available as a result of HITECH (2) correct misinformation currently being distributed in the marketplace, (3) provide information on why HIE is essential to maximizing their EHR investments to improve quality and improve patient safety, (4) explain the value of participation in statewide HIE, (5) clarify options and

mechanisms for participating in HIE. In addition, review and update of the current Minnesota HIO business models to support the full range of services required for meaningful use and statewide health information exchange will demonstrate value to the critical mass of providers and thus support widespread participation necessary to ensure long-term viability.

The *Outreach & Communications Workgroup* will provide recommendations on outreach and communications activities necessary to address these concerns in the statewide strategic and operational plan. The group will also identify and support outreach activities (e.g. communications, education, training), in cooperation with the Minnesota regional extension center and DHS, to engage health care organizations, providers, and consumers to support adoption, meaningful use of EHRs, and statewide HIE. OHIT will work to actively engage stakeholders from the organizations identified in Attachment A.

REQUIRED PERFORMANCE MEASURES

ARRA Required Reporting

The state of Minnesota utilizes a common system for all state agencies to support and report on accounting and procurement functions known as the Minnesota Accounting and Procurement System (MAPS). Incoming monies are assigned appropriation account numbers in MAPS and are tracked by allotment accounts within the established appropriation. Once the money has been allotted into the separate account, encumbrances (obligations) are established to authorize expenditures. This process enables MDH to track individual grants or other incoming monies separately for accounting and reporting purposes. MDH will include language requiring the timely submission of required information related to ARRA performance measures in contracts with vendors and/or sub-recipients of funds made available through the State HIE Cooperative Agreement program. Sub-recipients will be required to provide reports to MDH on the number of jobs that were prevented from being eliminated, the number of eliminated jobs that were reinstated, and the number of new jobs created through the use of these funds.

All reporting will be completed by Minnesota Management and Budget (MMB) in cooperation with MDH, and reporting will not be delegated to sub-recipients.

Reporting Requirements in the Five Domains

The Minnesota Commissioner of Health is provided specific authority under Minnesota Statutes, section 62J.495 (See Attachment I) for the collection of data necessary for reporting on performance measures. The law provides for the collection of data from providers, dispensers, group purchasers (i.e. payers), and pharmaceutical electronic data intermediaries for the purpose of demonstrating Minnesota's progress on goals established by the Office of the National Coordinator to accelerate the adoption and effective use of health information technology and for assisting the ONC in completing required assessments of the impact of the implementation and effective use of HIT in achieving the goals set forth in the national plan, and in evaluating the impact of regional extension centers. The law is currently being evaluated to determine whether additional authority is necessary for data collection related to the five domains. The details of the governance model that will be determined during the state and operational planning process will provide further clarity on reporting requirements for HIOs.

The contract with MN HIE will include \$50,000 annually to assist in the evaluation and assessment of HIE in Minnesota over the course of the project. The evaluation and coordination project lead for the State HIE Cooperative Agreement program will be charged with the adoption of assessment measures that support the efficient and effective gathering of required information throughout the course of the project as described below.

PROJECT MANAGEMENT

Office of Health Information Technology: Leadership & Statewide Coordination

On September 21, 2009, the Commissioner of Health, Dr. Sanne Magnan, announced the establishment of the Minnesota Office of Health Information Technology (OHIT) to coordinate and facilitate an integrated

statewide approach to health information technology and health information exchange. The Office was established in coordination with Governor Pawlenty's designation of the Department of Health as the State Agency responsible for State Health Information Exchange Cooperative Agreement Programs, and his designation of James Golden, PhD, as the State Government HIT Coordinator.

The OHIT's responsibilities include:

- Convening stakeholders to create a comprehensive and unified vision for the use of electronic health records and health information exchange in Minnesota.
- Developing and implementing Minnesota's strategic and operational plan for health information exchange to expand the secure, electronic movement and use of health information among health care organizations according to nationally recognized standards.
- Collaborating with other Federally-funded programs designed to promote the adoption and use of electronic health records and health information exchange (e.g., Regional Extension Centers, Medicare and Medicaid Incentive programs, the State Office of Rural Health and Primary Care);
- Coordinating across state government to maximize federal and state investments in health information technology and infrastructure development (e.g. the Department of Human Services, the Department Of Corrections, and the Department of Administration).

OHIT is also responsible for carrying out the e-health responsibilities assigned to the Department of Health under M.S. § 62J.495-497 (See Attachment I).

Targeted coordination activities include:

Coordination with Minnesota Department of Human Services (Minnesota Medicaid). Minnesota's State Medicaid HIT Plan (SMHP) will accelerate the development of Medicaid's capacity to facilitate care coordination and improved quality and efficiency and will be consistent with the broader statewide vision for health information exchange. To facilitate an integrated approach to HIT in Minnesota the Statewide HIT Plan and SMHP will be aligned and consistent. OHIT and DHS are leveraging the existing organizational infrastructure and common stakeholder forums of the Minnesota e-Health Initiative and the e-Health Advisory Committee to ensure the integration between the Minnesota e-Health Connect Project and the requirements of Section 4201 of HITECH related to, Medicaid Incentive

Payments. DHS and MDH worked collaboratively to produce a draft implementation strategy for the Medicaid Incentive Payments that leverages existing expertise from both agencies. To support the ongoing joint efforts of DHS and MDH and ensure Minnesota's Medicaid HIT Plan and Strategic and Operational Plans for HIE are coordinated an inter-agency team has been established. It consists of the State Government HIT Coordinator, the Deputy Director of OHIT, the Minnesota Medicaid Director, and the Minnesota Medicaid HIT Coordinator. An organizational chart illustrating the relationship between the two agencies on HITECH activities is included as Attachment F, and resumes for inter-agency team members are included in Attachment G.

Coordination with Minnesota Office of Rural Health and Primary Care. The Minnesota Department of Health, through its Office of Rural Health and Primary Care (ORHPC), promotes access to health care for health care providers in rural and underserved communities. The ORHPC and OHIT regularly coordinate resources to ensure that rural health resources support and effectively providers in rural and underserved communities to achieve meaningful use and exchange of health information. Federal programs include: (1) the *Rural Hospital Flexibility Program (HRSA)* which supports and strengthens Critical Access Hospital community health systems in the delivery of quality primary and emergency care, and encourages HIT adoption through grants and technical assistance; (2) the *Small Hospital Improvement Program (HRSA)* which supports small hospital quality, HIPAA, and health information technology investments; (3) the *State Office of Rural Health (HRSA) and Primary Care Office (HRSA)*, grants that support access to quality primary and emergency health care in rural and underserved urban communities through coordination of federal and state resources; and (4) the *Critical Access Hospital Health Information Technology Grant (HRSA, 2007-8)*, a \$1.6 million grant targeted to 3 rural communities to implement interoperable electronic health records systems.

State ORHPC programs include: (1) *Electronic Health Record Grants*. ORHPC distributed \$8.3 million in grants and \$6.3 million in loan programs to rural and safety net providers for adoption of interoperable EHRs; (2) *Community Clinic Grant Program, Rural Hospital Transition Planning Grant Program, Rural*

Hospital Capital Improvement Program, which provide financial and practice management consulting to providers to assist them with planning for and implementing health information technology purchases.

Coordination with broadband access initiatives. The ORHPC monitors and supports efforts to coordinate and expand broadband access for health care providers in Minnesota for purposes of health information exchange and delivery of health care through telemedicine and telehealth. In 2006, the ORHPC convened stakeholders concerned about telehealth to identify issues and barriers to telehealth. Broadband access and/or cost were identified as barriers for some rural health care providers. In response, the ORHPC assisted the Greater Minnesota Telehealth/e-Health Broadband Initiative (GMTBI), a coalition representing over 120 health care providers, obtain \$5.4 million in authorized funding under the FCC's Rural Health Care Pilot Program, and continues to provide support to the project.

Coordination with Key Health Alliance (Regional Extension Center applicant). The partners – Stratis Health, the National Rural Health Resource Center, and The College of St. Scholastica – of the Key Health Alliance (KHA) have a long history of providing assistance and support in the adoption and effective use of health information technology, focusing on the needs of the rural and underserved. KHA is committed to utilizing the existing e-Health infrastructure in Minnesota for planning and feedback, including the e-Health Advisory Committee and its workgroups. In addition, KHA will form a Minnesota Council composed of a small group of organizations pivotal to Regional Center success; and this group will include MDH. These efforts will help ensure alignment, coordination, and efficiency in resources across the Section 3012 and 3013 programs in Minnesota. The OHIT and the Minnesota e-Health Initiative commit to close coordination with the KHA as we fully expect them to be selected as a Regional Extension Center (REC). This coordination will help achieve the implementation of the statewide strategic and operational plans and the requirements of the 3013 and 3012 grant programs.

Key Staff

The OHIT and the State Government Health IT Coordinator, in consultation with the Minnesota e-Health Initiative, will be responsible for oversight and leadership of the project. Resumes of lead staff are included as Attachment G. Project leadership will be provided by:

James I. Golden, PhD, State Government HIT Coordinator. Dr. Golden is the Director of the Minnesota Department of Health's Division of Health Policy and has been designated by the Governor as the State Government HIT Coordinator. In his role as State Government HIT Coordinator, Dr. Golden is responsible for overall all direction and coordination of state government participation in HIE. Serving in these dual roles will enable Dr. Golden to ensure consistency between the cooperative agreement program and the overall goals of the state for health care reform. The Health Policy Division is responsible for:

- Monitoring and tracking health care access, cost, and quality;
- Implementing Minnesota's current health reform efforts;
- Promoting and supporting the adoption, effective use and exchange of health information through EHRs;
- Implementing uniform billing and coding requirements;
- Promoting access to quality health care for rural and underserved urban Minnesotans through the Office of Rural Health and Primary Care.
- Administering the Medical Education and Research Cost fund to support medical education activities in Minnesota; and
- Maintaining the official, permanent state birth and death records for Minnesota.

Prior to joining the Department of Health, Dr. Golden was the chief operating officer for the Midwest Center for HIPAA Education. He also served as a Peace Corps volunteer in Paraguay. Dr. Golden earned his doctorate at the University of Minnesota's Carlson School of Management.

Martin LaVenture, PhD, MPH, Director, Office of Health Information Technology. Marty

LaVenture is director of the Office of Health Information Technology at the Minnesota Department of

Health. Dr. LaVenture is currently leading the statewide Minnesota e-Health Initiative and is Principal Investigator for Grants from Robert Wood Johnson Foundation and US Department of Health and Human Services. In 2008 he was named as one of the top 100 influential health leaders in Minnesota. Dr. LaVenture has a master's degree in epidemiology and a PhD in Health Informatics from the University of Minnesota. Previously, he served as assistant State Epidemiologist for Wisconsin Division of Health and he has also worked for a national private medical software corporation. Dr. LaVenture is currently adjunct member of the faculty at the University of Minnesota. He has been involved with the design, implementation and evaluation of numerous health information systems for over 30 years.

Elizabeth Cinqueonce, Deputy Director, Office of Health Information Technology. Liz Cinqueonce is the Deputy Director of the Office of Health Information Technology at the Minnesota Department of Health. Ms. Cinqueonce has significant experience in health policy development and government affairs. As deputy director of OHIT, her responsibilities include providing direction and oversight for the statewide Minnesota e-Health Initiative; participating in the development of health policy initiatives by providing technical assistance to the executive office, the Governor's office, other state agencies and legislative staff; managing health informatics projects that support state and local public health; and grant development and management. Her responsibilities specific to the Minnesota e-Health Connect Project will include monitoring on-going progress and overseeing operations to ensure compliance with reporting requirements. She will also provide support to Dr. Golden in inter-agency coordination, policy development, and efforts to advance legislation necessary to enable statewide HIE. The deputy director will be a liaison to the Office of the National Coordinator in managing the cooperative agreement.

Project Staff

Michael Hawton, Privacy and Security Coordinator. Coordinates the privacy and security activities of the OHIT and the Minnesota e-Health Initiative and manages the Minnesota Privacy and Security Program (MPSP). Key activities will include coordination and input on privacy and security policy

development, education and outreach, coordination of broad stakeholder community. This position serves as a liaison to MNHIE on privacy and security issues, and will play a primary role in working with border-states to address privacy and security issues necessary to enable interstate health information exchange.

Priya Rajamani, PhD, Senior Informatics Specialist for Standards and Interoperability, Provides direction and oversight of the informatics activities relating to standards and interoperability specifications. Her responsibilities will include the identification, assessment and coordination of standards related activity including leadership for the Minnesota e-Health Initiative Standards Workgroup. Her experience includes participation in various informatics projects such as creation of informatics profile for the agency, design of public health informatics profile tool-kit, and business process methodologies by the Common Ground grant of RWJF. Dr. Rajamani was a NLM fellow in Health Informatics and holds a Ph.D. in Health Informatics and MPH in Public Health Administration from University of Minnesota. She is a physician by training with a medical degree from India.

Jennifer Ellsworth, Evaluation and Coordination Project Lead. Responsible for providing day to day project management and direction for the cooperative agreement. She will play a critical role in developing and implementing the process and procedures to monitor and evaluate progress toward the program goals. She will be responsible for a variety of program activities that include compliance with reporting requirements, working with contracted entities to ensure timely submission of all required information and regular analysis and reporting of the information. Ms. Ellsworth is a Research Scientist II with MDH and has been with the department for over 10 years serving in several lead program positions in the department. Most recently she has led the MDH three year Common Ground project funded by the Robert Wood Johnson Foundation. Ms. Ellsworth brings strong project management, organizational and analysis skills to the project team.

Education and Outreach Coordinator (TBD). Responsible for planning, developing and implementing a coordinated education effort to providers and hospitals, to promote connection to statewide health information exchange organization(s) for the purpose of improving patient care, increasing patient safety and reducing health care costs. Job requirements include: knowledge of principles of public health, health education, health promotion, and risk reduction, as well as health education theory and practice. The individual holding this position will play a key role in developing a strategy for planning, developing and implementing a coordinated education effort to providers and hospitals to promote connection to HIE. The person who holds this position will be responsible for designing and evaluating educational materials for hospital and clinic administrators, providers, and consumers regarding HIE and the privacy and security mechanisms that are in place to safeguard patient information. The education and outreach coordinator will play work to develop and maintain working relationships with a variety of organizations in the Minnesota health care community, and to assist them in connecting their members with Regional Extension Centers and the state designated HIO. This position will play a critical role in helping providers recognize the value of HIE and the role it can play in improving patient care.

HIT Planning Specialist (TBD). Job requirements include: Strong knowledge of State and federal HIT/EHR program policies and related regulations and HIT/EHR activities conducted by other agencies sufficient to evaluate and interpret impact. The individual hired for this position must have the ability to: review and evaluate complex technical reports and technology documents, identify and evaluate and summarize information/data, develop policy and program management recommendations and to conceptualize alternative solutions to complex issues and convey them to diverse audiences. Further, they will play a key role in writing, editing, and organizing technical, policy and other EHR/HIT related material from diverse sources to prepare comprehensive reports and plans, and will be prepared to make effective oral and written presentations to advance HIE in Minnesota.

This position is responsible for obtaining and analyzing assessment and evaluation data, to inform on-going HIT/EHR plans by OHIT in consultation OHIT staff, the advisory committee, stakeholders, and

others to achieve program goals. Further, they are charged with engaging key MDH staff, the state government agencies, and the regional extension centers in planning and implementing a coordinated approach to assist providers and hospitals in connecting to exchange organizations and integrating health information exchange into their workflow processes. The individual responsible for this coordination will have a thorough understanding of national health data standards required to achieve technical, semantic and process interoperability and will provide leadership in the development of a framework for assessment in Minnesota to measure HIE among the stakeholders necessary to facilitate meaningful use.

Contracted Entities

Minnesota Health Information Exchange (MN HIE). MN HIE is a non-profit organization with significant support of their founding partners that currently provide staffing and operational support for the HIO. The staff is responsible for all current business operations and development work activities associate with Release #2 project work. Michael Ubl is the Executive Director of MNIE. Previously, Mr. Ubl was employed by Blue Cross Blue Shield of Minnesota for over 35 years and served in a variety of technical and management positions within the company. He is actively involved in health information technology initiatives at both a state and national level, currently serving as the chairman of the board for the Workgroup for Electronic Data Interchange (WEDI), and participates in numerous health care industry groups dedicated to the advancement of technology for the purpose of improving the cost effectiveness and quality in health care. MN HIE's additional staff includes: Anne Dobbins, Operations Director, an employee of Blue Cross; and Steve Jensen, MN HIE Chief Information Security Officer (CISO) a part-time employee of Blue Cross. Additionally, MN HIE has three consultants under contract to provide project management and business analysis, communications and web management, marketing and sales.

MN HIE will establish a formal work force in 2010. MN HIE will convert consultant positions to permanent positions within MN HIE, to support the anticipated intense work efforts associated with

ARRA. MN HIE plans on dedicating the equivalent of 3 FTEs to support the necessary work activities, including achieving compliance with all current and future requirements of the cooperative agreement program. These employees will be dedicated to the execution of the four-year plan, and will provide critical expertise in the area of project management, business analysis, quality assurance testing, client implementation and support. MN HIE will leverage existing resources where possible, but anticipates that it will augment staff with consultants to meet heavy demand periods. A more detailed plan for use of consultants will be addressed as part of the operational plan to be constructed after the grant application is submitted on October 16, 2009.

MN HIE is committed to collaboration with stakeholders through the Minnesota e-Health Initiative. The Minnesota Medicaid Director is a current board member of MN HIE and will be integrally involved in guiding the efforts of the organization enabling MN HIE to effectively and efficiently assist the agency in monitoring and compliance related to eligible meaningful use recipients. MN HIE will collaborate with the Minnesota Regional Center to ensure that information and technical assistance is available as they support providers in connecting for exchange consistent with the statewide plan. MN HIE is also prepared and will be required by contract to comply with all reporting requirements as outlined in the FOA, as well as the terms and conditions of the cooperative agreement to ensure the timely release of funds. Pursuant to the anticipated contract extended to MN HIE under the cooperative agreement, MN HIE is prepared to cooperate with the ONC directed national program evaluation. MN HIE will be required to provide quarterly reports to assist OHIT in tracking and monitoring of progress on the projects tasks and objectives, as well as the timely completion of required ARRA reports and others established by the ONC.

Regional Outreach Contract(s) TBD.

The Minnesota e-Health Connect Project will dedicate funding to support outreach services to facilitate the connection of Minnesota providers to a designated statewide HIO. The method of distribution of these funds will be determined through the strategic and operational planning process, and may either be

distributed as grants to regional organizations, or issued by specific designation through the MN HIE contract. Recipients of outreach funds will be required to provide a full range of services including: identifying all related stakeholders and settings in their region, assessing their readiness for HIE using a standard checklist, assisting providers in obtaining technical assistance, providing referral to regional extension centers or others for technical assistance related to EHR adoption and implementation, and providing necessary technical assistance to facilitate connection to a statewide HIO.

Priority will be given to assist the most providers as possible to obtain funds for meaningful use; providers in areas serving the underserved will be considered a priority. Funding will be allocated for activities in several key categories as outlined in the budget justification for this section.

EVALUATION

Anticipated Strategy for Evaluation.

The Minnesota e-Health Connect Project will include \$50,000 designated annually within the MN HIE contract for purposes of evaluation, which will be augmented by the OHIT staff evaluation activities as outlined above. MDH is awaiting further guidance from ONC regarding additional program requirements related to evaluation, however, we anticipate some of the following method(s), techniques and tools will be used to track and maintain project information expected to be required for the state to conduct a self-evaluation of the project and to inform a national program-level evaluation:

- Quarterly reports from MN HIE
- Quarterly reports from recipients of Regional Outreach Contracts
- Assessment information gathered through by the Regional Extension Centers
- Assessment information collected pursuant to MN health care reform rules requiring annual surveys on the use of health information technologies (including EHRs) to improve the quality of care delivered.
- Information gathered through the administration of Medicaid MU incentives

- Additional information collected through the authority provided to the Commissioner of Health in Minnesota Statutes 62J.495.

Once guidance is received from ONC regarding the specific requirements for evaluation, OHIT will update its plans to ensure compliance with reporting requirements.

ORGANIZATIONAL CAPABILITY STATEMENT

OHIT, formerly the Center for Health Informatics, is well positioned to effectively lead the State HIE Cooperative Agreement Program in Minnesota, and to ensure the continuing success of HIE efforts beyond the term of the program. Over the course of the last five years, OHIT has provided leadership, technical and policy advice and successfully directed and supported the Minnesota e-Health Initiative, its Advisory Committee and Workgroups. Their leadership of OHIT in working with public and private stakeholders on matters related to e-health and the trust they built within the community has resulted in the achievement of eighteen significant legislative milestones to advance the adoption and effective use of health information technology in Minnesota. Of particular significance were the enactment of the 2011 mandate for electronic prescribing, the 2015 mandate for interoperable electronic health records, and the re-codification of Minnesota's privacy and security laws. Minnesota statutes require that OHIT prepare and submit formal annual reports to the Minnesota Legislature, the latest of which is provided as Attachment H.

Minnesota Statewide HIT Plan. In 2008, the Office led the Minnesota e-Health Advisory Committee in developing and publishing the Minnesota statewide HIT plan entitled: *A Prescription for Meeting Minnesota's 2015 Interoperable Electronic Health Record Mandate*. In addition to the statewide plan, OHIT has published four companion guides providing practical advice for providers in successfully adoption, implementation, and effective use of EHRs and other health information technology. The four published guides include:

- Guide 1: *Addressing Common Barriers to the Adoption of EHRs* (Released 2008)

- Guide 2: *Standards Recommended to Achieve Interoperability in Minnesota* (Released 2008, Updated June 2009)
- Guide 3: *A Practical Guide to e-Prescribing* (Released June 2009)
- Guide 4: *A Practical Guide to Effective Use of EHR Systems* (Released June 2009).

The statewide plan and companion guides (Attachment D) were released at the Minnesota e-Health Summit, which draws more than 400 Minnesota health care stakeholders on an annual basis.

Sustainability Beyond the Cooperative Agreement Program Period. The Office of Health Information Technology has been consistently funded by the Minnesota Legislature and Governor over the course of the last five years, and the adoption and effective use of EHRs and other HIT are recognized as critical components to assist the state in meeting its overall goals for health care reform. Minnesota will include in its on-going strategic and operational planning process an analysis of the role and needs of the Office of Health Information Technology in carrying out the duties necessary to support HIE in Minnesota.

One of the primary goals of the Minnesota e-Health Connect Project is to ensure that a sustainable business model for HIE is established during the four years of the cooperative agreement, and that a critical mass of Minnesota health care stakeholders are connected and utilizing the services of a state-designated HIO. Ultimately this will assist in meeting Minnesota's health reform goals to improve health care quality, increase patient safety, reduce health care costs, improve population and public health, and improve access to the information necessary to make the best possible health decisions.

CONCLUSION

As the adoption and meaningful use of electronic health records and other health information technology have expanded over recent years, Minnesota has positioned itself well to achieve the goals of secure, electronic statewide exchange of health information. The Minnesota e-Health

Connect project will build upon and integrate technical, operational, policy, legal and business infrastructure already developed through the investment of public and private stakeholders in Minnesota. An integrated statewide approach to health information exchange will improve the health and health care of Minnesotans by facilitating and expanding the secure, electronic movement and use of health information among organizations according to nationally recognized standards.

The Minnesota e-Health Connect project will build upon the previous five year effort of the Minnesota e-Health Initiative, a public-private collaborative whose vision has been to accelerate the adoption and use of health information technology through adoption of standards for health information exchange, privacy and security policy development, and support of providers in achieving adoption and effective use. This existing organizational and policy infrastructure will continue to guide Minnesota's efforts to build a statewide information exchange.

The Minnesota e-Health Connect project will serve the public interest as Minnesotans experience improved health care quality, increased patient safety, reduced health care costs, improved population and public health, and ready access to the information necessary for individuals and communities to make the best possible health decisions.