PART 2: ENVIRONMENTAL SCAN

ENVIRONMENTAL SCAN METHODOLOGY

A variety of data sources provide information on electronic health record adoption, electronic health record use, interoperability, and health information exchange in Minnesota. The methodology for creating this environmental scan incorporated information available from multiple sources:

- Minnesota-specific health information technology surveys
- Other existing data sources, including ongoing national surveys, one-time surveys, or regional studies
- Collection of information from subject matter experts

This assessment incorporates the most recent data for health / health care settings where available; however, limited data is available on electronic health record adoption, use and interoperability and related types of health information technology in Minnesota. Minnesota-specific information on adoption and utilization metrics was 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.

READINESS FOR ACHIEVING STATEWIDE HEALTH INFORMATION EXCHANGE IN MINNESOTA

The Minnesota e-Health Initiative was charged with assessing the level of adoption, effective use of electronic health records and other Health Information Technology across the health / health care delivery continuum in order to:

- Demonstrate Minnesota's progress on Office of the National Coordinator goal to accelerate the adoption and effective use of health information technology under the HITECH Act
- Assist the Centers for Medicare & Medicaid Services and the Department of Human Services in determining health care professional and hospital eligibility for incentives under the HITECH Act and/or other federal programs
- Other purposes as necessary to support implementation of the HITECH Act

To monitor progress on the achievement of "meaningful use" and Minnesota's 2015 statewide interoperable EHR goal, an assessment framework is an essential tool. To establish a valid and consistent methodology for future assessments, the Minnesota e-Health Initiative will:

- Develop a collaborative of professional and trade associations and other organizations who commit to a shared plan for carrying out HIT assessments
- Review existing survey tools and assessment results from within Minnesota and nationally
- Develop a core set of survey questions that measure stages of adoption, levels of effective use, and exchange capabilities, and barriers (e.g., competing priorities)
- Develop a communications plan around the assessment results, including actions to take for settings that are at risk of not achieving meaningful use or the mandate
- Identify the resources needed to implement this assessment plan effectively.

Significant gaps in knowledge remain about adoption, use and interoperability of electronic health records and other health information technology, particularly for groups like public health. Addressing these gaps is critical not only to ascertaining provider eligibility for incentives within the HITECH Act which require achievement of "meaningful use," but also for achieving the broader e-Health vision in Minnesota.

Electronic Health Record Adoption Rates by Eligible Meaningful Use Providers

Below are available data for electronic health record adoption rates among eligible meaningful use providers in Minnesota.

Hospitals

There are 137 Minnesota Licensed Acute Care Hospitals in Minnesota. The 2007 American Hospital Association (AHA) Survey of Hospital Health Information Technology Adoption assessed electronic health record availability. Minnesota hospitals had a 71 percent response rate. Table 2 below describes the extent to which Minnesota hospitals have implemented electronic health records.

Table 2. Minnesota Hospitals Health Information Technology Adoption American Hospital Association Survey 2007

Electronic Health Record Implementation	No EHR	Partially Implemented EHR	Fully Implemented EHR	N
Has EHR	34	49	15	98
EHR includes:				
▪ Patient-level data	8	39	26	73
▪ Results management from lab, radiology, etc.	4	17	53	74
▪ Order entry management	8	26	40	74
▪ Decision support	21	37	16	74

Source: Minnesota Hospital Association extraction of AHA Survey 2007 data

Critical Access Hospitals – a subset of licensed acute care hospitals

The Consortium of Rural Health Research Centers Survey in 2006 assessed health information technology adoption in the 79 Critical Access Hospitals (CAHs) in Minnesota, resulting in a sixty-five percent response rate. The survey found that nationally, and in Minnesota, CAHs have relatively high use rates for administrative and financial health information technology applications, but much lower use rates for a number of clinical applications. The vast majority of CAHs have high-speed Internet access, and many CAHs are computerizing radiology, lab, and pharmacy functions. However, only 23 percent of the responding CAHs in Minnesota were using electronic health records, and only 21 percent were using prescriber order entry. The national summary report of this study is available at: http://www.flexmonitoring.org/documents/BriefingPaper11_HIT.pdf

Since the information above was collected, information gathered informally from the Minnesota e-Health grant and loan program between 2006-2010 indicates that 49 percent of Minnesota Critical Access Hospitals have implemented an electronic health record and 32 percent are in the process of

implementing an electronic health record. The status of electronic health record adoption is unknown at fifteen Minnesota Critical Access Hospitals. See Table 3 for more information.

Table 3. Minnesota Critical Access Hospitals (n=79)

EHR Implemented		EHR Implementation in Process		Status Unknown	
Number of Critical Access Hospitals	Percent	Number of Critical Access Hospitals	Percent	Number of Critical Access Hospitals	Percent
39	49	25	32	15	19

Source: Minnesota Department of Health

Hospitals- non-acute care

There are 11 non-acute care hospitals in Minnesota; however, there is currently very limited or no information available for this group of providers.

Clinics- primary care

A 2010 survey conducted by Minnesota Community Measurement was returned by 915 of 1027 Minnesota based clinics, with a response rate of 89%. The results indicates that of those who responded, 66% have an EHR installed and in use by at least some clinic staff and providers. See Table 4 below. The complete survey questions can be found in Appendix I.

Table 4 : EHR Adoption and Implementation Status	**% (#) clinics**
EHR installed and in all (more than 90%) areas of the clinic	60% (548)
EHR installed and in use by some of clinic staff and providers	6% (60)
Purchased/begun installation of an EHR, but not yet using system	9% (86)
Do not have an EHR	24% (221)
Total	100% (915)

Specialty care clinics

There are approximately 200 specialty care clinics in Minnesota; however, no data is currently available on EHR adoption in these clinics.

Electronic Health Record Adoption Rates by Other Health Care Providers

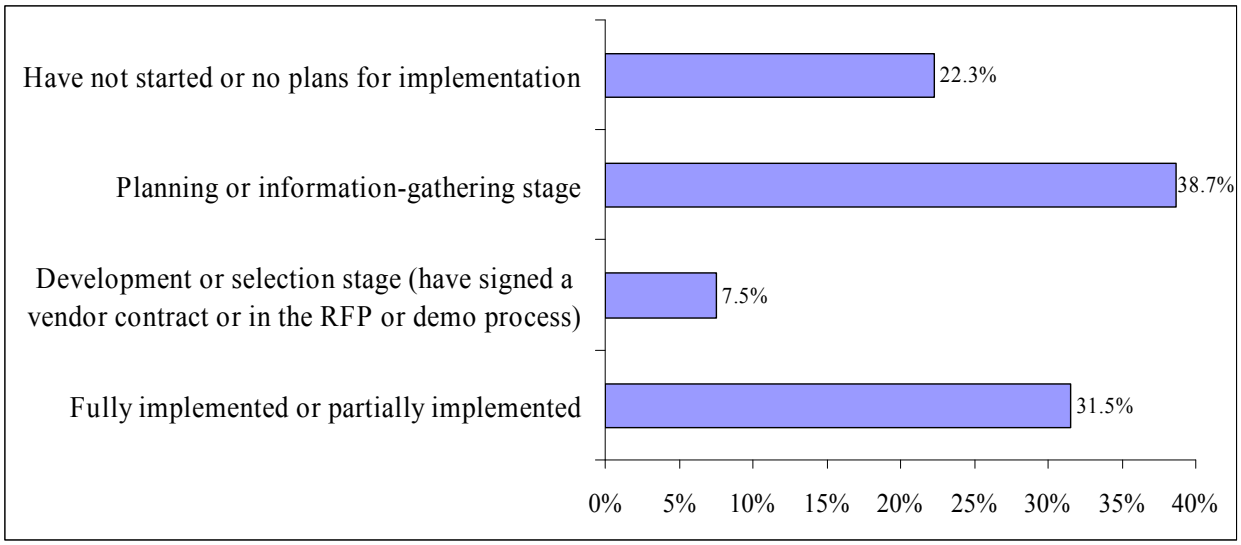
Below are available data for electronic health record adoption rates among other providers in Minnesota.

Nursing homes

There are 380 nursing homes in Minnesota. A 2008 survey conducted by Stratis Health established a baseline measurement, with approximately 32 percent of nursing homes indicating that they have an electronic health record, while approximately 8 percent indicated they are in a development or selection stage. Thirty-nine percent of respondents are in the planning or information-gathering stage, while seven percent are in the vendor development or selection stage, participating in demonstrations, or in a request-for-proposal process. Twenty-two percent of respondents reported that they have not implemented an electronic health record and/or have no plans for implementation. See Figure 5 below.

Nursing homes affiliated with some sort of group–either a hospital, integrated system, or a regional chain, or located in an urban area–are more likely to have an electronic health record implemented than those who are not part of a group. Nursing homes that are not part of a group, such as free-standing nursing homes in rural communities, are less likely to have an electronic health record fully or partially implemented. Additional information on this survey is located at: http://www.stratishealth.org/documents/HIT_LTCSurveyResults.pdf.

Figure 5. Electronic Health Record Implementation Status of Minnesota Nursing Homes



Source: Stratis Health, 2008.

Pharmacies

There are 1,311 licensed pharmacies located in Minnesota. 1,071 are community pharmacies –either chain or independent; 240 are in special settings (e.g. hospital, long term care). Most are linked electronically with pharmacy claims and pharmacy benefit managers. Of the 1,071 community pharmacies, 567 (52.9 percent) are linked to allow e-prescribing by prescribing providers and are electronically filling prescriptions. Of the 567 pharmacies electronically filling prescriptions, 540 are community chain pharmacies and represent 86 percent of the total 626 community chain pharmacies; the remaining 27 pharmacies are community independent pharmacies and represent 6 percent of the total 445. See Table 5 below. The majority of community chain pharmacies are in urban Minnesota

while the majority of community independent pharmacies are located in rural Minnesota. Their geographic location is likely to be a factor to the difference in their adoption.

Table 5. Electronic Prescribing Use by Pharmacies or Other Dispensers

Pharmacies or Other Dispensers

				Electronic Prescribing Use		
	Totals [6,7]	Urban	Rural	Electronically Filling [9,10]	Percent Active	Gap/ Need
Community Chain Pharmacy	626	361	265	540	86.3%	13.7%
Community Independent Pharmacy	445	139	306	27	6.1%	93.9%
Total Chain and Independent	**1,071**	**500**	**571**	**567**	**52.9%**	**47.1%**
Special Settings	240	62	178			

[6] Source: Minnesota Board of Pharmacy, 2006 Note: There are 6,901 licensed pharmacists in Minnesota.
[7] Source: Minnesota Board of Pharmacy, 2006. Special settings include hospitals, nursing homes, parenteral-enteral/home health care, and nuc
[8] Source: Surescripts, 2008. Activated by Surescripts after pharmacy software is certified.
[9] Source: Surescripts, 2008. Actively electronically filling prescriptions.
[10] Source: HealthPartners, 2009. HealthPartners pharmacies electronically filling prescriptions (18 pharmacies).

CURRENT STATUS OF HEALTH INFORMATION EXCHANGE IN MINNESOTA

Overview of Health Information Exchange in Minnesota

Electronic health information exchange is underway through a variety of methods in Minnesota. The primary approaches to health information exchange in Minnesota currently include:

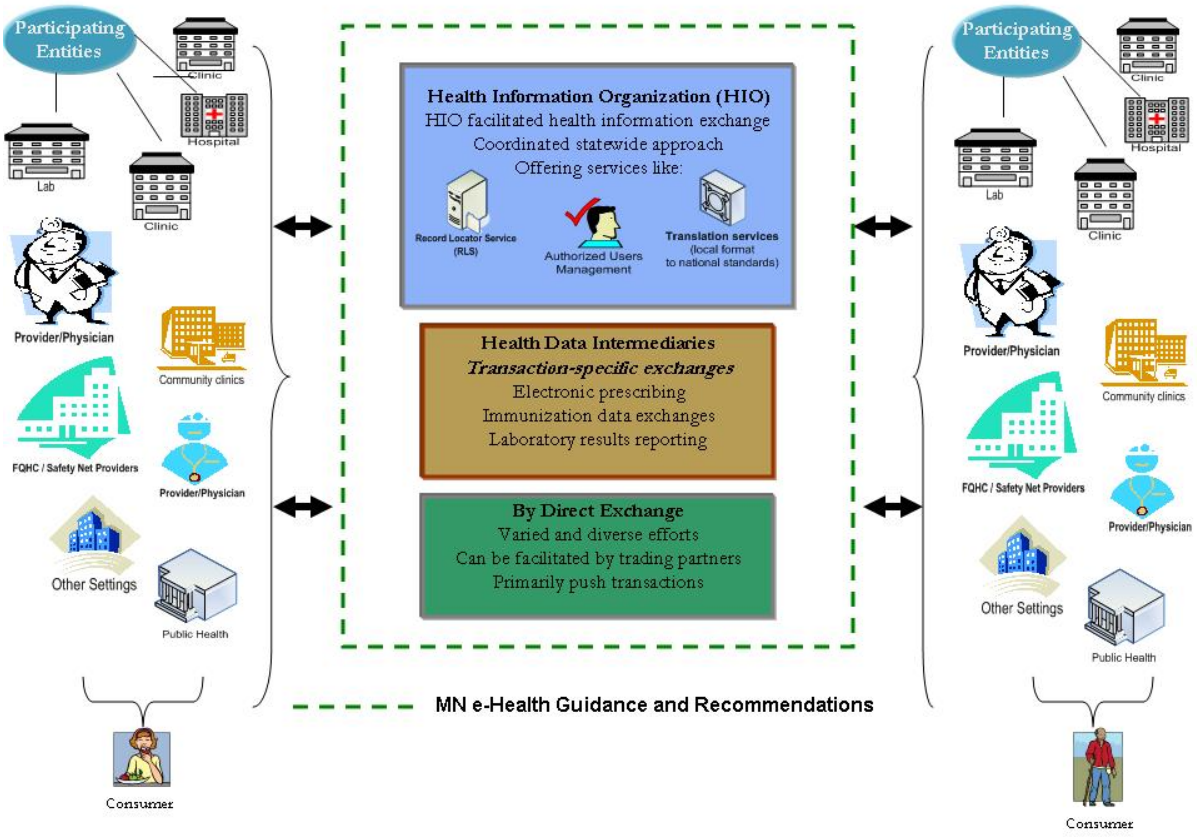
- Through a facilitated connection via health information organizations
- Through transaction-specific exchanges via a health data intermediary (e.g., electronic prescribing)
- Through direct exchanges between participating entities

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
- Connections to intermediaries that facilitate e-prescribing and other selected transactions

Figure 6 below depicts the types of health information exchange presently occurring in Minnesota.

Figure 6. Types of Health Information Exchange in Minnesota



Minnesota Health Information Organizations with Current Initiatives to Enhance Exchange and Interoperability

Currently, two health information exchange organizations exist in Minnesota, Minnesota Health Information Exxchange (MN HIE) and Community Health Information Collaborative (CHIC). MN HIE and CHIC have indicated that discussions are underway with to connect the two health information exchange systems to support an integrated information exchange in Minnesota.

Minnesota Health Information Exchange (MN HIE)

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. Beyond the services currently offered and scheduled for release, MN HIE has developed an initial plan for achieving the functionality necessary to support the exchange requirements put forth in the National HIT Policy Committee's recommendations for defining meaningful use. For more information on MN HIE, see www.mnhie.org.

Community Health Information Collaborative (CHIC)

Community Health Information Collaborative (CHIC) has developed a personal health record, participated in clinical a data exchange demonstration with NHIN, and recently implemented health information exchange through their HIE-Bridge service. CHIC recently received a contract from the Social Security Administration to connect HIE-Bridge to the SSA to speed up disability determinations for injured workers in Minnesota. The SSA project will be supported using the clinical exchange service available in HIE-Bridge. New services are being added soon to include direct connectivity with the MN Immunization registry, Social Security Administration, public health reporting, e-Prescribing, e-Referral, labs and full NHIN connectivity to other states and projects. More information on HIE-Bridge can be found at: http://hiebridge.org/index.html.

Assessment of Current Health Information Exchange Capabilities

Electronic prescribing, refill requests, prescription fill status and/or medication fill history

In 2008, approximately ten percent of Minnesota providers and prescribers and 53 percent of Minnesota pharmacies were electronically prescribing with transactions done by electronic data interchange. Additionally, 807,910 (3.6 percent) of all eligible prescriptions (new and refill) were electronically routed in Minnesota, representing an increase from the 258,019 or 1.6 percent of eligible prescriptions routed electronically in 2007. National statistics from Surescripts indicate that providers requested and received medication history for approximately 1.8 percent 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.

Pharmacy eligibility requests
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 percent response rate. Claims transactions submitted during the same time period for new and refill prescriptions are assumed to be 807,910 or 3.61 percent.

Electronic eligibility and claims transactions
Based on data provided by the Minnesota Council of Health Plans, the Minnesota Department of Health reports that in 2006, Minnesota health plans paid over 56 million claims, of which 83 percent (approximately 46.5 million) were submitted electronically.

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 (medical, pharmacy, and dental), of which approximately 97 percent (22.2 million) were processed electronically. In addition MMIS currently processes more than 98 percent of all claims in under two days. Effective July 20, 2009, all fee for service claims must be submitted electronically through the MN-ITS system, which is the Minnesota Department of Human Services' billing system for Minnesota Health Care Programs claims and other transactions.

Electronic clinical laboratory ordering and results delivery
There are approximately 174 clinical laboratories in Minnesota. Laboratories are primarily using automation and health information technology, but only approximately 11 percent 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 87 percent of Minnesota's primary care provider sites are enrolled in their voluntary program. Approximately 76 percent of provider sites have 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 percent. For the time period September 1, 2009, through October 5, 2009, 550,487 total immunizations were entered into MIIC. Of those, 82 percent came from electronic sources; 18 percent from direct data entry. Of the 82 percent from electronic sources, 62 percent were incorporated from flat file format loads, 15 percent from HL7 batch files, and 5 percent from HL7 transactions submitted in real-time.

Electronic public health reporting – 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 electronic health record systems which accounts for one percent of all the case reports received. All web-based case reports received are sent in flat file format. While the use of standards like HL7 transactions are planned, they are not yet implemented.

Electronic public health reporting – reportable conditions laboratory results
The Minnesota Department of Health infectious disease surveillance program receives approximately 10,000 lab results per month through electronic lab reporting. This estimate also includes lead reporting (both positive and negative results), which is a reportable condition in

Minnesota. Table 6 below lists details related to format of reporting and frequency (noted frequency includes multiple reports which are then parsed by disease condition).

Table 6. Electronic public health report – reportable conditions laboratory results

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 percent of total lab reports received by the Minnesota Department of Health related to surveillance of infectious diseases and lead. Currently only six laboratories are capable of doing electronic reporting (ELR), but the goal is to get 100 percent of labs in Minnesota and reference labs to report results electronically.

Local health departments

Most of the 91 local health departments in Minnesota use one of three major information systems for managing information about their clients; however, the data sets are not standardized and the systems are not interoperable within departments or between state and other local departments. A Minnesota Department of Health survey of local health departments in 2004 indicated that:

- About two-thirds of local public health agencies use one of the following applications: CHAMP (31 local health departments), CareFacts (4 local health departments), or PH-DOC (19 local health departments)
- Local health departments will need a comprehensive, integrated information system operating on national standards in order to achieve health information exchange 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 the Minnesota Department of Health to develop a uniform system for publicly reporting quality measures for all Minnesota physician clinics and hospitals. Minnesota Statutes, section 62U.02, requires 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. The Minnesota Department of Health 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. The Minnesota Department of Health is working with physician clinics and hospitals to implement the statewide reporting system through 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 electronic health record, and 97 sites submitted partially using an electronic health record.

Clinical summary exchange for care coordination and patient engagement

Minnesota Statutes section 256B.0751, subdivision 2, directs the Minnesota Department of Health and the Minnesota Department of Human Services to develop and implement standards of certification for health care homes (i.e., medical homes) for state health care programs. The Minnesota Department of Health and the Minnesota Department of Human Services 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:

- The participant's 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
- 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 posted on www.health.state.mn.us/ehealth.

Broadband capacity and access

Minnesota's health care providers have achieved some capacity and access to broadband services necessary for health information exchange, to 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 Federal Communications Commission 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, health care 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. 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. The most recent statewide broadband map can be found at http://connectmn.org/mapping/.

ONGOING HEALTH INFORMATION TECHNOLOGY ASSESSMENTS

Minnesota Community Measurement

The Minnesota Community Measurement has developed a survey based on the National Quality Forum's framework for measuring health information technology adoption and use at Minnesota clinics. The survey studies whether to what extent medical groups are using health information technology. The most recent survey results were released in June 2010, and it is anticipated that additional surveys will be conducted annually. For additional details on the survey results, please see Appendix K for the fact sheet titled, "Electronic Health Record Use in Ambulatoriy Care Clinic Settings in Minnesota: June 2010." Minnesota Community Measurement plans to continue to conduct the survey on an annual basis

Minnesota Hospital Association and American Hospital Association

The national American Hospital Association Survey included Minnesota-specific questions and was implemented the beginning of 2010. In addition to the general national American Hospital Association Survey, there was also an Information Technology Supplement Survey. The 2009 Information Technology Supplement Survey was in the field in early 2010 with results expected to be available in fall 2010. Once available, data from this survey will be incorporated into Minnesota's environmental scan as part of ongoing assessment activities.

RELEVANT COLLABORATIVE OPPORTUNITIES

A variety of Minnesota collaborative opportunities are underway with Minnesota networks supporting or hosting health information technology related activities. The following is a summary of many of these collaborative opportunities.

Epic Users Group
The Epic Users Group consists of a network of Epic customers that are currently using Epic products. Development of a Continuity of Care Document (CCD) Standard [Care Everywhere ©] is in process. Care Everywhere© is Epic's implementation of CCD standard to facilitate movement of health information in the Epic network. Care Everywhere© can query and bring back documents based on authorization and access privileges.

Greater Minnesota Telehealth/Electronic Health Record Broadband Initiative
The Greater Minnesota Telehealth/Electronic Health Record Broadband Initiative (GMTBI) is a consortium of five health care networks representing approximately 120 health care facilities that was authorized for funding under the 3-year FCC Rural Healthcare Pilot Program. The vision of the GMTBI is to enable a set of standard telehealth connection services throughout the State of Minnesota that will facilitate any health care location in the state to share one or more telehealth services with any other health care location within Minnesota, and ultimately, to interconnect with other health care providers regionally and nationally.

Lac qui Parle Health Network
Lac qui Parle Health Network (LqPHN) is a network of three integrated health systems in southwest Minnesota (Johnson Memorial Health Services - Dawson; Madison Lutheran Home - Madison; and Appleton Area Health Services – Appleton) that came together several years ago to coordinate health information technology investments and share health information technology resources.

Medi-Sota
Medi-Sota, Inc. is a non-profit health care consortium of 30 rural health care providers in Minnesota and one health care organization in eastern South Dakota. Medi-Sota provides a variety of services to members (i.e., educational programs for members and trustees, preferred vendor contracts**,** networking opportunities, etc.). Medi-Sota is a participant in the Minnesota Federal Communications Commission Pilot Project.

Minnesota Rural Health Cooperative
The Minnesota Rural Health Cooperative formed in 1995 to provide contracting services to member hospitals and clinics. The current membership includes Critical Access Hospitals and clinics located in south central and southwestern Minnesota. Services provided include: credentialing, health plan contracting and contract administrative support, assistance with health plan mandated quality assurance projects, patient satisfaction surveys, shared health information technology projects, health information technology services, and technology support.

Neighborhood Health Care Network
The Neighborhood Health Care Network is a shared management services organization that supports community health clinics in serving economically and ethnically diverse populations in the Minneapolis-St. Paul metropolitan area. Since its incorporation in 1995, the Network has focused on building the highest quality and most cost-efficient infrastructure for the health care safety net in the Twin Cities Metro. Network membership includes fourteen independent, non-profit community health centers with clinic locations in Minneapolis, St. Paul, and Stillwater.

The Network hosts and maintains state-of-the-art practice management software for member clinics—five of which have moved to a shared computer network. In 2007, the Network began planning a shared electronic health record system. The Network currently provides electronic

practice-management technology to five member clinics, keeping costs low through economies of scale. Building on this system, the Network is working with three of these organizations to implement an electronic health record system. In the future, data from these systems will be used to improve clinical quality and operational efficiency. The Network is also working with clinic members already on electronic health record systems to coordinate shared learning and explore data exchange across the systems.

North Region Health Alliance

The North Region Health Alliance is a collaborative of health care providers of Northeastern North Dakota and Northwestern Minnesota covering 20,000 square miles. The North Region Health Alliance was developed to provide economies and efficiencies of scale to better serve the residents of the respective service areas with the purpose of preserving rural health care access with quality, state-of-art technology, and the use of best practices. What individual facilities cannot afford to provide individually, they can collaboratively economize otherwise prohibitively costly financial projects and services. North Region Health Alliance is currently a participant in the Minnesota Federal Communications Commission Pilot Project.

Northern Minnesota Network

The Northern Minnesota Network (NMN) is a 501(c)(3) Health Center Controlled Network, started in 2001 and incorporated in 2004, providing health information technology resources and support to safety net providers in rural areas in Minnesota and eastern North Dakota to support the community health care system. The three members of the Northern Minnesota Network are Federally Qualified Health Centers (FQHCs) that provide care through 20 clinical sites in rural, medically underserved areas of Minnesota and eastern North Dakota.

The Network provides a robust health information technology system including: resources, access, support and maintenance for a complete electronic health record system, e-prescribing system, e-faxing solution, and electronic transmission of laboratory results.

SISU Medical Systems

SISU Medical Systems is a consortium of medical centers in Northern Minnesota working together to share information technology resources. Examples of these shared resources include: information systems staff, hardware, software, and a fully-equipped and secure data center. While SISU Medical Systems was officially established as a nonprofit corporation in 1997, several of the organizations that are members of SISU have shared information technology resources since 1982.

Administrative Uniformity Committee

The Administrative Uniformity Committee (AUC) is a voluntary, broad-based, advisory group representing Minnesota health care public and private payers, hospitals, physicians and other health care providers and state agencies. The AUC has worked for over 15 years to streamline health care administrative activities across Minnesota. A major focus of the AUC's recent work has been to consult with the Commissioner of Health on rules for the standard, electronic exchange of three types of common health care business transactions as required by state law. This first-in-the-nation law, enacted in 2007 as Minnesota Statutes, section 62J.536, received bipartisan legislative support, broad health care community endorsement, and the support of Governor Pawlenty as a means to reduce the costs and burdens of millions of routine health care business transactions each year. The AUC has provided hundreds of hours of in-kind support and technical assistance in the

development and refinement of rules specifying the standard data content and format to be used in the required electronic exchange of three types of business transactions: inquiries regarding patient insurance benefits and coverage; claims (billings), and remittance advices. For more information regarding Minnesota's health care administrative simplification efforts, including links to further information regarding the AUC, go to: http://www.health.state.mn.us/asa.

HEALTH INFORMATION TECHNOLOGY RESOURCES

Many health information technology resources are available in Minnesota, some of which are listed below. These resources will add value as tools in improving the electronic health record adoption and exchange rates.

Minnesota Statewide Implementation Plan and Guides

Through the Minnesota e-Health Initiative, a Statewide Implementation Plan and several guides have been created, including guides on :

- Addressing Common Barriers to EHR Adoption : A Practical Guide for Health Care Providers
- Standards Recommended to Achieve Interoperability in Minnesota
- A Practical Guide for Electronic Prescribing
- A Practical Guide for Effective Use of EHR Systems

The 2008 Statewide Implementation Plan and the guides can be downloaded at: http://www.health.state.mn.us/e-health/ehrplan.html.

Stratis Health Toolkits

As the State Quality Improvement Organization, Stratis Health is working in Minnesota to advance e-health and health information technology across the settings of care – hospitals, clinics, mental health facilities, nursing homes, and home health agencies. Stratis Health has developed setting-specific tools and resources to assist provider organizations in planning for and optimizing use of health information technology, including toolkits for:

- Adult primary care clinics
- Critical access and small hospitals
- Nursing homes
- Home health

These resources can be downloaded at: http://www.stratishealth.org/expertise/healthit/index.html.

Key Health Alliance

Key Health Alliance is a partnership of Stratis Health, Rural Health Resource Center, and the College of St. Scholastica. It was developed with an emphasis of meeting the needs of the rural and underserved. The three organizations have a long history of working together to improve health care. Each organization has unique and complementary expertise and experience in health care

quality, education, patient safety initiatives, and health information technology. This partnership formalizes their commitment to a long term, ongoing, working relationship.

The Regional Extension Assistance Center for Health Information Technology (REACH)—a program of Key Health Alliance—serves as a Health Information Technology Regional Extension Center, as part of the American Recovery and Reinvestment Act (ARRA) of 2009. It is one of 32 HIT Regional Extension Centers being established across the country to provide education and technical assistance to help providers select, implement, and achieve meaningful use of certified EHR technology, as well as the ability to exchange health information with other providers and agencies.

To help meet national HIT Regional Extension Center Program goals, REACH aims to provide technical assistance services and support to 5,100 priority primary care physicians and other clinicians in Minnesota and North Dakota over the next four years. In addition to primary care practices, REACH services will be available to providers of all types across the continuum of care. Services will be available to all providers, including those who already have an EHR and those that do not. Technical assistance and services from REACH will focus on the following areas of support as you work towards adoption and meaningful use:

- Select and purchase EHR software
- EHR implementation and project management support
- Practice and workflow redesign
- Functional interoperability and health information exchange assessment and guidance
- Privacy and security best practices
- EHR optimization and meaningful use