Minnesota e-Health Initiative

Report to the Minnesota Legislature 2010

Minnesota Department of Health

January 2010

Office of the Commissioner
625 Robert Street North
St. Paul, MN 55164-0975
(651) 201-4989
www.health.state.mn.us

Protecting, maintaining and improving the health of all Minnesotans

February 12, 2010

The Honorable Linda Berglin
Chair, Health and Human Services
Budget Division
Minnesota Senate
Room 309, State Capitol
75 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155-1606

The Honorable John Marty
Chair, Health, Housing, and
Family Security Committee
Minnesota Senate
Room 328, State Capitol
75 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155-1606

The Honorable Thomas Huntley
Chair, Health Care and Human Services
Finance Division
Minnesota House of Representatives
585 State Office Building
100 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155-1606

The Honorable Paul Thissen
Chair, Health and Human Services Committee
Minnesota House of Representatives
351 State Office Building
100 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155-1606

To the Honorable Chairs:

As required by Minnesota Statutes, section 62J.495, this Minnesota e-Health Initiative report outlines progress toward the goals set in statute for health information technology. Significant advances for 2009 included:

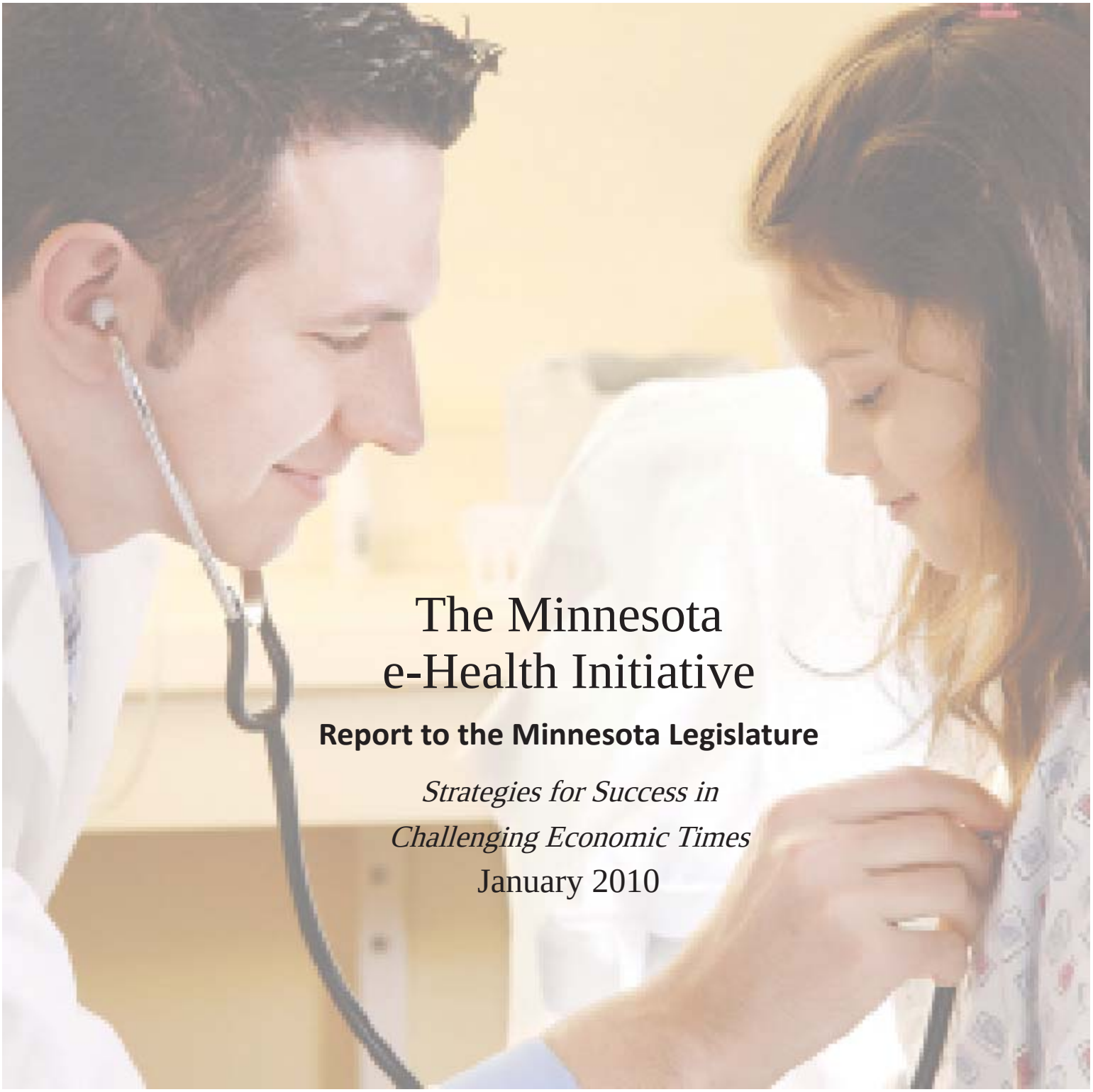
- Releasing three new guides to assist Minnesota providers in implementing e-prescribing, effectively using their electronic health record systems (EHRs), and adopting nationally recognized standards – all key components to achieving compliance with the Minnesota e-health mandates and requirements to receive federal incentives.
- Submitting the Minnesota application for the State Health Information Exchange (HIE) Cooperative Agreement Program to provide funding for the development of the infrastructure necessary to support health information exchange and meaningful use of EHRs.
- Coordinating statewide responses to several proposed federal health information technology regulations to ensure that Minnesota health care community's needs are adequately addressed in the final regulations.
- Establishing routine communications to facilitate stakeholder awareness of state and federal activities related to the HITECH Act, including meaningful use of EHRs and opportunities for involvement in Minnesota e-Health Initiative policy development activities.
- Convening the stakeholders through the Minnesota e-Health Advisory Committee and workgroups to recommend a framework for health information exchange that will enable Minnesota providers to achieve meaningful use.

The Minnesota e-Health Initiative is ensuring that these and many other activities in the public-private sectors across the state are occurring in a coordinated and focused way.

Sincerely,

Sanne Magnan

Sanne Magnan, M.D., Ph.D.
Commissioner
P.O. Box 64975
St. Paul, MN 55164-0975



The Minnesota e-Health Initiative

Report to the Minnesota Legislature

Strategies for Success in Challenging Economic Times

January 2010

Minnesota Department of Health
Division of Health Policy
Office of Health Information Technology
85 East Seventh Place
P.O. Box 64882
St. Paul, MN 55164-0882

Phone: 651-201-5979
Fax: 651-201-3830
TDD: 651-201-5797
www.health.state.mn.us/e-health/

As required by Minnesota Statutes, Section 3.197, this report cost approximately $4,327.00 to prepare, including staff time, printing and mailing expenses.

Upon request, this material will be made available in an alternative format such as large print, Braille, or cassette tape.

Printed on recycled paper.

"A key premise: information should follow the patient, and artificial obstacles – technical, business related, bureaucratic – should not get in the way... That is the goal we will pursue, and it will inform all our policy choices now and going forward."

Dr. David Blumenthal
Director, Office of the National Coordinator
U.S. Department of Health & Human Services
November 12, 2009

MINNESOTA'S MANDATE FOR INTEROPERABLE EHRS BY 2015

Minnesota Statutes 2007, section 62J.495

"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 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. The standards must be compatible with federal efforts. The uniform standards must be developed by January 1, 2009..."

TABLE OF CONTENTS

e-Health is the adoption and effective use of electronic health record (EHR) systems and health information technology (HIT).

EXECUTIVE SUMMARY

Over the past five years the Minnesota e-Health Initiative, the Advisory Committee, working groups and dedicated volunteer participants have provided leadership in the state and nation for the adoption and effective use of interoperable electronic health record (EHR) systems and health information technology (HIT). The ongoing vision and efforts are focused on using EHRs and other health information technology to improve health care quality, increase patient safety, reduce health care costs, and enable individuals and communities to make the best possible health decisions. E-health has the potential to make an ongoing major contribution to:

- Improve patient safety and health care quality
- Increase opportunities for cost savings through administrative and clinical efficiencies
- Improve continuity and coordination of care through electronic health information exchange (HIE)
- Increase opportunities to engage patients in their own health and care
- Improve disease management and research capabilities
- Improve public health, primary prevention and community preparedness
- Improve security to ensure privacy protections

EXECUTIVE SUMMARY (CONT.)

E-health activities in Minnesota are coordinated by the Minnesota Department of Health (MDH) through the Minnesota e-Health Initiative, a public-private collaborative that represents the Minnesota health and health care community's commitment to prioritize resources and to achieve Minnesota's mandates. The initiative fulfills the statutory role of the e-Health Advisory Committee and has set the gold standard nationally for a model public-private partnership. Additional coordination is provided by the staff of the Office of Health Information Technology (OHIT) and is part of the overall health reform effort in Minnesota.

Minnesota's leadership in pursuing bold e-health policies to accelerate the adoption of HIT, including the use of statutory mandates and governmental funding to accelerate adoption of EHRs and health data standards has laid the foundation for Minnesota to take full advantage of new opportunities presented through the federal Health Information Technology for Economic and Clinical Health (HITECH) Act.

The work of the Minnesota e-Health Initiative has laid the foundation for Minnesota to take full advantage of new federal opportunities.

Minnesota e-Health achievements in 2009 include:

- Releasing three new guides to assist Minnesota providers in implementing e-prescribing, effectively using their electronic health record systems (EHRs), and adopting nationally recognized standards – all key components to achieving compliance with the Minnesota e-health mandates and requirements to receive federal incentives.
- Submitting the Minnesota application for the State Health Information Exchange (HIE) Cooperative Agreement Program established pursuant to Section 3013 of the HITECH Act, and intended to provide funding for the development of the infrastructure necessary to support health information exchange and meaningful use of electronic health records.
- Coordinating statewide responses to multiple proposed federal health information technology regulations in order to ensure that the needs of the Minnesota health care community are adequately and efficiently addressed in the final regulations.
- Establishing routine communications to facilitate Minnesota stakeholder awareness of state and federal activities related to the HITECH Act, including meaningful use of EHRs and opportunities for involvement in Minnesota e-Health Initiative policy development activities.

- Convening the stakeholders through the Minnesota e-Health Advisory Committee and workgroups to recommend a framework for health information exchange that will provide the foundation for the statewide strategic and operational HIE plans to enable Minnesota providers to achieve meaningful use and meet requirements of section 3013 of the HITECH Act.
- Monitoring and assisting EHR grant and loan recipients whose projects begin to address the great need for financial and technical support in rural and community clinics and Critical Access Hospitals.

Priorities for 2010 include:

- Supporting providers and hospitals in meeting the requirements for the adoption and meaningful use of EHRs to improve quality of care and population health and to ensure access to federal incentives.
- Advancing interoperability between EHR systems to enable community electronic health information exchange to improve continuity and coordination of care.
- Ensuring widespread adoption and use of standards based on federal meaningful use requirements and Minnesota statute and e-health recommendations.
- Enabling health information exchange within Minnesota and across state borders.
- Ensuring trust and support for a statewide approach to HIE.
- Determining options for the financial sustainability of health information exchange services beyond the State Health Information Exchange Cooperative Agreement Program.
- Maximizing the use of state and federal funding available to support health information exchange, and the effective use of health information technology to improve patient care.

"Policymakers from all spheres have demonstrated a strong interest in using HIT and HIE as a means of shaping a health care system that is efficient, effective, safe, accessible, transparent, and affordable for all Americans."

Accelerating Progress: Using Health Information Technology and Electronic Health Information Exchange to Improve Care, State Alliance for e-Health, September 2008

OVERVIEW

What is e-health?

E-health is the adoption and effective use of Electronic Health Record (EHR) systems and other health information technology (HIT) to improve health care quality, increase patient safety, reduce health care costs, and enable individuals and communities to make the best possible health decisions. Across the nation, e-health is emerging as a powerful strategy to transform our ailing health care system. Minnesota is a leader in pursuing bold e-health policies to accelerate the adoption and use of EHRs and related HIT.

In Minnesota, e-health consists of multiple public/private collaborative activities and efforts related to the realization of the 2015 EHR mandate. These include:

- Increasing adoption and effective use of certified EHRs and other health information technology
- Connecting health care providers – clinicians and facilities – to ensure continuity of care for every Minnesotan
- Using national standards to guide electronic data interoperability, quality measurement and community health improvement
- Empowering consumers to understand and access personalized health information to facilitate active management of their health
- Improving public health, primary prevention and enabling community preparedness
- Informing health research and policy development
- Leveraging existing information systems and incrementally adding improved ones
- Safeguarding privacy and confidentiality of individuals' information
- Maintaining outcomes that focus on the patient
- Contributing to the development of federal standards efforts

Why is e-health important?

When EHR's and other health information technology are used effectively and health information is securely exchanged so it is available to the physician and patient at the point of care, e-health can provide:

- Improved safety and quality
- Cost savings through both administrative and clinical efficiencies
- Improved continuity and coordination of care through electronic health information exchange (HIE)
- Increased opportunities to engage patients in their own health and care
- Improved disease management and research capabilities
- Stronger privacy protections

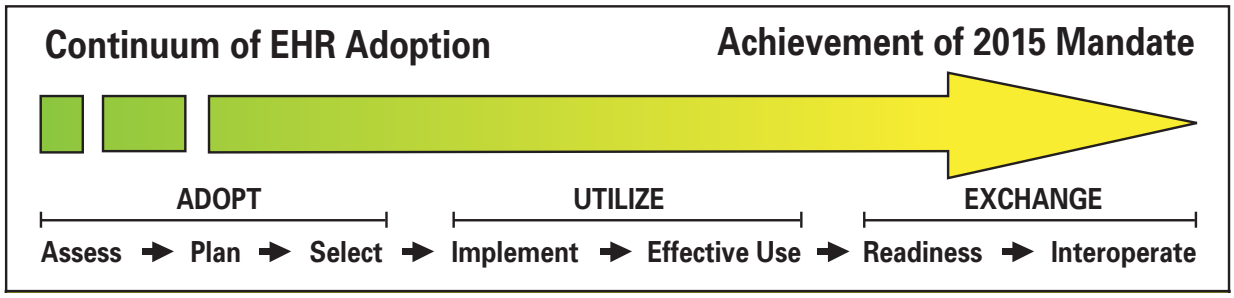
All of these benefits and others add up to healthier communities with healthier citizens and workers.

Who is leading e-Health Activities in Minnesota?

Over the past five years the Minnesota e-Health Initiative, the Advisory Committee, working groups and dedicated volunteer participants have provided leadership in the state and nation for the adoption and effective use of interoperable electronic health record (EHR) systems and health information technology (HIT). In 2008, the Initiative developed the Minnesota Model for Adopting Interoperable EHRs. The model contains seven major steps in adopting, implementing and effectively using an interoperable EHR. 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, including 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



The Initiative and Advisory Committee have chartered working groups for four of the five years, involving hundreds of volunteer members committed to advancing the vision of the Minnesota e-Health Initiative. The efforts of the e-Health Advisory Committee and workgroups have resulted in the development of critical resources and policy recommendations that have positioned Minnesota and our health care providers and hospitals to qualify for federal funding opportunities to further Minnesota's health reform agenda through effective use of EHRs and other health information technology.

Minnesota e-Health Definition & Framework for Effective Use of EHRs

The Effective Use Workgroup, convened in 2008-2009 to develop practical guidance for Minnesota providers on how to receive the most value out of their electronic health records, provided pivotal definitions and clarification on the framework for effective use. These efforts provide a solid foundation for Minnesota providers to work toward successfully meeting Centers for Medicare & Medicaid Services (CMS) requirements as meaningful users of EHRs to access $450-800 million in Medicare and Medicaid incentive payments.

As an ongoing element of the Minnesota EHR adoption continuum, effective use means: adequately planned for, selected, and implemented EHR systems that are efficiently and properly populated and used; are supported by and support the continuous commitment of individuals and organizations to improve patient safety and to provide optimal and comprehensive care to clients; achieve value for individuals, families, organizations, and populations across the continuum of care; and support the achievement of Minnesota's 2015 interoperable EHR mandate. At a minimum, these categories include:

- ***Organizational Support***
  Refers to support of continuous improvement to enhance organizational functions and design, which includes appropriate leadership and governance structures, competently trained workforce, practice culture and workflows, EHR related funding, value on investment (VOI), technology resources and compliance with regulatory and policy requirements.

- ***Health Care Decision Support***
  Utilizing relevant patient-centered information to support care delivery is one of the great utilities of an EHR. Including both clinicians and consumers as part of health care decision support is a critical ingredient for better health outcomes. Smart use of decision support systems (DSS) is essential to achieve a balance of what is possible and what is realistic to incorporate into the clinical workflow.

- ***Health and Practice Improvement***
  Information contained in EHRs should be used to improve quality of care as well as individual and populations. This concept is comprised of care management and care coordination tools like disease/care registries. The intent is to utilize aggregated information for population level analysis, which includes aggregating information to identify trends among groups of patients such as those with asthma or diabetes.

- ***Community Health Improvement***
  EHRs can utilize relevant population and public health information to support community health improvement in partnership with external organizations. This includes information exchange with public health

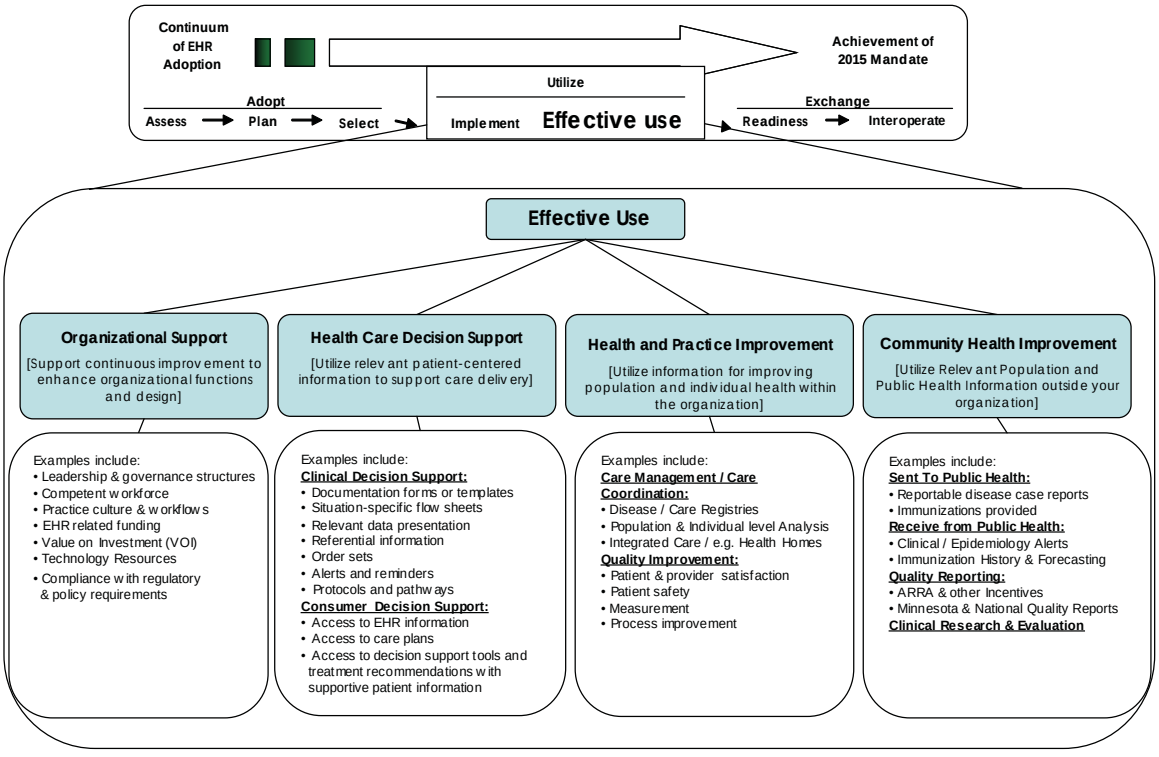
agencies for reportable diseases and immunizations, and also includes information received from public health such as clinical/ epidemiological alerts and immunization history and forecasting. It also includes reporting data as needed to support quality initiatives (e.g., Minnesota Community Measurement, Physician Quality Reporting Initiative (PQRI) requirements etc.) and information needed for clinical research and evaluation.

The Minnesota e-Health Initiative identified several characteristics or prerequisites for effective use of EHR systems, including:

- The system is adequately planned for, selected and implemented
- The system is efficiently and properly populated and intelligently used
- The system is not used to merely replicate old paper processes
- It is both supported by and supports continuous commitment of individuals and organizations to improving patient safety and providing optimal and comprehensive care to clients and populations
- Use of the system achieves demonstrable value for individuals, families, organizations and populations across the continuum of care, regardless of the setting in which it is used
- Implementation and use of the system represents concrete progress toward achieving Minnesota's 2015 interoperable EHR mandate

These characteristics reflect the complexities of "effective use": having to faithfully represent the needs of both clinical and administrative users, working in diverse settings, and seeking to meet the varied needs of patients, payers, populations and others.

Figure 2. Minnesota Framework for Effective Use of EHRs



Engagement in National Health Information Technology Standards Activities

One of the key responsibilities assigned to the e-Health Advisory Committee is to 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. Through the Minnesota e-Health Initiative's Standards Workgroup, Minnesota's industry representatives actively review relevant standards materials and offer suggestions based on Minnesota's experience and needs.

Active engagement in the national standards arena is essential and of particular significance as only qualified electronic health records may be acquired in Minnesota (Minnesota Statutes, section 62J.495). The electronic health record must be certified by the Office of the National Coordinator pursuant to the HITECH Act and must meet the standards established according to Section 3004 of the HITECH Act as applicable. This requirement ensures that EHRs have adopted national standards for information exchange and functionality — two critical components for achieving interoperability and improving quality. It also helps to ensure that the considerable financial investment a provider makes in an EHR system will bring value in the long run.

In 2008, Minnesota was the only state to submit a coordinated, statewide response to federal requests for comments on standards for certifying EHRs. In 2008, work group members and MDH staff reviewed over 1,400 criteria in six areas (ambulatory, inpatient, emergency department, cardiovascular, child health, and network), providing specific feedback on 77 criteria and proposing an additional 40 new ones. Many of Minnesota's suggestions were adopted nationally in the final set of EHR certification criteria for that certification cycle.

In 2009, the standards workgroup took the lead in submitting a coordinated response to the HIT Standards Committee on issues related to implementation of standards (related to "meaningful use"). The standards recommendations on "meaningful use" encompass the spectrum of clinical operations, clinical quality and privacy and security. The Minnesota e-Health response can be found at http://www.health.state.mn.us/e-health/standards/index.html. Efforts are currently underway to gather feedback from experts in the Minnesota community to respond to the interim final rule on certification standards for EHR's – a key component for Minnesota providers to achieve meaningful use and access incentive payments.

Standard setting and adoption is an iterative, ongoing process. Existing standards are continually refined and updated, and new standards will continue to emerge. In short, the work of standards setting, adoption and use is a continuing cycle with goals of enhancing interoperability.

Minnesota e-Health Standards

Minnesota e-Health Standards are a requirement for electronic exchange of health information and achieving interoperability as required by the Minnesota 2015 mandate. Interoperability of Electronic Health Records systems in Minnesota means the ability of two or more EHR systems or components of EHR systems to exchange information electronically, securely, accurately and verifiably, when and where needed. It is comprised of "technical," "semantic" and "process" interoperability, and the information exchanged includes transactions and standards as defined by the Minnesota Commissioner of Health. The Minnesota vision for exchange is to electronically move health information among disparate systems in order to improve health care quality, increase patient safety, reduce health care costs and improve public health, consistent with principles of health reform. An updated guide, "Standards Recommended to Achieve Interoperability in Minnesota" was released in June 2009, and is available at http://www.health.state.mn.us/e-health/standards/index.html.

Minnesota e-Health Advisory Committee & Stakeholder Engagement

The Minnesota e-Health Initiative and the Office of Health Information Technology (OHIT) through the Commissioner of Health has responsibility to seek advice and input from the Minnesota e-Health Advisory Committee. The Commissioner has sought, and the advisory committee has provided advice and input in 2009 on the following statutorily required areas:

Assessment of the Adoption and Effective Use of Health Information Technology

The Minnesota e-Health Initiative is charged to assess the level of adoption, use and interoperability of electronic health records (EHRs) and other Health Information Technology (HIT) in different health care settings. This vital information is needed to demonstrate Minnesota's progress on meeting the 2015 interoperable EHR mandate, goals established by the Office of the National Coordinator to accelerate the adoption and effective use of health information technology under the HITECH Act and for other purposes as necessary to support the implementation of the HITECH Act.

The initiative releases an assessment summary annually at the Minnesota e-Health Summit which is based on a comprehensive assessment framework. The framework includes various settings such as clinics, hospitals, nursing homes, pharmacies and public health. The current report is available at http://www.health.state.mn.us/e-health/hitassessmentsummary2009.pdf.

Assessment data from 2007 Electronic Health Record Landscape Assessment from Stratis Health surveyed 603 adult primary care clinics and showed an adoption rate of 62%. The Primary Care Clinics- Health Care Homes Capacity Survey which included a list of 707 state-contracted primary care clinics and done in early 2009 pointed to 67.83% of responding clinics as having a fully implemented electronic health record. Two surveys conducted in near past (Minnesota Community Measurement (MNCM) survey of Minnesota clinics and medical groups in November 2008 and the 2008 annual American Hospital Association (AHA) Information Technology Supplement survey) point to progress being made in EHR adoption rates. In the 2008 AHA survey, of the 106 (71%) responding hospitals in Minnesota, 20 (19%) have fully implemented systems, 65 (61%) have partially implemented systems and 21 (20%) have none. Of the 83 medical groups and clinics which responded to the MNCM survey, 59.5% acknowledged the adoption of an EMR/EHR certified by the Certification Commission of Healthcare Information Technology. These organizations are in process of updating their surveys and will aim to collect current assessment data in 2010.

Data on immunization information exchange show that 87% of 804 primary care provider sites (public & private providers, including those participating in Minnesota Vaccines for Children program , are enrolled in the Minnesota Immunization Information Connection (the state immunization registry). Approximately 76% of these sites submit data regularly. While the enrollment rate is high in the immunization registry, Minnesota is striving to achieve the federal goal of 95%.

Data on electronic prescribing show that approximately 10% of Minnesota providers and prescribers and 53% of Minnesota pharmacies were electronically sending or receiving prescribing transactions by electronic data interchange in 2008. 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.

Assessment is an on-going effort and needs to be updated annually by working collaboratively with various health care stakeholders. The EHR surveys to be conducted in 2010 will provide more comprehensive information on the adoption and use status in Minnesota clinics and hospitals and will provide a solid foundation to help measure the Minnesota's progress toward e-health goals (See p. 22).

Recommendations for implementing a statewide interoperable health information infrastructure

The e-Health Advisory Committee has worked in a collaboratively with the MDH Office of Health Information Technology to provide recommendations to the Commissioner regarding access to the necessary resources for

health information technology adoption and effective use. The Advisory Committee has accomplished this by tasking an exchange and meaningful use workgroup to develop criteria for organizations engaging in exchange activities in Minnesota. The workgroup will also develop recommendations regarding meaningful use criteria to help prepare Minnesota health care stakeholders for federal incentives. Additional recommendations have been and continue to be determined for standards for clinical data exchange, clinical support programs, patient privacy requirements, and maintenance of the security and confidentiality of individual patient data.

As a part of ongoing efforts, the Minnesota e-Health Initiative will continue to develop recommendations to encourage the use of innovative health care applications using information technology and systems to improve patient care and reduce the cost of care, including applications relating to disease management and personal health management that enable remote monitoring of patients' conditions, especially those with chronic conditions.

Coordination with National Heath Information Technology Activities

As a part of the Minnesota Department of Health, the Office of Health Information Technology staff has been working in conjunction with the e-Health Advisory Committee and working groups to coordinate Minnesota activities with national health information technology activities. Minnesota Statutes, section 62J.495, subdivision 4, requires coordination between state and federal health information technology activities. One of the important aspects of this effort is to help ensure Minnesota is responding in a timely and appropriate way to federal requests for information and feedback. To seek and gather stakeholder input, the OHIT has engaged in a coordinated and extensive communications effort to inform affected stakeholders, individuals and organizations involved in federal health information technology activities. While these activities are identified in statute, many hours of volunteer effort were committed to contribute to these efforts. Coordination work includes but is not limited to the following:

Development of State Strategic and Operational Plans for HIE
During the last year the advisory committee and workgroups have been working on two plans required by the HITECH Act's state cooperative agreement program. (This program provides states with federal funds to promote the adoption and effective use of EHRs.) The first is a strategic plan which will provide a high level strategy intended to inform both the state and federal stakeholders about how Minnesota will enable health information exchange. This strategic plan developed for health

information exchange will compliment and update the statewide implementation plan required by Minnesota statute and will be consistent with the current Federal HIT Strategic Plan released by the Office of the National Coordinator (ONC). In addition, the MDH Office of Health Information Technology, in consultation with the Advisory Committee, must also provide the Commissioner with recommendations for an operational plan which includes details such as dates and responsible parties that will implement the strategic plan. Both plans must be submitted to the ONC as part of the requirements for the State Health Information Exchange Cooperative Agreement Program.

Consultation with the e-Health Advisory Committee

The Commissioner of Health, in consultation with the e-Health Advisory Committee, is ensuring coordination between state, regional, and national efforts to support and accelerate efforts to effectively use health information technology. These coordination efforts include:

- Supporting the development of a health information technology regional extension center, established under the HITECH Act to provide technical assistance and disseminate best practices
- Providing supplemental information on state and federal health information technology efforts using an approach to ensure that the information is relayed in a meaningful way to the Minnesota health care community
- Actively monitoring national activity related to health information technology and submitting statewide coordinated responses to provide input on policy development

Applications for Federal Funding

As directed by legislation passed in 2008, the Commissioner of Health, after consultation with the Minnesota e-Health Advisory Committee and the Department of Human Services, applied for federal funding through the State Health Information Exchange Cooperative Agreement Program to access funds necessary to enable health information exchange in Minnesota. In addition, MDH and the advisory committee have provided support to the Department of Human Services in their efforts to develop criteria and administrative processes for the disbursement of meaningful use incentives for Medicaid. The Minnesota e-Health Initiative also provides support and coordination for our community partners who are pursuing additional federal monies to support infrastructure and research for health information technology adoption and use.

Stakeholder Outreach Activities

The Minnesota e-Health Initiative is involved in multiple activities in order to engage the public and a broad range of stakeholders in the policy process around Health Information Technology in Minnesota. Activities

include advisory committee meetings, public workgroup meetings, monthly public meetings via conference call, a weekly update email, the annual Minnesota e-Health Summit, public speaking engagements, coordinated responses to federal rule making, official MDH publications, and contributions to publications by outside entities.

- *Advisory Committee Meetings*
  The Minnesota e-Health Initiative is guided by a 25-member advisory committee, which represents stakeholders' commitment to work together to identify and address barriers of common interest, prioritize resources, and achieve Minnesota's mandates. In 2009, the Minnesota e-Health Advisory Committee held four quarterly meetings which were open to the public. An average of 60 individuals attended each meeting.

- *Workgroup Meetings*
  In 2009 the Minnesota e-Health Initiative convened five separate workgroups which held a total of 30 meetings to develop policy recommendations related to Health Information Technology Standards, Effective Use of EHRs, Electronic Prescribing, Health Information Exchange and Meaningful Use, and Privacy and Security in Minnesota. In addition, the Minnesota e-Health Advisory Committee called for an Outreach and Communications workgroup which will convene in 2010. All workgroup meetings are open to the public. Over 300 stakeholders participated in workgroup activities during 2009. Participants included: private citizens, representatives from health care providers, local public health, and government. In 2009 workgroups also wrote and reviewed three additional guides to health information technology implementation which were published by the Minnesota e-Health Initiative and the Minnesota Department of Health (available at http://www.health.state.mn.us/ehealth/ehrplan.html):
    - *Standards Recommended to Achieve Interoperability in Minnesota*
    - *A Practical Guide to Electronic Prescribing*
    - *A Practical Guide to Effective Use of EHR Systems*

- *Weekly Update*
  The Minnesota e-Health Initiative e-mails Weekly Update that is a synthesis of e-health related news, significant meetings, and other relevant information that is intended to provide health related professionals with a Minnesota perspective on local and national health information technology activities. In 2009, the number of Weekly Update subscribers increased by 36.5%, reaching 2,996 readers.

- *Monthly Public Update Meetings and Conference Calls*
  After the American Recovery and Reinvestment Act (ARRA) was passed in early 2009, the Minnesota e-Health Initiative began holding a series of public meetings to inform stakeholders about the HITECH Act provisions and how Minnesota is responding to developing federal policy. The first meeting had approximately 280 participants, 80 in person and 200 via a webinar teleconference. Because of the intense federal and Minnesota activity related to the HITECH Act, the public meetings evolved into a monthly conference call update where participants can ask questions and get answers related to those activities. During the five conference calls from August to December, 2009, over 427 lines were utilized, with an average of over 85 individuals participating in the call each month.

- *Summit*
  The Fifth Annual Minnesota e-Health Summit, held on June 25, 2009, had a capacity crowd of 438. The keynote speaker was Kelly Cronin, Director of the Office of Programs and Coordination at the Office of the National Coordinator of Health Information Technology, who spoke about advancing e-Health through Recovery Act opportunities and how Minnesota can position itself for success. Successes and lessons learned from projects in Minnesota were shared in eight breakout sessions led by over 40 local speakers.

- *Presentations at Associations and Other Groups*
  MDH staff assigned to the Minnesota e-Health Initiative gave more than 30 presentations at various conferences and meetings held by Minnesota and national organizations and associations, such as the Minnesota Hospital Association, the Minnesota Medical Association, the Minnesota Homecare Association, the Minnesota Rural Health Conference, the Many Faces of Community Health Conference, the National Council for Prescription Drug Programs Educational Summit, and many others.

- *Testimony Before National Committees*
  In addition, MDH leaders relayed the needs of Minnesota stakeholders by giving testimony to national policy makers. In April 2009, Dr. Martin LaVenture provided testimony about meaningful use of EHRs to the National Committee on Vital and Health Statistics' Executive Subcommittee. Also in 2009, Dr. James Golden testified before the National HIT Policy Committee about privacy and security issues related to health information technology.

- *Coordinated Responses to National Health Information Technology Policy Proposals*
  Through MDH, the Minnesota e-Health Initiative sponsored six statewide coordinated responses to federal rulemaking related to HIT. Comments were solicited through e-Health workgroups, stakeholder groups, and the Minnesota e-Health Weekly Update. Table 1 details the responses submitted during 2009.

Table 1. Minnesota Coordinated Responses on National Health Information Technology Policy and Standards

2009 Minnesota Coordinated Responses	Date Submitted
ONC Proposed Definition of Meaningful Use	June 2009
ONC Proposed Description of Regional Extension Centers	June 2009
FTC HITECH Breach Notification Rule for Personal Health Record Vendors and Related Entities	August 2009
HHS HITECH Breach Notification Rule for HIPAA Covered Entities	September 2009
ONC National HIT Standards Recommendations	November 2009
HHS Interim Final Rule on Enforcement	December 2009
2010 Minnesota Coordinated Responses Anticipated	**Future Submissions**
CMS Proposed Rule: Meaningful Use Criteria	First quarter 2010
ONC Interim Rule on Standards	First quarter 2010
ONC Interim Rule on Certification	First quarter 2010

UPDATE ON MINNESOTA E-HEALTH GRANTS AND LOANS

Minnesota ranks among the top states in the nation in EHR adoption in larger hospitals and primary care clinics. Yet Minnesota Critical Access Hospitals and community clinics, both urban and rural, lag behind in adopting health information technology, largely because they are in greater need of financial and technical support. The state of Minnesota appropriated $14.6 million in grants and loans to support the adoption of interoperable electronic health records (EHRs), health information technology or health information exchange.

- The Minnesota e-health Grant Program awarded $8.3 million for both planning and implementation projects between 2006 and 2008. Eligible applicants were community collaboratives, community clinics and regional or community-based health information exchange organizations. (See Appendix C: Minnesota e-Health EHR Grant & Loan Recipients.)

- The Minnesota EHR Loan Program approved $6.3 million for financing and support of interoperable electronic health records in 2008 and 2009. Eligible applicants for EHR loans included small rural hospitals, community clinics, primary care clinics in towns with population under 50,000, nursing facilities and other health care providers.

Minnesota e-Health Grants

The Minnesota e-Health Grant Program made two types of grants available to eligible providers. Both types required a one-to-three match:

- Planning grants of up to $50,000 to assess business and clinical needs for an EHR system, define requirements, re-engineer clinical and administrative workflows to gain efficiencies, determine how it will be paid for and sustained, review candidate EHR software systems, and select a system.
- Implementation grants of up to $750,000 to implement an EHR to maximize clinical and administrative value, optimize clinical decision support tools to improve quality, and prepare for and engage in electronic health information exchange.

The volume of requests demonstrated the considerable need for these grants in rural and underserved urban areas. Over $27 million was requested for 95 projects. The program funded 49 projects, representing over 120 community health providers and organizations throughout the state.

Seven planning grants and nine implementation grants were awarded in 2008-2009. There were 21 grants awarded in 2009-2010: 10 planning grants and 11 implementation grants (three of which had previously received a planning grant). As this grant program ends in April 2010, the final projects are nearing completion. Critical lessons learned from the grantees can help inform future efforts by other stakeholders and help advance Minnesota's goal of widespread EHR adoption, effective use and health information exchange. Details about grantees experiences are available at www.health.state.mn.us/divs/orhpc/funding/grants/pdf/08ehrlessons.pdf.

EHR Loan Program

The Minnesota EHR Loan Program has $6,300,000 to support implementation of interoperable EHR systems. The EHR loan terms are six years, 0 percent interest, with repayment deferred two years from loan date. The maximum loan amount is $1,500,000 and eligible borrowers include community clinics, small rural hospitals, physician clinics located in rural communities, nursing facilities, and other providers of health care services.

As with grants, loan applicants must clearly state their plans for achieving interoperability with other providers. Over $14 million in project requests were received over the past year and a half. The program has funded eight organizations (five Critical Access Hospitals, two rural clinics and one urban community clinic). It is anticipated that, as repayments begin in July 2010, funds will again be available for loans.

Although there is still much work to be done to achieve interoperable electronic health records, the e-Health Grant and EHR Loan Programs have helped Minnesota providers make considerable progress by addressing a central barrier to adoption—lack of capital. Minnesota state government has been a leader in responding to that barrier. By providing funds for the implementation of electronic health records, the State of Minnesota has helped Minnesota providers get ready to achieve meaningful use and access Medicare and Medicaid incentive payments.

Minnesota providers and hospitals could access between $450-$800 million in incentives through Medicare and Medicaid.

A NEW LANDSCAPE: THE HITECH ACT AND MINNESOTA'S RESPONSE

In 2009, Congress passed the Health Information Technology for Economic and Clinical Health Act (HITECH Act) as part of the American Recovery and Reinvestment Act of 2009 (ARRA). The HITECH Act authorized new financial incentives through the Medicaid and Medicare programs to ensure that the adoption and use of health IT contributes to a more efficient, effective and safe health care system that achieves improved health outcomes. Current estimates indicate that Minnesota providers and hospitals could access between $450-$800 million in incentives through Medicare and Medicaid.

In addition to the incentive programs, the HITECH Act also provided $2 billion to the Office of the National Coordinator for continuing health information technology policy and standard development and for the implementation of several additional programs to support providers and hospitals in becoming meaningful users of electronic health records. See Table 2 for a brief description of each program, the intended purpose and the estimated amount of funding available for Minnesota.

Table 2. Key Programs Established Under the HITECH Act

HITECH Act Program	State Share (estimated)
CMS Incentives for "meaningful use" Provides Medicare and Medicaid incentives for certain health care providers and hospitals that meet criteria established by CMS for the meaningful use of certified EHRs. Medicare providers who do not become meaningful users of EHRs will receive penalties in the form of payment reductions beginning in 2016.	**~$450-$800 million**
Regional Extension Centers (Section 3012) Provide grants for the establishment of Health Information Technology Regional Extension Centers that will offer technical assistance, guidance and information on best practices to support and accelerate health care providers' efforts to become meaningful users of Electronic Health Records (EHRs).	**~$7-9 million**
Health Information Exchange (Section 3013) These grant programs will support states and/or State Designated Entities (SDEs) in establishing health information exchange (HIE) capacity among health care providers and hospitals in their jurisdictions. Such efforts at the state level will establish and implement appropriate governance, policies, and network services within the broader national framework to rapidly build capacity for connectivity between and among health care providers. State programs to promote health information exchange will help to realize the full potential of EHRs to improve the coordination, efficiency, and quality of care.	**~$9.622 million**
HIT Workforce Development (Section 3016) These grant programs will support the development of curricula, training programs and competency testing for a competent and prepared health information technology workforce	**~TBD – Competitive**
Beacon Community Program (Section 3011) Provide funding to communities to build and strengthen their health information technology (health IT) infrastructure and exchange capabilities to demonstrate the vision of meaningful health IT.	**~TBD – Competitive**

Meaningful Use

In order to access federal HITECH incentives, providers and hospitals will need to demonstrate "meaningful use" of an EHR system. Congress established three measures of meaningful use in legislation: the use of nationally certified EHR systems that include e-prescribing, the submission of clinical quality measures, and the electronic exchange of health information. Further definition and guidance was released in a proposed rule by the federal Department of Health and Human Services on January 13, 2010.

CMS proposes a phased, incremental approach of adoption of certified EHR technology across three stages. CMS describes these stages as reflecting reasonable criteria based on currently available technology and provider practice experience that build over time to a more robust definition of "meaningful use," consistent with anticipated development of technology and health IT infrastructure. The proposed rule only specifies objectives and measures for Stage 1. CMS plans to establish Stage 2 and Stage 3 criteria through future rulemaking processes. CMS describes each Stage as follows:

- **Stage 1** meaningful use criteria focus on: 1) capturing health information in a coded format, 2) using the information to track key clinical conditions; 3) communicating captured information for care coordination purposes; and 4) reporting of clinical quality measures and public health information.
- **Stage 2** criteria will likely expand upon Stage 1 criteria in the areas of disease management, clinical decision support, medication management, support for patient access to their health information, transitions in care, quality measurement, research, and bi-directional communication with public health agencies. For Stage 2, CMS may also consider applying the criteria more broadly to both the inpatient and outpatient hospital settings. CMS expects to propose Stage 2 criteria by the end of 2011.
- **Stage 3** criteria will likely focus on achieving improvements in quality, safety and efficiency, focusing on decision support for national high priority conditions, patient access to self-management tools, access to comprehensive patient data and improving population health outcomes. CMS expects to propose Stage 3 criteria by the end of 2013.

While the Centers for Medicare and Medicaid Services will determine the requirements for Medicare incentives, the federal law gives states some leeway for determining the definition of "meaningful use" for Medicaid incentives. In Minnesota, the Department of Health and the Department of Human Services are working closely with the Minnesota e-Health Initiative to respond to the proposed federal rule, and to explore options for tailoring the requirements to meet the needs of Minnesota Medicaid.

The proposed definition of *meaningful use* is important because it will be a key measure that determines provider eligibility to receive incentive funds and will have an impact on Minnesota providers and hospitals. As a part of the broader e-health efforts, the Minnesota e-Health Initiative views the definition of *meaningful use* as part of our framework of effective use of electronic health records. This approach recognizes that the real value in EHR systems comes from using them effectively to support efficient workflows and effective clinical decisions, which have a positive and lasting effect on the health of individuals and populations.

A National Vision for Health Information Exchange & State Responsibilities to Achieve the Vision

On November 12, 2009, Dr. David Blumenthal, the National Coordinator for Health Information Technology, articulated the national vision for Health Information Exchange, based on the key premise that, *"information should follow the patient, and artificial obstacles – technical, business related, bureaucratic – should not get in the way."* To carry out this vision, the ONC established the State Health Information Exchange Cooperative Agreement Program, which provides funding and delegates the responsibility for enabling health information exchange to the states. Under the program, states are expected *" to use their authority, programs and resources to:"*

"...information should follow the patient, and artificial obstacles – technical, business related, bureaucratic – should not get in the way."

Dr. David Blumenthal
Director, Office of the National Coordinator, Department of Health & Human Services
November 12, 2009

- Convene stakeholders to ensure trust and support for statewide approach
- Ensure an effective model for health information exchange governance & accountability
- Ensure the development of state level directories and enable technical services for health information exchange
- Coordinate an integrated approach with Medicaid & public health
- Develop and update privacy and security requirements for health information exchange
- Remove barriers and create enablers for health information exchange

In accordance with legislation passed in 2008, the Commissioner of Health, in consultation with the Minnesota e-Health Advisory Committee and the Department of Human Services, submitted the Minnesota application for the federal Health Information Technology State Cooperative Agreement Program to implement the Minnesota e-Health Connect project. A copy of Minnesota's application can be accessed at: http://www.health.state.mn.us/e-health/hitech/hitechmn.html.

Leadership and Statewide Coordination: MDH Office of Health Information Technology

On September 21, 2009, the Commissioner of Health announced the establishment of the Minnesota Office of Health Information Technology 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 Program, and his selection of a State Government Health InformationTechnology Coordinator.

The Office of Health Information Technology'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 agencies 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)

The Office of Health Information Technology is also responsible for carrying out the e-health responsibilities assigned to the Department of Health under Minnesota Statutes, sections 62J.495 to 62J.497.

Advancing the Minnesota e-Health Initiative Vision: Addressing Health Information Exchange

Consistent with the national vision, enabling the secure exchange of health information among health and health care stakeholders is essential to allow Minnesota providers and hospitals to meet meaningful use criteria and to realize the broad vision of the Minnesota e-Health Initiative, to *"… accelerate the adoption and effective use of health information technology to improve*

health care quality, increase patient safety, reduce health care costs and enable individuals and communities to make the best possible health decisions."

The Minnesota e-Health Initiative's Exchange and Meaningful Use Workgroup, assembled in October 2009, was charged with convening stakeholders to work toward consensus on statewide policy, governance, technical infrastructure, and business practices needed to support the delivery of health information exchange services. The primary challenge faced by the workgroup was finding the appropriate balance, taking into account the interests of all Minnesota health care stakeholders, while ensuring the state fulfills its obligation to create the necessary infrastructure to enable providers and hospitals to achieve meaningful use. To achieve this balance, the workgroup identified the following public good principles to frame their discussions:

- The improvement of health and health care for all Minnesota citizens and communities is the central focus of statewide, interoperable health information exchange.
- Consumption of health information exchange services by one health care stakeholder does not reduce availability for others, and no health care stakeholder can be excluded from appropriately using interoperable health information exchange services.
- The value of information increases with use, and the value of one set of information increases when linked with other information.
- The need for secure exchange of health information essential to transforming health care and improving the health of Minnesotans must supersede technical, business, and bureaucratic barriers.
- Health information exchange must initially provide for the functionality necessary to support meaningful use, and expand over time to provide for continuous improvement in quality and coordination of care.

With these principles in mind, the Minnesota e-Health Advisory Committee has provided several recommendations on health information exchange based on the following approach:

Minnesota Approach to Health Information Exchange

Minnesota will advance its goals of transforming health care and improving the health of all Minnesotans through an integrated statewide approach to health information exchange that will facilitate and expand the secure, electronic movement and use of health information across the continuum of care according to nationally recognized standards.

Minnesota will advance patient centered health information exchange that will:

- Provide Minnesotans with access to coordinated care each time they access the health care system, across the continuum of care.
- Elevate the health of all Minnesotans by facilitating essential communications that support improvements in community and public health.
- Ensure that adequate protections are in place to maintain patient privacy, while enabling secure access to all of the information necessary to deliver the best possible care.
- Empower Minnesotans with the information they need to work with their providers to achieve the best possible health outcomes.

Preventing Barriers to Health Information Exchange

The Advisory Committee further recommended that Minnesota establish an oversight body to govern health information exchange activities. The recommendations are intended to:

- Ensure that information follows the patient and flows appropriately across the full continuum of care.
- Prevent the fragmentation of health information that can occur when there is a lack of interoperability or cooperation between health information exchange service providers, or when providers and hospitals are not connected in a manner that allows for patient information to be located and accessed.
- Ensure that organizations engaged in health information exchange are adhering to nationally recognized standards.
- Ensure that health information exchange service providers are operating in a manner that provides mechanisms to receive and respond to feedback from consumers and participating entities.
- Ensure that Minnesota has a reliable health information exchange infrastructure in place by late 2010 to allow Minnesota providers and hospitals to achieve meaningful use and access federal incentives available through Medicare and Medicaid.

The Advisory Committee recommendation provides the foundation for the legislative framework necessary to enable health information exchange in Minnesota and ensure sound practices in five critical domains as identified by the Office of the National Coordinator: governance, finance, legal/policy, technical infrastructure, and business and technical operations. To review the Advisory Committee's full recommendation, please See Appendix B.

Ensuring Statewide Coordination on Health Information Technology and Heath Information Exchange Initiatives

The State Health Information Exchange Cooperative Agreement program requires that states play an active role to ensure coordination of health information technology and health information exchange initiatives at the state level. The following is a description of coordination activities currently in progress that will be continuing in 2010:

Coordination with Minnesota Health Care Reform Initiatives

The effective use of electronic health records is a critical tool in moving forward on health care reform in Minnesota. MDH has been working to coordinate e-health and health reform efforts, particularly as it relates to the assessment of the status of EHR adoption and use. Minnesota health reform legislation has requirements for a Minnesota Statewide Quality Reporting and Measurement System that includes a goal of having a statewide hospital health information technology survey. Health reform rules established in fall of 2009 require Minnesota providers and hospitals to submit information on their activities related to the adoption and effective use of EHRs and other health information technology. Two surveys are under development and scheduled for release in early 2010:

- Minnesota Community Measurement initiated a Health Information Technology Workgroup in 2009 to update their survey for measuring health information technology adoption and effective/meaningful use at Minnesota clinics. Representatives from the Office of Health Information Technology participate on this workgroup along with Minnesota Community Measurement Members, Stratis Health, the Institute for Clinical Systems Improvement, and Minnesota Hospital Association. This survey is expected to be completed and ready for distribution in February 2010.
- A workgroup of individuals from the MDH Health Economics Program and Office of Health Information Technology, Stratis Health, Minnesota Hospital Association, Minnesota Community Measurement and the Minnesota Department of Human Services were convened to recommend an approach for assessing the adoption and effective/meaningful use at Minnesota hospitals. The group focused primarily on the American Hospital Association (AHA) Annual and Information Technology Supplement Surveys, and the complementary IT Supplement Survey. The 2009 version is under development and targeted for release after meaningful use is defined more explicitly. National data from the survey will be available in October 2010.

These surveys, in conjunction with the reporting of quality measures, will provide the data necessary to enable Minnesota to demonstrate progress on

our e-health goals and to begin measuring the impact that the effective use of EHRs is making in the transformation of health and health care in Minnesota.

Coordination with Minnesota Department of Human Services

Minnesota's State Medicaid HIT Plan 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 health information technology in Minnesota, the Statewide HIT Plan and State Medicaid HIT Plan will be aligned and consistent. The Office of Health Information Technology and the Department of Human Services 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 and coordination between the agencies. DHS and MDH worked collaboratively to produce a draft implementation strategy for the Medicaid Incentive Payments that leverages existing expertise from both agencies.

Coordination with the Minnesota Office of Rural Health and Primary Care

The Minnesota Department of Health, through its Office of Rural Health and Primary Care, promotes access to health care for health care providers in rural and underserved communities. Staff from MDH's Offices of Rural Health and Primary Care and Health Information Technology regularly coordinate resources to ensure that rural health resources effectively support providers in rural and underserved communities to achieve meaningful use and exchange of health information.

Federal programs include:

- *The Rural Hospital Flexibility Program (HRSA)* supports and strengthens Critical Access Hospital community health systems in the delivery of quality primary and emergency care, and encourages health information technology adoption through grants and technical assistance.
- *The Small Hospital Improvement Program (HRSA)* supports small hospital quality, HIPAA, and health information technology investments
- *The State Office of Rural Health (HRSA)* and Primary Care Office (HRSA) supports access to quality primary and emergency health care in rural and underserved urban communities through coordination of federal and state resources.
- *The Critical Access Hospital Health Information Technology Grant (HRSA, 2007-8)* a $1.6 million grant targets three rural communities to implement interoperable electronic health records systems.

State grant programs include:

- *Electronic Health Record Grants and Loans* provided $8.3 million in grants and $6.3 million in loans to rural and safety net providers for adoption of interoperable EHRs
- *Community Clinic Grant Program, Rural Hospital Transition Planning Grant Program, Rural Hospital Capital Improvement Program,* 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 Office of Rural Health and Primary Care 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 Office of Rural Health and Primary Care 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 Office of Rural Health and Primary Care assisted the Greater Minnesota Telehealth/e-Health Broadband Initiative (GMTBI), a coalition representing over 120 health care providers, to obtain $5.4 million in authorized funding under the FCC's Rural Health Care Pilot Program. The Office continues to provide support for the project.

Coordination with Key Health Alliance (Regional Extension Center Applicant)

The Key Health Alliance is a partnership between Stratis Health, the National Rural Health Resource Center, and The College of St. Scholastica. Key Health Alliance will likely be selected as the Regional Extension Center for Minnesota and receive HITECH Act funding to provide technical assistance to health care providers and hospitals in the implementation and meaningful use of electronic health records. The Key Health Alliance partners have a long history of providing assistance and support in the adoption and effective use of health information technology while focusing on the needs of the rural and underserved. Key Health Alliance is committed to utilizing the existing e-Health infrastructure in Minnesota for planning and feedback, including MDH and the e-Health Advisory Committee and its workgroups. In addition, Key Health Alliance will form a Minnesota Council composed of a small group of organizations pivotal to Regional Extension Center's success, including MDH.

2010-2011 E-HEALTH INITIATIVE PRIORITIES

Priorities for the Minnesota e-Health Initiative in 2010:

- Advancing adoption and effective use of EHRs and other health information technology to improve quality of care and population health, especially for those with chronic conditions, defining interoperability between EHR systems and establishing the framework necessary to enable health information exchange to improve continuity and coordination of care.

- Supporting widespread adoption and use of standards based on national recommendations and Minnesota law.
- Assessing the progress on adoption and use of EHRs, identifying gaps and barriers to success, and developing pragmatic guidance and resources for organizations to address them.
- Supporting community clinics and rural provider collaboratives.

Minnesota e-Health Initiative workgroups, which are comprised of industry leaders across the continuum of care, are actively addressing these priorities:

- *Standards and Implementation:* Identify, monitor and recommend specific standards for sharing and synchronizing patient data across interoperable electronic health record systems and across the continuum of care.
- *Privacy and Security:* Providing comment and feedback on the development of federal privacy and security rules and guidance; development of resources and tools for consumers and providers.
- *Outreach and Communications:* Work with health professional and trade associations to disseminate consistent, effective messages around the Minnesota mandates and e-Health priorities.
- *Exchange and Meaningful Use:* Reviewing and commenting on the Minnesota health information exchange policy including proposed strategic and operational state plans pertaining to policy, governance, technical infrastructure, and business practices needed to support the delivery of HIE services; and providing advice and input into implementation activities related to meaningful use and other Recovery Act HIT provisions.

To review the full charges for these workgroups, please see Appendix A.

WHAT REMAINS TO BE DONE?

- Establish the framework for health information exchange in Minnesota, including appropriate mechanisms for oversight.
- Continue to identify priority data exchange scenarios that require uniform adoption of standards; evaluate any national recommendations; recommend standards for adoption in Minnesota.
- Support current exchange and interoperability priorities by implementing the recommended standards for e-prescribing, laboratory reporting and immunizations.

- Develop metrics and benchmarks for regularly assessing progress toward achieving the adoption, effective use and interoperability of EHR systems and other health information technology.
- Identify and address the unique challenges to health information technology adoption and health information exchange in special settings such as long term care, public health, and alternative care providers.
- Develop implementation and other guides to ensure consistent implementation of recommended standards.
- Perform applied research and evaluation of e-health activities to measure the value of EHR systems and other health information technology in improving quality and population health.

CONCLUSION

Health information technology and health information exchange offer transformative opportunities to improve the health and care of citizens. Minnesota has been a leader in pursuing bold e-health policies to accelerate the adoption of EHRs and other health information technology, including the use of statutory mandates and governmental funding to accelerate adoption of electronic health records and health data standards. It has also provided a model for effective public-private collaboration to advance e-health goals. While much of the foundation has been laid through the Minnesota e-Health Initiative, considerable work remains to ensure all providers and all Minnesotans can share in the benefits of e-health.

The State e-Health Alliance noted that "…the high costs, avoidable deaths, poor quality, and inefficiency of the current system drive urgency for transformation. But … if not smartly coordinated, it may only result in an electronic version of the "siloed", inefficient system we have today."[1] Ensuring the smart and coordinated implementation of health information technology and health information exchange to improve the health and care of Minnesotans will continue to be the vision and focus of the Minnesota e-Health Initiative and the Minnesota Department of Health.

1. Accelerating Progress: Using Health Information Technology and Electronic Health Information Exchange to Improve Care, State Alliance for e-Health, September 2008.

SELECTED GLOSSARY OF TERMS

e-Health
E-health is the adoption and effective use of Electronic Health Record (EHR) systems and other health information technology (HIT) to improve health care quality, increase patient safety, reduce health care costs, and enable individuals and communities to make the best possible health decisions. Across the nation, e-health is emerging as a powerful strategy to transform the health care system and improve the health of communities.

Electronic Health Record (EHR) Systems
An Electronic Health Record is a computerized record of a person's health history over time, typically within and for a single health organization. EHR systems increasingly include tools that assist in the care of the patient or result in greater efficiency, such as e-prescribing, appointments, billing, clinical decision support systems, and reports. Because of such tools, EHR systems are much more than just computerized versions of the paper medical chart. Proper planning and implementation of an EHR system can typically take 6-24 months in clinics, and three years or more in a hospital.

e-Prescribing
E-prescribing means secure bidirectional electronic information exchange between prescribers (providers), dispensers (pharmacies), Pharmacy Benefits Managers, or health plans, directly or through an intermediary network. E-prescribing encompasses exchanging prescriptions, checking the prescribed drug against the patient's health plan formulary of eligible drugs, checking for any patient allergy to drug or drug-drug interactions, access to patient medication history, and sending or receiving an acknowledgement that the prescription was filled.

Health Data Intermediary (HDI)
Health data intermediaries are entities that provide the infrastructure necessary to connect computer systems or other electronic devices utilized by health care providers, laboratories, pharmacies, health plans, third-party administrators or pharmacy benefit managers in order to facilitate the secure transmission of health information.

Health Information Exchange (HIE)
Health Information Exchange is the electronic, secure exchange of health information between organizations/information systems. The term can also be used to represent a regional or statewide organization whose purpose is to facilitate and support information exchange between member organizations.

Health Information Organization (HIO)
Health information organization means an organization that oversees, governs, and/or facilitates the exchange of health-related information among organizations according to nationally recognized standards.

Health Informatics
Health informatics is the science and art of ensuring that health information systems are designed and used in ways that truly support health professionals in improving the quality and safety of care, and of improving the health of populations.

HITECH Act
The Health Information Technology for Economic and Clinical Health Act was created in division A, title XIII and division B, title IV of the American Recovery and Reinvestment Act of 2009, and provides Medicare and Medicaid incentives for hospitals and providers that are meaningful users of EHR technology.

Interoperability
Interoperability is the ability of information systems to exchange data electronically, such that each system "understands" what the data are, the meaning of that data, and what to do with it. In everyday terms, interoperability is what is meant by the phrase, "computers can talk to each other."

Minnesota e-Health Initiative
The Minnesota e-Health Initiative is a public-private collaborative that represents the Minnesota health and health care community's commitment to prioritize resources and to achieve Minnesota's mandates. The initiative is legislatively authorized and has set the gold standard nationally for a model public-private partnership.

Personal Health Record (PHR)
Personal Health Record typically refers to a computerized application that stores health information on an individual over time. It can be initiated and maintained by the individual, the individual's health care provider, the individual's health plan, or by a third party. The individual can usually input health information themselves. The various models for PHRs and the lack of standards currently make this a confusing area.

Regional Extension Centers
Regional Extension Centers refers to entities that have received federal funding through the Health Information Technology for Economic and Clinical Health (HITECH) Act to provide technical assistance to health care providers and hospitals in the implementation and meaningful use of electronic health records.

Standards
Health data standards are consistent, uniform ways to capture, record and exchange data. Standards are a necessary component to achieve interoperability (see above). The various types of standards include Terminology (how data such as lab results and diagnosis are coded in uniform ways), Messaging (how data are sent in ways that the receiving system can understand what's coming in), Transactions/claims (to receive payment), and Data Content (common definitions and codes, such as for race and ethnicity).

ACRONYMS USED IN THIS REPORT

AHIC: American Health Information Community is the national public-private body that establishes priority "use cases" (that is, scenarios) for electronic exchange that have the greatest potential to improve quality, safety and/or population health.

CCHIT: Certification Commission for Healthcare Information Technology is the national body that establishes criteria for certifying EHR systems, conducts the evaluation, and issues the certification. www.cchit.org. CCHIT incorporates many of the standards recommended by HITSP (see below) based on AHIC priority use cases (see above).

HITECH: Health Information Technology for Economic and Clinical Health Act refers to Division A, Title XIII and Division B, Title IV of the American Recovery and Reinvestment Act of 2009, which established Medicare and Medicaid incentives for hospitals and health care providers that can demonstrate meaningful use of electronic health records. The act also provided funding to the Office of the National Coordinator to establish supporting programs to provide for technical assistance, the infrastructure necessary to enable health information exchange, and to provide for workforce development and mechanisms to share best practices.

HITSP: Health Information Technology Standards Panel is the national body tasked with identifying the optimal standards to be adopted nationwide in order to implement the use cases identified by AHIC (see above) and to achieve interoperability across systems and organizations.

MN HIE: Minnesota Health Information Exchange is a statewide partnership of payers, provider systems and state government, formed in 2007 to connect doctors, hospitals and clinics across the state. MN HIE will enable physicians and other health providers to quickly and securely access electronic medical information. MN HIE's initial service offers providers access to patient medication history, a critical component for e-prescribing. MN-HIE is a type of HIE as described above.

ONC : Office of the National Coordinator is a part of the federal Department of Health and Human Services, and is responsible for coordination of national activity relating to EHR's and HIT. The "The ONC-Coordinated Federal Health IT Strategic Plan: 2008-2012" was released in June 2008 and can be found at www.hhs.gov/healthit/resources/HITStrategicPlan.pdf.

APPENDICES

Appendix A

e-Health Workgroup Charges

Appendix B

e-Health Advisory Committee Recommendations on Health Information Exchange (HIE)

Appendix C

Minnesota e-Health Loan Recipients, Grantees and Community Partners

Appendix D

Selected Bibliography of e-Health Resources

Appendix E

Minnesota e-Health Initiative Advisory Committee Members

APPENDIX A: E-HEALTH WORKGROUP CHARGES

Exchange and Meaningful Use Workgroup Charge 2009-2010

Workgroup Charge

- Review and comment on the Minnesota framework for health information exchange (HIE). Provide input on recommendations related to criteria for a Minnesota Designated Health Information Organization (HIO). Provide input on American Recovery and Reinvestment Act of 2009 (ARRA) implementation activities relevant to exchange and meaningful use.
- Review and comment on proposed strategic and operational State plans pertaining to the development of statewide policy, governance, technical infrastructure, and business practices needed to support the delivery of health information exchange services
- Provide review and feedback as necessary on proposed state and federal definitions, criteria and/or proposed regulations regarding meaningful use and exchange pertaining to Medicare and/or Medicaid incentive payments under the American Recovery and Reinvestment Act of 2009 (ARRA) to ensure that Minnesota providers seeking to obtain incentive payments are able to meet federal and state criteria.

Background

Meaningful Use Incentives: The American Recovery and Reinvestment Act of 2009 (ARRA) establishes Medicare and Medicaid incentives for hospitals and health care providers who can demonstrate they are meaningful users of electronic health records (EHRs). There are three core requirements for "meaningful use" identified in the new law:

1. Use of certified or qualified EHR technology
2. Electronic exchange of health information
3. Use of EHR in reporting on clinical and other quality measures

The ARRA requires the Office of the National Coordinator (ONC) and the Centers for Medicare and Medicaid Services (CMS) to develop rules, guidance and plans to promote the adoption and meaningful use of EHRs. Draft rules are expected to be published in late December 2009. The law gives states some leeway in 2010 for determining the definition of meaningful use for the purpose of determining eligibility for Medicaid incentives. The Minnesota Departments of Health and Human Services will jointly implement the Medicaid incentives and define meaningful use to meet Minnesota and federal priorities. How meaningful use is defined is important because it will determine whether Minnesota providers are able to meet the necessary criteria to receive incentive funds.

Health Information Exchange: ARRA includes funds to states for aid in developing the health information exchange capacity needed to allow providers to meet meaningful use criteria. This assistance is provided through the State Health Information Exchange Cooperative Agreement Program, the overall purpose of which is to facilitate and expand the secure, electronic movement and use of health information among organizations according to nationally recognized standards. The cooperative agreements will focus on developing the statewide policy, governance, technical infrastructure, and business practices needed to support the delivery of health information exchange services. The resulting capabilities for health care-providing entities to exchange health information must meet the Medicaid and Medicare meaningful use requirements for health care providers to achieve financial incentives.

Work Group Deliverables and Timeline

1. **September-December 2009.**
   - Provide input on recommendations related to criteria for a Minnesota Designated Health Information Organization (HIO) and present feedback to the e-Health Advisory Committee.
   - Review and provide feedback on proposed Minnesota HIE Strategic Plan as required for the Cooperative Agreement Program, including the addition of strategies to address health information exchange development in Minnesota.
   - Provide review and feedback as necessary on proposed state and federal definitions, criteria and/or proposed regulations regarding meaningful use of health information technology.
2. **January –April 2010.** Review and provide feedback on meaningful use criteria including Medicaid meaningful use. Review and provide feedback on the proposed Operational Plan to execute the revised Minnesota HIE Strategic Plan that will be executed to enable statewide exchange. The updated strategic and operational plans are to be consistent with the funding opportunity announcement (FOA) requirements.

3. **September 2009–April 2010.** Provide review and feedback as necessary on ARRA program activities including but not limited to proposed documents for outreach and communication related to meaningful use
4. **By April 2010**. Monitor assessment activities and the status of EHR adoption conducted by MDH staff in Minnesota to identify specific challenges facing Minnesota providers in meeting federal and state criteria to obtain Medicare and/or Medicaid incentive payments under ARRA, and provide recommendations to Regional HIT Extension Center where additional practical guidance should be developed for eligible Minnesota providers.
5. **By April 2010**. Identify communication, education and collaboration opportunities to address common topics and issues with other organizations, the regional extension center and e-Health workgroups.
6. **June 2010.** Provide a status report issued at the Minnesota e-Health Summit.
7. **Quarterly.** Progress updates to the Minnesota e-Health Advisory Committee.

Guiding Principles and Themes

- Focus guidance on the core ARRA requirements for providers needing to achieve meaningful use requirements for purposes of Medicare and Medicaid health information technology incentive payments and then expand guidance to include all health care settings.
- Consider and expand upon the previous work completed and published in guides 1, 2, 3, and 4.
- Consider the broad view of issues that affect achieving meaningful use including technical, organizational, legal, community and telecommunications or related issues.
- Initial focus should be on meaningful use criteria for 2011 and then subsequent years 2013 and 2015.
- Consider data collected at the provider level – a patient-centered approach.
- Ensure that deliverables are consistent with and support federal and state health care reform efforts, especially health care homes and quality reporting.

Workgroup Member Expectations

- Serve a one-year term: September 2009 – June 2010.
- Participate in meetings and/or conference calls approximately every 2-3 weeks or more frequently as needed during the term.
- Bring the perspective of the stakeholder group you represent to all discussions and decisions.
- Keep the statewide interests of the e-Health Initiative foremost in your decisions and recommendations.
- Review meeting materials ahead of time and be prepared to contribute clear and focused ideas for discussion.

Value in Participating

- Proactively help shape future policy directions that can have a major impact on your organization.
- Enable your organization to be more prepared to respond to the requirements of state and federal implementation plans as they are established.

Workgroup Leadership

Co-Chair:
Alan Abramson, PhD
Senior Vice President IS&T, CIO
HealthPartners

Co-Chair:
Paul Kleeberg, MD
Consultant on Medical Informatics

Approximately 20-25 stakeholders will be invited from across the spectrum of care based on expertise and subject matter knowledge to participate on the workgroup. Meetings are open to the public and all participants are welcome.

Workgroup Staff

Jennifer Fritz
Senior HIT/HIE Program Lead
Office of Health Information Technology
Minnesota Department of Health
Phone: 651-201-3662
Email: jennifer.fritz@state.mn.us

Priya Rajamani
Senior Project Consultant
Office of Health Information Technology
Minnesota Department of Health
Phone: (651) 201-4119
Email: Priya.Rajamani@state.mn.us

Privacy & Security Workgroup Charge 2009-2010

Workgroup Charge

- Review and comment on privacy and security topics related to the development and implementation of statewide strategic and operational plans for health information exchange and topics related to the support for Minnesota providers and hospitals efforts to meet the privacy and security requirements of "meaningful use".
- Provide comment and feedback on the development of federal privacy and security rules and guidance developed pursuant to the American Recovery & Reinvestment Act (ARRA) and the Health Information Technology for Economic and Clinical Health Act (HITECH).
- Support providers and health care stakeholders in the implementation of privacy and security criteria established to qualify as a "meaningful user" of an Electronic Health Record (EHR) under HITECH.
- Ensure the needs of consumers, providers and health care stakeholder needs are fully considered in the development of privacy and security informational/educational resources and tools.

Background

Consumer acceptance and trust are the foundation for the successful development and implementation of EHR's and other Health Information Technologies (HIT). Privacy and security protections afforded to a patients' health information are important factors in earning that trust. Patients and consumers have a strong interest in how the privacy, confidentiality, and integrity of their information will be addressed and integrated into the implementation of EHR's and other HIT.

The HITECH Act included an expansion in federal HIPAA laws, and requires the Office of the National Coordinator (ONC) and the federal Department of Health and Human Services (HHS) to develop rules and guidance to implement the new law. The HITECH Act also includes provisions for the development of an incentive/grant program to promote the adoption and effective use of health information technology.

This year, the MPSP is chartered as a workgroup that will focus their efforts on several key privacy and security activities including but not limited to: reviewing and commenting on the statewide strategic and operational plans as a part of the HITECH Act 3013 grant program, modification of Health Information Security and Privacy Collaborative (HISPC) resources and tools for consumers, and information and resources to support providers and hospitals in meeting the privacy and security requirements for the meaningful use of EHRs. The 2009-2010 Minnesota Privacy and Security Advisory Group will require participation of experts in the area of privacy, security and health information technology as well as other interested stakeholders.

Tasks, Deliverables and Timeline through June 2010

- As needed, review and comment on:
  - Minnesota e-Health privacy and security resources and tools to inform and educate physicians and hospitals to help them meet the requirements of "meaningful use".
  - Minnesota e-health consumer privacy and security information tools and resources built on existing work such as the Health Information Security and Privacy Collaboration (HISPC) consumer education tools and resources.
  - Identified coordinated response to federal requests for public comment on proposed rules and guidance pursuant to the HITECH Act.
  - Privacy and security topics and issues as identified by Minnesota e-Health Initiative Advisory Committee and staff.
  - Privacy and security portions of federal grant applications.
  - The proposed privacy and security portions of the state strategic and operational plans, during development and implementation including:
    - Harmonizing federal and state laws
    - Objectives, measures and standards for meaningful use
    - Reporting requirements
    - Legal and policy domain including but not limited to:

- Issues related to intra and interstate health information exchange
- Standard policies and procedures for health information exchange
- Standard language for trust agreements, i.e. business associate, data sharing, data use and reciprocal support agreements
- Compliance with all applicable state and federal privacy and security policies
- Exchange requirements with federal care delivery organizations such as the VA and Indian Health Services

- Ongoing: Work in concert with the Regional Extension Center (REC) to meet the privacy and security requirements of the (3013) and REC (3012) grant programs.
- January 2010: Review and comment on the privacy and security activities and deliverables in the MDH report to the Minnesota Legislature.
- Quarterly: Provide updates to the Minnesota e-Health Advisory Committee.
- Ongoing: Identify communication, education and collaboration opportunities to address common topics and issues with advisory committee and other workgroups.

Workgroup Member Expectations

- Serve a one-year term: September 2009 – June 2010.
- Participate in meetings and conference calls as needed.
- Bring the perspective of the stakeholder group you represent to all discussions and decisions.
- Keep the statewide interests of the e-Health Initiative with a focus on exchange foremost in your decisions and recommendations.
- Review meeting materials ahead of time and be prepared to contribute clear and focused ideas for discussion.

Value in Participating

- Proactively help shape future policy directions that can have a major impact on your organization.
- Enable your organization to be more prepared to respond to privacy and security requirements as they are established.

Workgroup Leadership

Co-Chairs:

Laurie Beyer-Kropuenske
Director, Information Policy Analysis Division
Minnesota Department of Administration

Darrell Shreve
Vice President of Health Policy
Aging Services of Minnesota

Approximately 20-25 stakeholders will be invited from across the spectrum of care based on expertise and subject matter knowledge to participate on the workgroup. Meetings are open to the public and all participants are welcome.

Workgroup Staff

Bob Johnson
Project Consultant
Office of Health Information Technology
Minnesota Department of Health
651-201-4856
bob.b.johnson@state.mn.us

Liz Cinqueonce
Deputy Director
Office of Health Information Technology
Minnesota Department of Health
651-201-5979
liz.cinqueonce@state.mn.us

Minnesota e-Health Standards & Interoperability Work Group Charge 2009-2010

Proposed Workgroup Charge

- Identify and recommend 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
- Review and comment on standards, implementation specifications and certification criteria related to meeting the requirements of "meaningful use" and recommend resources and actions that will help increase implementation of these standards.
- Review and comment on standards related to the development and implementation of statewide strategic and operational plans for health information exchange [Section 3013 of American Recovery and Reinvestment Act (ARRA)].

Background

Standards related to "meaningful use" and health information exchange. The Health Information Technology for Economic and Clinical Health Act of 2009 (the HITECH Act) aims to facilitate and expand the secure, electronic movement of health information among organizations through its State Health Information Exchange (HIE) Cooperative Agreement program (Section 3013). The standards based exchange of information is essential to achievement of "meaningful use" as identified in HITECH Act. One of the state responsibilities/ requirements is to ensure compliance with relevant HHS adopted standards and all applicable policies for interoperability, privacy and security. Minnesota Department of Health has been designated as the entity to create and execute strategic and operational plans that advance standards-based heath information exchange.

Minnesota e-Health Standards are a requirement for electronic exchange of health information and achieving interoperability as required by the Minnesota 2015 mandate. Interoperability of Electronic Health Records (EHR) systems in Minnesota means the ability of two or more EHR systems or components of EHR systems to exchange information electronically, securely, accurately and verifiably, when and where needed. It is comprised of "technical," "semantic" and "process" interoperability, and the information exchanged includes transactions and standards as defined by the Minnesota Commissioner of Health. The Minnesota vision for exchange is to electronically move health information among disparate systems in order to improve health care quality, increase patient safety, reduce health care costs and improve public health, consistent with principles of health reform.

The 2009-2010 standards workgroup charge builds on the accomplishments of the previous two years' work which is published in the 2009 edition of *Guide 2: Standards Recommended to Achieve Interoperability in Minnesota* at http://www.health.state.mn.us/ehealth/summit/g2standards2009.pdf. The workgroup will continue to look to key national standards activities for priorities, standards recommended, implementation specifications; certification criteria and timelines *(see Figure 1, page 3 for workgroup process)*.

Work Group Deliverables and Timeline

Deliverables Related to Standards:

- September 2009 – March 2010: Provide review and feedback as necessary on HITECH activities including:
  - Identify, review and comment on proposed standards, implementation specifications and certification criteria for electronic exchange and use of health information (related to "meaningful use" requirements)
  - Review and provide feedback on strategic and operational plans that support standards-based health information exchange as specified by Section 3013 of HITECH Act.
- By December 2009: Review and comment on the standards section of the January 2010 MDH report to the Minnesota Legislature.
- By January 2010: Review and comment on Minnesota framework for exchange of health information.
- By April 2010: Update the tools and resources to support implementation of e-health standards including those that can help support achieving meaningful use.

- By April 2010: Deliver a final draft of the 2010 update for Guide 2 (Standards Recommended for Use in Minnesota).
- Review and comment on plans of the regional extension centers to promote standards-based exchange of health information as part of "meaningful use" requirements

General Deliverables:
- June 2010: Provide a status report issued at Minnesota e-Health Summit.
- September – May 2010: Provide quarterly updates to the Minnesota e-Health Advisory Committee.
- Identify opportunities in common with other committees, workgroups and organizations.

Workgroup Member Expectations
- Serve a one-year term: September 2009 – June 2010.
- Participate in monthly workgroup meetings during the term and additional conference calls as needed.
- Bring the perspective of the stakeholder group you represent to all discussions and decisions.
- Keep the statewide interests of the e-Health Initiative foremost in decisions and recommendations.
- Review meeting materials ahead of time and be prepared to contribute clear and focused ideas for discussion.

Value in Participating
- Proactively help shape future policy directions that can have a major impact on your organization.
- Enable your organization to be more prepared to respond to standards as they are established.

Workgroup Leadership

Co-Chairs:

Bobbie McAdam
Director, e-Business
Medica

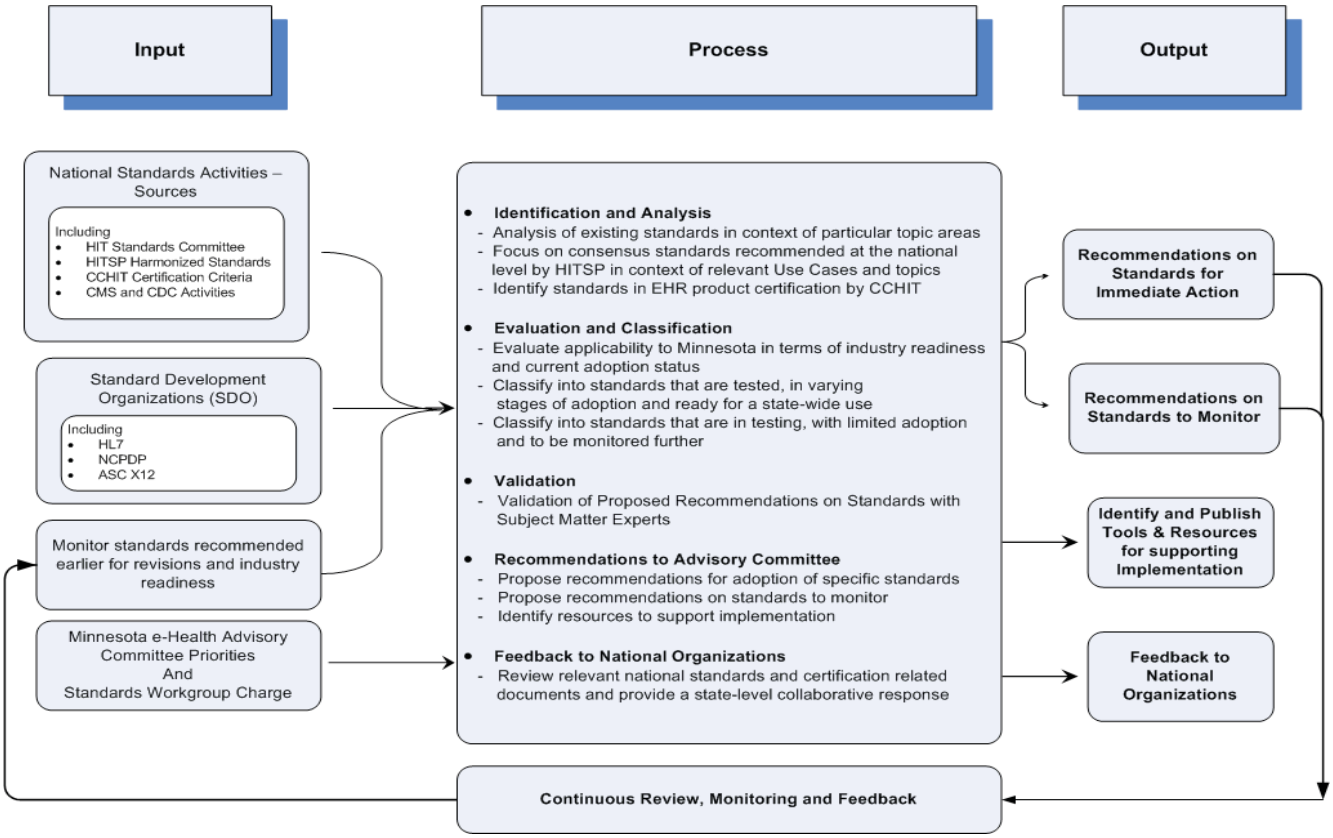
Mike Ubl
Executive Director
Minnesota Health Information Exchange (MN-HIE)

Many members of the 2008-09 standards workgroup have expressed interest in continued participation. Additional members will be recruited across the spectrum of care based on expertise and subject matter knowledge. Meetings are open to the public and all participants are welcome.

Workgroup Staff

Priya Rajamani
Senior Project Consultant
Office of Health Information Technology
Minnesota Department of Health
Phone: (651) 201-4119
Email: Priya.Rajamani@state.mn.us

Standards and Interoperability Process Flow



For more information visit www.health.state.mn.us/e-health or e-mail MN.eHealth@state.mn.us

Outreach and Communications Workgroup Charge 2009-2010

Workgroup Charge

Advise on the Minnesota e-Health Initiative communications activities, including a review of the Communications Plan to support health care providers and health care organizations in achieving meaningful use, and meeting the Minnesota interoperable electronic health record (EHR) mandate in 2015.

Advise on the coordination of outreach and communication efforts statewide, including coordination with the regional extension center and health information organizations in Minnesota and ARRA funded initiatives.

Background

The Minnesota Department of Health and the Minnesota e-Health Advisory Committee have been working to carry out significant legislation enacted in Minnesota in 2007 and 2008. This includes mandates that all health care providers have interoperable EHRs by 2015 (MS s 62J.495), and that all health care providers, dispensers and payers establish and use an e-prescribing system by January 1, 2011 (MS s 62J.497). In June of 2008, the Minnesota e-Health Initiative and the Minnesota e-Health Advisory Committee issued: *A Prescription for Meeting Minnesota's 2015 Interoperable Electronic Health Record Mandate: A Statewide Implementation Pla*n. In 2009, companion guides to the statewide plan were updated or added including: *A Practical Guide to Electronic Prescribing*, *Standards Recommended to Achieve Interoperability in Minnesota*, and *A Practical Guide to Effective Use of EHR Systems.*

The Health Information Technology for Economic and Clinical Health Act (HITECH Act), part of the American Recovery and Reinvestment Act of 2009 (ARRA), requires the Office of the National Coordinator (ONC) and federal Department of Health and Human Services (HHS) to develop rules, guidance and plans to promote adoption and meaningful use of health information technology (HIT). The Act also establishes incentives for hospitals and health care providers through Medicare and Medicaid for meaningful use of electronic health records (EHRs).

Workgroup Tasks through June 2010

- Review the revised Minnesota e-Health Communications Plan with representatives from Minnesota professional and trade associations, vendors and others and recommend revisions and updates.
- Inventory the key communications tools, including those used by Minnesota professional and trade associations.
- Identify any gaps in outreach and communications and prioritize groups and messages.
- Recommend activities to address outreach gaps that engage health care organizations, providers, and consumers to support the adoption and use of EHRs to achieve meaningful use and compliance with the 2011 and 2015 mandates.
- Identify outreach activities and opportunities for coordination with the regional extension center for Minnesota and health information organizations (HIOs) in Minnesota).
- Identify communication, education and collaboration opportunities with other committees and workgroups such as the Exchange and Meaningful Use Workgroup, Privacy and Security Workgroup or Standards Workgroup, as well as other organizations identified by the workgroup.

Workgroup Deliverables

September 2009 – June 2010:

- April 2010: Review the revised Minnesota e-Health Communications Plan, in particular, the following components:
  - Recommendations for coordination opportunities with regional extension center for Minnesota, health information organizations (HIOs) in Minnesota, the Minnesota Department of Human Services (DHS)-Medicaid, and others as identified.
  - Efforts to integrate with federal work to support of Minnesota providers for achieving *meaningful use* through EHR adoption, effective use, and health information exchange.
  - Recommendations for consumer communications tools to list on the Minnesota e-Health website, incorporating the contributions of Minnesota e-Health workgroups.
- April 2010: Identify activities that health and health care organizations, associations and providers can engage in to ensure information is relayed in a meaningful way to the Minnesota health care community.
- April 2010: Inventory of key communications tools used by Minnesota and national professional and trade associations.

Workgroup Member Expectations

- Serve a one-year term: September 2009–June 2010.
- Participate in two meetings and additional conference calls as needed.
- Bring the perspective of the stakeholder group you represent to all discussions and decisions.
- Keep the statewide interests of the e-Health Initiative foremost in your decisions and recommendations.
- Review meeting materials ahead of time and be prepared to contribute clear and focused ideas for discussion.

Value in Participating

- Proactively help shape future policy directions that can have a major impact on your organization.
- Enable your organization to be more prepared to respond to the requirements of state and federal implementation plans as they are established.

Workgroup Leadership

Co-Chair:	Co-Chair:	Co-Chair:
Becky Schierman	Mark Sonneborn	Sue Severson
Quality Improvement Manager	Vice President, Information Services	Director, Health IT Services
Minnesota Medical Association	Minnesota Hospital Association	Stratis Health

Approximately 20-25 workgroup members will be invited from across the spectrum of care based on expertise and subject matter knowledge to participate on the committee. Meetings are open to the public and all participants are welcome.

Workgroup Staff

Bob Johnson
Project Consultant
Office of Health Information Technology
Minnesota Department of Health
651-201-4856
bob.b.johnson@state.mn.us

Anne Schloegel
Project Planner
Office of Rural Health & Primary Care
Minnesota Department of Health
651-201-3850
anne.schloegel@state.mn.us

APPENDIX B: HEALTH INFORMATION EXCHANGE RECOMMENDATIONS

Approved by the Minnesota e-Health Advisory Committee January 13, 2010

Executive Summary:

The Minnesota e-Health Initiative's Exchange and Meaningful Use Workgroup was charged with convening stakeholders to work toward consensus on statewide policy, governance, technical infrastructure, and business practices needed to support the delivery of health information exchange services. The primary challenge faced by the workgroup was finding the appropriate balance of taking into account the interests of all Minnesota health care stakeholders, while ensuring the state fulfills its obligation to create the necessary infrastructure to enable providers and hospitals to achieve meaningful use. To achieve this balance, the workgroup identified the following public good principles to frame their discussions:

- The improvement of health and health care for all Minnesota citizens and communities is the central focus of statewide, interoperable health information exchange (HIE).
- Consumption of health information exchange services by one health care stakeholder does not reduce availability for others, and no health care stakeholder can be excluded from appropriately using interoperable health information exchange services.
- The value of information increases with use, and the value of one set of information increases when linked with other information.
- The need for secure exchange of health information essential to transforming health care and improving the health of Minnesotans must supersede technical, business, and bureaucratic barriers.
- Health information exchange must initially provide for the functionality necessary to support meaningful use, and expand over time to provide for continuous improvement in quality and coordination of care.

With these principles in mind, the recommendations approved by the Minnesota e-Health Advisory Committee would establish an oversight body to govern health information exchange activities. This would include the creation of a certification process for health information organizations, and a registration process for health data intermediaries to ensure sound practices in the five critical domains: governance, finance, legal/policy, technical infrastructure, and business and technical operations.

The following descriptions and recommendations on the Minnesota framework for health information exchange and criteria for state-certification of health information organizations (HIOs) were approved by the Minnesota e-Health Advisory Committee on January 13, 2010.

Background:

The American Recovery and Reinvestment Act, passed in February 2009, provided funding to states to assist in developing the health information exchange (HIE) capacity needed to allow providers to become "meaningful users" of electronic health records and receive incentives through the Medicare and Medicaid programs. The assistance provided through the State Health Information Exchange Cooperative Agreement Program, is intended to facilitate and expand the secure, electronic movement and use of health information among organizations according to nationally recognized standards. The cooperative agreements specifically require states to use their authority, programs and resources to:

- Ensure the development of state level directories and enable technical services for HIE
- Convene stakeholders to ensure trust & support for statewide approach
- Ensure an effective model for health information exchange governance & accountability
- Coordinate integrated approach with Medicaid & public health
- Develop/update privacy and security requirements for HIE
- Remove barriers/create enablers for HIE

DESCRIPTION 1:
EXCHANGE EFFORTS IN THE BROADER CONTEXT OF THE MINNESOTA E-HEALTH INITIATIVE

Advancing the Minnesota e-Health Initiative Vision: Addressing Health Information Exchange
Enabling the secure exchange of health information among health care stakeholders is essential to realizing the broad vision of the Minnesota e-Health Initiative, to

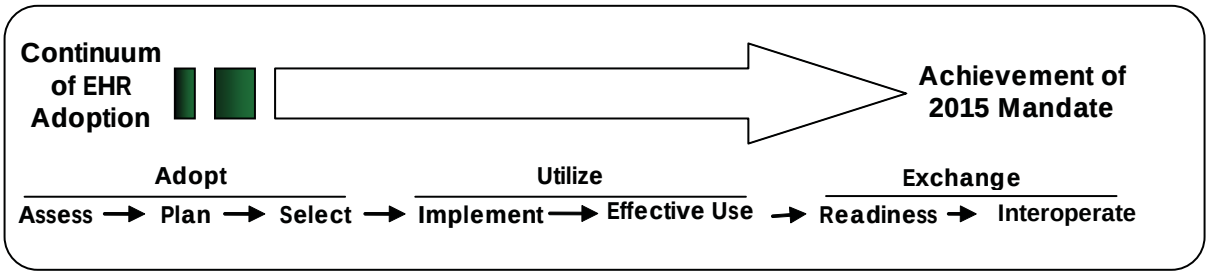
"… accelerate the adoption and effective use of health information technology to improve health care quality, increase patient safety, reduce health care costs and enable individuals and communities to make the best possible health decisions."

This vision has guided the Initiative for the past five years and has enabled Minnesota stakeholders to realize several achievements including the development of a statewide plan to provide the model for the Minnesota health and health care community to meet Minnesota's mandate for the adoption and use of interoperable electronic health records by 2015.

The Minnesota e-Health Initiative has identified a model containing seven major steps in adopting, implementing and effectively using an interoperable EHR. 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, including 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



Since the Minnesota Model was adopted in 2008, the Minnesota e-Health Initiative has convened workgroups to provide specific guidance to Minnesota providers working on adoption and utilization of EHRs. In 2009, the Initiative has turned its attention to addressing the third category on the Minnesota Model: Health Information Exchange.

Building on the broad Minnesota e-Health Initiative vision, the following principles [see Description 2] will guide the state as it moves forward with implementation of health information exchange:

DESCRIPTION 2:
STATEMENT ON MINNESOTA APPROACH TO HEALTH INFORMATION EXCHANGE

Minnesota will advance its goals of transforming health care and improving the health of Minnesotans through an integrated statewide approach to health information exchange that will facilitate and expand the secure, electronic movement and use of health information across the continuum of care according to nationally recognized standards.

Minnesota will advance patient centered health information exchange that will:

- Provide Minnesotans with access to coordinated care each time they access the health care system, across the continuum of care.
- Elevate the health of all Minnesotans by facilitating essential communications that support improvements in community and public health.
- Ensure that adequate protections are in place to maintain patient privacy including indication and transmission of consent, while enabling secure, authenticated, role based access to all of the information necessary to deliver the best possible care.
- Empower Minnesotans with the information they need to work with their providers to achieve the best possible health outcomes.
- Serve all citizens of Minnesota as a public good; using health information technology to reduce health disparities and ensure equal access to health information exchange services by consumers and health care providers.

RECOMMENDATION I:
DEFINITIONS

All Minnesota stakeholders interested in exchange of health information should adhere to the following consensus-based definitions of key health information technology terms in order to promote consistent usage of these terms during policy development, development of regulatory guidance, and implementation activities:

Health Information Exchange (HIE)*
The electronic movement of health-related information among organizations according to nationally recognized standards.

Health Information Organization (HIO)*
An organization that oversees and governs the exchange of health-related information among organizations according to nationally recognized standards.

State Certified Health Information Organization (HIO)
An organization that oversees and governs the electronic exchange of health-related information among organizations according to nationally recognized standards that has successfully demonstrated compliance with criteria established by the state to ensure sound practices in the areas of governance, legal/policy, finance, technical infrastructure, business and technical operations, and provides transaction capabilities necessary to fully support meaningful use of electronic health records as defined by the Centers for Medicare and Medicaid Services (CMS) and the Minnesota Department of Human Services.

State Registered Health Data Intermediary (HDI)
An organization that supports the electronic exchange of health-related information among organizations according to nationally recognized standards, that provides a subset of the clinical transaction capabilities necessary for hospitals and providers to achieve meaningful use of electronic health records as defined by CMS and the Minnesota Department of Human Services, and is subject to compliance with criteria established by the state to ensure sound practices in the areas of governance, legal/policy, finance, technical infrastructure, business and technical operations.

*Definitions as referenced in FOA of Section 3013 and as released in a report by ONC in April 2008 http://healthit.hhs.gov/defining_key_hit_terms

RECOMMENDATION II-A:
GENERAL RECOMMENDATIONS
ON HEALTH INFORMATION EXCHANGE ACTIVITIES

1. Exchange between HIPAA covered entities, and between HIPAA covered entities and/or their business associates must follow best practices and use nationally recognized standards.

2. Data requirements for web-based mechanisms such as portals or dashboards must be consistent with nationally and state recognized technology, privacy and security standards.

3. All providers must connect to record locator services through a state certified HIO either directly or through health data intermediaries for all meaningful use transactions as they are defined by CMS and the Minnesota Department of Human Services.

4. When a transaction requires a patient look-up, all state-certified HIOs must have a record locator service (RLS) and state-registered HDIs must utilize a record locator service (RLS) as defined in Minnesota law.

RECOMMENDATION II-B:
GENERAL RECOMMENDATIONS FOR
HEALTH INFORMATION EXCHANGE ENTITIES

Minnesota Certified Health Information Organization*

- Any state certified Health Information Organization (HIO) must provide all transaction capabilities necessary to fully support meaningful use as defined by CMS and the Minnesota Department of Human Services.
- Any Health Information Organization (HIO) seeking to be state certified must demonstrate compliance with requirements of certification criteria recommended by the Minnesota e-Health Advisory Committee and approved by the Commissioner of Health.
- Any HIO seeking to be state certified must utilize a scaleable business model that addresses capacity to support current and future participants in HIE.
- Any state-certified HIO must interoperate with all other state-certified HIOs and state-registered HDIs.

Minnesota Registered Health Data Intermediary*

- Any entity that meets the definition of Health Data Intermediary must be registered with the state.
- State Registered Health Data Intermediaries (HDI) must interoperate with at least one state certified health information organization (HIO) and must provide an option for connection through at least one state-certified HIO.

*Source: Office of the National Coordinator

RECOMMENDATION III:
BASELINE CERTIFICATION CRITERIA

Certification criteria related to technical infrastructure, business and technical operations, and legal/ policy domains from the draft Health Information Exchange Accreditation Program of Electronic Healthcare Network Accreditation Commission (EHNAC) are “baseline” requirements for Minnesota Health Information Organizations (HIOs).

RECOMMENDATION IV:
CRITERIA FOR LEGAL/POLICY DOMAIN IN ADDITION TO EHNAC

- Any state-certified HIO must meet the privacy and security requirements set forth by Federal & State Laws.

- To the degree that the federal government develops or updates requirements for connecting to NHIN (National Health Information Network), a state-certified HIO must be able to meet the requirements established within federally mandated timeline or within a timeframe established by the Commissioner of Health.

RECOMMENDATION V:
GOVERNANCE CRITERIA FOR STATE-CERTIFIED HIO IN ADDITION TO EHNAC

All State-certified HIOs must:

1. Maintain their status as legally established, non-profit entities responsible to a board of directors and committed to operational and financial transparency.
2. Provide for open and transparent stakeholder input about the organization, management, and board.
3. Maintain an adequate professional staff responsible to the board through an executive to help ensure accountability to the organization's mission.
4. Provide mechanisms for collecting and responding to complaints.
5. Have strategic and operational plans that accommodate membership composition, growth and change.
6. Have a board composition that reflects the HIO participants and stakeholders.
7. Have trust agreements* in place with members and other HIOs that address Minnesota law, meaningful use transactions and interstate exchange.

* A trust agreement means an agreement that establishes the obligations and assurances to which all health information exchange participants agree. Source: http://healthit.hhs.gov

RECOMMENDATION VI-A:
GENERAL FINANCE CRITERIA IN ADDTION TO EHNAC

All state-certified HIOs must:

1. Annually submit strategic and operational plans for review by the state oversight body that must address the five critical domains.
2. Develop and maintain financial policies and procedures consistent with state and federal requirements.
3. Adequately demonstrate that appropriate insurances are in place.
4. Have independent audit of their financials on an annual basis.
5. Develop and maintain a business plan that includes:
    a) Plans for financial sustainability
    b) Public and private financing strategies
    c) Financial reporting – income statement, balance sheet, progress towards financial stability
    d) Financial Audits and controls
    e) Mechanisms to support safety net providers in accessing HIE
    f) HIE capacity to support "meaningful use"
    g) Rates of adoption, utilization and transactions
    h) Consistent with public good characteristics of HIE
    i) Description of plans to seek and use federal and state funding and other grant opportunities where possible to offset user fees

6. Annually submit a plan for approval by the oversight body charged with ensuring that costs are distributed equitably among users and is consistent with the following:

    f) Subscription rate for conducting all meaningful use services must include access to health information retrieved through other state-certified HIOs and state registered HDIs
    g) Subscription/fee structure must achieve the appropriate balance in raising resources sufficient to meet on-going operating costs and future development without discouraging system utilization by Minnesota stakeholders
    h) Subscription/fee structure must not effectively exclude any Minnesota health care stakeholder from accessing HIE services necessary to support meaningful use
    i) Subscription/fee structure must provide predictable costs for the member organizations and a predictable revenue stream for the HIO
    j) Due diligence processes to ensure the needs of the HIO are balanced with needs of users
7. Have a clear plan for increasing HIE adoption rates to achieve critical mass necessary to achieve financial sustainability
8. Demonstrate measurable progress in achieving previously submitted strategic and operational plans for continued certification.

RECOMMENDATION VI-B:
FINANCE CRITERIA: RECIPROCAL AGREEMENTS

1. All state-certified HIOs must enter into reciprocal agreements* with all other state-certified HIOs, and all State-registered HDIs must enter into reciprocal agreements with at least one state-certified HIO to enable:
    a) Access to record locator services to find patient data
    b) Transmission and receipt of meaningful use transactions
2. Reciprocal agreements must include a fair and equitable model for charges between the entities that:
    a) Does not impede the secure transmission of transactions necessary to achieve meaningful use.
    b) Does not add additional fees for the pass-through of meaningful use transactions where no additional value-added service is rendered to the sending or receiving HIO or HDI either directly or on behalf of their client.
    c) Is consistent with fair market value and proportionately reflects the value-added services accessed as a result of the agreement.
    d) Prevents health care stakeholders from being charged multiple times for the same service.
    e) Is consistent with public good principles and industry best practices.
3. Reciprocal agreements are subject to review and approval by the State oversight board.
4. State-certified HIOs and/or State-registered HDIs should not be precluded from entering into reciprocal agreements for the provision of value-added services beyond meaningful use.
5. Reciprocal agreements between HIOs and HDIs may not obligate providers to purchase additional value added services beyond meaningful use transactions as a condition of participation in HIE.

*"Reciprocal Agreements" means arrangements in which two or more parties agree to share their resources to achieve a common objective. Source: http://www.businessdictionary.com/definition/reciprocal-agreement.html

RECOMMENDATION VII:
OVERSIGHT OF HEALTH INFORMATION EXCHANGE

The state oversight board is responsible for:

1. Certifying HIOs and registering HDI's, with authority to withdraw certification or registration of entities that are not compliant with certification or registration requirements.

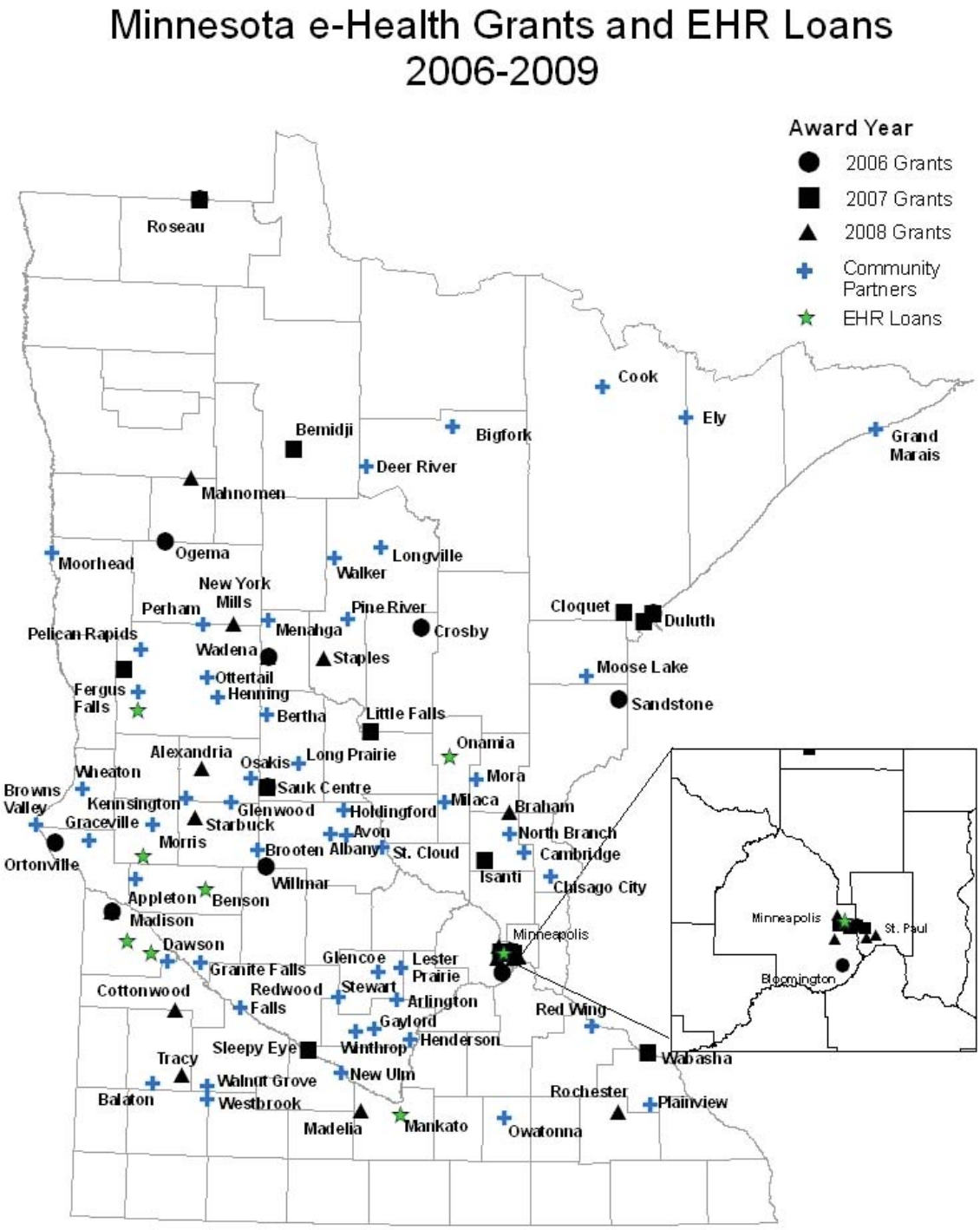
2. Protecting the public interest as it relates to HIE.
3. Periodically reviewing and updating criteria for certification and registration of entities offering health information exchange services.
4. Maintaining an open and transparent discussion and decision-making process and mechanisms to receive public input.
5. Providing a mechanism to process complaints related to HIE services.
6. Ensuring that enforcement mechanisms are adequate to compel corrective action without causing a disruption in services.
7. Must be composed in a manner that broadly represents stakeholders, including consumers.
8. Should be subject to reporting requirements that are comprehensive in addressing the activity within the scope of the oversight body, completed on a regular schedule, and publicly available.
9. Must hold meetings on a regular schedule, and open to the public.
10. Should be established under the direction of the Commissioner of Health, with provisions to ensure coordination with other appropriate agencies, particularly DHS.
11. Should establish registration and certification fees at a level that provides funding sufficient to cover costs associated with state oversight

RECOMMENDATION VIII:
ISSUES IDENTIFIED FOR FUTURE CONSIDERATION

Issues identified for future consideration, include:

- Financial Issues
  - General financial issues related to Health Information Exchange (HIE)
  - Fees charged to other safety net, rural and smaller providers for participation in HIE
  - Capital resources for investment in health information technology particular to safety net providers, clinics and rural providers
  - Pass along costs to providers from relationships between Health Information Organizations (HIOs) and Health Data Intermediaries (HDIs)
- Implementation Issues
  - Specifying a limited number of certified HIOs
  - Registration requirements for Health Data Intermediaries (HDIs)
  - State approach to meaningful use compliance
  - Process for certification of HIOs and registration of HDIs
  - Complexity of electronic health record (EHR) systems for providers
  - Meeting the eligibility requirements for meaningful use
- Oversight Issues
  - Details to oversight of HIOs and HDIs
- Other Issues
  - Clarify definition of HDIs
  - Mitigating the digital divide or the gap between consumers, providers and health information technology adoption and use
  - Future strategic and operational planning for HIE
  - Direct exchange or vendor driven solutions to HIE
  - Harmonize trust agreements with national Nationwide Health Information Network (NHIN) Data Use and Reciprocal Support Agreement (DURSA)

APPENDIX C: MINNESOTA E-HEALTH LOAN RECIPIENTS, GRANTEES AND COMMUNITY PARTNERS



E-Prescribing

Fact sheet on Minnesota's e-prescribing mandate.
www.health.state.mn.us/ehealth/eprescribing/index.html

Fact sheet from the federal Centers for Medicaid and Medicare Services (CMS) on its incentive program for e-prescribing.
www.cms.hhs.gov/eprescribing/

National ePrescribing Patient Safety Initiative (NEPSI), a coalition-based program comprised of health care, technology and provider companies that provides free e-prescribing to every physician and medication prescriber in the country.
www.nationalerx.com

Agency for Healthcare Research and Quality (AHRQ) press release: *Study Finds Doctors' Use of E-Prescribing Systems Linked to Formulary Data Boost Drug Cost Savings*, December 8, 2008
www.ahrq.gov/news/press/pr2008/eprescribpr.htm

SureScripts, operator of the nationwide Pharmacy Health Information Exchange.
www.surescripts.com/safe-Rx/

A Consumer's Guide to ePrescribing¸ eHealth Initiative, June 2008
www.ehealthinitiative.org/assets/Documents/eHI_CIMM_Consumer_Guide_to_ePrescribing_Final.pdf

Options for Increasing e-Prescribing in Medicare, Gorman Health Group, July 2007.
www.gormanhealthgroup.com/

Adoption and Effective Use of EHR Systems

Certification Commission for Healthcare Information Technology (CCHIT): Includes the list of nationally certified EHR systems required to meet the 2015 Minnesota interoperable EHR mandate.
www.cchit.org

Certification Commission for Healthcare Information Technology (CCHIT) press release: *Incentive Programs for EHRs Growing*, September 2008.
www.cchit.org/about/news/releases/2008/Incentive-programs-EHR-adoption-growing.asp

Minnesota e-Health grants and loans available through the Minnesota Department of Health.
www.health.state.mn.us/ehealth, under Funding and Other Resources.

Stratis Health DOQ-IT program: Practical tools to assist in planning, implementation and effective use of EHR systems.
www.stratishealth.org

The American Academy of Family Physicians Center for Health Information Technology: Practical tools for preparation, selection, implementation and maintenance of EHR systems.
www.centerforhit.org

Healthcare Information and Management Systems Society (HIMSS): Dozens of articles and presentations on the realities of EHR adoption and use.
www.himss.org/ASP/topics_FocusDynamic.asp?faid-198

Agency for Healthcare Research and Quality (AHRQ) Health IT Toolkit: Tools to support effective adoption and use of EHR systems.
www.healthit.ahrq.gov

Standards and Interoperability

Standards required for implementation in Minnesota, background information on standards, and information on the Standards Workgroup of the MN e-Health Initiative.
www.health.state.mn.us/ehealth/standards/index.html

Healthcare Information Technology Standards Panel (HITSP): The national body charged with harmonizing and integrating standards for health information.
www.hitsp.org

Certification Commission for Healthcare Information Technology (CCHIT): The national body that certifies EHR based on objective, verifiable criteria for functionality and interoperability.
www.cchit.org

The National Council for Prescription Drug Programs (NCPDP): Creates and promotes the transfer of data related to medication, supplies and services within the health care system through the development of standards and industry guidance.
www.ncpdp.org

Health Level Seven (HL7): ANSI accredited Standards Developing Organization (SDO) that is involved in development and advancement of clinical and administrative standards for health care.
www.hl7.org

Privacy, Confidentiality and Security

Minnesota Standard Consent Form to Release Health Information: The development of this form was mandated in the 2007 Minnesota Health Records Act, Minn. Stat. 144.291-.298. Its purpose is to allow a person to request that their health records be sent to whomever they choose for whatever purpose they choose.
www.health.state.mn.us/divs/hpsc/dap/consent.pdf

Minnesota Standard Consent Form to Release Health Information Q&A: Answers general questions regarding the standard consent form.
www.health.state.mn.us/e-health/wgs0708/mpsp050608consentformqa.pdf

Nationwide Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health Information: Principles established to govern exchange of health information, including defining roles of and responsibilities of the exchange partners. Department of Health and Human Services, December 2008.
www.hhs.gov/healthit/privacy/framework.html

The Health IT Privacy and Security Toolkit: Guidance designed to help implement the *Nationwide Privacy and Security Framework* (see above). Department of Health and Human Services, December 2008.
www.hhs.gov/healthit/privacy/framework.html

Connecting For Health policy brief: A discussion of "a 21st Century privacy approach" allowing Americans to protect *and* share their health information. Markle Foundation, September 2008.
www.connectingforhealth.org

Personal Health Records

myPHR: Background information, testimonials, and a no-cost PHR. American Health Information Management Association.
www.myphr.com

Minnesota fact sheet on PHRs: See Appendix B or www.health.state.mn.us/ehealth, under Consumers and PHRs.

Certification Commission for Healthcare Information Technology Personal Health Record Work Group: Reviewing and revising criteria and test scripts for certifying PHRs, scheduled to begin in 2009.
www.cchit.org/phr

APPENDIX E: MINNESOTA E-HEALTH INITIATIVE ADVISORY COMMITTEE MEMBERS

Walter Cooney Advisory Committee Co-Chair Executive Director Neighborhood Health Care Network Representing: Community Clinics and Federally Qualified Health Centers	**Jennifer Lundblad, PhD** Advisory Committee Co-Chair President and Chief Executive Officer Stratis Health Representing: Quality Improvement Organization
Alan Abramson, PhD Senior Vice President, IS&T and Chief Information Officer HealthPartners Representing: Health Plans	**Barry Bershow, MD** Vice President, Quality Fairview Health Services Representing: Expert in Clinical Guideline Development
Laurie Beyer-Kropuenske, JD Director, Information Policy Analysis Division Department of Administration Representing: Minnesota Department of Administration	**RD Brown** Consumer Advocate Representing: Consumers
Angie Franks Senior Vice President of Sales & Market Dev. Healthland Representing: Vendors of Health Information Technology	**Tim Gallagher** Vice President of Pharmacy Operations Astrup Drug, Inc. Representing: Pharmacists
Raymond Gensinger, Jr., MD Chief Medical Information Officer Fairview Health Services Representing: Professional with Expert Knowledge of Health Information Technology	**John Gross** Director, Health Care Policy Minnesota Department of Commerce Representing: Minnesota Department of Commerce
Maureen Ideker Associate Administrator, Care Management Rice Memorial Hospital Representing: Small and Critical Access Hospitals	**Julie Jacko, PhD** Director, The Institute for Health Informatics University of Minnesota Representing: Academics and Clinical Research
Paul Kleeberg, MD Health Information Technology Consultant Representing: Physicians	**Marty LaVenture, PhD** Director, Center for Health Informatics Minnesota Department of Health Representing: Minnesota Department of Health
Bobbie McAdam Director, e-Business Medica Representing: Health Plans	**Walter Menning** Vice Chair, Information Services Mayo Clinic Representing: Health System Chief Information Officers
Charlie Montreuil Vice President, Enterprise Rewards and Corporate Human Resourses Best Buy Representing: Health Care Purchasers and Employers	**Brian Osberg** Assistant Commissioner Minnesota Department of Human Services Representing: Minnesota Department of Human Services
David Osborne Director of Health Information Technology/ Privacy Officer Volunteers of America Representing: Long Term Care	**Joanne Sunquist** Chief Information Officer Hennepin County Medical Center Representing: Large Hospitals
Mary Wellik Director Olmsted County Public Health Services Representing: Local Public Health	**Bonnie Westra, RN, PhD** Assistant Professor University of Minnesota, School of Nursing Representing: Nurses
John Whisney Director of Ridgeview Clinics Ridgeview Medical Center Representing: Clinic Managers	**Tamara Winden** Healthcare Informatics Consultant Representing: Laboratories

Marty Witrak, PhD, RN Professor, Dean, School of Nursing College of St. Scholastica Representing: Academics and Research	**Cheryl M. Stephens, MBA, PhD** Executive Director Community Health Information Collaborative Ex-Officio Exchange Liaison: CHIC
Michael Ubl Executive Director Minnesota Health Information Exchange Ex-Officio Exchange Liaison: MN-HIE	

ADVISORY COMMITTEE DESIGNATED ALTERNATES

Megan Daman, RN, MA Nurse Manager University of Minnesota Medical Center Alternate Representing: Nurses	**Becki Hennings** Medical Laboratory Technician St. Michaels's Hospital Alternate Representing: Laboratories
John Hofflander Senior Vice President and Chief Information Officer PreferredOne Alternate Representing: Health Plans	**Martha LaFave** Health Fund Coordinater Internaitonal Union of Operating Engineers Local 49 Alternate Representing: Health Care Purchasers & Employers
Melinda Machones, MBA Health IT Consultant Alternate Representing: Professional with Expert Knowledge of Health Information Technology	**Justin McMartin** Government Coordinator LSS Systems Alternate Representing: Vendors of Health IT
Julie Ring Director Local Public Health Association of Minnesota Alternate Representing: Local Public Health	**Phil Riveness** Associate Administrator Noran Neurological Clinic Alternate Representing: Clinic Managers
Rebecca Schierman, MPH Manager, Quality Improvement Minnesota Medical Association Alternate Representing: Physicians	**Peter Schuna** Director of Strategic Initiatives Pathway Health Services Alternate Representing: Long Term Care
Mark Sonneborn Vice President, Information Services Minnesota Hospital Association Alternate Representing: Hospitals	**Kenneth Zaiken, PMP** Consumer Advocate Alternate Representing: Consumers

inside back cover:
BLANK

For More Information:

Minnesota Department of Health
Minnesota e-Health Initiative/
Office of Health Information Technology

P.O. Box 64882
85 East Seventh Place, Suite 220
St. Paul, MN 55164-0882
651-201-5979
www.health.state.mn.us/e-health/