Minnesota e-Health Initiative Advisory Committee

June 28, 2007

Progress Report on Achieving the Vision of e-Health

e-Health Transforms Healthcare

Health and health care are undergoing what is arguably the largest and most widespread transformation in history. In Minnesota, at a rapid pace that is itself historic, hospitals, clinics, health systems, clinicians and others are adopting health information technologies to improve patient safety, increase the quality of care, reduce costs, and strengthen and advance public health.

This transformation is guided by a private/public collaboration called the Minnesota e-Health Initiative (MN e-Health). MN e-Health has broad support and a comprehensive consumer focus that ensures its work provides real value to citizens and communities. The MN e-Health Advisory Committee advises the Commissioner of Health on policies and strategies that will:

- **Empower Consumers** with information to make informed health and medical decisions.
- Inform and Connect Healthcare Providers so they have access to information about patients to help decide what care is needed.
- **Protect Communities** with accessible prevention resources, to facilitate rapid detection and response to community health threats.
- Enhance Infrastructure (technical, informational, educational, privacy and security policies, and financial resources) to fulfill the e-Health vision.

Law Mandates Interoperable EHRs
New state law requires all Minnesota health care
providers to have interoperable Electronic Health
Records (EHRs) by 2015. The Advisory
Committee and MDH must develop a plan to
meet this mandate that includes uniform
standards by 2009.

Lawmakers passed other landmark legislation during the 2007 session:

• \$14 million for EHR grants & loans;

- Updated patient consent requirements that strengthen privacy and allow electronic information exchange;
- New mandate that insurance eligibility, claims, and payments be done electronically in a uniform way.

Recommendations Form Core of Plan In 2006-2007, the Advisory Committee developed recommendations that will form the core of the strategic plan to meet the 2015 mandate. The attached table shows progress on these recommendations.

All stakeholders share the responsibility to "get it right" by achieving measurable and meaningful results on defined priorities laid out by the plan. The stakes for everyone — from patients to providers to payers — are high, and demand everyone's participation and commitment.

Achievements Made in 2006-2007

Over this last year widespread increases in the adoption of EHR's by clinics and health and health care provides have occurred in communities statewide. Highlights of progress are shown in the attached table. The Advisory Committee focused efforts to achieve the following priorities:

- Developing an updated framework for Minnesota's health information privacy laws to better reflect an environment of electronic exchange.
- Writing 19 principles to guide technical development of secure health information exchange in Minnesota.
- Developing a definition and Minnesota Principles for Personal Health Records (PHRs).
- Launching the Minnesota Public Health Information Network to improve how state and local public health information and information systems are used to protect and promote the health of communities.
- Funding 12 projects in rural and underserved areas awarded funding totaling \$1.3 million.
- Organizing efforts to coordinate telehealth systems in Minnesota that integrate with e-Health policies and activities.



"The Minnesota e-Health Initiative will accelerate the adoption and use of Health Information Technology to improve healthcare quality, increase patient safety, reduce healthcare costs and enable individuals and communities to make the best possible health decisions." www.health.state.mn.us/e-health

Accelerating e-Health in Minnesota
Three years ago, the question, "Why do we need electronic health records?" was frequently asked.
Today policy makers, consumers and others are asking, "How can we implement interoperable electronic health records in Minnesota ... and when?"

The health and health care community as part of the Minnesota e-Health Initiative and Advisory Committee must address several challenges in the coming year to meet new mandates to adopt standards by 2009 and ensure interoperable EHR adoption by 2015. In addition, consumer and community expectations are rising for improved quality of health and health care through the use of health information technology (HIT). In light of these influences, the Minnesota e-Health Initiative and Advisory Committee must transform itself in order to get the work done. Specifically, the committee will need to:

- Develop and disseminate an implementation plan for adoption of EHRs by 2015;
- Advise on the distribution of \$14 million in grants and loans;
- Develop and oversee a new health information technology standards selection, refinement and approval process by 2009;
- Monitor, assess and report out on statewide progress on the goals and recommendations, on personal health records, electronic health records, health information exchanges and modernization of public health systems;
- Develop and disseminate tools and resources to support collaborative learning and leveraging of resources; and
- Promote learning laboratories in the field to test and evaluate using health information exchange for "Use Cases" that provide value.

To accomplish these tasks, the MN e-Health Advisory Committee must broaden its traditional focus on strategic planning to also actively address implementation. This requires updating the charter for the Advisory Committee to adopt a formal committee process that accommodates multiple parallel projects.

In addition, the extension of the Advisory Committee to 2015 requires a formal membership rotation plan and more systematic use of workgroups that involve a broader group of stakeholders with specific expertise. An enhanced communication strategy will be implemented to support a collaborative approach to rapid learning statewide by sharing knowledge and experiences.

Acknowledgements

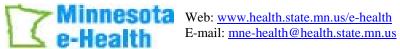
Tremendous progress has been made on e-Health in Minnesota, thanks to the efforts of many organizations and professionals statewide. By continuing to work collaboratively, we can further accelerate progress to achieve the vision of improving the health and health care for all Minnesotans and our communities.

	2006-2007			
MN e-Health Advisory Committee				
Mary Brainerd	MN e-Health Advisory Committee			
Mary Wellik	Co-Chairs			
David Abelson	Institute for Clinical Systems			
	Improvement			
Alan Abramson	HIPAA Collaborative			
Kristin Benson	Physicians			
Laurie Beyer-	State Government			
Kropuenske				
R.D. Brown	Consumers			
Donald Connelly	Academics and Research			
Rhonda Degelau	Clinics			
Fred Dickson	Health Plans			
Andrew Galbus	Health Information Management			
	Systems Society, Minnesota Chapter			
Ray Gensinger Jr.	Hennepin County Medical Center			
John Gross	State Government			
Mary Klimp	Rural Hospitals			
Marty LaVenture	MN e-Health Initiative			
Katie LeBeau	Pharmacists			
Jennifer	MN Quality Improvement			
Lundblad	Organization			
Bobbie McAdam	Health Plans			
Rina McManus	Local Public Health			
Cindy Nelson	Clinical Laboratories - ASCLS			
Brian Osberg	State Government Purchasers			
Carolyn Pare	Purchasers of Health Care			
Kim Pederson	Large Hospitals			
Peter Schuna	Long Term Care			
Jennifer Sundby	Long Term Care			
Gregg Thomas	Academics and Research			
Bonnie Westra	MN Nurses Association			



Recommendations for Action	††	Current Status	Milestones Yet To Be Achieved
Empower Consumers			
 Accelerate the availability and use of accessible, portable "My Personal Health Record," with priority given to: "My Preventive Health Information" (immunizations, well child screenings) for children and adolescents; "My Medication and Health History Information" ("My Clipboard") for all individuals; and "My Care" management tools for individuals with chronic disease (diabetes, asthma, heart disease, cancer). 	S	 Personal Health Record (PHR) project in Willmar awarded \$250K to support patients with chronic heart disease. Principles for implementation and use of PHRs in Minnesota created. Minnesota goal for PHR adoption developed and adopted. At least six MN health systems offer PHRs (with preventive health information, medication information) including Health Partners, Fairview Health Systems, Allina Hospitals and Clinics, Park Nicollet Health Services, Veterans Association and Hospitals, and Children's Hospital. Links to these systems published. Available at: www.health.state.mn.us/e-health 	 Support additional projects in rural and underserved areas. Educate consumers on the value of PHRs, how to get one and use it effectively. Develop a plan to make PHRs available to all segments of the population including those without access to the Internet. Refine and adopt national standards for use of PHRs for sharing and synchronizing patient data across systems. Develop and support a framework of laws and policies that support the Advisory Committee's principles for PHRs. Evaluate and share findings of PHR adoption, usage, and portability.
INFORM AND CONNECT HEALTHCA	RE P	ROVIDERS	
2. Fund and implement interconnected health information technology statewide, focusing on secure health information exchange in the following priority areas: (see below)		 12 projects in rural and underserved areas awarded funding (7 planning and 5 implementation) in December 2006 from \$1.3 million interoperable Electronic Health Records (EHRs) grant program appropriated from the State of Minnesota. Laws of Minnesota 2007, chapter 147, appropriates \$14 million for expanded e-Health grants and loans program. Minnesota Privacy and Security Project reports identified critical policy issues which need to be resolved for health information exchange to become commonplace. 	 Implement expanded grant and loan program. Develop and share summaries of public and private resource opportunities for HIT implementation and adoption including grants, loans, and incentives. Develop a plan for implementing the findings and recommendations of the Minnesota Privacy and Security Project, particularly those associated with Access, Authentication, Authorization and Auditing. In conjunction with stakeholder organizations, hold training and informational sessions to explain ramifications of the newly-modified Minnesota Health Records Act.

*Bolded recommendations are identified priority areas for 2007-2008



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2a. Continuity of Care Records, through secure and timely exchange of patient health histories.	L	A Community-shared Clinical Abstract to Improve Care project provides valuable insights into the needs and challenges of Health Information Exchange (HIE) by Allina, Fairview, Health Partners, and U of M collaboration.	 Adopt and disseminate the proposed Continuity of Care Record (CCR) standard. Support CCR demonstration projects.
2b. Secure statewide use of e-prescribing.	S	 MN e-Health funded projects in Sauk Centre and Wadena conducted to support e-prescribing in rural areas. HIPAA Collaborative e-Pharmacy project is in progress, focusing on making medication histories available in Emergency Departments and Urgent Care settings for project partners (HealthPartners, Allina, Fairview). MN Department of Human Services e-prescribing project to improve quality and cost of care is initiated. Long-term care pilot project being conducted through Benedictine Health Systems to develop e-prescribing standards in long term care and to test e-prescribing with the use of electronic communication between facilities, pharmacies and physicians. 	 Establish an implementation plan for settings not currently using e-prescribing. Identify and distribute frameworks for e-Prescribing data interchange. Support resources and policy that encourage investment/adoption of e-prescribing Identify and distribute minimum set of alerts that should be at core in every e-prescribing system implemented in MN. Perform a quantitative assessment to establish a baseline status of e-prescribing systems implemented in MN.
2c. Shared information for improved chronic disease management.	S	PHR project in Willmar awarded \$250K to support patients with chronic heart disease.	Develop action steps for evaluation and implementation in more locations statewide.
2d. Accessible, complete laboratory result reports with the interpretation of the results.	L	MDH Laboratory participates with CDC and six states and partnerships to collaboratively conduct the Public Health Laboratory Interoperability Project (PHLIP) to complete standardization of influenza lab results data exchange. This project aims to harmonize data exchange of all nationally notifiable diseases through standard HL7 format.	 Develop action steps for statewide implementation. Support additional projects in rural and underserved areas. Refine and adopt national standards for sharing and synchronizing lab data across systems. Evaluate and share findings of Lab exchange standards adoption, usage, and portability.
2e. Fund and implement interconnected health information technology statewide, focusing on bi-	W	Real-time, bi-directional Electronic Health Record-Minnesota Immunization Information Connection (EHR-MIIC) interface endorsed by the Clinical Decision Support Work Group of the MN Epic Users Group.	 Implement 2-way, real-time interface between MIIC and health systems with EHR's. Develop detailed business requirements and implementation plans for the real time exchange based

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directional immunization data exchange between the MIIC immunization registry and EHRs, with centralized decision support from the registry.		 Update obtained from Epic's home office and other states on progress with real-time interfaces. Work begun with other states to develop a single national standard and detailed HL7 implementation guide. 	on national, vendor-neutral data exchange standards. • Expand to other health systems/EHRs and continue to refine procedures and requirements.
PROTECT COMMUNITIES			
3. Protect and promote healthier communities with an emphasis on population health, prevention, health promotion and rapid response to health threats including: 3a.Improve the timely detection and electronic reporting of diseases and other health risks to public health authorities, with the timely communication of information on disease and environmental risks and threats to health care providers and the public; and 3b.Support the Minnesota Public Health Information Network (MN-PHIN) in coordinating the development of an integrated statelocal system for the timely detection of and response to community public health needs.	S	 Laws of Minnesota 2007, chapter 147, appropriate \$2 million in one-time funding for FY 08-09 to begin modernizing the MDH infectious disease reporting system. MN-PHIN identified five priority state-local information system projects for accelerated progress. MN-PHIN assessed current needs, challenges and priorities in updating public health information systems. Available at: www.health.state.mn.us/e-health/mnphin/locpubsyst.pdf Robert Wood Johnson Common Ground Grant Funding secured to establish business processes and collaborative requirements definition for chronic disease information systems to ensure they are more standards-based and interoperable. 	 Publish the initial core set of terminology, data content and messaging standards for use by public health information systems in Minnesota based on national consensus standards. Develop an implementation plan for statewide implementation of electronic public health disease surveillance in Minnesota as part of the MN e-health implementation plan. Form a collaborative between local universities to develop informatics courses for practicing public health professionals. Update state and local public health information systems to be more standards-based and interoperable. Establish standards for two-way exchange of data needed for public health/population health purposes by working with health care organizations.
RELATED TO TECHNICAL INFRASTRUCTURE			
4. Ensure that e-Health system development is integrated with and supports statewide telehealth services.	W	Telehealth Summit held in fall 2006 to begin organizing efforts toward a coordinated and supported telehealth system in MN that integrates with MN e-Health policies and activities. In-depth analysis and report of issues and barriers	 Identify regulatory and policy barriers to achieving the telehealth goal and propose solutions. Forge agreements among telehealth providers to share

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5. Measure and publish, on an ongoing basis attatowide progress		 Directory of telehealth services started through a contract with the University of Minnesota. 1500 surveys were mailed to health providers and facilities in Minnesota to assess the current state of telehealth services and to identify barriers. MDH coordinates a statewide application for the FCC/Rural Health Care Program to expand telehealth communications. Progress report issued in 6/2006 on priority recommendations 	the current proprietary networks. Collaborate with other organizations and professional
ongoing basis, statewide progress on priority actions to achieve the adoption and effective use of HIT.	S	 identified by Advisory Committee, available at: www.health.state.mn.us/e-health/. Progress report issued in 6/2007 on priority recommendations identified by Advisory Committee. January 2007 Report to the Minnesota Legislature submitted and available at: www.health.state.mn.us/e-health/legrpt2007.pdf. Funding granted to Stratis Health to assess HIT adoption in long term care facilities. 	 associations that conduct HIT assessments to establish consensus metrics and survey questions that can lead to comparable results across domains and surveys. Update profile of activity in Minnesota in 1/2008 and 6/2008. Develop measures across 14 domains for rates of adoption, use and interoperability.
RELATED TO EDUCATION AND INFO	RMAT	TION	
6. Provide information for HIT implementation in rural and underserved settings to minimize business risk and ensure effective use of EHRs and other forms of interconnected health information technology.	S	 Stratis Health Doctor's Office Quality - Information Technology (DOQ-IT) program materials made available at www.stratishealth.org/ MN Health Information Technology State Profile being designed by the Rural Health Resource Center and funded through the Medicare Rural Hospital Flexibility Program. Anticipated completion date of 6/1/2007. Profile available at: www.ruralresource.org/hit/mn/#infrastructure. 2007 Pre-Summit workshop on financing opportunities for EHRs and other technologies hosted. MN e-Health website expanded to over 650 resource links. 	 Inventory credible, useful information sources that are currently available nationally. Update and link web-based sites that will compile existing resources and links including project management and assessment tools. Develop a structure for ongoing assessment of information needs and gaps (see recommendations #5 and #7). Promote / Support educational forums about assessment and procurement in a variety of venues by sharing practical experiences, questions, and solutions.

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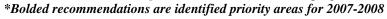
Recommendations for Action	††	Current Status	Milestones Yet To Be Achieved
7. Increase the workforce capacity around health informatics and health information technology (HIT) by assessing current needs, and identifying or developing training and education solutions.	S	 MN e-Health web page about health informatics established with links to key education and training activity available at: www.health.state.mn.us/e-health/training.html. Curriculum enhanced at University of Minnesota, College of St. Scholastica, St. Mary's College, and the University of St. Thomas. 	 Identify a lead organization(s) on workforce capacity to identify and address actions to increase health informatics capacity. Define core health informatics competency and literacy applicable across a broad range of health, health care, and related disciplines. Assess workforce health informatics capacity, skills and gaps in all key settings and professional groups. Assess, catalog and publish a directory of health informatics education, training and research programs and resources available to the Minnesota workforce. Develop incentives for recruitment. Develop an informatics research agenda.
8. Increase public awareness of the benefits and effective use of secure health information technology, especially electronic health records and personal health records; enable input into statewide privacy and security laws and policies.	S	Access to consumer-oriented HIT health information in Minnesota available at: www.health.state.mn.us/e-health .	 Host a discussion of health education specialists to coordinate effort on health information access for consumers. Develop a communication plan to provide comprehensive support of consumer oriented information. Establish a workgroup on Communications/Education to identify and address consumer information needs.
9. Increase statewide access to model policies, best practices, algorithms, training and other essential resources.	L	 Developed a framework of 19 principles to guide the security activities of Health Information Exchanges, available at: www.health.state.mn.us/ehealth/mpsp/index.html Stratis Health DOQ-IT program materials made available at: www.stratishealth.org. Access to information resources linked to on MN e-Health web site available at: www.health.state.mn.us/e-health/ 	 Inventory current national and state resources and update MN e-Health and other relevant web sites as necessary. Launch an effort to coordinate communications for sharing of HIT knowledge and best practices.

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10. Advance the incentives for adoption and use of Electronic Health Records and other health information technologies in private and public health settings.	L	 Stratis Health DOQ-IT program initiated as a CMS quality payment program extended to other programs through an State grant of \$10,000. In 2007, the state appropriated \$14 million in one-time funding for HIT grants and loans. In 2006, the state appropriated \$1.3 million in one-time funding for one-year interoperable EHRs planning and implementation grants which were distributed. 	 Develop priorities for incentives for HIT including pay for performance options, one-time support and support for HIT-related services. Develop e-Health Revolving Loan Fund in MDH. Implement an e-Health Grants program in MDH.
11. Support health information exchange through coordinated policy development and other support for state and regional health information exchanges.	L	 State grant of \$130,000 in 2005-2006 to Stratis Health to support the development of a statewide non-profit organization to focus on health information exchange. Minnesota Healthcare Connection (MnHCC) board established. \$798,000 in state grants awarded in December 2006 to support exchange related operations in rural and underserved areas (Community Health Information Collaborative – \$224,000, Cuyuna Range District Hospital - \$200,000, Pine Medical Center - \$124,000, Tri-County Hospital - \$250,000). 	 Update the catalog on current models to drive adoption of HIE across the state. Communicate legal barriers to exchange in Minnesota, including possible future legislative proposals. Develop solutions to the policy and technical barriers to exchange. Harmonize existing requirements and architecture solutions for HIEs across Minnesota.
12. Establish a Minnesota roadmap for use and adoption of HIT data and information standards in healthcare and public health.	L	 Laws of Minnesota 2007, chapter 147, requires MDH, in consultation with Advisory Committee, to develop a plan to meet the mandate that all Minnesota healthcare providers must have interoperable Electronic Health Records (EHRs) by 2015. Laws of Minnesota 2007, chapter 147, requires uniform standards to be adopted by January 1, 2009, with a status report due to the legislature by January 15, 2008. Laws of Minnesota 2007, chapter 147, requires the advisory committee to provide recommendations to the commissioner for encouraging innovative health care applications using information technology and systems to improve and reduce the cost of care. 	Establish and implement collaborative process for refinement and adoption of national standards for use in Minnesota based on formal recommendations made by national accredited standards development organizations.

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		Minnesota e-Health web page developed containing information on standards with links to major national standards development activity.	
13. Develop a roadmap for how electronic health records can improve health and healthcare quality and support performance measurement, beginning with quality measures for preventive health.	L	National indicators identified and linked from the Minnesota e-Health Initiative web site. www.health.state.mn.us/e-health/	Develop a tactical action plan for improving quality in Minnesota through widespread use of EHRs, including strategies for more complete data capture, effective use of alerts and prompts, and a wide rage of quality- related reports.
14. Identify and seek sources of capital funds so that rural and underserved settings can make the necessary investment in interoperable (i.e., "standards based") EHRs and other health information technology (HIT) applications.	S	 Laws of Minnesota 2007, chapter 147, appropriates \$14 million for expanded e-Health grants and loans program targeted for rural and underserved areas. 12 projects in rural and underserved areas awarded funding (7 planning and 5 implementation) in December 2006 from \$1.3 million interoperable Electronic Health Records (EHRs) grant program appropriated from the State of Minnesota. State awarded 10 Rural health improvement grants. 	Catalog sources of federal, state and other funding available for procurement of EHRs and other HIT in Minnesota, as well as inventory funding strategies used or planned in other states.
15. Establish a Health IT council for state government to coordinate the implementation of interoperable interagency exchange among health information systems (based on the federal inter-agency informatics group).	L	DHS and MDH CIO's and other staff identified opportunities for integration and collaboration.	 Assemble a statewide public and private CIO meeting to address common architecture and policy issues. Develop and implement a joint policy for HIT- related services.

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16. Identify variations in privacy and security policies and laws; recommend solutions for efficient and secure exchange of health information that ensures consumer protection, including patient privacy.	A	 Comprehensive evaluation and recommendations of MN privacy and security barriers, polices and laws was completed as part of a national effort. Reports available at www.health.state.mn.us/e-health/mpsp/index.html. Laws of Minnesota 2007, chapter 147, modifies Minnesota's patient consent requirements in order to facilitate the electronic, real-time exchange of patient health information while maintaining or strengthening patient privacy protections. Available at: www.health.state.mn.us/e-health A set of 19 principles was developed by the Minnesota Privacy and Security Project to serve as a framework for authorizing and authenticating individuals, setting access controls, and auditing in a health information exchange in order to ensure the secure exchange of patient health information. Available at: www.health.state.mn.us/e-health/mpsp/index.html 	 Identify on-going community forums, organizations, funding mechanisms, and other processes to further develop and refine security solutions. Refine and further develop the framework of 19 security principles.
17. Establish an ongoing assessment, priority setting, and evaluation of adoption, use, and interoperability of HIT.	S	 Statewide approach and model to assess HIT adoption, use and interoperability proposal has been drafted. Web page established for presenting the process, approach and data on HIT assessment and adoption status by domain. Stratis Health conducting assessment of Long Term Care needs for HIT and EHR adoption through a state contract. 2006/2007 Meta-analysis of HIT adoption and use of interoperability available at: www.health.state.mn.us/e-health. 	 Validate the approach and process for a comprehensive ongoing assessment in Minnesota. Update the meta analysis in 1/2008 and 6/2008 to show the status of HIT adoption that reflects the activity in Minnesota.

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