



Progress to Date, Recommendations for Action

Minnesota e-Health Initiative Steering Committee

1:00 pm - 2:00 pm Session
June 23, 2005

Moderator: Colleen Reitan, BCBSM



Progress Report Summary: September 2004-June 2005

Minnesota e-Health Initiative Steering Committee

June 23, 2005

Presenter: Marty LaVenture, PhD, MPH



What is the Minnesota e-Health Initiative Steering Committee?

- ★ Established by 2004 Legislation
- ★ Private-Public collaboration
- ★ Dedicated to accelerate the use of Health Information Technology (HIT) in all areas of the state...
- ★ For the purpose of:
 - Improving health and health care quality
 - Increasing patient safety
 - Reducing health care costs
 - Improving public health



Minnesota e-Health Initiative Steering Committee Members

★ Co-Chairs:	Mary Brainerd, Mary Wellik
<u>Members</u>	
★ Hospitals	Mary Klimp, Kim Pederson
★ Health plans	Colleen Reitan
★ Physicians	John Balfanz, M.D.
★ Primary Care	Marilyn Grover
★ Nurses:	Marcelline Harris
★ Purchasers:	Carolyn Pare, Brian Osberg
★ Long term care	Deb Kempf, Sharon Klefsaas,
★ Academic & Research	Gregg Thomas, Frank Cerra, M.D.,
★ Pharmacy	Michelle Frey
★ Public health	Rina McManus, Marty LaVenture
★ Citizens:	Donna Neal
★ Experts:	Patsy Riley, David Abelson, M.D.,
	Ray Gensinger Jr. M.D., John Gross



Minnesota e-Health Initiative Steering Committee Workgroup Co-Chairs

Governance:

- **Rina McManus,*** Anoka County Public Health, *Local Public Health*
- **Carolyn Pare,** Buyers Health Care Action Group, *Purchasers of Health Care*

Finance:

- **Frank Cerra, M.D.,** University of Minnesota Academic Health Center, *Academics and Research*
- **Ray Gensinger Jr. M.D.,*** Hennepin County Medical Center - *Professional with Expert Knowledge*
- **Mark Schoenbaum,** Director, Office of Rural Health, Minnesota Department of Health

Technology

- **Alan Abramson,*** CIO Health Partners
- **Mike Ubl,*** Blue Cross Blue Shield Minnesota

** Presenting workgroup reports today*



Role of Minnesota e-Health Initiative Steering Committee

Role: Provide statewide **leadership**, facilitate **coordination** and foster **collaboration**

Including:

- ★ Assess status, identify & address barriers
- ★ Seek / foster incentives
- ★ Help spread knowledge and best practices
- ★ Help ensure focus on consumers and continuity of care
- ★ Leverage Minnesota resources:
 - Seize opportunities for federal funding
 - Focus on community stakeholders
 - Ensure support for medium and smaller communities



Special Notes about MN e-Health

- ★ Strengthens privacy and data protection
- ★ Supports private innovation
- ★ ***Not*** a warehouse of private medical data



MN Challenges and Gaps*

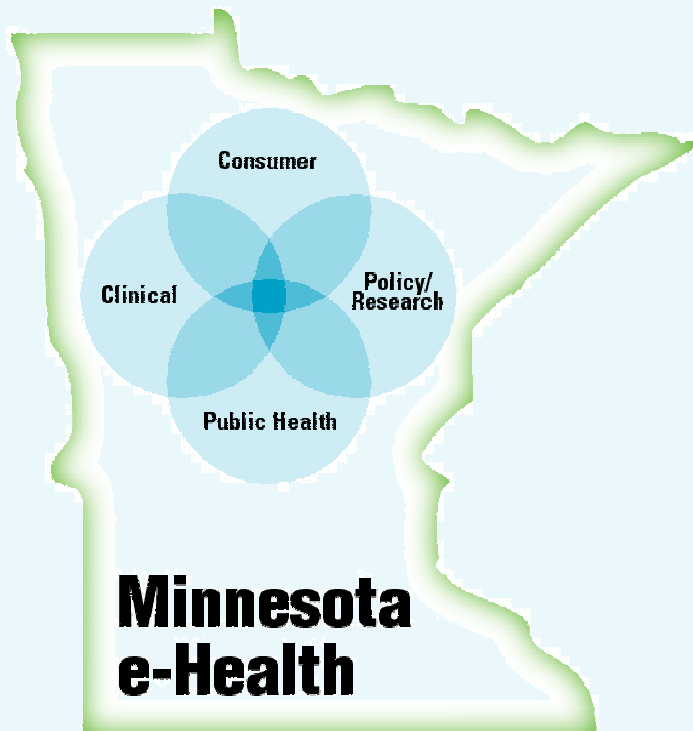
* Preliminary data – Based on limited surveys

Type of Facility/ Provider	Number	Estimated use of HIT	Gap/ Comment
Clinics / Primary Care	~ 700	Est. 5%-15%	Small & rural clinics
Long Term care-Nursing Homes	~ 402	~ 2% - 4%	Clinical support, Inter-connectivity
Emergency Departments	~ 129	~ 10% - 12%	Core data access, Connect across systems
Local Public Health Departments	~ 91	Varies	Limited access to community data. No Interoperability

***Source: Committee Report to the Legislature, January 2005**



Vision for Minnesota e-Health



“... 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.”

Source: Committee Report to the Legislature, January 2005



Roadmap for Strategic Action

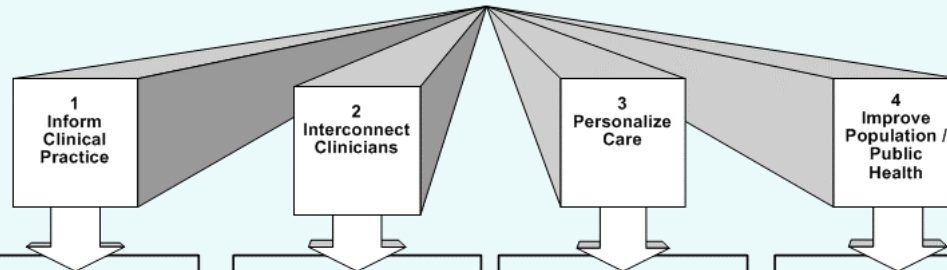
Statewide →

Vision

The Minnesota e-Health Initiative will accelerate the adoption and use of 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.

Build on National work →

Goals



In progress →

Recommendations for Action to Achieve in One Year

Goal-Specific

- 1) Assess current use & adoption-readiness for HIT (such as EHR and e-prescribing)
- 2) Promote HIT adoption by identifying/addressing true barriers & analyzing Value of Investment
- 3) Define targeted incentives that get buy-in and promote interoperability

- 1) Ensure secure methods to uniquely identify an individual
- 2) Define data and information for electronic interoperability
- 3) Interconnect with sources of health and healthcare data (such as pharmacy, immunizations, etc.)

- 1) Develop principles for consumer rights
- 2) Address privacy and security concerns
- 3) Educate and inform consumers about opportunities and benefits of health information technology

- 1) Adopt standards for data and technical structure
- 2) Expand use of local population data to support good policy development, decision making, and planning
- 3) Establish a governance structure for public and private data exchange

Cross Cutting

- a. Analyze Value of Investment and develop principles for financing
- b. Establish governance structure for sharing data
- c. Establish a statewide process for adopting and promoting national standards for data and interoperability
- d. Implement ongoing communication/education programs
- e. Establish policies and practices to ensure protection of confidentiality and security
- f. Endorse MDH's continued leadership role in guiding e-Health development

Workgroups →

Source: Committee Report to the Legislature, January 2005



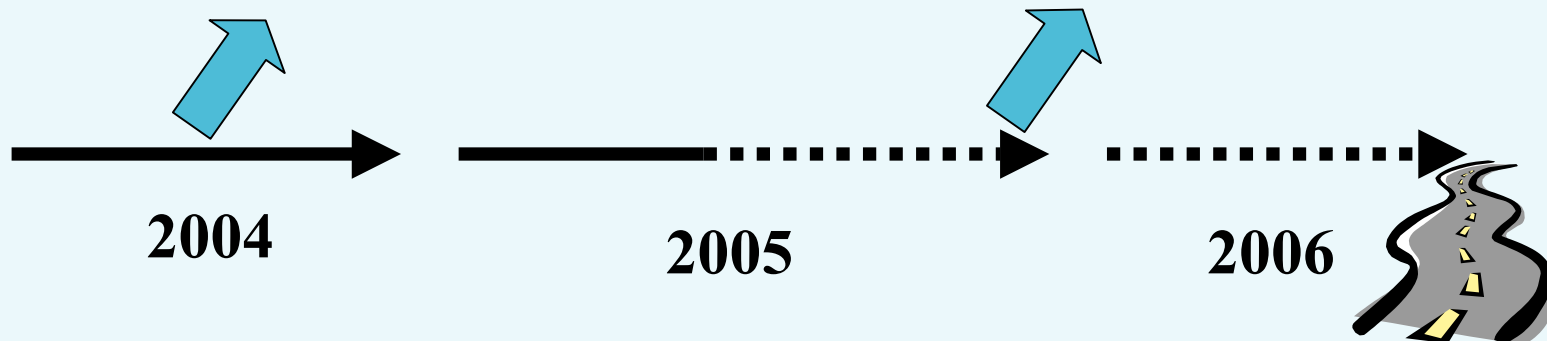
MN e-Health Steering Committee Progress – Proposed Actions 2004-2006

Progress To date

- ★ Delivered report to Legislature (vision, roadmap, recommendations)
- ★ Developed principles for MN Health information exchange (MH-HIE) (Goal 2: Interconnect)
- ★ Collaborated on response to NHIN-RFI
- ★ Identified priorities for MN-HIE
- ★ Held statewide summit

Proposed Actions

- ★ Seek further input/commitment
- ★ Assure broad HIT assessment
- ★ Support business planning for independent MN-HIE
- ★ Advance the roadmap: Goal 1: Goal 3: and Goal 4:
- ★ Priorities for exchange:
 - ★ Laboratory
 - ★ Pharmacy
 - ★ Infectious Disease Surveillance





Call to Action

- ★ Help shape Minnesota directions - provide your input and suggestions
- ★ Support / conduct assessment of needs and readiness for HIT
- ★ Participate in planning for the MN-HIE
- ★ Contribute to advancing the roadmap
- ★ Increase level of health informatics skills, knowledge & education
- ★ Educate your elected representatives on your needs



Governance for Minnesota Health Information Exchange

**The Governance Workgroup
Minnesota e-Health Summit
June 23, 2005
Presenter: Rina McManus**



The Role of Governance

- ★ Governance is critical to the creation and sustainability of a successful collaborative electronic health information exchange organization.



The Role of Governance

- ★ Minnesota needs a model governance structure that:
 - is consistent with national standards
 - is enhanced and tailored to meet Minnesota's needs
 - supports existing and future community initiatives





Governance Principles

MN-HIE will:

- ★ Be a private-public partnership
- ★ Have comprehensive stakeholder representation
- ★ Seat a multi-stakeholder Board of Directors
- ★ Define roles and responsibilities of persons and entities associated with MN-HIE
- ★ Operate as a low-cost, self-sustaining model
- ★ Support universal access for all stakeholders
- ★ Be accountable to all stakeholders
- ★ Support existing and future community-based initiatives



Recommendation: Form a Minnesota Health Information Exchange

★ *MN-HIE Mission:*

- Exchange accurate, standardized health information
- Improve quality of care
- Assure greater patient safety
- Manage the cost of healthcare delivery
- Obtain optimum efficiency
- Improve population health





Recommendation: Form a Minnesota Health Information Exchange

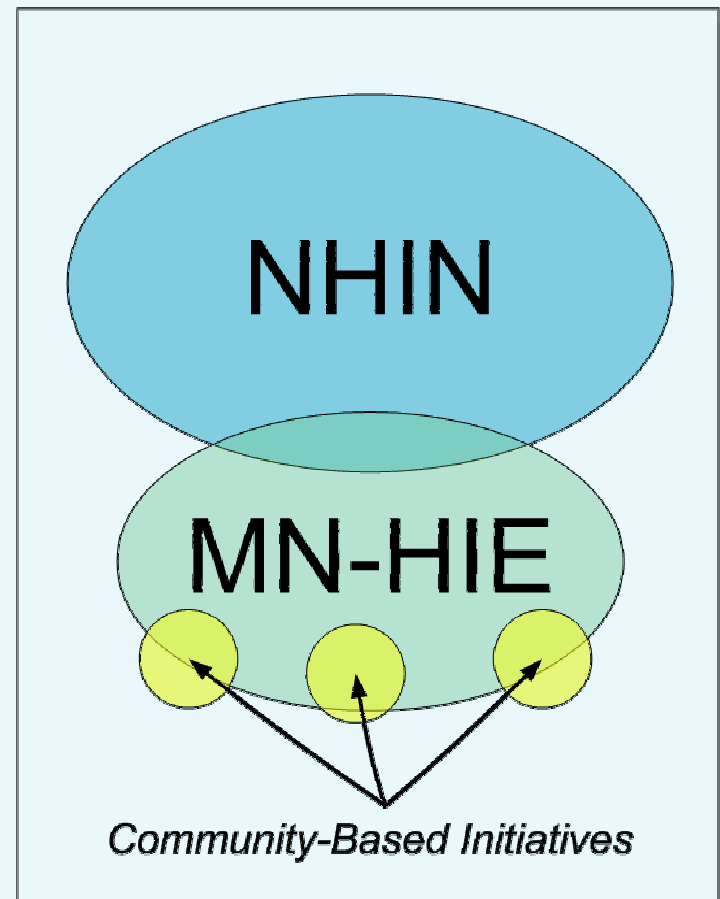
- ★ MN-HIE will adopt standards, determine participation requirements, and assure security, patient privacy, legal compliance.



Recommendation: Form a Minnesota Health Information Exchange

MN-HIE will interconnect clinicians and be the connection point for:

- ★ National Health Information Network (NHIN)
- ★ Community-Based Initiatives





Recommendation: Form a Minnesota Health Information Exchange

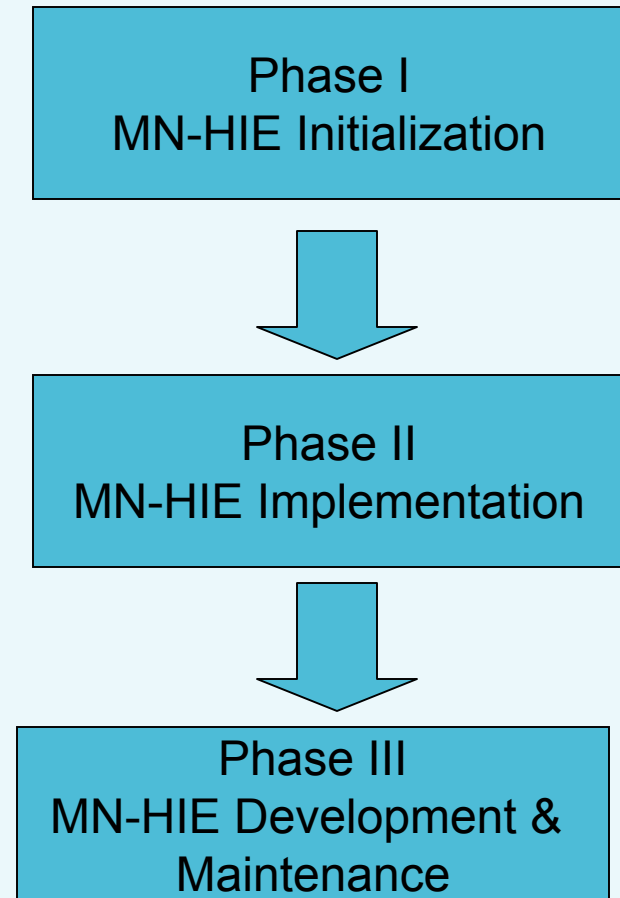
★ To establish MN-HIE, the Minnesota e-Health Steering Committee will convene an interim Board of Directors.





Recommendation: Form a Minnesota Health Information Exchange

★ The MN-HIE governance structure will be developed utilizing a phased-in approach.





Minnesota Health Information Exchange Board of Directors

★ After MN-HIE is established, composition of the Board will evolve over time as the organization moves through phases of development.





Call to Action

The MN-HIE Interim Board will:

- ★ develop initial business plan
- ★ address financial needs
- ★ identify and fill staffing needs
- ★ consult with industry experts as needed



Financing the Adoption of Health Information Technology in Minnesota

**The Finance Workgroup
Minnesota e-Health Summit**

June 23, 2005

Presenter: Ray Gensinger, Jr., M.D.



Minnesota Findings

- ★ Large variation in use of HIT across systems
- ★ Implementation requires significant initial and ongoing investment of time and financial resources
- ★ Financing investments is a major barrier for many providers



Minnesota Findings

- ★ Lack of alignment between HIT investment and benefit accrual—

Those who pay may or may not recognize a direct benefit from their investment

- ★ Challenge balancing the needs of interoperability and individual practitioner systems



Financing Principles

- ★ Investments need to:
 - Advance interoperability
 - Improve quality
 - Be consistent with national standards & certifications

- ★ Align the cost of HIT investment with benefits received



Financing Principles

- ★ Financially “able” entities are expected to make investments as part of their regular budget and IT planning
- ★ State financing will complement, not displace, private or federal investments
- ★ Public financing will:
 - Support small, rural, or underserved communities
 - Require resource commitments from recipients
 - Require interoperable system investment



Framework for HIT Financing in Minnesota

MN & National Goals	Goal 1 Inform Clinical Practice	Goal 2 Interconnect Physicians	Goal 3 Personalize Care	Goal 4 Improve Population and Public Health
System Technology (Initial Focus)	Electronic Health Record	Minnesota Health Information Exchange	Personal Health Record (PHR)	Disease Surveillance
Startup Phase	A	Who/What, e.g.: small clinic, hospital, physician. Finance Sources/ Mechanisms, e.g.: Insurer Incentives, State, Federal, Foundation Grant	C	D
Ongoing Operations Phase	E	TBD	G	H



Financing Needs & Sources

★ Finance Needs - Who, What, Where

- Locations and Institutions: Clinics, Clinic Systems, Nursing Homes, Hospitals, Pharmacies, Home Health Care Systems, Public Health Departments, R&D Incubators, etc.
- Persons: Physicians, Nurses, other providers
- What: Infrastructure, hardware, software, education, conversion initiatives, HIT R&D

★ Potential Funding Sources

- Employers, Purchasers/Insurers, Private Financing, Self-funded, State Loans/Grants, Federal Loans/Grants, Non-profit Loans/Grants



Key Issues in Financing HIT

- ★ Greatest Value on Investment (VOI) return is derived from Interoperable Systems
- ★ VOI is derived from quality improvement AND cost reduction
- ★ Some purchasers drive HIT Investments in certain areas
- ★ Over time, provider demand may drive HIT adoption in all practice settings



Key Issues in Financing HIT

- ★ Financing mechanisms differ in “startup” and “ongoing operations” stages
- ★ Appropriate alignment of financial resources with recipients is key
- ★ All the benefits and all the costs need to be shared



Call To Action

- ★ Develop a business plan, cost estimates, and financing mechanisms to implement MN-HIE
- ★ Support interoperable HIT for providers including the “safety net”
- ★ Focus on the greater good for the citizens of Minnesota



Call To Action

- ★ Determine the financial requirements and sources of funding supporting the recommended business opportunities:
 - Pharmacy
 - Laboratory information exchange
 - Infectious disease surveillance



Technology Standards and Architecture in Minnesota

**The Standards Workgroup
Minnesota e-Health Summit**

June 23, 2005

Presenters:

Alan Abramson & Mike Ubl



e-Health Technology Today in Minnesota

- ★ Laboratory results and pharmacy wide-area networks exist
- ★ Many hospitals, multi-specialty clinics have systems or installations planned
- ★ Departmental systems
- ★ Most small, rural MDs have legacy systems with no or limited clinical data
- ★ Islands of information





Architecture – Guiding Principles

- ★ MN Health Information Exchange (MN-HIE) will adopt standards implemented by federal government
- ★ MN-HIE will use only vendor products and technologies that meet federal certification standards
- ★ Adoption of standards will be balanced with business and patient care requirements



Architecture - Guiding Principles

- ★ MN-HIE technical design will support a 'consumer-centric' philosophy of health care
- ★ In general, clinical information will be decentralized
- ★ Patient electronic health information will be kept confidential in accordance with federal and state regulations in matters of privacy and security



Successful EHRs & Architecture

- ★ There are examples of successful Governance models, successful data sharing models, standards models, and (a few) successful EHRs
- ★ No examples of all of these together with adequate operational financing
- ★ There are several alternative approaches to Architecture and Standards



Four Alternative Architectures

- ★ **Common community EHR**
 - U.K. National Health Service
 - Winona Minnesota Community
- ★ **Shared repository of summary EHR data**
 - Indiana Health Information Exchange
- ★ **Shared access to multiple EHRs**
 - Mass. eHealth Collaborative/MA-SHARE
- ★ **Shared electronic clinical transactions – no EHR**
 - Santa Barbara County Care Data Exchange



Technical Architecture

★ Shared access to multiple EHRs

- Industry example: Mass. e-Health Collaborative/MA-SHARE
- Key Architecture Attribute:
 - Shared access to de-centralized data repositories ('Google' to multiple EHR systems)
 - Master Patient Indexing (MPI)
 - **Architecture Assessment:** Practical solution in consumer-directed healthcare market



Architecture Building Block Standards

★ **Standardized Content**

- ASTM CCR E31.28
- HL7 CDA Release 1.x and 2.x
- NCPDP Rx
- LOINC Lab
- DICOM Digital Image

★ **Standardized data transmission**

- X.12, HL7 & NCPDP

★ **Standardized identification**

- Massachusetts e-Health Collaborative Record Locator Service (RLS)
- National Provider Identifier (NPI)



Call to Action

- ★ Complete survey on status of Minnesota EHR adoption and interoperability capability
- ★ Finalize a recommendation on architecture model
- ★ Complete analysis of technology requirements for initial set of business opportunities
- ★ Identify a minimum set of standards to support recommendations on initial set of business opportunities.
- ★ Identify potential technology vendors that can supply necessary services
- ★ Address legal and organizational barriers



Summary

- ★ There is a critical **need** and **readiness for change**
- ★ Minnesota has an environment for success
 - e.g. leadership and innovation
- ★ **Private–Public collaboration is critical**
- ★ Committee welcomes your **input and suggestions**



For More Information

★ www.health.state.mn.us/e-health

The screenshot shows a Netscape browser window displaying the Minnesota e-Health Initiative website. The browser title is "Minnesota e-Health Initiative - Minnesota Dept. of Health - Netscape". The address bar shows "http://www.health.state.mn.us/e-health/". The website header features the Minnesota Department of Health logo and the text "Minnesota Department of Health Protecting, maintaining and improving the health of all Minnesotans". Below the header is a navigation menu with links for MDH HOME, MAIN CATEGORIES, ABOUT US, LIBRARY, and NORTHSTAR. The main content area is divided into three columns. The left column contains a "Minnesota e-Health Initiative" section with a list of links: Home, Vision, Steering committee, Education and training, Events calendar, Projects and activities in Minnesota, Minnesota reports and recommendations, and Resources. The middle column is titled "Minnesota e-Health Initiative" and contains a paragraph describing the initiative as a public-private collaborative effort to improve healthcare quality, increase patient safety, reduce healthcare costs, and enable individuals and communities to make the best possible health decisions by accelerating the adoption and use of health information technology. Below this paragraph are links for Vision, Steering Committee, Informatics-related Education and Training, Events Calendar, Projects and Activities in Minnesota, Minnesota Reports and Recommendations, and Resources. A contact email address, MNe-health@health.state.mn.us, is provided at the bottom of this column. The right column is titled "Upcoming Event" and contains a link to the "Minnesota e-Health Summit" with the note "Registrations are now closed." A small version of the Minnesota e-Health logo is displayed in the middle column.