Emerging Themes and Preliminary Recommendations for Action

Minnesota e-Health Initiative

Introduction

The Minnesota e-Health Initiative (MN e-Health) is a private–public collaboration whose vision is to accelerate the adoption and use of health information technology in order to improve health care quality, increase patient safety, reduce health care costs and improve public health. It is guided by a statewide advisory committee with representatives from hospitals, health plans, physicians, nurses, other healthcare providers, academic institutions, purchasers, local and state public health agencies, citizens and others with expert knowledge of health information technology and electronic health record systems.

The Advisory Committee developed the following recommendations for priority action after eight months of information gathering and analysis, building on previous committee and workgroup actions. The recommendations are the core element of a strategic action plan being developed for Minnesota.

The recommendations are intended to actively engage all stakeholders to achieve measurable and meaningful results on defined priorities. They represent a shared responsibility to "get it right." The stakes for everyone—from patients to providers to payers—are high, and demand everyone's participation and commitment.

Committee Process and Information Acquisition

The Minnesota e-Health Advisory Committee conducted monthly half-day meetings from October 2005 to May 2006. During those eight meetings, the committee heard from 35 individuals representing 25 Minnesota health information technology projects. The presentations highlighted diverse projects and compelling experience in implementing initiatives within organization and communities.

Feature topics included:

- Health Information Exchange (HIE) projects in Minnesota (November 2005)

- Consumer access and personal health records (December 2005)

- Health Information Privacy and Security challenges (January 2006)

- Electronic health records in health systems and large settings (February 2006)

- Electronic health records in rural and underserved settings and telehealth (March 2006)

- Population and public health issues and systems. (April 2006)

Presenters were asked to provide brief perspectives on:

- the current status of their project and benefits achieved;

- challenges they faced and opportunities for advancing this technology; and

- specific policy recommendations the committee should address to advance this type of effort statewide.

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Vision statement - 2005

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Committee members had the opportunity to ask questions to further understand the projects, clarify issues, probe into greater detail, and offer their analysis of situations and actions that should be considered.

Copies of the presentation slides and meeting summaries are available on the Minnesota e-Health web site: www.health.state.mn.us/e-health/. Input from the presentations, the committee's discussion, audience comments, and background information from all six meetings was synthesized, resulting in fourteen recommendations for priority action, grouped into four themes:

- **Empower Consumers** with the information they need to make informed health and medical decisions.

- **Inform and Connect Healthcare Providers** so they have access to the information and decision support they need.

- **Protect Communities** with accessible prevention resources, and rapid detection and response to community health threats.

- **Enhance the infrastructure** (technical, informational, educational, privacy and security policies, and financial resources) necessary to fulfill the e-Health vision and focus.

The synthesis also addresses committee members' desires to:

- **Integrate with previous work**

  Table 1 affirms the Minnesota e-Health Initiative's vision, focus, strategic goals, and committee charge.

- **Focus on consumer benefits**

  Table 2 illustrates the impact of e-Health on consumers by translating the four strategic goals into 24 consumer benefit statements.

- **Identify required infrastructure changes**

  Table 3 identifies priority action areas, and includes recommendations for specific improvement in the statewide infrastructure to achieve these changes.

- **Identify where public funding is needed**

  Table 3 identifies which recommendations are most appropriate for public funding, based on the principles of the 2005 e-Health Steering Committee Finance Workgroup.

- **Identify actionable details such as goals, milestones, and targets**

  To be developed in the fall of 2006.

- **Acknowledge that progress will be incremental**

  While progress will be accelerated through these priority actions, it will rarely be rapid, given the many interdependent complexities of adopting HIT across diverse health care settings.

- **Acknowledge that progress is dependent upon appropriate funding, both one-time and ongoing**

  This includes strategic use of public funding (federal, state, local) in conjunction with private investment, and aligning incentives for the use of HIT.

Planned Next Steps

During the next six months, the Advisory Committee will add goals, targets, milestones, status, lead organizations, and proposed level of public funding for each of the recommendations. It will then move to finalize the recommendations before including them in the report to the Commissioner of Health and the Minnesota Legislature in December 2006.

The Advisory Committee's 2007 work plan will identify the priorities for committee action.

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Table 1: Summary of Vision, Focus, Strategic Goals and Committee Charge

Vision	**The vision of the Minnesota e-Health Initiative is to accelerate the 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.**
Focus	**Empower Consumers** with the information they need to make informed health and medical decisions. **Inform and Connect Healthcare Providers** so they have access to the information they need. **Protect Communities** with accessible prevention resources, and rapid detection and response to community health threats. **Enhance the infrastructure** (technical, information, education, privacy and security policies, and financial resources) necessary to fulfill the e-Health vision and focus.

Strategic Goals	**(1) INFORM Clinical Practice**	**(2) INTERCONNECT Clinicians and Communities**	**(3) PERSONALIZE Care**	**(4) IMPROVE Population/Public Health**

Committee Charge	**Recommend to the Commissioner of Health immediate and incremental priority actions for achieving the adoption and use of interoperable health information technology across Minnesota.**

Table 2: Consumer Benefit Statements by Strategic Goal

Goal 1: Informing Clinical Practice – Electronic Health Records

- I save time and worry because there is no need to fill out lengthy forms or explain my health history (and possibly forget something important) every time I see my healthcare provider.
- I increase the likelihood of receiving the care I need.
- My healthcare will be safer because my provider will have the right information to help make better decisions.
- My electronic health record can be encrypted and backed up, so it would be protected, yet accessible by my doctor, even after a disaster that would have destroyed my old paper record.
- My information will always be available so I won't need to bring my medical records with me to doctor appointments to ensure that I receive appropriate, high quality care.
- My healthcare will be more affordable because I won't have to spend extra time and money to re-take tests and x-rays unnecessarily.

Goal 2: Interconnecting Clinicians – Health Information Exchange

- All of my healthcare providers (primary doctor, nurse, etc.) have health information about me that is available without the time delay and risk of transporting paper records. (Example information: medications taken, health history, and lab results.)
- It is easier for me to move from one provider to another.
- Ready access to my information will improve communication and coordination of care among my caregivers. (That is, my doctor can read about my visits to the specialist last week or last year.)
- Time will not be lost in an emergency while ER staff reconstructs my medical history.
- No matter where I go to the doctor, my providers have health information about me.
- I have the best possible disease protection in the case of community-wide outbreaks or natural disasters.

Goal 3: Personalize Care - Personal Health Records

- I have convenient and secure access to my personal health information.
- I have the information I need, whenever I need it, to help my children and elderly parent who rely on me for health decisions.
- I can ask good questions and am able to make better healthcare decisions for my children, my elderly parent, and me based on pertinent, personalized information.
- I can record my health history and set reminders to help me monitor and take responsibility for my healthcare, particularly my chronic conditions.
- I get test results quickly and can understand them.
- I am aware of potential drug interactions with the medications that I am taking.
- My electronic "clipboard" with my recent health information can be used by all of my healthcare providers.
- I can use e-mail to securely ask my physician confidential health questions.
- I keep tabs on the health information contained in my record and provide updates when needed.

Goal 4: Population and Public Health – Public Health Information Network

- I have greater confidence that, because public health agencies and healthcare providers are connected electronically, they can communicate more easily and respond quicker in the event of a health emergency.
- Since we are better informed about public health issues in our community, my neighbors and I are healthier because diseases and other risks are prevented, healthy behaviors are supported, and environmental health hazards are reduced.
- I am supported in taking responsibility for my health and wellness by the prevention and wellness resources that are available electronically in my community.
- I have support from programs and other electronic resources that help me in caring for my health.

Table 3. MN e-Health Advisory Committee Recommendations for Action

Summary of Themes and Recommendations for Action Needed to Advance the Statewide Implementation and Use of HIT	Relates to				Proposed Public Funding†	Status Statewide†† (1 Low–4 High)
	Inform practice	Interconnect Care Providers	Personalize care	Improve public health		
Empower Consumers						
1. Accelerate the availability and use of accessible, portable "My Personal Health Record," with priority given to:						
1a. "My Preventive Health Information" (immunizations, well child screenings) for children and adolescents;			✔	✔	◒	2
1b. "My Medication and Health History Information" ("My Clipboard") for all individuals; and			✔	✔	◒	1
1c. "My Care" management tools for individuals with chronic disease (diabetes, asthma, heart disease, cancer).			✔	✔	◒	1
Inform and Connect Healthcare Providers						
2. Fund and implement interconnected health information technology statewide, focusing on secure health information exchange in the following priority areas:						
2a. Continuity of Care Records, through secure and timely exchange of patient health histories;	✔	✔	✔		○	1
2b. e-Prescribing;	✔	✔	✔		◒	2
2c. Shared information for improved chronic disease management;	✔	✔	✔	✔	◒	2
2d. Accessible, complete laboratory result reports with the interpretation of the results; and	✔	✔		✔	◒	1
2e. Fully integrate bi-directional immunization data exchange between the registry and EHRs, with centralized decision support from the registry.	✔	✔	✔	✔	◓	3
Protect Communities						
3. Improve population health and protect communities through accessible prevention resources, widespread knowledge of community risks, and rapid detection of and response to public health threats, including to:						
3a. Improve the timely detection and electronic reporting of diseases to public health authorities, with timely return of information on community risks and threats.	✔			✔	●	1
3b. *Create and support an integrated state-local Minnesota Public Health Information Network (MN-PHIN) for timely detection of and response to infectious disease and other emergencies.	✔	✔	✔	✔	●	1

†Proposed Public Funding
●= Significant or full reliance on public funding   ◓ = Considerable reliance on public funding
◒= Little reliance on public funding   ○ = No use of public funding

††Status of Statewide Progress on this Recommendation (estimate)
1 = Not started or very limited progress   3 = Widespread progress
   2 = Some progress   4 = Statewide achievement of recommendation

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Summary of Themes and Recommendations for Action Needed to Advance the Statewide Implementation and Use of HIT	Relates to				Proposed Public Funding†	Status Statewide†† (1 Low-4 High)
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Essential Activities Needed to Support the Priorities Above						
Related to technical infrastructure:						
4. Improve access to secure telehealth services in rural and underserved areas, including upgrades to high-speed Internet services ("the last mile").	✔	✔	✔		◓	2
5. Measure and publish, on an ongoing basis, statewide progress on priority actions to achieve the adoption and effective use of HIT.	✔	✔	✔	✔	◓	2
Related to education and information:						
6. Provide the information resources for HIT implementation in rural and underserved settings‡, to minimize risk and ensure their effective use.	✔	✔	✔	✔	◓	2
7. Increase the workforce capacity around health informatics and health information technology, including assessing current needs and developing training and educational solutions.	✔	✔		✔	◓	2
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.	✔	✔	✔	✔	◓	1
9. Increase statewide access to model policies, best practices, algorithms, training and other essential resources.	✔	✔		✔	◓	2
Related to privacy and security policy, and finance:						
10. Advance the incentives for adoption and use of Electronic Health Records and other health information technologies in private and public health settings‡.	✔	✔	✔	✔	◒	1
11. Provide matching funds to the Minnesota Health Care Connection (MHCC) to coordinate policy development and other support for regional health information exchanges.	✔	✔	✔		◓	1
12. Establish a Minnesota roadmap for use and adoption of HIT data and information standards in healthcare and public health.	✔	✔		✔	◓	1
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.	✔	✔	✔	✔	○	1
14. Provide sources of capital funds so that rural and underserved settings‡ can make the initial investment in EHRs.	✔	✔	✔	✔	◓	2

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Summary of Themes and Recommendations for Action Needed to Advance the Statewide Implementation and Use of HIT	Relates to				Proposed Public Funding†	Status Statewide†† (1 Low-4 High)
	Inform practice	Interconnect Care Providers	Personalize care	Improve public health		
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).		✔		✔	●	1
16. * Identify variations in privacy and security policies and laws; recommended solutions for efficient and secure exchange that ensure consumer protection, including patient authentication and policy for release notification.	✔	✔			◖	2
17. Establish a process for ongoing needs assessment, priority setting, and evaluation.	✔	✔	✔	✔	◒	2

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†State government subsidies, financing or incentives should complement rather than displace private and federal government investment. The design and targeting of public sector investments should be based on an objective assessment of the public good derived from that investment, and the location and extent of financial barriers within the health systems. Subsidies should only be provided to the extent needed to provide an acceptable return on investment or other benefit, and expenditures with a decent return on investment or cost-benefit ratio should finance themselves. (MN e-Health Finance Work Group, 2005)

‡ 'Settings' includes clinical, long term care, home health, public health, hospitals, and any other health-related organization/domain generally considered to be part of MN e-Health.

 Denotes a major initiative of the Minnesota e-Health Advisory Committee for 2006-2007.

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2006 Minnesota e-Health Roadmap for Strategic Action

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.

Goals

INFORM *Clinical Practice* ~ INTERCONNECT *Providers & Communities* ~ PERSONALIZE *Care* ~ IMPROVE *Population/Public Health*

Focus

| Empower Consumers | Inform and Connect Healthcare Providers | Protect Communities | Enhance Infrastructure |

Priority Actions

Empower Consumers	Inform and Connect Healthcare Providers	Protect Communities	Enhance Infrastructure
1. Accelerate the availability and use of accessible, portable "My Personal Health Record," with priority given to: 1a. "My Preventive Health Information;" 1b. "My Medication and Health History Information" ("My Clipboard") for all individuals; and 1c. "My Care" management tools for individuals with chronic disease.	2. Fund & implement inter-connected HIT statewide, focusing on secure HIE in these areas: 2a. Patient health histories; 2b. e-Prescribing; 2c. Improved chronic disease management; 2d. Laboratory result reports with interpretation; and 2e. Bi-directional immunization data exchange between the registry and EHRs, with centralized decision support from the registry.	3. Develop accessible prevention resources, knowledge of community risks, and rapid detection and response to public health threats, including to: 3a. Improve timely detection and electronic reporting of diseases to public health authorities, with timely return of information on community risks and threats. 3b. Create and support MN-PHIN for timely detection of and response to infectious disease and other emergencies.*	4. Improve telehealth access. 5. Measure HIT progress. 6. Give information resources. 7. Increase workforce capacity. 8. Increase public awareness. 9. Increase essential resources. 10. Advance incentives for HIT. 11. Provide funds to MHCC to support RHIOs in MN. 12. Create a MN HIT Roadmap for data standards. 13. Create quality measures for preventive health. 14. Help w/initial EHR investments 15. Establish state HIT council. 16. Identify privacy & security solutions to ensure consumer protection.* 17. Establish process for needs assesment, priority setting, & evaluation.

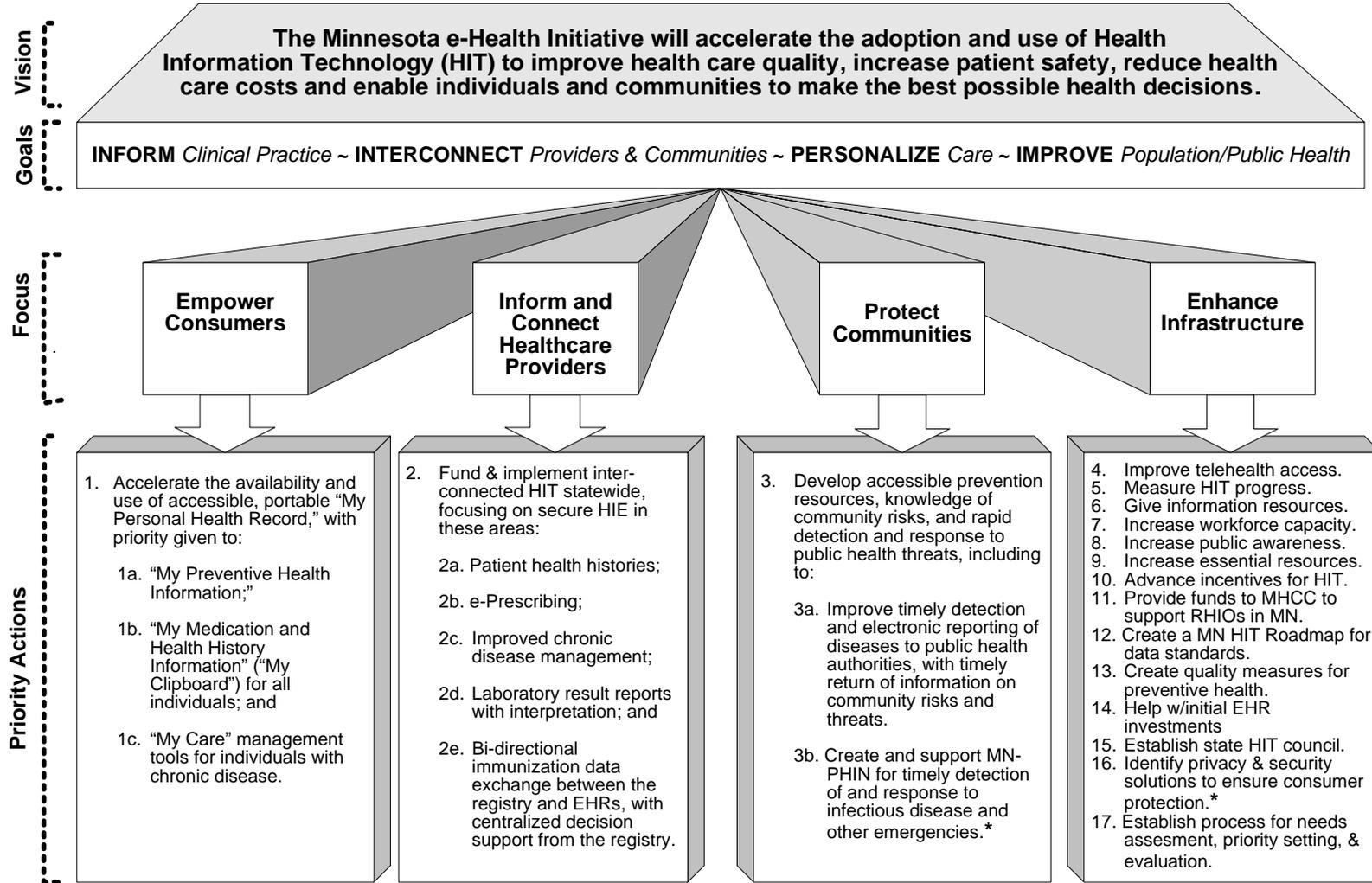***Denotes a major initiative of the Minnesota e-Health Advisory Committee for 2006-2007.**

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