Connecting to Statewide Health Information Exchange (HIE) in Minnesota

January 31, 2017
A few housekeeping reminders...

Please put your phones on mute
To mute the line press *6
Please don’t put your phones on hold

Questions
Please submit your question in the chat box
Questions will be answered at the end of the presentation

The presentation slides will be sent out after the webinar and also posted at:
http://www.health.state.mn.us/e-health/hie.html#resources
Acknowledgements

Minnesota Department of Health- Division of Health Policy
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Minnesota e-Health Initiative

A public-private collaboration established in 2004

-Legislatively chartered

-Coordinates and recommends statewide policy on e-health to Commissioner of Health

-Develops and acts on statewide e-health priorities

-Reflects the health community’s strong commitment to act in a coordinated, systematic and focused way

“Vision: ... 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 Model

**Continuum of EHR Adoption**

- **Adopt**
  - Assess
  - Plan
  - Select
- **Utilize**
  - Implement
  - Effective Use
- **Exchange**
  - Readiness
  - Interoperate

**Exchange partners**

- Adult day services
- Behavioral health
- Birth centers
- Chiropractic offices
- Clinics: primary care and specialty care
- Complementary/integrative care
- Dental practices
- Government agencies
- Habilitation therapy
- Home care
- Hospice
- Hospitals
- Laboratories
- Local Public Health
- Long-term care
- Pharmacies
- Social services
- Surgical centers

Health Information Exchange (HIE)
What is Minnesota’s vision for statewide HIE?

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

HIE Vision:
Assuring the *right information* is available to the *right provider*, at the *right time* for individuals and communities.
Why should providers connect for statewide HIE?

• Helps provide more coordinated care to individuals and improve overall population health

• Helps providers be successful in evolving value-based payment arrangements such as accountable care organizations (ACOs) and Integrated Health Partnerships (IHPs) (Minnesota’s Medicaid ACOs)

• Fulfills requirement for connection to a state-certified HIO* to help providers meet the Minnesota Interoperable Electronic Health Record Mandate (Minnesota Statute §62J.495)

* EHR must be connected to a State-Certified Health Information Organization (HIO) either directly or through a connection facilitated by a State-Certified Health Data Intermediary (HDI)

Minnesota’s HIE Approach: Market-based

What does that mean?

Allows for an open HIE “vendor” market with limited state government oversight and governance to:

• Ensure standards-based exchange
• Help create a level playing field to ensure access for all communities and providers
• Facilitate coordination and collaboration among HIE providers
• Allow private sector and market-driven innovation, connectivity and services (follow growth and demand)
• State’s role to assess and report on adoption/progress of HIE
• Offers flexibility – a variety of vendors to help support sustainability
• Enable the ability to respond to local or regional community needs

Driven by regional and local community needs to coordinate care and support population health
How can providers connect for statewide HIE?

In Minnesota, there are several options:

• Connect directly to a State-Certified HIO,
• Connect to a State-Certified HIO through a State-Certified HDI,
• Establish and meet requirements to be a State-Certified HIO (with your data-sharing partners).

Think about...

• What information your organization wants to exchange?
• With what organizations does it want to exchange?
• What are the exchange options available based on your organization’s e-health capabilities?
What are the state-certified HIE options?

Health Information Organization (HIO):
an organization that *oversees, governs, and facilitates HIE among health care providers that are not related health care entities* to improve coordination of patient care and the efficiency of health care delivery.

State-Certified HIOs

[Logos of Koble Minnesota, Allina Health, Southern Prairie Community Link]
What are the state-certified HIE options?

**Health Data Intermediaries (HDIs)**

- Provide the *technical capability or service to enable HIE*;
- May work with HIOs and/or health care providers directly

**State-Certified HDIs**

- CenterX
- Cerner
- CIOX Health
- Epic Systems Corporation
- Inpriva
- MaxMD
- MedAllies
- Orion Health (*in process*)
- Medicity
- NextGen Healthcare (Mirth)
- Relay Health
- Secure Exchange Solutions
- Simply Connect
- South Dakota Health Link
- Surescripts
- Wisconsin Statewide Health Information Network (WISHIN)
What are HIO and HDI capabilities?

Query (push/pull):
• Allina Health*
• Cerner
• Change Healthcare Solutions
• CIOX Health
• Inpriva
• Koble-MN*
• Medicity
• NextGen Healthcare
• Relay Health
• Simply Connect
• South Dakota Health Link
• Southern Prairie Community Care*
• Surescripts

EHR vendors (push/pull):
• Cerner
• Epic Systems Corporation
• NextGen Healthcare

Pharmaceutical data:
• CenterX
• Cerner
• Change Healthcare Solutions
• NextGen Healthcare
• Surescripts

Orion Health (in process)

* Denotes HIO
What are the HIO and HDI options for Direct Secure Messaging (DSM)?

- Allina Health*
- Cerner
- Inpriva
- Koble-MN*
- MaxMD
- MedAllies
- Medicity
- NextGen Healthcare
- Relay Health
- Secure Exchange Solutions
- Simply Connect
- South Dakota Health Link
- Southern Prairie Community Care*
- Surescripts
- WISHIN

* Denotes HIO
How will HIOs and HDIs support statewide HIE? through the Minnesota Health Information Network

• Minnesota Health Information Network (MNHIN) is the network of Minnesota state-certified HIE service providers (HIOs and HDIs) - collaborate on infrastructure design and implementation to improve interoperability in Minnesota

• Requirements for State-Certified HIOs and HDIs :
  — HIOs must connect to all other HIOs
  — HDIs must connect to at least one HIO, based on preference by provider client, or may connect to two or more
Minnesota HIE Approach: Market-Based Advantages and Limitations

Advantages

• Growth can evolve from user needs/community level
• Flexible – multiple vendors to support sustainability
• Investments follow growth and demand
• State oversight ensures choices

Limitations

• Multiple choices can be challenging
• Growth first among those with resources
• State oversight limited in enforcing participation
• Limited ability to support broad population health
• Sharing information across multiple vendors is complex
What do we know from current e-health assessment data?

Progress, Gaps, and Challenges
EHR/HIT Adoption is High

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>Percent of Providers with EHRs or related HIT</th>
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</thead>
<tbody>
<tr>
<td>Hospitals</td>
<td>100%</td>
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<tr>
<td>Clinics</td>
<td>98%</td>
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<tr>
<td>Pharmacies</td>
<td>97%</td>
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<tr>
<td>Local Health Depts</td>
<td>94%</td>
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<tr>
<td>Nursing Homes (2011)</td>
<td>69%</td>
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</tbody>
</table>

Source: Minnesota e-Health Profile, MDH Office of Health IT, 2011-2016
HIO connections are increasing

Source: MDH–OHIT Survey data 2015, connection includes HIO participatory agreement with direct and/or query capability
What do we know from assessment data?

Gaps and Challenges

Gaps

• Some settings just beginning to about EHRs or other health information technology
• Disparity in the use of EHRs and HIE despite similar adoption rates

Challenges

• Exchanging across different vendor platforms
• Integrating data from other providers into the EHR
• Managing patient consent to share information
• Leveraging EHR data to support population health
What is the Minnesota e-Health Initiative doing to address known HIE challenges?

The Path to e-Health Policy

Guidance to providers & communities

Recommendations to Commissioner of Health

Minnesota e-Health Advisory Committee
Members represent 24 stakeholder perspectives

Established by the Minnesota Legislature in 2004

HIE Workgroup
Privacy and Security Workgroup
Workgroup
Workgroup
## Resource: Minnesota HIE Framework and Guidance to Support Accountable Health

<table>
<thead>
<tr>
<th>Key Element</th>
<th>A. Engage and Activate Individuals and Caregivers</th>
<th>B. Engage and Activate all Health Providers</th>
<th>C. Extend Care Coordination into the Community</th>
<th>D. Monitor Cohorts and Attributed Populations</th>
<th>E. Manage Population Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Premise (Desired Outcomes)</td>
<td>Individuals who have access to their health information are more engaged, more responsible for their health and have better health outcomes.</td>
<td>Providers who are engaged, with access to all necessary information at the point of care, help contribute to better health outcomes for patients.</td>
<td>Individuals are healthier when health care and related services are coordinated across providers.</td>
<td>Cohorts and attributed populations have better health and financial outcomes when program decisions are made using information generated with enhanced data analytics.</td>
<td>Health policy, emergency preparedness, and public program decisions are improved when based on accurate &amp; timely population health information.</td>
</tr>
</tbody>
</table>

http://www.health.state.mn.us/e-health/hie.html#resources

(1) Adapted from CCHIT’s “A Health IT Framework for Accountable Care” [http://www.healthit.gov/FACAS/sites/faca/files/a_health_it_framework_for_accountable_care_0.pdf](http://www.healthit.gov/FACAS/sites/faca/files/a_health_it_framework_for_accountable_care_0.pdf)

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<th>B. Engage and Activate all Health Providers</th>
<th>C. Extend Care Coordination into the Community</th>
<th>D. Monitor Cohorts and Attributed Populations (including risk stratification)</th>
<th>E. Manage Population Health (well-being of the population)</th>
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</thead>
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<td>Key Premise (Desired Outcomes)</td>
<td>Individuals who are engaged, with access to their health information, are more responsible for their health and have better health outcomes.</td>
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</tr>
<tr>
<td>Key HIE Functions and Capabilities to Achieve Desired Outcomes</td>
<td>a) Patients have access to bi-directional communication with providers. b) Individuals have access to their personal health information that is understandable, in a useable form and actionable. c) Individuals and patients have access to information about their providers and health care services d) Individuals have access to tools to actively monitor and care for themselves and are able to share health activity monitoring information with providers. e) Individuals have easy access to chronic disease management tools f) Individuals have easy access to disease specific and preventative education materials</td>
<td>a) Providers have access to bi-directional communication with patients. a) Providers have ability to communicate/share information within their own organization</td>
<td>a) Providers have closed loop referral capability (Referral Management l) b) Individuals and providers have access to identified social &amp; community supports (for referral) that address social as well as medical needs c) Providers have the information needed for care coordination in standard and/or shared terminologies where possible d) Providers participate in care teams e) Providers have access to bi-directional care coordination support services to/from MDH f) Providers have access to information on targeted patients (e.g., cohorts) for follow-up/support g) Individuals and patients have access to financial information needed for care management h) Care coordinators have access to shared care management plans</td>
<td>a) Access to information to identify and monitor cohorts; share trends with care coordinators b) Access to financial risk sharing models use predictive analytics l c) Access to shared care management plan and transparency of data analyzed d) Ability to normalize and integrate data, including social determinants of health e) Ability to provide care coordinators and providers performance reports f) Access to information that allows for participation in reimbursement systems for other than fee for service (ACO, value-based payment) g) Access to and ability to use repository and data warehouse</td>
<td>a) Access to information for health assessment of entire population k) Ability to evaluate effectiveness of public health programs c) Ability to report measures to external designated entities l d) Ability to report adverse events to Patient Safety Organization l e) Access to emergency preparedness monitoring and assessment information f) Access to information needed to react to emergency disasters and outbreaks more quickly g) Access to and ability to share research protocol information h) Access to and ability to share comparative effectiveness research l i) Access to and ability to share population health analysis</td>
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<td>F. Transactions and Standards</td>
<td>Recommended transactions and national standards are supported</td>
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<td>G. Patient Safety Practices</td>
<td>HIE and e-health protocols and procedures are supportive and enhance patient safety</td>
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<td>H. Privacy and Security</td>
<td>Protect all health information; any data sharing includes patient permissions (shared with whom and for what purpose).</td>
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<tr>
<td>I. Total Cost of Care (TCOC)</td>
<td>HIE and e-health protocols and procedures support TCOC model (clinical decision support, program evaluation etc.)</td>
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<td>J. Learning Health System</td>
<td>Moving toward an “ecosystem where all stakeholders can securely, effectively and efficiently contribute, share and analyze data and create new knowledge that can be consumed by a wide variety of electronic health information systems to support effective decision-making leading to improved health outcomes” (Collect, share, use)</td>
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<td>K. Administrative Simplification</td>
<td>Providers, patients and individuals can easily access information for appointment, insurance eligibility and benefits among other needs</td>
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*Adapted from CCHIT Framework

*Source: Connecting Health and Care for the Nation A Shared Nationwide Interoperability Roadmap January 2015
**Key Element A: Engage and Activate Individuals and Caregivers**
Desired outcome: Individuals who have access to their health information are more engaged, more responsible for their health and have better outcomes

<table>
<thead>
<tr>
<th></th>
<th>Org 1</th>
<th>Org 2</th>
<th>Org 3</th>
<th>Org 4</th>
<th>Org 5</th>
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<tbody>
<tr>
<td>1. Do patients have access to bi-directional communication with their providers?</td>
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<td>2. Can patients access their personal health information in a way that is understandable, useable and actionable?</td>
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<td>3. Do patients have access to information about their providers and health care services?</td>
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<tr>
<td>4. Do patients have access to tools to actively monitor and care for themselves? Can they share this monitoring information with providers?</td>
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<tr>
<td>5. Do patients have access to disease-specific and preventive education materials including chronic disease management tools?</td>
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HIE barriers being addressed by Action Plan*

- Minnesota HIE approach is not fully implemented
- Key transactions need to be prioritized (e.g., notification and alerting, care summaries) and supported statewide
- Selecting an HIE service provider is complicated by a rapidly evolving market
- There are challenges to HIE implementation (e.g., workflow)
- It is difficult to understand and execute legal and policy requirements (e.g., Minnesota privacy & consent)
- Establishing partner relationships/agreements is often difficult, time-consuming and costly
- There are competing organizational priorities

*Action Plan developed by 2015-16 HIE Workgroup*
Call to Action—What Can You Do Now?

- Subscribe to the Minnesota e-Health weekly update
  [http://www.health.state.mn.us/e-health/](http://www.health.state.mn.us/e-health/)

- Participate in Minnesota e-Health Workgroups
  - HIE
  - Privacy and Security

  [http://www.health.state.mn.us/e-health/wgshome.html](http://www.health.state.mn.us/e-health/wgshome.html)
• **Save the Date:** Thursday, June 15, 2017
  8:00 a.m. – 5:30 p.m.
  Earle Brown Heritage Center
  Brooklyn Center

• The goal of the annual Minnesota e-Health Summit is to provide quality education about emerging national and state e-Health initiatives. In addition to hearing from internationally recognized e-Health leaders, attendees discuss policy issues, learn about the progress of innovative projects underway in Minnesota, and get progress reports that highlight statewide activities.

• [http://www.health.state.mn.us/e-health/summit/index.html](http://www.health.state.mn.us/e-health/summit/index.html)
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http://www.health.state.mn.us/e-health/hiewghome.html