Health Information Exchange Oversight

2022 REPORT TO THE LEGISLATURE

December 20, 2022

Minnesota Health Information Exchange Oversight 2022 Report to the Minnesota Legislature

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DEPARTMENT OF HEALTH

Protecting, Maintaining and Improving the Health of All Minnesotans

December 20, 2022

The Honorable Paul Utke, Chair
Health and Human Services Finance and Policy Committee
Minnesota Senate
3403 Minnesota Senate Building

The Honorable Tina Liebling, Chair
Health Finance and Policy Committee
Minnesota House of Representatives
477 State Office Building

The Honorable Jim Abeler, Chair
Human Services Reform Finance and Policy Committee
Minnesota Senate
3215 Minnesota Senate Building

The Honorable Jennifer Schultz, Chair
Human Services Policy Committee
Minnesota House of Representatives
473State Office Building

To the Honorable Chairs:

As required by Minnesota Statutes, sections 62J.498-4982, this Minnesota Health Information Exchange Oversight report outlines progress toward Minnesota's goals for health information exchange (HIE). This report represents updates since the most recent report published in 2019 and will be the final report for the HIE Oversight program.

When Minnesota's HIE oversight law was established in 2010, HIE was in its infancy across the country, and it was not clear how the market would evolve to meet the demands of providers for different types of exchange. Updates to Minnesota's HIE oversight law in 2015 addressed the wide variation of exchange models that had developed by creating standardization for certification of HIE service providers.

The evolution of the HIE market in Minnesota and nationally, combined with federal certification changes for health information technology that included HIE requirements, prompted reconsideration of Minnesota HIE oversight law requirements. Modifications to the oversight law were part of the Minnesota Department of Health's 2021 legislative requests and in June 2021, the certification requirement for Health Data Intermediary (HDI) was eliminated.

Minnesota now requires only health information organizations (HIOs) be certified. As of October 1, 2022, Minnesota has one certified HIO. At the time of this report, an additional HIO application is under review.

Sincerely,

Jan K. Malcolm
Commissioner

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Executive Summary

Health information exchange (HIE) is a collection of activities associated with the electronic transmission of health-related information between organizations according to nationally recognized standards (Minnesota Statutes, section 62J.498 sub. 1(g)). HIE allows providers to securely share information with other providers or organizations using agreed-upon standards and according to patient preferences. The goal of HIE is to help make health information available, when and where it is needed, to improve the quality and safety of health and health care. Information provided using HIE has the potential to make information much more useful to support both patient care and community health. Connecting providers across the care continuum allows for consolidation of information and use of analytics to support health outcomes.

HIE has progressed dramatically over time. Minnesota established the Health Information Exchange Oversight law in 2010, and since has enacted modifications to evolve and meet needs in the HIE ecosystem. Most recently, in 2021, updates were made to remove administrative burden and oversight over many entities in the HIE market as the certification requirement for Health Data Intermediaries was eliminated. Minnesota continues to certify Health information Organizations; Minnesota currently has one state-certified Health information Organization, with another submission under review.

The COVID-19 pandemic accelerated the development and expansion of HIE to meet the evolving needs. Prior to the pandemic, significant work was underway to move forward with a connected networks approach for HIE in Minnesota. This connected networks approach, endorsed by the Minnesota e-Health Advisory Committee, included developing a model for an HIE governance process in the state. The pandemic halted the workgroup meetings, as well as broader HIE governance and connected networks activities. However, several HIE-related advancements were made in Minnesota and nationally during that time including:

- MDH declared readiness for four Centers for Medicare and Medicaid Services (CMS) public health reporting use cases
- Minnesota Department of Human Services expanded Encounter Alert Service (EAS)
- National and federal activities influenced the HIE market
  - 21st Century Cures Act - Office of the National Coordinator for Health Information Technology (ONC) Cures Act Final Rule established information blocking exceptions to implement the law (issued May 2020, effective October 2022)
  - Trusted Exchange Framework, Common Agreement (TEFCA) was developed with an overall goal to establish a floor of universal interoperability across the country.

Moving forward, Minnesota's HIE needs will be reevaluated as MDH looks to continue the effort to support and advance Minnesota's health ecosystem. MDH will continue to monitor national movement on TEFCA to help further refine what is needed to ensure that HIE services are adequate to meet the needs of Minnesota citizens and providers statewide. In addition, the Minnesota e-Health Advisory Committee is anticipated to resume in 2023. The status of HIE and next steps will likely be a key focus.

Introduction

Health information exchange (HIE) is the electronic transmission of health-related information between organizations according to nationally recognized standards (Minnesota Statutes, section 62J.498 sub. 1(f)). See Appendix A for more information. HIE allows providers to securely share information with other providers or organizations by using agreed-upon standards and according to patient preferences. The goal of HIE is to make health information available, when and where it is needed, and to improve the quality and safety of health and health care. Using HIE has the potential to make information much more useful to support both patient care and community health. Connecting providers across the care continuum allows for improved individual care and consolidation of information and use of the analytics can help support population health and outcomes. This report specifically addresses implementation of Minnesota's Health Information Exchange Oversight Law (Minnesota Statutes, section 62J.498-4982).

Minnesota's approach to HIE since 2010 has been to support a market-based strategy that allows for private sector innovation with government oversight to ensure fair practices, availability of services, and compliance with state and federal requirements for privacy, security, and consent protections. Minnesota's HIE oversight law (Minn. Stat. §§62J.498-4982), enacted in 2010, updated in 2015 and 2021, provides limited state government oversight intended to:

- Ensure standards-based exchange requirements are being met
- Create a level playing field to ensure access for all communities and providers and provide a transparent process to the certification of HIE service providers
- Facilitate coordination and collaboration among HIE service providers
- Allow market-driven innovation, connectivity, and services
- Assess and report on the state and progress of HIE

The Minnesota Department of Health (MDH) manages this oversight role through the following activities:

- Monitoring national, federal, and state HIE activities and policies
- Certifying HIE service providers that provide HIE products and/or services in Minnesota
- Supporting a coordinated HIE strategy to decrease fragmentation of health information in the state

HIE oversight and the evolution of Minnesota's HIE service provider landscape

When Minnesota's HIE oversight law was established in 2010, HIE was in its infancy, and it was not clear how the market would evolve to meet the demands of providers for different types of exchange. Updates to Minnesota's HIE oversight law in 2015 addressed the wide variation of exchange models that had developed at that time. From 2015 - June 30, 2021, Minnesota's HIE oversight law continued

to recognize two types of entities as HIE service providers that provide the infrastructure for HIE – Health Information Organizations (HIO) and Health Data Intermediaries (HDI). Both were required to be certified under the state's oversight program and to share information through implementation of reciprocal agreements.

- An HIO is an organization that oversees, governs, and facilitates HIE among health care providers from unrelated health care organizations to improve coordination of patient care and the efficiency of health care delivery.
- An HDI is an entity that provides the technical capabilities, or related products and services, to enable HIE among health care providers from unrelated health care organizations (but does not govern the information).

A separate law required health care providers to connect to an HIO, either directly or indirectly by connecting through an HDI that is connected to an HIO[1].

While MDH continued to certify HIOs and HDIs[2], Minnesota's HIE environment was the focus of a study from 2016 -2018 and a task force in 2018-2019. These activities provided opportunities for Minnesota stakeholders to share feedback and propose recommendations to address expressed concerns that the HIE model was not working and needed to be adjusted to ensure that Minnesota can achieve its goal of ensuring the right information is available about the right patient at the right time. These concerns included the confusing and unstable HIE market, financing and sustainability, and the legal framework for HIE, among others.

The HIE Study's primary recommendation was to move Minnesota in the direction of a connected networks model that would provide essential HIE services accessible to all stakeholders statewide and align with and build upon national initiatives. To accomplish this, MDH was asked to establish an HIE Task Force to develop strategic and implementation plans for a connected networks model and to recommend updates to Minnesota's Health Information Exchange Oversight law to support the coordinated networks concept.

The HIE Task Force made recommendations for implementation of the Minnesota connected networks approach. MDH, in collaboration with the Minnesota e-Health Advisory Committee and Health Information Exchange Task Force, invited public input on a connected networks approach for health

[1] Minnesota Interoperable EHR Mandate Sec. 62J.495 MN Statutes (https://www.revisor.mn.gov/statutes/cite/62J.495)

[2] The HIE oversight process was paused in 2020 with the COVID-19 waiver in through May 15, 2021. On April 8, 2020, the governor issued Emergency Executive Order 20-32, which granted temporary emergency authority to the Commissioner of Health to temporarily delay, waive, or modify laws and regulations governing providers, facilities, and activities regulated by the Department of Health; issue temporary variances; temporarily waive requirements related to state-funded grants; and establish temporary alternative health care facilities. Similar temporary emergency authority was granted to the commissioner in law.

information exchange (HIE) in Minnesota. A stakeholder theme was to modify Minnesota requirements for HIE oversight to align with national efforts since Minnesota's requirements were put in place before there were any federal certifications.

The evolution of the HIE market in Minnesota and nationally, combined with federal certification changes for electronic health records (EHRs) and health information technology (HIT) that included HIE requirements[3], prompted reconsideration of the Minnesota HIE oversight law requirements. Modifications to the oversight law were part of the Minnesota Department of Health's 2021 legislative requests. In June 2021, the certification requirement for Health Data Intermediary (HDI)[4] was eliminated to help simplify the HIE requirements in Minnesota. As a result of the 2021 changes to statute, 14 HDIs were no longer required to be certified beginning in July 2021.

Minnesota now certifies only health information organizations. At the time of this report, Minnesota has one certified HIO and one HIO application under review.

Minnesota e-Health Initiative HIE recommendations

As part of this biennial report, MDH is asked to provide an update on the status of health information exchange services that includes, but is not limited to, recommendations on actions necessary to ensure that health information exchange services are adequate to meet the needs of Minnesota citizens and providers statewide. This portion of the report addresses that requirement and reflects the ongoing HIE-related work of the Minnesota e-Health Initiative.

The Minnesota e-Health Initiative (Initiative) was established in 2004 to help Minnesota health care providers, payers, and patients move forward in the electronic health era together. All stakeholders in this public-private collaborative have a common goal of sharing information to facilitate patient care while protecting that health information appropriately and efficiently.

The Initiative is guided by a legislatively authorized 25-member advisory committee that provides recommendations, insight, and input from the health and health care community in Minnesota. Recommendations regarding health information exchange and HIE oversight are within the scope of this committee. Achieving comprehensive information sharing has proven to be a big challenge in Minnesota and across the nation. MDH and the Initiative are committed to developing multifaceted

[3] ONC Health IT Certification Program (Certification Program) (https://www.healthit.gov/sites/default/files/PUBLICHealthITCertificationProgramOverview.pdf)

[4] Health Data Intermediary (HDI): An entity that provides the technical capabilities or related products and services to enable health information exchange among health care providers that are not related health care entities as defined in Minnesota Statutes section 144.291, subdivision 2, paragraph (j). This includes but is not limited to: health information service providers, electronic health record vendors, and pharmaceutical electronic data intermediaries as defined in section 62J.495.

and long-term solutions that work for Minnesota, align with efforts happening across the nation, address federal and state requirements, and can adapt to changing technologies with an emphasis on:

- **Promoting information sharing** to achieve better care and outcomes, healthy communities, and greater efficiencies.
- **Improving public health reporting processes** to improve our preparation for, and response to, public health challenges and emergencies.
- **Convening the stakeholders** within this ecosystem to understand how to work together for a healthier Minnesota.

Prior to the pandemic, the Initiative focused on evaluating and recommending options for improved HIE for both clinical and population health. In February 2020, the Initiative's Advisory Committee had endorsed moving forward with a connected networks approach for HIE as outlined by the 2018 -2019 Minnesota e-Health HIE Task Force (https://www.health.state.mn.us/facilities/ehealth/hie/taskforce/index.html). The committee recognized the need to request additional or new authority from the legislature to help support the identified need for governance[5]. This approach included a coordinating entity with key responsibilities for managing participation, statewide collaboration, and decision-making processes.

The committee recommended that MDH lead the development of a new model with greater authority as part of a legislative proposal and continue moving forward with what can be done under existing authority. The Initiative continued to advise on this work in early 2020 to establish and implement a pilot governance model and decision-making process.

While the Initiative continued to meet until June 2021, this work was not completed due to the COVID-19 pandemic. In 2023, the Initiative plans to reconvene with a newly appointed committee. It is anticipated that this topic will be revisited once this happens.

Advances in HIE during the COVID-19 pandemic

The COVID-19 pandemic halted the work on HIE governance and much of the work of the e-Health Initiative. Nevertheless, there were several significant changes in both Minnesota and national HIE

[5] **Minnesota e-Health Advisory Committee Action:**

1. Agreement that there is a need for more authority than is currently in law (move from 'you should' to 'you have to' for certified entities?) to ensure success with a Minnesota connected networks approach (authority would apply to both private and public sector entities exchanging health information).
2. All authority model options (private-only, state agency(ies) level, governor level) are on the table. Although the Advisory Committee is not entirely agnostic to authority models, the committee requests MDH to work with commissioner, governor, and legislature to identify the options that are most viable/feasible.

landscape during that time that helped advance the work and will impact future actions relating to HIE oversight in Minnesota.

MDH declares readiness for CMS public health reporting use cases

January 1, 2022, MDH declared readiness to accept public health reporting data for the Centers for Medicare and Medicaid Services (CMS) 2022 Medicare Promoting Interoperability Program Requirements[6]. Health care systems and independent hospital partners working toward full reimbursement for Medicare services are required to report on four of the Public Health and Clinical Data Exchange Objective[7] measures:

- Centers for Disease Control and Prevention, National Syndromic Surveillance Program (CDC NSSP) (https://www.cdc.gov/nssp/index.html)
- Electronic case reporting (eCR) (https://www.health.state.mn.us/diseases/reportable/medss/ecr.html)
- Electronic laboratory reporting (ELR) (https://www.health.state.mn.us/diseases/reportable/medss/elr.html)
- Immunization reporting (MIIC) (https://www.health.state.mn.us/people/immunize/miic/index.html)

MDH has contracted with Koble Minnesota, a State-certified Health Information Organization (HIO) (https://www.health.state.mn.us/facilities/ehealth/hie/certified/index.html#11), to help support interoperability implementation between MDH programs and the partners that have information needed for public health work. In particular, the NSSP use case requires submission through an HIO. Additionally, other use cases may also be sent via Koble to increase value and reduce the administrative burden for public health reporting.

Minnesota Department of Human Services expands participation in Encounter Alert Service (EAS)

The Minnesota Encounter Alert Service (EAS) enables providers to receive notifications for individuals who have been admitted, discharged, or transferred from an EAS-participating hospital, emergency department, long-term or post-acute care facility, or other provider organization in real time. Over 314,000 alerts are sent monthly by the EAS.

[6] https://www.cms.gov/regulations-guidance/promoting-interoperability/2022-medicare-promoting-interoperability-program-requirements

[7] https://www.cms.gov/files/document/2022-public-health-and-clinical-data-exchange-objective-fact-sheet.pdf

Originally established to support care coordination for Medicaid beneficiaries, the EAS is now used statewide and for all payers.[8] The EAS has participation from 224 data sources and 60 subscribers including all health systems and hospitals in Minnesota. This also includes many independent providers, nursing homes, behavioral health clinics. There has been an increase of participation from county case management, community partners and health plans. The notifications were also available for COVID-19 situational awareness.

These EAS alerts, also known as Admission, Discharge, and Transfer (ADT) event notifications, not only help support improved care coordination but also allow Minnesota hospitals and critical access hospitals to meet Centers for Medicare and Medicaid Services (CMS) conditions of participation requirements that became effective in May 2021.

National and federal activities influence the HIE market

There have been a couple of federal and national activities related to HIE.

- 21st Century Cures Act - Office of the National Coordinator for Health Information Technology (ONC) Cures Act Final Rule established information blocking exceptions to implement the law (issued May 1, 2020, and effective October 6, 2022), established information blocking exceptions https://www.healthit.gov/topic/information-blocking
- Trusted Exchange Framework, Common Agreement (TEFCA) was developed with an overall goal to establish a floor of universal interoperability across the country. (https://rce.sequoiaproject.org/tefca/) While participation is currently voluntary, it will help scale electronic health information (https://www.healthit.gov/sites/default/files/page2/2021-12/Understanding_EHI.pdf) exchange nationwide and help ensure that health information networks, health care providers, health plans, individuals, and many more stakeholders have secure access to their electronic health information when and where it is needed.

Looking to the Future

Prior to the pandemic, the Minnesota e-Health Advisory Committee had been moving in the direction of a connected networks model for HIE with a corresponding governance structure and anticipated changes to the Minnesota HIE Oversight Program. Although that work was paused, several other HIE-related activities, facilitated by needs that arose during the pandemic, were completed. These activities included: accelerated information sharing for COVID-19 situational awareness, care coordination, and other public health reporting achieving what had been statewide HIE goals. In

[8]https://mneas.org/wp-content/uploads/2022/12/MN_EAS_Participant-List-December-2022.pdf

addition, national movement on the TEFCA work may further refine what is needed to ensure that HIE services are adequate to meet the needs of Minnesota citizens and providers statewide. The Minnesota e-Health Advisory Committee is anticipated to resume meeting in 2023. The status of HIE and next steps will likely be a key focus.

Appendices

Appendix A: Minnesota e-Health HIE Task Force Charge

Context

The 2016 Minnesota Legislature directed the Minnesota Department of Health (MDH) to assess Minnesota's legal, financial, and regulatory framework for health information exchange (HIE), including the requirements in Minnesota Statutes, Sections 144.291 to 144.298 (the Minnesota Health Records Act). As directed by the legislature, the study also provided recommended modifications that would strengthen the ability of Minnesota health care providers to securely exchange data in compliance with patient preferences and in a way that is efficient and financially sustainable. A copy of the Minnesota HIE Study Report is available at http://www.health.state.mn.us/e-health/hie/study/index.html.

The study's primary recommendation is to move Minnesota in the direction of a "connected networks" approach that will provide essential HIE services accessible to all stakeholders statewide, and to align with and build upon national HIE initiatives and networks. To achieve this, MDH, is establishing an HIE task force of the e-Health Advisory Committee to develop implementation plans for the connected networks approach by focusing on actions and policies to:

a. Expand exchange of clinical information to support care transitions between organizations that use Epic and those that do not.
b. Expand event alerting (for admission, discharge, and transfer) to support effective care coordination.
c. Identify, prioritize and scope needs for ongoing connected networks and HIE services with the goal of optimal HIE.

Purpose and Proposed Deliverables

By December 2018, the Minnesota e-Health HIE Task Force will develop a report for the Minnesota e-Health Advisory Committee including, but not limited to, the following:

1. Action steps for 2018-2019 to implement connected networks by building upon existing HIO and national network connections to address priority use cases and gaps, including: care transitions between organizations that use the Epic EHR software and organizations that do not; and the Department of Human Services (DHS) event alerting service (EAS).
2. An implementation plan for 2018-2019 with measurable targets that includes:
   - agreed upon transactions, standards, and specifications
   - requirements for how organizations will commit and participate
   - financial requirements and costs.

3. A plan for five-year interim governance, authority, and financing needed to establish expansion of connected networks (future transactions/use cases, shared services) with the goal of optimal HIE and including the role for the HIE Task Force going forward.
4. Recommended updates to Minnesota's Health Information Exchange Oversight Law (Minnesota Statutes §§ 62J.498 through 62J.4982) to ensure effective support for HIE and allow timely updates based on changing markets and technology.

Guiding Principles

- The Minnesota e-Health HIE Task Force is expected to collaborate with and build upon complementary HIE-related efforts in the state and region, including but not limited to: activities and evolution of HIOs and networks in Minnesota and nationally, implementation of the DHS EAS and cross-sector efforts to support stakeholders.
- Begin with a manageable scope and remain incremental. Prioritize actions that can be achieved in 2018 – 2019.
- Minimize duplication and number of HIE connections when possible.
- Keep in mind the needs of the continuum of care and the multiple goals for HIE (e.g., foundational, robust, optimal HIE as described in the HIE study report).
- Design for full participation of providers, payers, and government programs in the connected networks approach.
- Consider the needs of Minnesota's entire health and health care community.

Input and Recommendation Process

The Minnesota e-Health HIE Task Force will:

- Conduct well-publicized open public meetings
- Actively seek the broadest input and perspectives possible, including from individuals and organizations not directly represented on the Task Force. Additional opportunities for input may include: presentations/discussions at Task Force meetings; interviews and surveys; requests for comments and suggestions; and other options.
- Make consensus recommendations to the Minnesota e-Health Advisory Committee. If consensus is not possible in the time available, the Task Force will clearly summarize relevant points of view and contrasting opinions for the Advisory Committee.

Proposed Minnesota e-Health HIE Task Force Membership

Collectively, the Minnesota e-Health HIE Task Force will meet the expectations for individual members above and:

- Represent and contribute to greater understanding of a variety of perspectives and stakeholder needs e.g., health equity, rural, small, and independent providers, national HIE initiatives, and others

- Contribute both strategic and tactical perspectives for the governance and use of HIE
- Promote and implement the Task Force recommendations. Be able to influence and champion recommendations

Category of Representation/Perspective:	Expertise
1. Minnesota Health Information Organization (HIO)- A	HIE implementation, technical aspects and national networks
2. Minnesota Health Information Organization (HIO)- B	HIE implementation, technical aspects and national networks
3. Professional with Expert Knowledge of HIE	HIE infrastructure and operations
4. Professional with Expert Knowledge of Legal Context and Patient Consent	Minnesota and Federal laws; patient privacy and consent
5. Minnesota Department of Human Services (DHS)	Medicaid, IHPs, EAS
6. Chief Medical Information Officer	Clinical informatics and information technology
7. Practicing clinician (e.g., physician, nurse, mental health provider)	Care coordination, population health (attributed population and/or public health)
8. Hospital, Health System, ACO or IHP - A (Large)	Priority HIE transactions and/or alerting
9. Hospital, Health System, ACO or IHP - B (Small)	Priority HIE transactions and/or alerting
10. Long-Term and Post-Acute Care	Priority HIE transactions
11. Health Plan, Payer or Health Care Purchaser	Payment models, financial risk
12. Individual with Expert Knowledge of Patient Advocacy	Disease-specific or chronic condition expertise

In addition to the categories identified above, the Task Force will actively seek input and ideas from the broadest range of additional stakeholders, settings, and perspectives possible, including but not limited to: local public health and other local government entities, patients or caregivers, vendors for small providers, quality improvement experts, state and national programs and experts, and others.

Minnesota e-Health HIE Task Force Member Expectations

- Serve a one-year term: May 2018 – June 2019; term may be extended if necessary.
- Participate fully in task force meetings, preparation, and follow-up as needed.
  - MDH is planning for monthly, approximately half-day meetings. Preparation time, additional meetings and other activities may also be needed. Members may spend 6-12 hours per month on Task Force-related activities. If unable to participate in meetings or activities, please ensure a designated alternate attends and/or provide written or verbal comments to the co-chairs in advance of any meeting.
- Keep Minnesota e-Health Initiative goals foremost in discussions and recommendations.
- Bring the perspective(s) of the category/group being represented to all discussions and recommendations, as well as additional perspectives that are constructive.

- Review/prepare meeting materials ahead of time and be prepared to contribute clear, focused ideas for discussion.

Proposed Timeline

2018	
April 26	Update to Minnesota e-Health Advisory Committee on HIE Task Force
May – September	Monthly Minnesota e-Health HIE Task Force Meetings
September	Update on activities to Minnesota e-Health Advisory Committee
October – December	Monthly Minnesota e-Health HIE Task Force Meetings
December	Report on deliverables to Minnesota e-Health Advisory Committee
2019	
January – June 2019	Additional Task Force monthly meetings as needed and presentations to Minnesota e-Health Advisory Committee

MDH Contacts

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The MDH staff above, and other MDH staff as needed, with consulting support from the state's Management Analysis Division, will assist the Task Force with planning, organization, communications, research, facilitation, documentation (notes, drafts, etc.), and other tasks within the project scope and timeframe. MDH will also assist with meeting arrangements, providing phone lines, creating and maintaining a special webpage for Task Force and related information, activities, calendars, etc., and other related support functions.

Appendix B: Summary of HIE Task Force preferences and preliminary recommendations for governance, authority and financing of a Minnesota connected networks approach

1. **Introduction and Purpose**

This summary represents the Task Force preferences for a connected networks approach to health information exchange (HIE) and captures perspectives and preferences that evolved over the 12 months of the group's work. In some cases, there may be more than one option or strategy recommended. The HIE Task Force (Task Force), using a set of agreed-upon guiding principles,[9] worked to develop a plan that would increase overall value for statewide HIE overall rather than for any single stakeholder.

This summary presents a set of options and preferences intended to be considered as a single package. If considered separately, they may not be fully representative of the Task Force's work or achieve the Task Force's overall charge.

In particular, this summary synthesizes the work of the Task Force to:

- identify preferred strategies to achieve effective, sustainable HIE in Minnesota; and,
- address needs for a five-year interim governance, authority, and financing to establish and expand a connected networks approach with a goal of future "optimal" HIE for all stakeholders.

This summary from the Task Force presents agreed upon principles and the beginnings of a governance process for a connected networks approach. It is not intended to be a detailed description of a connected networks model.

2. **Working definitions**

The Task Force used the following definitions to guide its work on multiple levels of HIE:

Foundational HIE – With foundational HIE, providers have ability to electronically share information outside their organization; providers can query and receive health information for consenting individuals.

[9] Guiding principles include: HIE Task Force is expected to collaborate with and build upon complementary HIE-related efforts in the state and region, including but not limited to: activities and evolution of HIOs and networks in Minnesota and nationally, implementation of the DHS EAS and cross-sector efforts to support stakeholders. Begin with a manageable scope and remain incremental. Prioritize actions that can be achieved in 2018 – 2019. Minimize duplication and number of HIE connections when possible. Keep in mind the needs of the continuum of care and the multiple goals for HIE (e.g., foundational, robust, optimal HIE as described in the HIE study report). Design for full participation of providers, payers, and government programs in the connected networks approach. Consider the needs of Minnesota's entire health and health care community.

Note: HIE Task Force Recommendation 1: Enable Foundational HIE Using the eHealth Exchange (CCDA transactions only) allows for foundational HIE.

Robust HIE – Robust HIE includes event alerting for emergency department visits and hospital admission and discharges, closed-loop referrals, access to and sending of a patient's most recent consolidated and longitudinal records by providers and attributed population data for use in determining best practices, and identifying cohorts for better overall population management.

Optimal HIE – Optimal HIE allows research into best practices, access to public health alerts for providers, community-based assessments of health for entire populations, and identification of important community health issues so that they can be addressed, including for example, opioid abuse and contagious illnesses before those illnesses become epidemics.

Value propositions of levels of HIE above:

- Business case for HIE – Improved care coordination, improved patient satisfaction, and long-term lower costs from reductions in duplicate tests, faxing, manual exchange of data, and other improvements. The business case for HIE can be more easily demonstrated through foundational and robust HIE.
- Community value of HIE – Improved population health, improved community interventions, and lower community costs from improved overall community health. The community value of HIE can be demonstrated through **optimal** HIE.

Node – A "node" refers to a health information organization (HIO), or a large health system already connected to the eHealth Exchange network and identified in the Task Force's Recommendation 1. Large health systems may choose to participate in a connected networks approach either as an independent node or through an HIO).

Centralized services (examples of centralized services include the following**)**

- **Patient directory or other patient matching tool/solution** – This may be a common key for patient matching between organizations. Each node will have a patient matching capability, but this would be enhanced with a central patient directory. There were other patient directory uses that could be considered through the governance process for a connected networks approach. This is not a repository of all the patient's information.
- **Routing mechanism –** Minnesota's connected networks nodes (and eventually other stakeholders) could use this centralized service to help route health information more easily and efficiently to appropriate receiving organizations. Initial use cases may include MDH public health reporting.
- **Healthcare (provider) directory** – This is a central directory to ensure that information is sent to the correct/appropriate provider using that provider's predetermined transport/ delivery method and workflow. This central directory may be used for referrals, transitions of care, and event alerting.

3. **Task Force input for a five-year interim plan for governance, authority and financing of a Minnesota connected networks approach**

For this work on a connected networks approach, Task Force members strove for consensus or general agreement on the options and strategies that received Task Force support and were recommended to the Minnesota e-Health Advisory Committee for consideration. However, Task Force members agreed at the start of their work to advance recommendations even if those recommendations fell short of support from all members, provided that a supermajority of at least nine of the 12 members found them acceptable. For this reason, the summary below indicates Task Force support for several options and strategies that nine or more Task Force members supported but that up to three members did not. When voting on their preferences for strategies and options, Task Force members also indicated their level of acceptance or support using a four-point scale. The summary below uses the qualifiers "limited" or "weak" for cases when nine or more Task Force members considered the options and strategies as acceptable but some of those nine offered only weak support.

A. Governance model

The Task Force noted that a governance model/process is necessary to ensure an open, transparent, aligned process for HIE policy, using stakeholder input. The Task Force recommends that the governing entity of a connected networks approach include representation from participants (e.g., health care providers, payers, state government, and other stakeholders similar to those represented on the Task Force). The Task Force also recommends that the governing entity represents the participants of the connected networks and has the authority to require financial commitment of connected networks participants. The Task Force considered the following governance models and their potential strengths and weaknesses. Below are the options reviewed, listed in order of Task Force support:

- Public-Private (highest level of support)
- Public only (support but limited)
- Private only (fell short of threshold for Task Force support)

B. Governance source(s) of authority

The Task Force noted the need for one or more sources of authority to ensure appropriate compliance for a connected networks approach. It also considered potential strengths and weaknesses of different sources of authority. Below are options listed in order of Task Force support:

- Combination of Options 1 and 2 -- the state government grants authority to the governing entity for some circumstances and for others that entity depends on the state to exercise state authority based on its recommendations and requests (highest level of support)
- Option 1: State government grants authority (support)
- Option 2: Entity depends on state to exercise authority (support but limited)
- Option 3: Entity derives authority from agreements (fell short of threshold for Task Force support)
- Option 4: Incorporate into existing authorities (fell short of threshold for Task Force support)

C. Essential elements of governance

The Task Force identified essential elements of governance for a connected networks approach. The Task Force considered the elements key to the effective and efficient governance process for a connected networks approach. The Task Force grouped theses essential elements, listed below, into five broader categories, divided between "strategic" and "operational" considerations.

1. Strategic governance

- Determining Governance – Composition of a governance body include determining roles and responsibilities for nodes, state government, payers, and others; decision making processes; patient and participant representation; oversight for fees and costs; conflict resolution; role of HIOs and HDIs; complaint processes. Key stakeholders to be represented through the governance body include health providers, payers, and other stakeholders similar to those that participated in the Task Force.
- Formalized Participant Agreement – Policies and procedures include consent policy, rules and requirements; consent across states, national efforts and populations; rules of the road; reporting and auditing; data protection; accountability; risk and audit; ensuring legal and regulatory compliance.
- Ensure Sustainability – Responsibility for funding, revenue and sustainability; encouraging/incentivizing participation; determining optimal participation; enabling and ensuring full adoption.

2. Operational Governance

- Data Standards and Usage -- Permitted purposes; access policy; responsibility for assessing data quality and completeness; data stewardship; data standards, uniformity and normalization; discrete data to get to optimal HIE; trust framework.
- Defined Services -- Define minimum functionality; service definition and data; roadmap for workflow and priority use cases; implementation of shared services; decisions about national connectedness; business continuity; ensure redundancy of critical components; ensure functionality of network; assessing and integrating new technology.

D. Participation and Services/Capabilities

The Task Force agreed that participation and services are necessary to ensure that Minnesota meets needs for foundational, robust and eventually optimal HIE. The Task Force also recognized that stakeholders and end users of the services/capabilities are at varying stages in their need for the services/capabilities and that they vary in the benefits they might derive from the services/capabilities. As a result, the need or value of the services/capabilities may vary by stakeholders over time.

1. **Expectations of Nodes** (expected to be developed/adopted/implemented as needed within the next one-three years)

- State-certification or other process may be required.

- Data is normalized, aggregated, and may be stored at the node. The node is the primary place that an individual's information may be queried from (for a visit) and kept. For the interim, more than one node may have information on a patient depending on how many providers an individual visits.
- Information is shared based on rules of the connected networks. All nodes will participate with centralized service(s). Participation is defined as contributing data to the centralized service(s) or contributing data to and using the centralized service(s).
- Nodes participate in development and agreement/consensus on standards. An HIE governance model/process is needed that will include a uniformity process with representation of node organizations to harmonize, align, and develop standards as needed to achieve full agreement.
- All nodes maintain and update consent management of an individual's HIE consent, as defined by the governance process. (This service could be provided through a centralized patient directory, as another use case suggestion).

2. Importance of three centralized services/capabilities

The Task Force has noted, and the Minnesota e-Health Advisory Committee has also acknowledged, the importance of three centralized services/capabilities:

- Patient directory/other patient matching service
- Routing mechanism
- Healthcare (provider) directory

The Minnesota e-Health Advisory Committee also noted that a patient directory alone may not have enough value and encouraged incremental implementation of all three centralized services during or within a similar timeframe.

E. Critical success factors for a Minnesota connected networks approach.

In order to meet the needs of a connected networks approach, the Task Force and Minnesota e-Health Advisory Committee corroborated that the following four critical success factors be addressed as part of the governance, authority and financing discussions.

- Full participation is needed to achieve the most value for all. (A commitment from large health systems, which are key data contributors, is essential.)
- At least one HIE service provider (e.g., HIO) is needed to fill HIE connectivity gaps for stakeholders such as smaller, independent providers, long-term and post-acute care providers, behavioral health providers, and social services organizations. (There is a need to ensure sustainability for a "safety-net" HIE provider).
- Financial commitment by all participants (e.g., nodes and other stakeholders) is needed to ensure long-term sustainability.
- Alignment with other HIE activities (national, federal, state) is needed to achieve an efficient and effective network, one that uses a flexible governance process that can evolve to meet HIE needs.

The Task Force discussed each success factor separately, identified common strategies to help achieve them and indicated support for one or more of those strategies.

1. Full participation is needed to achieve the most value for all

The concept of full participation means that all stakeholders of a connected networks approach (e.g., providers, payers, state government, and others) contribute and use information to ensure that information is available to those for whom it is essential for patient care. Below are suggested Task Force strategies for "full participation" listed in order of Task Force support:

- State government incentives (highest level of support)
- Stand-up centralized services incrementally (high level of support)
- Payer incentives (support)
- State government requirements (support but limited)
- Payer requirements (fell short of threshold for Task Force support)

2. At least one HIE service provider (e.g., HIO) is needed to fill HIE connectivity gaps

As noted in the discussion of centralized or shared services above, stakeholders have varying capabilities and resources available for implementing and benefitting most effectively from HIE. In particular, smaller independent providers, providers of long-term care and post-acute care and behavioral health, and others may be lagging in their adoption and use of HIE. It may also be prohibitively expensive and burdensome for them to implement and use HIE on an individual or small-scale basis.

At least one HIE service provider is anticipated to provide a "safety net" for HIE connections for those who may have significant challenges implementing HIE otherwise. The service provider could also be available to anyone else, regardless of their capabilities. Below are suggested Task Force strategies for ensuring that there is at least one HIE service provider for anyone needing those services, listed in order of Task Force support:

- Establish policies or recommendations to reduce the use of faxing and view-only access to health records – not this alone but in conjunction with one or more other strategies – instituted carefully so as not to eliminate view-only access until information is available via HIE to all providers (highest level of support)
- State designates and possibly funds an HIE service provider (e.g., HIO) (support)
- Require contributions from nodes, the state and other stakeholders that participate in a connected networks approach to help subsidize costs and support at least one HIE service provider; (support)
- Require that an HIE service provider (e.g., HIO) be the vendor for a centralized patient directory service and require nodes and other stakeholders to pay for use of the service (support but somewhat limited).

3. Financial commitment is needed from nodes, the state and all other stakeholders that participate in a connected networks approach to ensure long-term sustainability

Participants are broadly defined here as nodes, payers, state government and others that may contribute to or use the connected networks. The financial commitment would be determined by the connected networks governance process and the governing entity. The Task Force recommends that the governing entity represents the participants of the connected networks and has authority to require financial commitment of said participants. Below are suggested strategies for ensuring financial commitment by all participants listed in order of Task Force support:

- Require participants to contribute data to a centralized patient directory and provide them with the option to use that directory (highest level of support)
- Payers initially fund with the requirement for full participation but with the assumption that the costs for initial funding do not fall exclusively on payers (high level of support)
- Create incentives for participants to contribute data to and use centralized patient directory (support)
- Initial shared commitment for investment toward start-up implementation, with long term determination of support costs or fees for use of centralized directory (support but very weak)

4. **A connected networks approach in Minnesota needs to align with other national, federal, and state HIE activities in order to be efficient and effective, and it should depend on a flexible governance process that can meet evolving HIE needs.**

   Stakeholders emphasized the need to monitor and align with other HIE activities and build this critical success factor into a governance process for a connected networks approach.

Appendix C: E-health standards

E-health standards are common and repeated rules, conditions, guidelines, or characteristics that define how to collect, use, and share electronic health information. Different categories of e-health standards define the language and data types, format, structure, transport, security, and functionality. A set of e-health standards is required for a single interoperability need (i.e., use case) such as sending a referral to a specialist or a prescription to a pharmacy. Interoperability is the ability of a system to exchange and use electronic health information from other systems using a set of e-health standards without special effort by the user. Individuals, communities, and providers are able to collect, use, and share bi-directional electronic information in a way that is appropriate, secure, timely and reliable to improve the health and wellness of individuals and communities, advance health equity, support decision-making, and lower health costs.[10]

The Interoperability Standards Advisory (ISA)[11], released annually by the Office of the National Coordinator for Health Information Technology (ONC), provides clarity, consistency, and predictability for e-health standards. The ISA identifies four high level types of standards for interoperability needs including:

- **Vocabulary/Code Sets/Terminology** with 32 interoperability needs including, for example, allergies and intolerances, clinical notes, immunizations, medications, social determinants of health, and vital signs.
- **Content/Structure Standards and Implementation Specifications** with 24 interoperability needs including, for example, clinical decision support, clinical notes, electronic prescribing, and public health reporting.
- **Services/Exchange** with 10 interoperability needs including, for example, healthcare directory/provider directory, image exchange, "push" exchange, and query.
- **Administrative Standards and Implementation Specifications** with five interoperability needs including health care claims and coordination of benefits and transactions to support financial exchanges, clinical care, and non-claims.

The ISA also identified key sources of security standards and patterns[12] commonly associated with health data interoperability. These are supplemental to the standards described above.

[10] Derived from The Office of the National Coordinator for Health Information Technology. Connect Health and Care for the Nation. FINAL Version 1.0. Accessed December 2, 2022. https://www.healthit.gov/sites/default/files/hie-interoperability/nationwide-interoperability-roadmap-final-version-1.0.pdf

[11] https://www.healthit.gov/isa/sites/isa/files/inline-files/2022-ISA-Reference-Edition.pdf

[12] Appendix I – Sources of Security Standards and Security Patterns | Interoperability Standards Advisory (ISA) (healthit.gov)