



# Wisconsin State-Level Health Information Exchange Planning and Design Project

*Findings Summary of the Stakeholder Assessment and  
Environmental Scan*

*September 10, 2009*

## **Disclaimer**

This document summarizes the outcomes of interviews, meetings, and surveys conducted with a wide variety of stakeholders throughout Wisconsin. They constitute an extremely valuable source of information and perspectives (the very intent of the exercise). It is realized that:

- These results are only a data point among many. In time, they will be complemented by other analyses (financial, technical, Federal requirements, etc.) that may change the preliminary analyses now drawn from this data;
- The topic is both complex and new. Some stakeholders warned that their lack of knowledge may limit the value of some of their responses; and
- As indicated above, the document presents raw data which do not necessarily represent what will be the Steering Committee's ultimate point of view and recommendations once other analyses are completed.



## Revision History

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## Approvals

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# **1 INTRODUCTION**

## **1.1 Project Background**

As an extension to the work initiated by the Wisconsin eHealth Care Quality and Patient Safety Board, the Wisconsin Department of Health Services began work on a crucial project to plan and design statewide health information exchange (HIE) at a state-level. State-level refers to collective, collaborative efforts involving public and private sectors to advance HIE efforts through:

- Statewide planning and implementation
- Governance, technology, policy, HIE services, business model/financing
- Addressing unique needs and characteristics of the inclusive statewide landscape
- Coordinating negotiated, consensus-based solutions for HIE implementation
- Supporting statewide health and health care improvement for all

The goals of this State-Level HIE (SLHIE) Planning and Design project are to address the governance, functions, financing, and technical architecture of a statewide HIE. The first phase of the project will result in recommendations for a designated public-private state-level entity with broad stakeholder representation designed to assume a distinct state-level HIE governance role. Major activities to be undertaken in Phase One include:

- Conducting an environmental scan and stakeholder assessment to understand capabilities, interests, and health information exchange needs
- Identifying high priority services to be provided by a SLHIE
- Developing an inventory of existing assets in Wisconsin that may be leveraged to support the HIE
- Identifying and analyzing business options for a SLHIE governing entity – including the presentation of a recommendation

Phase Two will focus on technology-related activities and will result in recommendations for technical plans and architecture, and a detailed implementation roadmap. Major activities to be undertaken in Phase Two include:

- Institutionalizing a statewide HIE Operating Model (e.g. governance, legal entity, organizational structure, stakeholder input mechanisms)
- Defining and designing a statewide HIE technical architecture
- Identifying stakeholder-level value propositions
- Development of HIE use cases
- Defining and designing a sustainability model for a SLHIE
- Defining a HIE Business and Technical Migration Plan
- Conducting education and outreach with stakeholders

## **1.2 Objective**

The objective of the Stakeholder Assessment and Environmental Scan is to capture and report on Wisconsin health care stakeholders' overall interests, objectives, priorities, and concerns on the subject of health information exchange (HIE). This scan is the first step



in the process of planning for and designing a SLHIE for Wisconsin. The information gathered as part of this effort will be used to provide recommendations on the services that could be provided by a Wisconsin SLHIE, the role of the SLHIE, the business and governance models under which it would operate, and a potential implementation roadmap.

The outcome of this data gathering effort is presented in this document in two forms: an aggregated view (identifying common themes or trends) as well as the data tables containing information collected throughout the scan effort (to support more detailed follow-up analysis). The data collected can be found in appendices to this deliverable.

Please note this report is not intended to be an educational document about HIEs; readers are presumed to have a general understanding of the concepts underlying HIE and HIT.

### **1.3 Overall Themes**

This summary highlights the key findings from the more than 20,000 discrete data points or comments collected in July 2009 through the following channels:

- Five HIE regional summits (summits) held throughout the state, where over 300 stakeholders provided input and recommendations through verbal comments, handouts focused on specific HIE-related issues, and comments submitted through the live webcasts which aired each Summit
- A detailed online HIE survey that collected the perspectives of over 90 organizations and individuals
- Interviews with the Wisconsin SLHIE Planning and Design Project's Steering Committee members

While the individual opinions presented were unique in some respects and there were only a few instances where unanimity was observed, the scan activity uncovered ten common themes.

- 1) Clear support for the SLHIE concept<sup>1</sup>** – Stakeholders overwhelmingly endorsed the vision that a SLHIE is needed in Wisconsin to support the ultimate goal of improving the quality, safety and efficiency of health care delivery in the state. While there is a wide range of opinions as to the services and roles this SLHIE could perform, there is a broad consensus that **patient-centric, statewide interoperable health information exchange** is a critical component of the state's larger effort to achieve the ultimate goal, and that the timing is right to launch this initiative due to current national and state focus on health information technology (HIT) and exchange.

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<sup>1</sup> Source: Online HIE Survey. For more details, please refer to Appendix C – Participation: Question 12 (Tables 1 and 2)



- 2) Clear support for a SLHIE entity<sup>2</sup>** – A majority of every stakeholder type in every region endorsed the objective of creating a specific leadership entity to drive this to-be-detailed Wisconsin SLHIE initiative through its different phases of planning and development. Stakeholders consistently expressed far more interest in defining the details of the SLHIE initiative than the specifics of the SLHIE entity's governance structure—provided the following conditions are met. Stakeholders indicated the selected governance structure should:
- Maintain independence to allow decisions to be made for the patient's benefit and the public good;
  - Prevent proprietary interests or particular stakeholder groups' interests to dominate;
  - Ensure inclusivity and equity in participation in the SLHIE entity—especially with respect to smaller care providers, consumers, local governments, technical experts, and others who collectively play a significant role in health care but may be overshadowed by larger stakeholders; and
  - Have broad representation on the Board of that entity to ensure the necessary consultation and buy-in process is taking place from all stakeholders.
- 3) Dual need to both optimize HIE initiatives statewide and address regional needs<sup>3</sup>** – By and large, stakeholders seemed well aware of the difficulty of exchanging patient data across organizations, and the magnitude of the effort required. While stakeholders acknowledged the synergistic benefits that could be derived by efforts endeavored on a statewide basis (and, the risk of having multiple disjointed regional or local HIE efforts that could end up establishing larger islands of automation), they also consistently emphasized most patient data exchanges are taking place at a local or regional level, either within Wisconsin or across neighboring state borders.
- 4) A vehicle for better analytics<sup>4</sup>** – Stakeholders expressed an understanding and interest that the SLHIE's future potential is not only in facilitating the exchange of patient data, but also in allowing patient data analysis for other purposes including, but not limited to, population management, outcome measurement, disease surveillance, and quality reporting. There needs to be a balance of priorities between the services supporting direct care delivery and the huge collective health benefits that can be derived from a SLHIE construct that allows the collection of patient data from many more sources than before and at an unprecedented speed of collection. The SLHIE provides a unique opportunity to measure and improve population health.

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<sup>2</sup> Source: Online HIE Survey. For more details, please refer to Appendix C – Participation Data: Question 12 (Tables 1 and 2)

<sup>3</sup> Source: Regional HIE Summit Meetings. For more details, please refer to Appendix C Participation Data: Information Needs (Table 80)

<sup>4</sup> Source: Online HIE Survey. For more details please, refer to Appendix A – Services Data: Question 14 (Tables 1 – 61)



- 5) **Strong privacy and security framework**<sup>5</sup> – Stakeholders strongly emphasized the SLHIE must be designed to safeguard patient privacy. Whatever role it eventually takes and whatever services it eventually provides, the SLHIE must be predicated on establishing a chain of trust among stakeholders, and it must ensure patients their personal health information (PHI) is protected from unauthorized access, and will not be used for purposes outside their consent. Many stakeholders commented that Wisconsin’s existing legal framework regarding the electronic exchange and use of PHI may need to be amended.
- 6) **Clear value and end user participation**<sup>6</sup> – Many stakeholders’ questions and comments during the summits raised practical considerations about the SLHIE’s ease of use and integration into their existing workflows. They also pointed out a strong reluctance from across all stakeholders for contributing financially to the SLHIE. These are strong reminders that the SLHIE must articulate clear value propositions for each stakeholder type. The SLHIE’s long-term success will be measured by widespread, sustained usage of its services.
- 7) **Holistic vision and design**<sup>7</sup> – Many stakeholders expressed concern that the design encompasses all providers, such as local government and long-term care, even if there will not be initial ARRA funding for all provider types.
- 8) **Listening to the Consumer/Patient**<sup>8</sup> – There is a consensus that consumers/patients are key stakeholders who often offer very distinct perspectives from the others. Efforts must therefore be made to ensure that consumer voices are included in the governance process as the interests and concerns that consumers/patients expressed are not always aligned with other stakeholder types.
- 9) **Leveraging Wisconsin’s existing advantage** – Many stakeholders pointed out Wisconsin’s enviable position of having a strong legacy of collaboration and early HIE initiatives. Whenever and wherever possible, these existing efforts should be leveraged and incorporated in the SLHIE’s design and capability.

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<sup>5</sup> Source: Online HIE survey and Regional HIE Summit Meetings. For more details, please refer to Appendix C – Participation Data: Summit Handouts, Dealbreakers (Table 79); Appendix C – Participation Data: Question 22 (Tables 29 – 40); Appendix C – Participation Data: Question 23 (Tables 41 – 42)

<sup>6</sup> Source: Regional HIE Summit Meetings. For more details, please refer to Appendix A – Services Data: Summit Handouts, Services Value and Ease of Workflow Integration (Tables 62 – 72)

<sup>7</sup> Source: Regional HIE Summit Meetings. For more details, please refer to Appendix D – Governance Data: Summit Handouts, Suggested Stakeholder Participation (Table 52)

<sup>8</sup> Source: Online HIE survey. For more details, please refer to Appendix A – Services Data: Question 14 (Tables 1 – 61)



**10) Think big, start small<sup>9</sup>** – Stakeholders recognized the functions and operating model of the Wisconsin SLHIE are likely to evolve over time. They expressed the general concern that the functions supported by the SLHIE should not be so grand in scope that it is not able to accomplish basic goals or deliver value in a reasonable period of time. The common theme is that the SLHIE should establish a holistic vision and overarching blueprint, and implement it in small increments to deliver short-term benefits while leveraging existing HIE assets/experience, as covered above.

## **1.4 Acronyms**

<b>Acronym</b>	<b>Full Name</b>
AODA	Alcohol and Other Drug Abuse
DHS	Department of Health Services (State of Wisconsin)
DED	Deliverable Expectation Document
HIE	Health Information Exchange
HIT	Health Information Technology
MTA	Medical Trading Area
NHIN	National Health Information Network
ONC	Office of the National Coordinator for Health Information Technology
QSDE	Qualified State Designated Entity
SLHIE	State-Level Health Information Exchange
SOW	Statement of Work
WI	Wisconsin

## **2 APPROACH**

### **2.1 Scope of Review**

The success of this stakeholder assessment and environmental scan is dependent not only on the effective capture of stakeholder views but also the scope of the review. As the exchange of health information affects so many interests, capturing broad representation was one of our guiding principles. Stakeholders representing the following groups were asked to participate in the summits and the online survey:

- Consumers/Patients
- Patient Advocacy Groups
- Government (State and Local)
- Hospitals/Integrated Delivery Networks
- Providers
- HIE Vendors and Service Providers
- Tribal Representatives
- Payers

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<sup>9</sup> Findings Summary – Functions of SLHIE (Table 3)



## **2.2 Outreach Methods**

To maximize the number of views represented as part of this data gathering effort, different outreach methods were employed. Flyers were sent to a list of over 800 individuals asking them to participate in the summits as well as take the online survey. The flyers were also posted on the project's website. Partnerships with the organizations represented on the Steering Committee were leveraged to further extend the communication outreach through newsletters and postings on their organization's websites. A letter was sent from the Secretary's Office to the CEOs of healthcare organizations and Tribal Leaders requesting their involvement in the HIE planning and design efforts. Lastly, individual phone calls were made to stakeholders encouraging their participation in the HIE Online Survey as well as attendance at the summits.

## **3 INPUTS AND SOURCES**

### **3.1 Background documentation**

A number of Wisconsin efforts and nationally focused reports and studies were reviewed by the project team to provide context for this project. In particular, the team relied heavily on information coming from the Wisconsin eHealth Care Quality and Patient Safety Board and the ongoing activities of the Office of the National Coordinator (ONC) for Health Information Technology. The following reports were used as input into the efforts:

- Wisconsin's eHealth Action Plan
- Advancing Effective State-level Approaches to Interoperability in the New Federal Context, Foundation of Research and Education (FORE Report)

### **3.2 Stakeholder interviews**

In order to capture more in-depth perspectives from key stakeholders and thought leaders, the project team arranged interviews with a list of individuals identified by DHS, which included all members of the Wisconsin State-Level HIE Planning and Design Project Steering Committee.

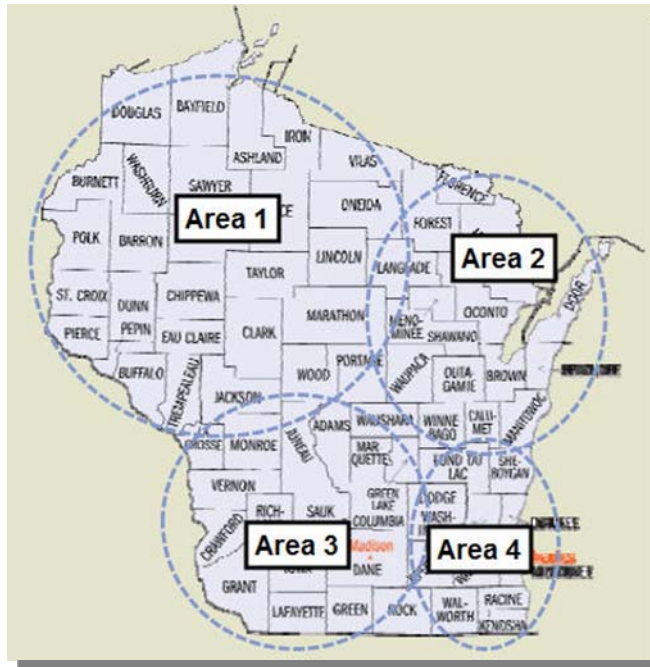
An interview template guided the discussion during each stakeholder interview to maintain consistency in the topics covered. Not every question from the interview guide was addressed in each interview, but an attempt was made to cover each major question during the interview and any needed follow-up calls or meetings. The interviews were conducted in person and recorded. Each interview was then reviewed and distilled into a summary document. Upon conclusion of the stakeholder interviews, an aggregated synopsis of the interviews was compiled to group stakeholder comments with topic areas.



### 3.3 Regional summits

Between July 1st and July 16th, 2009, five summits were held at the following locations throughout the state:

- Superior – Area 1
- Marshfield – Area 1
- Appleton – Area 2
- Sauk City – Area 3
- Milwaukee – Area 4



The collective goal of these summits was to provide an open forum to give as many stakeholders as possible a basic understanding of the issues surrounding HIE and provide them with an opportunity to share their opinions about the approach Wisconsin should take in establishing a state-level HIE entity.

The overall format of each summit was largely the same and included opening and closing comments offered by DHS Secretary Karen Timberlake; educational briefings by the SLHIE project team members that helped to level-set participants' understanding of past efforts, current status, and Wisconsin's efforts in relation to the national HIT agenda; and multiple opportunities for participants to provide input. The information solicited from summit attendees was guided by a roadmap. *Figure 1* reflects the summit roadmap.



**Figure 1. SLHIE Definition Summit Roadmap.**

To ground the discussion, stakeholders discussed and reviewed the state's goals for health care. For each step along the roadmap, stakeholder input was collected both verbally as well as in writing. Attendees were given the opportunity to submit their written responses at the summits or submit them later after consulting with their organization. All five summits were webcast live and archived for review. Stakeholder verbal comments were captured and summarized. It was not always possible to identify all speakers, but where individuals identified themselves or their affiliation, this information was



documented. Individuals who participated in the summits via the webcast were also able to offer comments through the chat function.

All summit inputs were entered into a spreadsheet and categorized by stakeholder type, topic area, region and specific question addressed where possible. Modifications to the slides, handouts and the amount of time given to each topic were modified through a post-mortem process that followed each summit. Some of these modifications created discrepancies in the data collected as certain questions were added, removed or changed. A list of the organizations represented is provided in Appendix E – Respondent Data.

### **3.4 Online HIE survey**

The goal of conducting the online HIE survey is to capture stakeholder views on HIE in a more structured manner that can be parsed and analyzed for common themes and patterns. The survey was provided to all Summit participants as a handout with instructions on how to complete the survey online. Survey requests were also sent out via email to stakeholders provided by DHS. The project team monitored response rates and contacted stakeholders as appropriate to encourage completion of the survey. Upon closure of the survey, results were downloaded into a spreadsheet and analyzed for trends and clusters of responses according to topic areas.

### **3.5 Summary of inputs**

Table 1 summarizes the variety of stakeholder types (consumers/patients, state and local government, HIEs and HIE service providers, hospitals, integrated delivery networks, payers, individual providers, tribal leaders, etc.) that contributed to the Scan.

<b>Stakeholder Type</b>	<b>Summit Attendee</b>	<b>Summit Handouts</b>	<b>HIE Survey</b>	<b>Interview</b>	<b>Total</b>
<b>Consumers/Patients</b>	19	3	16	0	<b>38</b>
<b>Government</b>	45	8	9	1	<b>63</b>
<b>HIE/HIE Service Provider</b>	9	2	5	6	<b>22</b>
<b>Hospital/IDN</b>	104	34	30	5	<b>173</b>
<b>Payer</b>	34	7	9	1	<b>51</b>
<b>Provider</b>	35	7	17	4	<b>63</b>
<b>Tribal Representative</b>	5	1	2	0	<b>8</b>
<b>Other/Not Recorded</b>	67	13	5	0	<b>85</b>
<b>Total</b>	<b>318</b>	<b>75</b>	<b>93</b>	<b>17</b>	<b>503</b>

**Table 1. Number of contributors by stakeholder type and input source.<sup>10</sup>**

<sup>10</sup> Some individuals represented in this table are counted more than once as they may have been interviewed and/or completed a survey or handouts; also, some individuals attended more than one Summit.



Please refer to Appendix E – Respondent Data for a detailed breakdown of the contributors.

## **4 RESULTS**

### **4.1 Overview of how the results are presented**

The Results section of this Findings Summary is organized into five core topics: services, functions, participation, governance, and existing HIE initiatives. For each topic, a summary graphic of the survey results is presented first, which highlights clusters of responses, trends and outliers. The data were examined for any notable differences in responses among stakeholder types and regions; these are noted where found. Where relevant, the results from summit handouts are presented together with the data from the surveys. Notable comments from the in-person summit participants as well as online participants are highlighted along with relevant findings from the review of background information and prior work. More detailed findings are found in the appendices of this report.

### **4.2 Many services could be offered through a state-level HIE in Wisconsin**

A significant component of the Scan activity focused on obtaining input around the interoperability services a state-level HIE could provide. Input was collected through an online HIE survey as well as handouts provided at the summits. *Table 2* below summarizes the results of responses obtained through the online survey.



**Stakeholder Assessment and Environmental Scan**

**WI SLHIE Planning & Design Project**

HIE-Related Service	Critical / Very Important	Provided by SLHIE	Provided by Local HIE
Patient Identifier	● 94%	● 67%	● 28%
Medication History Exchange	● 96%	● 59%	● 34%
Record Locator	● 87%	● 61%	● 30%
Lab Results Exchange	● 86%	● 57%	● 36%
Audit Trail	● 83%	● 63%	● 34%
Support for Meaningful Use	● 83%	● 62%	● 30%
Cross-Enterprise User Authentication	● 81%	● 60%	● 33%
Data Transformation	● 78%	● 60%	● 26%
Patient Registry Connectivity	● 77%	● 59%	● 32%
Patient Consent Management	● 75%	● 52%	● 43%
Clinical Portal	● 75%	● 49%	● 35%
Connection to NHIN	● 73%	● 74%	● 17%
Population Health	● 72%	● 72%	● 21%
PHI De-identification	● 72%	● 60%	● 29%
Benchmarking and Reporting	● 68%	● 66%	● 28%
Terminology	● 63%	● 66%	● 20%
Personal Health Record Exchange	● 62%	● 52%	● 35%
Electronic Health Record Provisioning	● 61%	● 46%	● 28%
Advanced Directives Management	● 51%	● 53%	● 35%
Clinical Decision Support	● 56%	● 45%	● 33%

**Table 2. Stakeholders indicated a strong willingness for a number of services to be provided at a state-level.** Percentage of all stakeholders rating an HIE-related service as being “critically” or “very important”(first column); their willingness for that service being offered through a state-level or local HIE provider (column 2 or 3)

As reflected in *Table 2*, stakeholders indicated a clear willingness to focus first on HIE efforts that would have the most direct impact on patient care by providing the most essential patient information to care providers at the point of decision making (demographics, medications, lab results, care transfer summaries, etc.); and by helping address the perennial fundamental issue of uniquely identifying a patient (and secondarily easily identifying a care provider). The findings support earlier work completed by the eHealth Board in 2006 identifying the same priorities.

One notable exception was found in consumers’ high interest in services related to gaining access to clinical information and in “consumer empowerment” services that obviate the need for the “clipboard” by facilitating electronic collection of registration information when accessing health care services and gaining electronic access to medication histories.



For more details on the responses received from stakeholders around the various service options that could be provided statewide, please refer to Appendix A – Services Data.<sup>11</sup>

### 4.3 Stakeholders support a wide range of potential operating models for a Wisconsin SLHIE

A significant component of the Scan activity focused on obtaining input about the operating model the SLHIE could assume.<sup>12</sup> Rather than directly asking stakeholders which operating model they wanted to assign to the SLHIE (which would have been too theoretical), the questions posed related to which functions stakeholders felt should be performed by the SLHIE. *Table 3* summarizes the primary results received from responses collected through the summits.

Model	Function	Maybe	No	Yes
Convener	Interpreting and supporting the application of HIE standards	0%	7%	93%
	Interpreting and supporting the application privacy/security frameworks	1%	10%	89%
	Conduct outreach and education	0%	13%	87%
	Administer funds	4%	13%	83%
Connector	Network of networks	2%	18%	81%
	Develop reference architecture	1%	19%	79%
Operator	Centralized repository of de-identified data	0%	20%	80%
	Interoperability service provider	0%	26%	74%
	HIE provider	3%	26%	71%
	Regional HIE certifications	1%	26%	72%
Single Utility	Operate the state-level HIE covering both state and regional levels	2%	42%	56%

**Table 3:** Stakeholder preferences for the Wisconsin SLHIE performing HIE-related functions and how those functions align with four HIE operating models<sup>13</sup>

<sup>11</sup> Source: Online HIE Survey. For more details, please refer to Appendix A – Services: Tables (1 – 61)

<sup>12</sup> For purpose of presentation, four possible operating models were outlined for the state-level HIE. A Convener operating model is a model whereby the SLHIE acts as a catalyst/facilitator and may provide or arrange to provide discrete interoperability services, but is not a direct HIE provider. A Connector operating model is a model whereby in addition to the Convener operating model, the SLHIE functions as a “network of networks”—connecting various regional HIEs together and connecting them to the National Health Information Network (NHIN). An Operator operating model is where, in addition to be the Connector operating model, the SLHIE operates a regional HIE on behalf of one or several Medical Trading Areas (MTAs), or acts as a default HIE for regions that do not have the mass of stakeholders needed to create a regional HIE. A Utility operating model is one where the SLHIE deploys and operates a single HIE for the entire state.

<sup>13</sup> Source: Responses represent answers to handouts collected from the five Regional HIE Summit Meetings.



- A majority of stakeholders supported the concept of the SLHIE supporting all the functions listed. However, there is only a small majority (56%) for the SLHIE functioning at both the statewide and regional levels; this function defines the operating model for a single HIE utility
- All other functions gather a 70%+ majority of the positive responses. As these functions are strictly cumulative for the first three models (e.g., the Operator model includes the functions of the Convener model and the Connector model), a preliminary observation is that a majority of stakeholders feel comfortable with (up to) an Operator model for the SLHIE. The Operator model includes functions that provide interoperability services (e.g., enterprise master patient indexing services) and HIE services (“HIE in a box”) where regional HIEs do not already exist
- Most participants have a definite opinion about functions the SLHIE should perform: the undecided never represents more than 4% of the total responses

A number of specific, recurring points were made both during the summits and as annotations to the surveys on the topic of the functions Wisconsin’s SLHIE should provide. All serve to reinforce some common emerging themes:

- Regarding funds administration (Function 4), stakeholders emphasized the need to have fair and equitable representation on the SLHIE governing entity to ensure funds are allocated fairly<sup>14</sup>
- Regarding the centralized repository of de-identified data (Function 7), stakeholders emphasized the need for strong security and privacy mechanisms around data access<sup>15</sup>
- Stakeholders also emphasized the need to define an operating model for the SLHIE that both allows synergy and harmonization of HIE services and infrastructure across regional HIEs and supports the fact that most data exchanges take place locally or regionally (either within the state or across state borders)
- Stakeholders also emphasized the following points:
  - A need to leverage existing and emerging HIE efforts
  - Envision an HIE platform that can connect the broad spectrum of stakeholders including those with limited resources; even if the participation of these providers is phased over time, the SLHIE construct should be designed to accommodate their participation
  - Map out an evolutionary path whereby the SLHIE could evolve seamlessly from one operating model to the next (i.e., from the convener model to the connector model)

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<sup>14</sup> Source: Regional HIE Summit Meetings. For more details, please refer to Appendix D – Governance Data: Summit Handouts, Suggested Stakeholder Participation (Table 52)

<sup>15</sup> Source: Regional HIE Summit Meetings and the online HIE survey. For more details, please refer to Appendix C – Participation Data: Summit Handouts: Dealbreakers (Table 79); Appendix C – Participation Data: Question 22 (Tables 29 – 40); Appendix C – Participation Data: Question 23 (Tables 41 – 42)



For more details on the responses received from stakeholders around the functions that the SLHIE should perform please refer to Appendix B – Functions Data.

**4.4 Stakeholders are interested in participating in a state-level HIE at many levels, though they are mindful of many challenges, roadblocks, and legal and financial considerations**

Survey respondents were asked about their interest in participating in various roles in a state-level HIE. The survey and summit comments reinforce these findings and reveal a wide range of readiness and concerns. A solid majority were interested in receiving data, providing data, serving in a governance capacity and receiving grants for pilots. Somewhat less interest was evident for participation in technical workshops or being an advocate for a state-level HIE.

Role	Data recipient	Data provider	Grant recipient for pilots/impl.	Governance or leadership	Technical workgroups	Advocate	Tech. or service provider	Financial supporter
Patient	50%	33%	33%	75%	67%	100%	33%	50%
Government	75%	57%	50%	63%	56%	43%	17%	20%
HIE	75%	80%	80%	100%	100%	80%	80%	40%
Hospital/IDN	96%	96%	100%	85%	90%	79%	33%	24%
Other	50%	25%	60%	80%	60%	80%	40%	25%
Payer	100%	100%	63%	71%	86%	71%	60%	40%
Provider	73%	67%	57%	47%	40%	53%	21%	15%
Tribal	100%	100%	100%	100%	50%	50%	50%	50%
<b>Total</b>	<b>83%</b>	<b>79%</b>	<b>76%</b>	<b>74%</b>	<b>72%</b>	<b>69%</b>	<b>36%</b>	<b>26%</b>

**Table 4. Percentage of respondents showing moderate to high interest in having their organization participate in specific roles in a state-level HIE.**

**4.4.1 Participation Deal-Breakers**

When asked about potential deal-breakers for participation in a state-level HIE,<sup>16</sup> 25 of the 52 comments received through the summit handouts mentioned money or resource issues; 15 remarked about privacy and security issues. This is consistent with the online survey questions about potential deal-breakers, where the top two concerns were sustainability and challenges related to privacy and security.<sup>17</sup>

*“Reform existing regulations related to privacy and release of information especially as it relates to Mental Health and AODA requirements.”*

When asked “What would it take to enable your organization’s participation in health information exchange either organizationally, technically or financially?” respondents offered many compelling thoughts, a sampling of which follows.<sup>18</sup>

<sup>16</sup> Source: Regional HIE Summit Meetings. For more details please refer to: Appendix C – Participation Data: Summit Handouts, Dealbreakers (Table 79)

<sup>17</sup> Source: Online HIE survey. For more details, please refer to Appendix C – Participation Data: Question 23 (Table 41 – 42)



*“We recommend planners carefully consider what levels of HIE are reasonably attainable so that small providers will not be de facto excluded from participating due to technical complexity and cost. We have little doubt that internal costs (in terms of staff time and system vendor’s interface costs) to participate will be significant, which will stretch the resources of small hospitals.”*

*“A single consolidated state run HIE to allow for the sharing of patient clinical data to provide the most appropriate non-duplicated care for patients at lowest possible cost and best outcome. Our organization fully supports a state-run entity to allow sharing of information without competitive regional barriers.”*

*“I think the state should be an investor/collaborator in local/regional medical trading area HIE activities and these regional groups should directly interface into the national level HIE. I think that putting a State of WI level technology layer into this as well as a heavy governance layer would be viewed as counterproductive and financially or technically supporting this would be a hard sell.”*

*“HIEs should not focus solely on connectivity within a state. Patients do not limit their health care to a single state so connectivity should not either.”*

*“A guarantee that knowledgeable professionals are in charge of the project. So often the State does not think a plan through and often excludes areas outside of Madison and Milwaukee.”*

#### **4.4.1.1 Resourcing Considerations**

Stakeholders generally agreed that they had at least some capacity to participate in state-level HIE activities,<sup>19</sup> with 58% saying that they had good or sufficient capacity. Providers (18% of them) were the only stakeholders indicating that they had no capacity to participate. Nearly all stakeholders indicated that their capacity would either stay the same or increase in the next year, though four hospital/IDNs indicated their capacity would decrease.<sup>20</sup> Responses regarding organizational *capability* were similar, though somewhat lower than the responses regarding organizational

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*“We are highly motivated to participate, but we have only one FTE with a strong database and interface background. So very limited capability compared to large healthcare organizations, but probably more capacity than any of the 59 individual [critical access hospitals] in Wisconsin.”*

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<sup>18</sup> Source: Online HIE survey. For more details, please refer to Appendix C – Participation Data: Question 20 (Table 28)

<sup>19</sup> Source: Online HIE survey. For more details, please refer to Appendix C – Participation Data: Question 14 (Tables 3 – 4)

<sup>20</sup> Source: Online HIE survey. For more details, please refer to Appendix C – Participation Data: Question 15 (Tables 5 – 6)



capacity.<sup>21</sup> There were no significant geographical trends in the responses. When asked about their organizations' interest in participating in state-level HIE relative to other priorities,<sup>22</sup> more than 70% of respondents indicated that it was at least an articulated priority, but only among hospital/IDNs was there a majority (60%) that consider participation a "top" priority in the next three years.

#### **4.4.1.2 Financing Considerations**

Providers and payers of all types expressed a high level of interest in receiving data from the SLHIE. Not surprisingly, their enthusiasm for financially supporting the SLHIE was dramatically lower, with only 15% of office-based providers indicating their interest in being a financial supporter (the average for all stakeholders being only 26%). When asked about potential deal-breakers for participation, 25 of the 52 comments submitted through the Summit handouts cited money or resource issues. Despite these resource constraints and the current financial climate, a surprising majority of organizations (58%) reported they have both the capacity and capability to actively participate in statewide HIE (though the majority of these indicated doing so would stretch these resources to their limits).

The data on stakeholder opinion regarding funding of the SLHIE tells an interesting story.<sup>23</sup> Stakeholders see a transition from initial funding coming largely from Federal and State government sources (with 77% and 53% indicating that it should be the "sole" or the "major" source, respectively),<sup>24</sup> then transitioning to a mix of ongoing funding from Federal Government (52%), transaction fees (35%), payers (32%), and State Government (30%). Stakeholders showed less enthusiasm for funding from other sources such as philanthropy, HIE membership fees, secondary uses of data, and a "tax" on health insurance premiums. Very few thought that revenue should come from a "tax" on provider services for either initial (3%) or ongoing (6%) funding. Many comments related to this issue suggested the costs should flow to those who benefit.

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<sup>21</sup> Source: Online HIE survey. For more details, please refer to Appendix C – Participation Data: Question 16 (Tables 7 – 8)

<sup>22</sup> Source: Online HIE survey. For more details, please refer to Appendix C – Participation Data: Question 18 (Tables 10 – 11)

<sup>23</sup> Source: Online HIE survey. For more details, please refer to Appendix C – Participation Data: Question 35 (Tables 43 – 78)

<sup>24</sup> Appendix C (Participation) – Question 35 (Federal Funding) (Tables 45 – 46)



#### **4.4.1.3 Privacy / Legal Considerations**

Though the specifics of the legal limitations are beyond the scope of this discussion, Wis. Stat. §51.30 regarding sensitive health information is one statute cited during the interviews that needs to be reviewed carefully in the context of HIE. Providers and hospitals expressed concerns about the liability and medical malpractice issues associated with using a health information exchange in the provision of patient care. Ensuring the data are able to be universally “trusted” among stakeholders was also regarded as a significant concern. The first step to participation is having in place a thoughtful approach to upholding patient privacy, protecting patient data from non-authorized use, and ensuring data integrity.

Another notable component but not a strong deterrent to participation concerned the issue of data exchange among organizations that compete for the same resource dollars. Stakeholders reported that in these situations, the lessons learned from other organizations exchanging data cross-enterprise can be leveraged to bring stakeholders to agree on data use requirements.

For more details on the responses received from stakeholders around the participation needs/challenges please refer to Appendix C – Participation Data.

#### **4.5 Stakeholders indicated a preference for establishing a Wisconsin SLHIE as a public-private partnership with an inclusive governance model and active State government involvement and oversight**

The Scan evaluated three alternative governance options for Wisconsin’s SLHIE: a state-led organization; a private entity designated by State Government; or a public-private partnership.

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*“I believe there remain legal/regulatory barriers to the exchange of data and/or access to data relating to children in foster care. These barriers relate to privacy issues of biologic parents. Perhaps a new consent form that biologic parents could sign when children are placed into foster care - this electronic sharing consent form will need work at the legislative and executive level.”*



A minority of stakeholders indicated a preference for a State Government-led SLHIE entity; primarily out of concern that a non-State Government entity would be subject to proprietary interests or an imbalance of stakeholder type influence. While recognizing this concern, stakeholders expressed their highest preference for establishing Wisconsin's SLHIE as a not-for-profit, public-private partnership or a State Government-designated private entity.<sup>25</sup>

Stakeholders provided input on the optimal composition of the governing body of the SLHIE. There is a broad consensus that the Board should meet the following conditions:

- State Government should play a vital role in the SLHIE through active participation as well as the provision of oversight and support
- Involve the right people with sufficient expertise to achieve expectations while providing a degree of accountability
- Maintain oversight of and responsibility for any services or functions offered, regardless of the specific delivery mechanism or provider
- Include representation from a diverse set of stakeholders, including consumers, care providers from rural and urban settings, small and large providers, and typically underrepresented groups
- Limit the governing body to a “manageable size”

Stakeholders indicated their awareness of the last two statements' contradicting imperatives. Several recommendations were advanced to address them, such as the creation of multiple specialized committees or advisory groups with a large stakeholder representation to advise the smaller Board.

Stakeholders acknowledged the importance of examining the legal landscape to align the governance structure with what is legally permissible and logistically practical. This pragmatic perspective is consistent with the viewpoint expressed by stakeholders that the SLHIE entity not be subject to political cycles and partisan politics. Beyond political concerns, stakeholders emphasized that the individual or individuals selected to lead the SLHIE be above repute, independent, and free from conflicts of interest.

The model that most closely aligns with overall stakeholder preferences is a board that is balanced in its stakeholder composition and is supported by a committee structure that includes both board members and knowledgeable experts.

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<sup>25</sup> In the online survey, 44% indicated a preference for a public-private partnership; 36% preferred a private entity regulated by State Government; 14% preferred a State-led SLHIE; 5% offered other suggestions. During informal polling at the Summits and in the Summit handout responses, there was a clear preference for a public-private partnership model, with 74% of comments favoring this model, versus 19% favoring a State-led model and 7% favoring a private entity regulated by State Government model. The vast majority of written and oral comments supported a not-for-profit model, whatever the composition of the governance entity. For more details, please refer to Appendix D – Governance Data: Question 22 (Tables 1 and 2).



For more details on the responses received from stakeholders around the various service options that could be provided statewide please refer to Appendix D – Governance Data.

#### **4.6 The Number of Self-Identified Existing HIE Initiatives Indicates a Clear Interest in Exchanging Health Information**

Online survey respondents were asked to identify the number of HIE initiatives in which they are involved, the status of the HIE initiative’s respective business model, and the ability of each HIE initiative to potentially play a role in a statewide HIE. Respondents were also given an opportunity to provide additional comments for each initiative. The results of the survey are organized in three ways: 1) by MTA; 2) status of business models; and 3) the future role of the HIE initiative in a state-level HIE.

Multiple stakeholders identified initiatives that were categorized as local in nature. These initiatives tended to be internal to a hospital, clinic or limited in scope. For the purposes of this reporting effort, we focused on broader-based HIE initiatives involving greater numbers of stakeholders or larger scope. This latter group resulted in the identification of 21 initiatives. The responses are the sole opinion of the survey respondents. Detailed analysis will need to be conducted at a later date to validate the survey responses. The following table present the responses received by stakeholders regarding the HIE initiatives in which they are involved.

<b>Identified HIE Initiatives</b>
1. Availity
2. Epic CareEverywhere
3. Epic Care Link
4. Children's Health System Regional Portal Initiative
5. Community Health Information Collaborative
6. Exchange of Lab Data Orders
7. GPRA Reporting to Indian Health Services (IHS)
8. Health Disparities Collaborative
9. Innovations in Planned Care
10. KCIN (Kiera Clinical Integration Network)
11. MEGAHIT (Medical Evidence Gathering and Analysis of Health Information Technology)
12. Ministry/Marshfield Clinic – Privacy Initiative
13. Northeastern Wisconsin Health Value Network (NEWHVN)
14. Public Health Information Network (PHIN) pilot
15. Rural Wisconsin Health Cooperative Information Technology Network (ITN)
16. ThedaCare/Affinity Regional Sharing Initiative
17. WCHQ Repository-based data submission
18. Wisconsin Health Information Exchange (WHIE)
19. Wisconsin Health Information Organization (WHIO)
20. Wisconsin Immunization Registry (WIR)
21. Wisconsin State Lab of Hygiene - Point to point relationships with partners

**Table 5. Self-identified HIEs that are currently operating in Wisconsin.**



## **5 CONCLUSIONS AND NEXT STEPS**

This report is solely a consolidation and high-level summary of the input sought from stakeholders to understand the current landscape and motivations associated with participating in Wisconsin's SLHIE; however, this information alone is not sufficient to derive a set of recommendations as to the structure, scope and design of the entity or the exchange itself. It is imperative to further review and analyze where assets may be leveraged as part of Wisconsin's SLHIE. The results of this stakeholder assessment and environmental scan will be combined with more detailed information to be gathered on Wisconsin's existing technical and operational assets to shape the recommendations for the design of the Wisconsin's SLHIE operating model and associated services and functions.

The Scan process was extremely well received, and many stakeholders expressed their satisfaction to be offered an opportunity to shape in its early stage an initiative that will have far-reaching impact on Wisconsin. This reinforces the necessity to continue the two-way communication process initiated with stakeholders: this may well be the SLHIE project's most essential success factor.

*“Statewide health information exchange is needed to address gaps and inconsistencies in services and functions across the state; progress [is being made] in some parts of the state and none in other areas, so we need to get everyone up to a basic level of functionality. We have to address the needs of providers of all sizes, particularly small and independent practices, which have limited resources.”*