

State of Michigan  
**MiHIN Shared Services  
Strategic & Operational Plan**  
Amendment 1.4  
November 2, 2010



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# 1 Introduction

This amendment to Michigan's Strategic and Operational Plans that were submitted on April 30, 2010 for the Office of the National Coordinator for HIT (ONC) approval is in response to the Program Information Notice (ONC-HIE-PIN-001) issued on July 6, 2010. Guidance was issued from the ONC via email on July 14, 2010 that asked each state that had previously submitted plans to respond directly to the new criteria introduced in ONC-HIE-PIN-001. The July 14 guidance asked states that meet the new criteria but needed to supply new documentation to do so by August 1, 2010. Michigan falls into this category of needing to supply new documentation.

This amendment is meant to supply new documentation to the ONC to demonstrate Michigan's compliance with ONC-HIE-PIN-001. The new guidance is separated into two categories; Strategic Plan and Operational Plan. The ONC guidance is listed at the beginning of each section in black text. Michigan's response is under each new criterion in blue text and is also boxed.

In most cases, Michigan's response points back to specific page numbers in the Strategic and Operational Plans. In cases where further documentation is needed, the additional documentation is available in the Appendices of this amendment and is noted in the blue and boxed responses.

The responses in this amendment should be considered supplemental information to what is given in the Strategic and Operational Plans that were submitted on April 30, 2010.

## 2 Strategic Plan

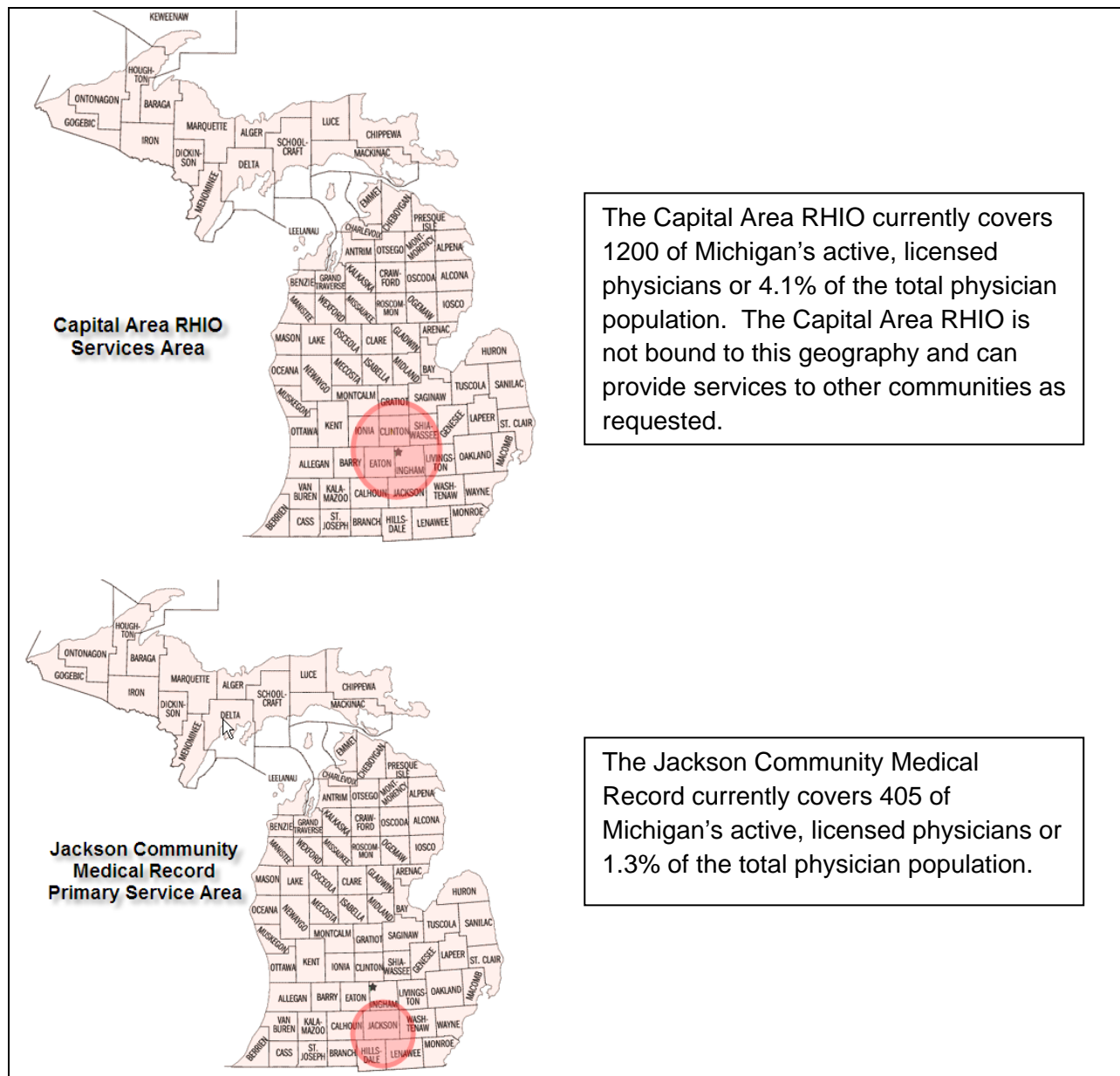
### 2.1 Environmental Scan

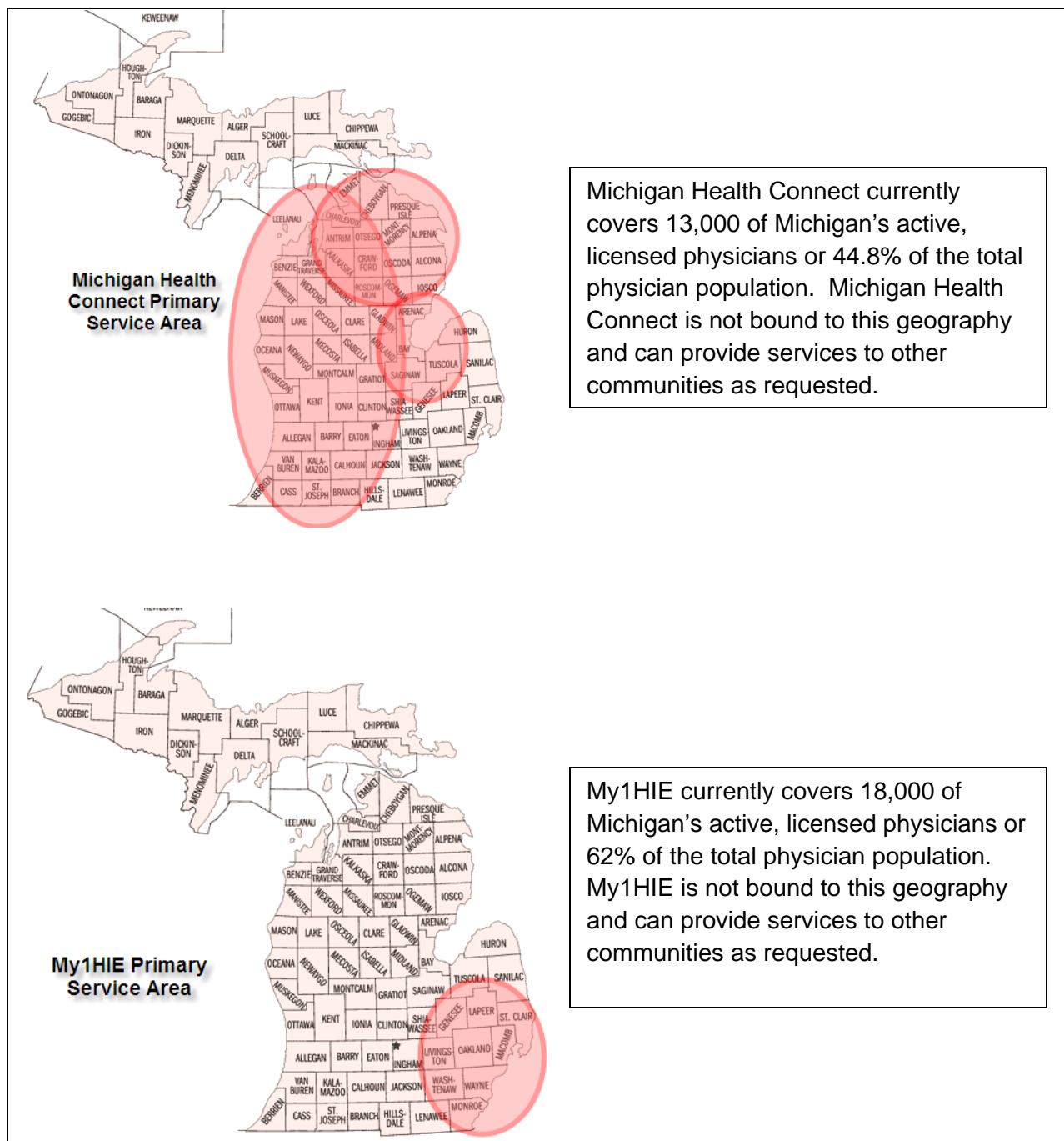
Within the strategic plan, the environmental scan shall include an overview of the current HIE activities within the state including the penetration of electronic lab delivery, e-prescribing networks and other existing HIE solutions.

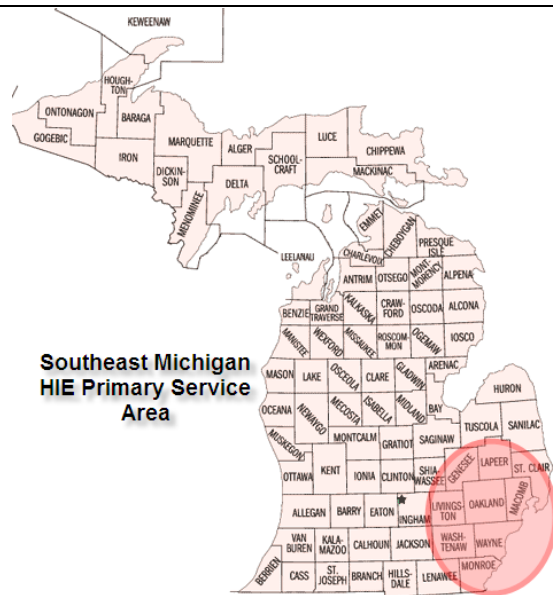
Michigan has addressed this requirement in pages 7-11 of the MiHIN Shared Services Strategic Plan submitted to the Office of the National Coordinator on April 30, 2010.

To update the comprehensive environmental scan maps of the covered counties of each sub-state HIE initiative shown below. Only the sub-state HIEs are listed that are able to (or are planning to) provide the delivery of structured lab results directly to a provider EHR in order to meet meaningful use in 2011. Only the current coverage area is depicted, though nearly all sub-state HIEs report active plans to expand and cover further area in Michigan. Also, several sub-state HIEs are not bound by geography and can facilitate service to any area of the state. The Michigan HIT Coordinator will facilitate collaboration with Michigan's Regional Extension Center to identify eligible providers that are not being met by a regional offering and provide information about the non-geographic HIEs.

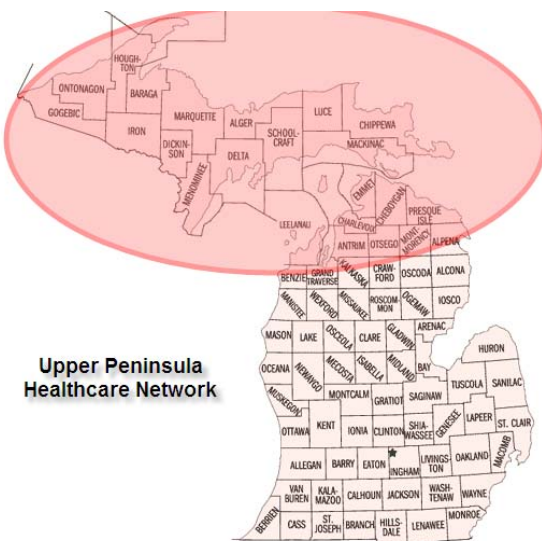
The percentage of Michigan's active, licensed providers that can be covered by the sub-state HIE is listed next to each initiative. In Michigan, there are approximately 29,000 active, licensed physicians (according to the 2009 Michigan Department of Community Health physician licensure study), which is the denominator for the percentage. The numerator is the number of licensed, active providers that could utilize the services of the sub-state HIE in order to meet the meaningful use requirements in 2011. The percentages are meant to illustrate the proportion of Michigan's provider population that have at least one option for receiving service from a sub-state HIE to meet meaningful use criteria in 2011 (e.g., structured lab results directly to a provider EHR and the exchange of patient care summaries between unaffiliated providers).







The Southeast Michigan HIE currently covers 15,000 of Michigan's active, licensed physicians or 51.7% of the total physician population.



The Upper Peninsula Healthcare Network currently covers 850 of Michigan's active, licensed physicians or 2.8% of the total physician population.

In Michigan, not only does every provider have at least one choice for a sub-state HIE that has the capability to meet the Meaningful Use criteria in 2011, there are several areas that have multiple choices. This accounts for the more than 100% coverage of each sub-state HIE's area. The table below sums up the amount of licensed active providers in the state and the proportion that are covered by a sub-state HIE that can meet meaningful use in 2011.

	Area of Michigan	Number of Providers	Proportion of Michigan
Jackson Community Medical Record	South Central	405	1.30%
Capital Area RHIO	Central	1,200	4.10%
Upper Peninsula Health Care Network	Upper Peninsula and Upper lower	850	2.80%
Michigan Health Connect	West, Upper Lower, Central	13,000	44.80%
my1HIE	Southeast, central	18,000	62%
South East Michigan Health Information Exchange (SEMHIE)	Southeast	15,000	51.70%
TOTAL COVERED WITH HIE OPTIONS		48,455 *	
TOTAL PROVIDERS IN MI		29,000	
*Many providers fall into the service are of multiple sub-state HIEs and therefore have more than one option			

**Structured Lab Results:**

The baseline of sub-state HIE capabilities for the delivery of structured lab results is strong in Michigan. All six sub-state HIEs listed are either currently delivering structured lab results to provider EHRs or will be able to support this functionality in 2011. These services are provided by a combination of secured messaging, interfaces with EHR vendors and interoperability hubs. The standards that are being used are predominately HL7 and LOINC. Several sub-state HIEs are planning LOINC in the first through third quarters of 2011. The table below details the structured lab results delivery capabilities in Michigan.

	Currently Providing the Delivery of Structured Lab Results to Provider EHRs	If no, what quarter of 2011 will this be provided? (quarter & year)	How is it/How will it be provided?	Standards in use/Planned to use
Jackson Community Medical Record	Yes		Secure messaging and interface engine	HL7, IHE and LOINC Planned for Q3 2011
Capital Area RHIO	No	Q4 2010	Interface engine	HL7, LOINC
Upper Peninsula Health Care Network	No	Q2 2011	Secure messaging and interface engine	HL7, LOINC
Michigan Health Connect	Yes		Secure messaging and interface engine	HL7, LOINC planned for Q1 2011
my1HIE	Yes		Secure messaging and interface engine	HL7, LOINC, SNOMED
South East Michigan Health Information Exchange (SEMHE)	No	Q3 2011	Secure messaging and interface engine	XDS-A, XDS-B - LOINC SNOMED planned for Q3 2011



### Exchange of Patient Care Summaries:

The capacity for the exchange of patient care summaries across unaffiliated providers/organizations is strong in Michigan and will grow with the State HIE Cooperative Agreement program funding. In Michigan, the six sub-state HIEs are at differing levels of adoption readiness to meet the meaningful use requirements for 2011. The table below shows what each sub-state HIE is planning to meet meaningful use independent of the MiHIN Shared Services. Once the MiHIN Shared Services is in place, data from each sub-state HIE and state of Michigan public health sources can populate the summaries for a more complete patient summary.

	Currently Providing the Exchange of Patient Care Summaries	If no, what quarter of 2011 will this be provided? (quarter & year)	If yes, what Vendor. If you are not able, what steps are needed?
Jackson Community Medical Record	Yes		Using Integrated Healthcare Solutions
Capital Area RHIO	No	Q3 2011	Working with vendor - Axolotl - to generate patient care summary specifications consistent with Meaningful Use.
Upper Peninsula Health Care Network	No	Q2 2011	Currently in the vendor selection process. Implementing a contractual requirement to meet stage 1 meaningful use in 2011
Michigan Health Connect	Yes		Using Medicity
my1HIE	Yes		Using Covisint & Wellcentive
South East Michigan Health Information Exchange (SEMHE)	No	Q3 2011	Received 2nd round Beacon Award, and SSA contract - in the planning stage for vendor selection for this functionality. Will have contractual requirements to ensure vendor meets stage 1 meaningful use in 2011.

Please refer to Appendix R for the full environmental scan of Michigan's sub-state HIEs.

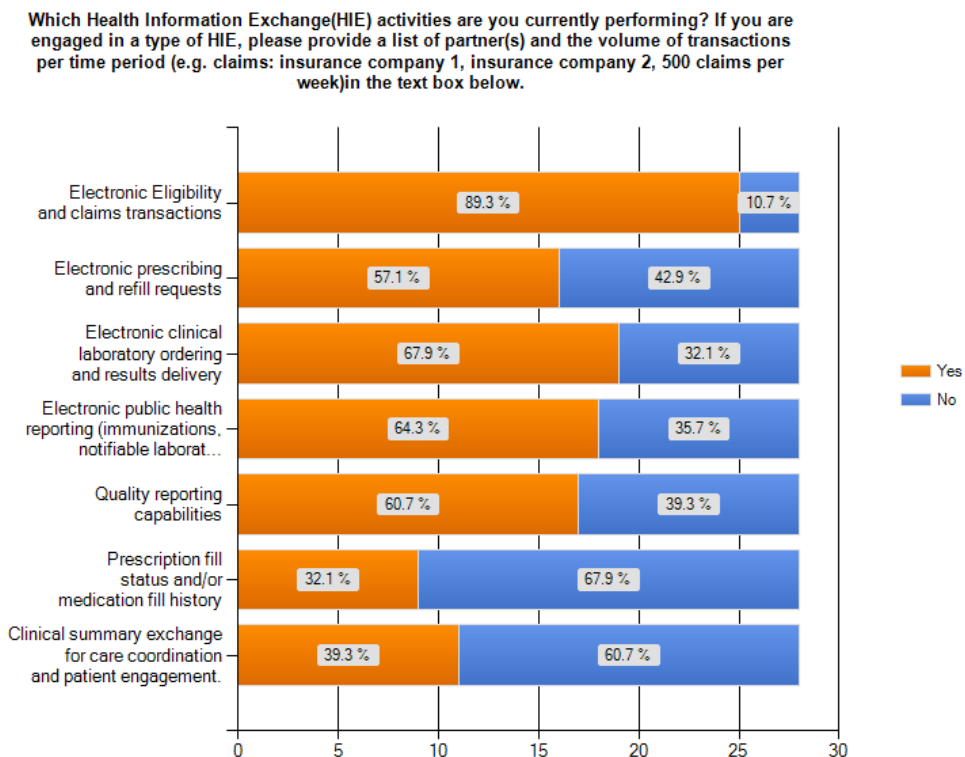
The environmental scan should include the following measures or similar measures to determine the health information exchange taking place with these important data trading partners:

- % pharmacies accepting electronic prescribing and refill requests
- % clinical laboratories sending results electronically
- % health plans supporting electronic eligibility and claims transactions

% health departments receiving immunizations, syndromic surveillance, and notifiable laboratory results

In the Strategic Plan, on page 7, an analysis of Michigan's early adopters of HIT and HIE that was done to support the MiHIN planning process is briefly described. The entire analysis was fundamental to the decision-making of the MiHIN Workgroups and the project staff throughout the planning process. The qualitative findings of this analysis are discussed in the Environmental Analysis that was submitted in the Strategic Plan, but more detail, including the full report and the breadth of quantitative findings, was not included. Appendix B of this amendment contains the "Michigan HIT and HIE Technical Environment Analysis", which is the full report containing all detail of Michigan's current state and gap analysis.

Page 9 of Appendix B "Michigan HIT and HIE Technical Environment Analysis" details the current status of Michigan's HIE and HIT functionality with this chart:



This chart shows Michigan's initial metrics. The analysis that derived these metrics will be expanded as part of the State HIE Cooperative Agreement. As the reporting requirements are solidified, future analyses will include more scientific data collection methods and include data from national sources like Surescripts and federal partners like CMS.

An analysis of state government systems was also critical to the planning process, but was not provided in the Strategic and Operational Plans. This analysis is called the "State of Michigan Systems Technical Environment Analysis" and can be found in Appendix J. This analysis

looked exclusively at State of Michigan government systems that utilize clinical and/or administrative data and provides a full environmental scan of the State of Michigan systems and reaches the conclusion that several systems are able to be leveraged and have great potential to assist providers in meeting meaningful use and expanding statewide HIE capacity.

These systems include the State's vital records systems, public health reporting and surveillance, corrections health systems, Medicaid and several others. This analysis was fundamental in the decision making of the workgroups that were formed and directly influenced Michigan's focus on public health surveillance and reporting and Medicaid quality data.

After a first review of available data sources Michigan has determined the following data points. In determining the "% of pharmacies accepting electronic prescribing and refill request, Surescripts data from 2009 indicates that 98% of Michigan pharmacies have activated e-prescribing. See Appendix L for the Surescripts data. Michigan is committed to surveying all pharmacies for a more accurate number as part of the State HIE Cooperative Agreement in 2011.

In determining the "% of public health departments receiving immunizations, syndromic surveillance and notifiable laboratory results", MDCH data indicates that 100% of Michigan's 45 public health departments are receiving this data electronically from Michigan's public health registries. See Appendix M for a full report and analysis.

In determining the "% of health plans supporting electronic eligibility and claims transactions", the Michigan Association of Health Plans which has all health plans in Michigan as members except for Blue Cross Blue Shield of Michigan has indicated that 100% of the health plans operating in Michigan support electronic eligibility and claims transactions. Blue Cross Blue Shield of Michigan accepts electronic eligibility and claims transactions through their Web-Denis portal fully described in Appendix N. So, Michigan can report that 100% of health plans support eligibility and claims transactions. Further, those health plans that are participating as a Medicaid Health Plan are, by contract with Michigan Medicaid, required to support electronic claims transactions. More information about Michigan Medicaid Health Plans can be found at [http://www.michigan.gov/mdch/0,1607,7-132-2943\\_4860---,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2943_4860---,00.html).

In determining the "% of clinical laboratories submitting results electronically", Michigan turned to the MDCH laboratory licensing section and learned that Michigan has 7,444 CLIA certified clinical laboratories. The State of Michigan relies on CLIA certification and does not have a separate licensing or certification process. The contact data for all of the CLIA laboratories certified to perform in Michigan is kept with the Centers for Medicare and Medicaid. Michigan is currently in the process of requesting that data and will survey the clinical laboratories in Michigan in 2011 per the requirements of the ONC-HIE-PIN-001.

Michigan ran an analysis of trading partners with the state of Michigan's laboratory information system. The analysis shows that 1,583 of trading laboratories receive or send results delivery via electronic means. It is not known at this time by which standard these results are received. Considering this is not a scientific survey, it is difficult to ascertain a true percentage of laboratories submitting results electronically.

Looking specifically at hospital laboratories, there are 138 in Michigan. Of these 138 it is estimated by the Joint Venture Hospital Laboratories (JVHL) that works directly with 126 of those hospital laboratories that 5% are sending results using LOINC coding. However, the JVHL provides a service to the 126 hospital laboratories by translating CPT codes into LOINC for the Healthcare Effectiveness Data and Information Set (HEDIS) quality reporting to state and national health plans.

The core of the JVHL services are intended to allow the 26 independent Michigan hospitals and laboratories that make up the JVHL to work together in the billing of claims and HEDIS result reporting for a wide array of different health plans. This includes working with over 35 distinct electronic data interchange (EDI) partners and the utilization of ANSI-HIPAA EDI file formats for the transmission of billable claim data and remittance information. More information on JVHL can be found in appendix Q.

The strategy of relying on sub-state HIEs to work directly with laboratories to electronically send and receive data will be key in reaching the small, local or specialized clinical laboratories in Michigan. Our strategy for bridging the gaps in clinical laboratories statewide is to pursue direct connections to the MiHIN Shared Services where appropriate with large, statewide clinical laboratories. With this two-tiered approach, Michigan will be able to demonstrate improvement in closing the gap.

## **2.2 Strategy to meet meaningful use**

Strategic plans shall describe how the state will execute the state's overall strategy for supporting Stage 1 meaningful use including how to fill gaps identified in the environmental scan. Specifically, states and SDEs shall describe how they will invest federal dollars and associated matching funds to enable eligible providers to have at least one option for each of these Stage 1 meaningful use requirements in 2011:

### **Overall Strategy for Ensuring Success in Meaningful Use**

The strategy for ensuring that all Michigan providers have an option for at least one method of results delivery is to utilize and expand the reach of sub-state HIEs in Michigan.

One of the goals of the MiHIN Shared Services is to provide the technical, business and policy support for that will allow sub-state HIEs to thrive, expand and keep costs affordable to providers seeking meaningful use. By creating a suite of shared services that focus on identity management, record locator service and security, this allows for statewide HIE connectivity. The MiHIN Shared Services also allows sub-state HIEs to utilize the shared services to reach greater efficiencies and capabilities within their own areas of services. The MiHIN Shared Services Governance board will work directly with sub-state HIEs to determine what resources are needed for each sub-state HIE to connect to the MiHIN Shared Services and what resources are needed for sub-state HIEs to expand to provide greater functionality and choice for Michigan's providers. Michigan's strategy is to ensure that all of Michigan's providers have the capability to meeting the first stage of meaningful use by providing resources from the State HIE Cooperative Agreement to assist where necessary and then looking toward the MiHIN Shared Services that would be needed for later stages of Meaningful use connectivity.

Beyond resources, Michigan will utilize other collaborative, contractual and policy mechanism to ensure that Michigan's sub-state HIEs are successful in implementing and expanding technology and services to support the first stage of meaningful use.

For contractual mechanisms, the Michigan Department of Community Health, the recipient of the State HIE Cooperative Agreement funding, will include specific contract language in its agreement with the MiHIN Shared Services Governance board that requires the board to develop success criteria and the methodology to measure against the criteria before funding is provided to sub-state HIEs. This ensures that success is tracked and measured throughout the program. Only those initiatives that continue to show success will be provided with continued resources.

As part of the Medicaid strategy, MDCH will work closely with Medicaid to determine appropriate policies to incent successful sub-state HIE initiatives and further incent Medicaid providers and Medicaid health plans to participate in the successful sub-state HIEs.

Michigan will collaborate with all of the other ARRA HIT resources in the State to ensure that sub-state HIEs are successful. The Michigan HIT Coordinator will also work with Michigan's Regional Extension Center – the Michigan Center for Effective IT Adoption (M-CEITA) to ensure that providers are aware of the sub-state HIE options and that the options are appropriately represented in every area of the state. Michigan will work with Beacon community selected in Michigan – the Southeast Michigan Health Information Exchange – to identify best practices and other useful resources to deliver to all other sub-state HIEs in Michigan.

The Michigan HIT Coordinator will be responsible for bringing the sub-state HIEs together on a regular meeting schedule to promote cross-learning, collaboration on developing shared resources and collect potential policy issues. The HIT Coordinator will be tasked with looking for other resources and opportunities to work with the sub-state HIEs to promote their continued success.

## 1. E-prescribing

As described in the Environmental Scan on page 10 (E-prescribing readiness) and through the offerings of sub-state HIEs described on pages 7-9 of the strategic plan and the analysis provided in Appendix B, Michigan's providers currently have options for e-prescribing. To ensure that all of Michigan's providers have at least one option for e-prescribing, Michigan will pursue two paths – expanding e-prescribing directly through sub-state HIEs and expanding e-prescribing through policies, incentives and other available market levers. To expand e-prescribing technology offered throughout the state, the MiHIN Shared Services will expand the coverage areas and technical capacity of sub-state HIEs in Michigan (described on pages 29-39 of the Strategic Plan). Every sub-state HIE that is operating in Michigan currently or plans to offer e-prescribing in the near future. See Appendix B for more information on sub-state HIE offerings in MI.

To expand e-prescribing through policy, incentives and other market levers, the HIT Coordinator will work with Michigan Medicaid to continue to examine policy levers and the operations of the EHR incentive program that can be utilized to encourage E-prescribing. Further, the Michigan HIT coordinator will work with existing coalitions of payers and other stakeholder to identify mechanisms for encouraging e-prescribing in Michigan to those providers that are not utilizing this service today.

The Michigan Primary Care Consortium is currently working on expanding e-prescribing in Michigan as a stated goal. The Michigan HIT Coordinator is already and will continue to work directly with the Michigan Primary Care Consortium to identify levers to make this goal a reality. See Appendix E for a full description of the Michigan Primary Care Consortium and a list of their stated goals and accomplishments.

The HIT Coordinator will also work closely with the Michigan HIT Commission to develop recommendations for specific action on promoting the availability and use of e-prescribing. The Michigan HIT Commission has representatives from pharmacies, pharmacists, pharmaceutical companies as well as payers, providers and hospitals which are important stakeholders in promoting e-prescribing. See pages 18-19 for more information on the composition of the Michigan HIT Commission.

## 2. Receipt of structured lab results

As described in the technical section of the Strategic Plan, pages 26-40, the proposed technical architecture for the MiHIN Shared Services is to connect Michigan's sub-state Health Information Exchange initiatives together for statewide Health Information Exchange. The architecture is built upon functioning HIE initiatives at local levels. In Michigan, the first and most robust services offering of sub-state HIEs is the delivery of structured lab results (more detail is available in Appendix B "Michigan HIT and HIE Technical Environment Analysis" and Appendix R "Sub-State HIE Capabilities, Plans and Proportions Survey").

At present, all of Michigan's providers have or will have at least one option for receiving structured lab results (see the Environmental Scan on pages 1 through six to see the statewide reach of HIE in Michigan and Appendix R "Sub-State HIE Capabilities, Plans and Proportions Survey").

Michigan has several sub-state HIEs that are not bound by geography and can provide services to communities throughout the state. If a sub-state HIE is not successful in providing the services to meet the criteria for exchanging structured lab results then a provider may choose to utilize one of the non-geography based sub-state HIEs to meet stage 1 meaningful use. The Michigan HIT Coordinator will facilitate collaboration with Michigan's Regional Extension Center to identify eligible providers that are not being met by a regional offering and provide information about the non-geographic HIEs.

Michigan's strategy is also work with the Joint Venture Hospital Laboratories (JVHL – see appendix Q) to determine the best policy and resources available to promote the use of LOINC



in Michigan's independent hospital laboratories. This could include providing training and technical assistance through the JVHL to these laboratories. Michigan will pursue working with JVHL to coordinate efforts and resources to ensure that the experience of JVHL will be leveraged to promote the use of structured lab result reporting in addition to the translation services that most sub-state HIEs are currently or planning to offer.

Through the MiHIN Shared Services Governance Structure (described on pages 15-21 of the Strategic Plan), further policy methods will be pursued to maximize available options for Michigan's providers. The HIT Coordinator will take responsibility for working with all relevant stakeholders to explore, recommend and implement policies, incentives or other market levers to ensure that Michigan providers have the capacity to receive structured lab results.

### 3. Sharing patient care summaries across unaffiliated organizations

The sharing of patient care summaries across unaffiliated organizations was found by Michigan's stakeholders through the MiHIN Shared Services planning process to be a high priority and is described in detail on pages 42 – 45 in the Technical domain of the Strategic Plan.

See page 7, environmental scan, and Appendix R of this amendment for Michigan's baseline capacity for sharing patient care summaries across unaffiliated organizations.

Michigan's sub-state HIEs have been working toward this goal before it was a part of the first phase of meaningful use and therefore many are already prepared to offer this service to eligible providers to meet the meaningful use criteria. Michigan's strategy for meeting this requirement is to first empower MiHIN Shared Services governance to determine the appropriation of resources to sub-state HIEs to ensure that the exchange of patient care summary functionality is available to all of Michigan's providers. Once patient care summaries are able to be exchanged to meet the first stage of meaningful use, the MiHIN Shared Services governance board will utilize the MiHIN Shared Services (as described in the technical domain of Michigan's strategic and operational plans) to expand the data elements available to be incorporated into the patient care summaries. The goal is for a complete patient summary and this will require data elements from the state of Michigan public health systems, Medicaid, other payers and all sub-state HIEs. Michigan's strategy is to ensure that all providers can meet the meaningful use requirements for the first year before implementing the statewide data sharing capabilities.

Michigan has several sub-state HIEs that are not bound by geography and can provide services to communities throughout the state. If a sub-state HIE is not successful in providing the services to exchange patient summaries across unaffiliated providers/organizations in 2011, then a provider may choose to utilize one of the non-geography based sub-state HIEs to meet stage 1 meaningful use. The Michigan HIT Coordinator will facilitate collaboration with Michigan's Regional Extension Center to identify eligible providers that are not being met by a regional offering and provide information about the non-geographic HIEs.

States and SDEs should also describe a strategy and plan to address the other required information sharing capabilities specified in the FOA over the course of the project, including:

- Building capacity of public health systems to accept electronic reporting of immunizations, notifiable diseases and syndromic surveillance reporting from providers;

Expanding the capacity of Michigan's robust immunization reporting, notifiable disease and syndromic surveillance systems was found to be a top priority for Michigan's stakeholders through the MiHIN Shared Services planning process.

As outlined in the Strategic and Operational Plans submitted in April 2010, several of the Michigan Department of Community Health's systems will be enhanced to support eligible providers (EPs) and hospitals achieve meaningful use (see chart below, Figure 1 State of Michigan System Descriptions). The state of Michigan had already procured the necessary technologies and is currently working to adopt the necessary standards to allow all EPs and hospitals to meet the three meaningful use menu set measures that are aimed at improving population and public health.

Enabling bi-directional communication with the MDCH's public health and Medicaid systems has long been an MDCH goal. Michigan has been working to implement standards based messaging in all of the public health systems since 2005. The details outlined below are consistent with the plans outlined in the Strategic and Operational Plan. No budgetary, governance or technical decisions have been made that differ from the information and strategy outlined in Michigan's April 2010 submission. The information in this section is intended to support and add detail to the strategies and plans outlined in the Strategic and Operational Plans submitted in April 2010.



Figure 1 – State of Michigan System Descriptions

State System	Description
Michigan Care Improvement Registry (MCIR)	The Michigan Care Improvement Registry (MCIR) is a secure web-based statewide immunization information system accessed by over 4,000 health care organizations. It is estimated that over 90% of Michigan immunization providers submit immunization data to the registry. Over half of the immunization data sent to the registry is electronically transferred from providers' practice management applications and electronic health records (EHRs). On average, there are 15,000 users accessing the registry on a daily basis. Providers utilize the decision support and quality improvement capabilities including immunization status assessment and forecasting, high risk flu alerting, immunization reminder/recall and patient immunization coverage level reporting. MCIR also aids in public health preparedness through functionality enabling the tracking, distribution and administration of pharmaceuticals during public health emergencies, such as, a H1N1 epidemic.
Michigan Bureau of Labs Systems	STARLIMS enables tracking and reporting of laboratory tests as performed by the State Bureau of Laboratories and regional laboratory partners. STARLIMS allows real-time, secure electronic transfers of data via the intranet and/or Internet to public health, laboratories, and health care providers. Notifiable laboratory results are flagged in STARLIMS and transmitted electronically using HL7 to the state's disease surveillance system (MDSS)
Michigan Disease Surveillance System (MDSS)	MDSS is a secure, Web-based, statewide integrated surveillance system that has improved Michigan's ability to identify and track emerging infectious diseases and potential bioterrorism attacks. It allows for the investigation of outbreaks and the monitoring of public health trends at a local, regional, and state level. The system enables physicians to complete required communicable disease reporting online. Every local health department in Michigan utilizes MDSS for case management. MDSS electronically receives laboratory reports from the State Of Michigan's laboratory information management systems and several laboratories throughout the state using the CDC's Public Health Information Network (PHIN) guidelines and standards.
Michigan Syndromic Surveillance System (MSSS)	The Michigan Syndromic Surveillance System (MSSS) is a real-time surveillance system tracking and monitoring the chief presenting complaints from emergent care settings allowing public health officials and providers to rapidly detect and track unusual outbreaks of illness that may be the result of bioterrorism, natural outbreaks or other public health emergencies. MSSS receives syndromic feeds in HL7 format from the majority of Michigan's hospitals.

Currently, Michigan's public health systems supporting meaningful use are functioning in accordance with the Meaningful Use adopted content exchange and vocabulary standards. Michigan will be ready to support providers in the first stage of Meaningful Use in 2011 in the following ways. The Michigan Disease Surveillance System (MDSS) provides a means for EPs and hospitals to submit electronic data on reportable lab results through HL7 2.5.1 using LOINC codes. The Michigan Syndromic Surveillance System (MSSS) will enable the capability of the EPs and hospitals to submit electronic syndromic data and the interoperability between certified EHRs using HL7 2.3.1 and HL7 2.5.1. The Michigan Care Improvement Registry (MCIR) will permit the electronic submission of immunization information to an immunization information system through the HL7 Standard Code Set and HL7 2.3.1 and 2.5.1. MDCH Bureau of Laboratories, laboratory information system, STARLIMS, will also be enhanced to send electronic lab results to certified EHRs using LOINC and HL7 2.5.1. EHR Incentive enrollment, payment and meaningful use reporting will be streamlined by adding additional features and functionality to MDCH's MMIS and Medicaid Data Warehouse.

However, to continue the bi-directional communication between the state of Michigan systems and Michigan's providers and hospitals will be better supported by the MiHIN Shared Services by providing a single point of contact for health care providers to access and report to these

systems. Though Michigan's public health systems will be ready for the first stage of meaningful use, the integration with the MiHIN Shared Services will provide a transport solution streamlining health information exchange between providers and public health that will likely be necessary for subsequent stages of Meaningful Use.

To streamline data exchange between health care providers and systems supporting meaningful use, the recently named State of Michigan Health Information Exchange (SOM HIE) will be created based on existing MDCH systems and offered as a service to the MiHIN. The SOM HIE is not a sub-state HIE as described in the Strategic and Operational Plans. The SOM HIE is the integration of all relevant MDCH systems to support bi-directional communication with Michigan's providers. SOM HIE will conform to the MiHIN Shared Services Interoperability Specifications, which meet NHIN standards, to enable integration with other sub-state HIEs, certified EHRs and NHIN.

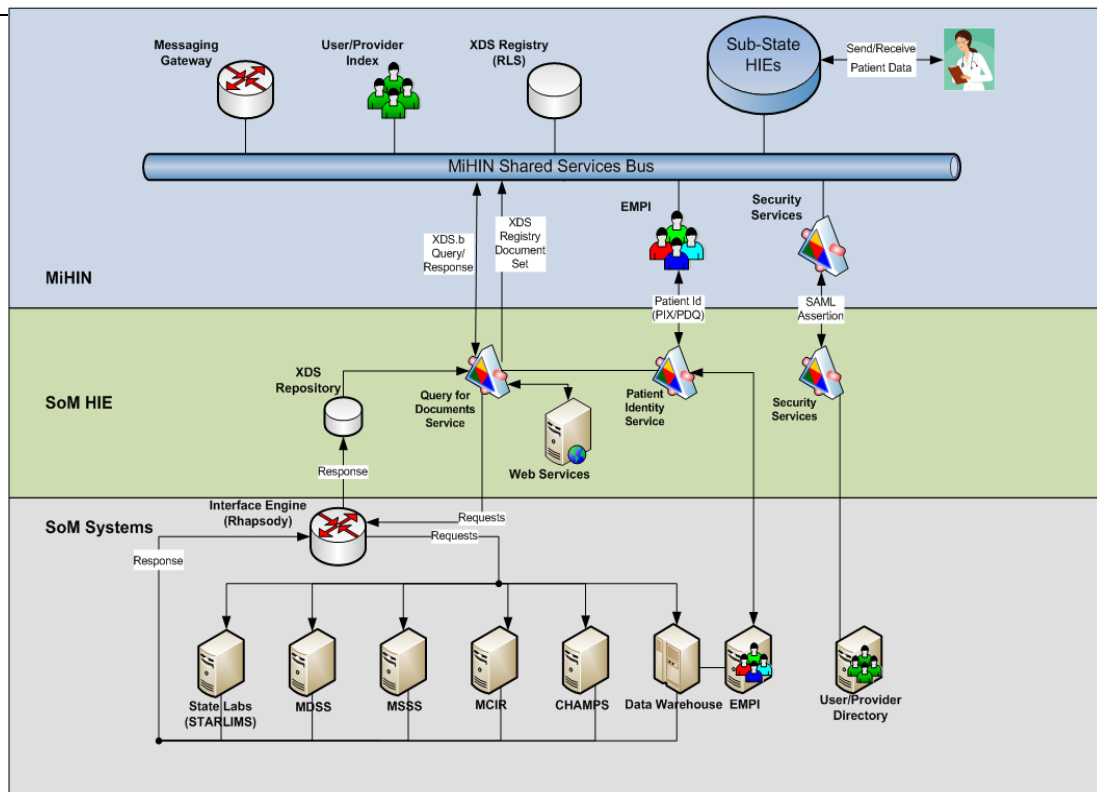
The SOM HIE is a function of state of Michigan government and will therefore be operated and governed by the State of Michigan. The SOM HIE will collaborate fully with the MiHIN Shared Services Governance board. To ensure collaboration and coordination, the MiHIN Shared Services Governance Board includes two members from the SOM HIE (one from Medicaid and one from MDCH public health systems, as described in the Governance Section of the Strategic Plan). The SOM HIE has a steering committee that is made up program and technical leaders from MDCH and the Michigan Department of Technology, Management and Budget.

The development of the SOM HIE is an enterprise-wide approach that will not only enable MDCH to support stage 1 meaningful use but also it will enable mechanisms to capture clinical information in real-time, such as, birth defect and cancer data, to improve public health surveillance and disease management. The following table, Figure 2, illustrates the SOM HIE project milestones. This timeline is dependent upon the approval of the MiHIN Shared Services Strategic and Operational Plan.

<b>SOM HIE Milestones and Timelines</b>	
<b>Milestone</b>	<b>Target Completion Date</b>
Implement messaging gateways for meaningful use (receive immunizations, receive notifiable lab results, receive syndromic data)	December 2010
Complete requirements and design of SOM HIE	Early 2011
Implement security and messaging services to receive immunization information via MiHIN Shared Services	Summer 2011
MDSS receive notifiable laboratory results from sub-state HIEs	Late 2011
Implement XDS repository to send immunization histories via MiHIN Shared Services	Early 2012
STARLIMS send lab results via MiHIN Shared Services	Summer 2012
MCIR, MDSS and STARLIMS fully integrated with SOM HIE MPI	Late 2012
MCIR, MDSS and STARLIMS fully integrated with SOM HIE Provider Index	Early 2013
Combined Public Health and Medicaid data available in CCD format to health care providers via the MiHIN Shared Service	Late 2013

SOM HIE will include four main services; Patient Identity Service, Security Service and Query for Documents Service and provide a messaging gateway to the MiHIN Shared Services. The Patient Identity Service will use national standards (PIX and PDQ) and leverage the Master Patient Index (MPI) that is currently being integrated with the Medicaid Data Warehouse. The Security Services will use the national standards (mainly SAML) and integrate with the existing SOM Single Sign On and the Provider Index. The Query for Documents Service (aka Record Locator Service) will support XDS query and responses from two sources. This includes a web services server that early meaningful use providers will be able to use until the MiHIN Shared Services are readily available. SOM HIE will leverage and use an existing messaging gateway, Orion Rhapsody. Rhapsody will be interoperable with the MiHIN Shared Services allowing health care providers to send and receive public health information in an efficient and streamlined manner. (See diagram below)

**SoM HIE and MiHIN Shared Services Interoperability Design**



The implementation of the SOM HIE will be aligned with the MiHIN Shared Services Operational Plan and the Michigan State Medicaid HIT Plan. Public health reporting integration with the MiHIN Shared Services will occur in a phased approach as stated in the operational plan. Each use case is strategically deployed with the core infrastructure needed for the electronic exchange. In phase one, the use cases deployed will be notifiable labs to MDSS and immunizations to MCIR. The core infrastructure that will be deployed to carry out these use cases are the MPI, Provider Directory and the security services. Sending immunization histories back to providers requires a query and response and therefore will be deployed in

coordination with the XDS registry or record locator service in the second phase. In the third phase, MSSS will receive syndromic information via the MiHIN.

More detail can be found on the following pages of the Strategic Plan: 35, 41-45, Operational Plan: 12-13, 34-36. Also, see Appendix J for a full analysis of capabilities and environmental scan of Michigan's public health systems.

- Enabling electronic meaningful use and clinical quality reporting to Medicaid and Medicare.

Michigan's Medicaid program and the MiHIN Shared Services are working closely together to determine the best solutions for enabling electronic meaningful use and clinical quality reporting. As described on pages 12-14 of the Strategic Plan, there is a framework in place to continue working on common goals between these two programs, one of which is clearly defined as electronic quality and meaningful use reporting. Through this collaborative framework, Michigan Medicaid and the MiHIN Shared Services plan to address this capability over the course of the project. The Michigan HIT Coordinator will continue to work with federal partners to ensure that Medicare meaningful use and clinical quality reporting is addressed.

## 2.3 Coordination with Medicaid

Because of the importance of the Medicaid program in setting state level HIT policy, states and SDEs are required to describe their coordination with Medicaid in their Strategic Plans. The following activities are either required or highly encouraged and the activities adopted shall be reflected in the state HIE plan.

### **Required Activities:**

1. The state's governance structure shall provide representation of the state Medicaid program.

In the MiHIN Shared Services Strategic Plan, on page 19, it is stated that Medicaid will have a seat on the board of the MiHIN Shared Services Governance Board. Also, the Director of the Michigan Department of Community Health, which houses the Michigan Medicaid program, is by state statute a member of the Michigan HIT Commission.

2. The grantee shall coordinate provider outreach and communications with the state Medicaid program.

As outlined on pages 12-14 of the Strategic Plan, Michigan Medicaid and the MiHIN Shared Services are working together to coordinate efforts. Since submitting the Strategic and Operational Plans in April, the two programs have been also working with Michigan's Regional Extension Center, M-CEITA, to do outreach and communications.

One example of this collaboration is the jointly hosted website [www.michiganhit.org](http://www.michiganhit.org), which provides information, links and contact information for each of the ARRA funded HIT initiatives in Michigan.

Also, Medicaid, MiHIN and M-CEITA worked together to hold provider outreach sessions – a postcard that details this first round of outreach sessions is in Appendix C “Michigan Provider Outreach Sessions Postcard”. These sessions took place in May and June, and all of the information from each of the initiatives was presented. Archived video of the sessions are available at [www.michiganhit.org](http://www.michiganhit.org).

Medicaid, MiHIN and M-CEITA plan to continue working together on provider outreach and communications. To ensure that these initiatives continue to collaborate on this and other actions, the HIT Coordinator has developed a coordination framework that is described on pages 12-14 of the Strategic Plan and further detailed on pages 12-13 of the Operational Plan.

3. The grantee and the state Medicaid program shall identify common business or health care outcome priorities.

Page 13 of the MiHIN Shared Services Strategic Plan details the efforts of the Michigan Medicaid agency and the State HIE Cooperative Agreement and the joint goals that have been developed collaboratively.

4. The grantee, in collaboration with the Medicaid program, shall leverage, participate in and support all Beacon Communities, Regional Extension Centers and ONC funded workforce projects in its jurisdiction.

Page 14 of the MiHIN Shared Services Strategic Plan and pages 12-13 of the Operational Plan outline the coordination strategy between all ARRA funded activities within Michigan. The Michigan HIT Coordinator is responsible for the coordination and identification of activity, resources or other leverage point. The Strategic plan focuses on collaboration between the Medicaid agency, the Regional Extension Center in Michigan and the State HIE Cooperative Agreement. There are currently no Beacon or workforce projects within Michigan's jurisdiction. If/when new projects are awarded in Michigan; they will be added to the collaboration framework.

5. The grantee shall align efforts with the state Medicaid agency to meet Medicaid requirements for meaningful use.

The MiHIN Shared Services is committed to aligning with Michigan Medicaid to meet the requirements of meaningful use as stated on page 13 of the MiHIN Shared Services Strategic Plan. Also, the letter from the Michigan Medicaid Director, in Appendix A, clearly states the commitment to collaborate with the State HIE Cooperative Agreement and other HIT and HIE initiatives in the state.

**Encouraged Activities:**

6. The state's HIE program is encouraged to obtain a letter of support from the Medicaid Director. If a letter of support is not provided, ONC will inquire as to why one was not provided and the lack of a letter may impact the approval of a state plan, depending on circumstances.

Though the Medicaid Director approved the submission of the MiHIN Shared Services Strategic and Operational Plan to the Office of the National Coordination through a vote on the MiHIN Governance Workgroup and through the Michigan HIT Commission as stated on page 1 of both the Strategic and Operational Plan, a letter of support is attached in Appendix A for completeness.

7. Conduct joint needs assessments.

The MiHIN Shared Services is committed to conducting joint needs assessments with the Michigan Medicaid program, specifically the Medicaid EHR Incentive program and Michigan's Medicaid Management Information System. Through the planning phase of the State HIE Cooperative Agreement, Medicaid was a key partner in assisting in the environmental scan of private partners and of State of Michigan systems (Appendix B and Appendix J) and in participating in all of the planning workgroups. This made certain that the Michigan Medicaid needs were well represented in the Strategic and Operational Plans.

8. Conduct joint environmental scans.

For Michigan Medicaid's State HIT Plan, the MiHIN Strategic Plan environmental Scan as well as the information contained in Appendix B and Appendix J were used to assess the current state in Michigan. Further, MiHIN and the Regional Extension Center worked with Medicaid to administer the survey found in Appendix D, "Medicaid EHR Provider Survey". Over 10,000 surveys were sent out to Michigan's Medicaid providers on May 7, 2010. Full results and analysis are anticipated in late August 2010.

9. Collaborate with the Medicaid program and the ONC-supported Regional Extension Centers to provide technical assistance to providers outside of the federal grant for Regional Extension Centers' scopes of work.

Page 14 and 21 of the MiHIN Shared Services Strategic Plan details the foundation of coordination, support and collaboration between the Michigan Medicaid, Michigan's Regional Extension Center (M-CEITA) and the MiHIN. It is the role of the HIT Coordinator to continually assess and improve the coordination between these programs. Further, the Medicaid State HIT Plan when it is finalized will further detail the coordination between Medicaid and the Regional Extension Centers and the State HIE Cooperative Agreement.



10. Leverage public help desk/call center contracts and services between the State HIE Program, Medicaid and the REC.

The State HIE program, Medicaid and the REC are committed to collaborating together to leverage help desks, call centers, informational resources and other services between all programs to ensure efficiency and coordination for Michigan's providers and patients. The framework for collaboration (as outlined on pages 12-14 of the Strategic Plan) will be utilized to identify and determine the feasibility of potential leverage points.

11. Conduct joint assessment and alignment of privacy policies at the statewide level and in the Medicaid program.

The MiHIN Shared Services and the Michigan Medicaid program are committed to leveraging existing assets and are all committed to following statewide policies and standards as they emerge. As it is outlined on pages 50-55 of the Strategic Plan, the necessary statewide policy framework will be finalized throughout the course of this cooperative agreement and with Medicaid at the governance board and as a programmatic partner all policies will be aligned.

12. Leverage existing Medicaid IT infrastructure when developing the health information exchange technical architecture.

Pages 13, 14, 34, and 35 of the MiHIN Shared Services Strategic Plan address exactly how Michigan's Medicaid Management Information System (called the Community Health Automated Medicaid Payment System or CHAMPS) will be utilized and leveraged by the state HIE technical architecture to ensure that it is interoperable statewide.

13. Determine whether to integrate systems to accomplish objectives such as making Medicaid claims and encounters available to the health information exchange and information from non-Medicaid providers available to the Medicaid program.

Michigan Medicaid and the MiHIN Shared Services will utilize the framework for collaboration described on pages 12-14 of the Strategic Plan to further explore this issue and make the appropriate determination.

14. Determine which specific shared services and technical services will be offered or used by Medicaid.

Michigan Medicaid and the MiHIN Shared Services will utilize the framework for collaboration described on pages 12-14 of the Strategic Plan to further explore this issue and make the appropriate determination.

15. Determine which operational responsibilities the Medicaid program will have, if any.

Michigan Medicaid and the MiHIN Shared Services will utilize the framework for collaboration described on pages 12-14 of the Strategic Plan to further explore this issue and make the appropriate determination.

16. Use Medicaid HIT incentives to encourage provider participation in the health information exchange.

It is the intent of the MiHIN Shared Services and Michigan Medicaid to ensure that Michigan's providers who take advantage of the EHR incentives also take full advantage of the sub-state HIEs that are available throughout the state. Michigan Medicaid is working with the HIT Coordinator, the HIT Commission and the MiHIN Shared Services Governance board to examine which policies, financial incentives or other levers can be utilized to create this cross-participation a reality.

17. Collaborate during the creation of payment incentives, including Pay for Performance under Medicaid, to encourage participation by additional provider types (e.g. pharmacies, providers ineligible for incentives).

Michigan Medicaid and the MiHIN Shared Services will utilize the framework for collaboration described on pages 12-14 of the Strategic Plan to further explore this issue and make the appropriate determination.

## 2.4 HIE Sustainability Plans

ONC recognizes the importance and challenges of developing a sustainable health information exchange capability. It is essential, therefore, that for the initial submittal of the Strategic Plan, that states and SDEs shall describe initial thoughts for sustaining HIE activities during and after the cooperative agreement period. It is important to consider how to achieve sustainability based on the model being pursued and to incorporate any work that has been done to test the market acceptance of revenue models. The primary focus of sustainability should be on sustaining information sharing efforts, and not necessarily the persistence of government-sponsored health information exchange entities. ONC anticipates that annual updates to the state plans will provide further developed approaches and activities for long-term HIE sustainability.

Pages 22 – 26 of the Strategic Plan and pages 16-21 of the Operational Plan detail the financial sustainability strategy for the MiHIN Shared Services. By examining the lessons learned from HIE initiatives around the nation throughout the MiHIN planning process, the MiHIN Finance and Governance workgroups found several success factors of financial sustainability that are planned to be part of the MiHIN Shared Services. First, the MiHIN Shared Services will provide a limited set of functions that have been identified by the primary customers as services that will demonstrate direct value. Second, the MiHIN Shared Services technology is designed to meet all requirements with the minimum amount of technology. Third, the direct customers of the MiHIN Shared Services will be the majority of the governing entity that makes business and technology decisions.



The result of these three factors is valuable services at low costs to the MiHIN Shared Services customers. Keeping costs low, implementing the minimum necessary and involving the primary customers in governance are key lessons learned that will improve the long-term sustainability of the MiHIN Shared Services.

As discussed in the page numbers referenced above, Michigan's governance for the MiHIN Shared Services is primarily made up of direct customers – Sub-state HIEs and payers. Both of these stakeholder groups are the direct users of the MiHIN Shared Services. The long-term sustainability strategy is to have the direct customers thoroughly represented in governance of the technical and business operations decisions so that as new services and new costs are added they will be palatable because those paying are those that made the decisions. To add further “checks and balances” to ensure that the entire healthcare community (including consumers) are well represented, the coordinated governance model is balanced with the Michigan HIT Commission, which is described on pages 18 and 19.

**Facilitating Services** - If the state HIE effort is facilitating the statewide coverage of HIE services using a variety of exchange methods, the state plan shall describe preliminary plans for how sustainability of the HIE market in the state may be enhanced by state or SDE actions including any state policy or regulation. Specific plans for sustainability of any directories or authentication services offered at the state level by the grantee must be addressed during the course of the four-year program.

Pages 16-21 of the Operational Plan detail how Michigan will support the MiHIN Shared Services. In the first two years of implementation, the Cooperative Agreement funding will be utilized. As operations begin, the MiHIN Shared Services will be supported by customers – sub-state HIEs and payers. These customers are the majority on the MiHIN Shared Services Governance Board, which is the organization that is tasked with the full business plan (which includes the plan for sustainability) that has previously been established by the ONC and being due in February of 2011.

**Directly Offering Services** - If the state HIE effort is directly providing the services, the state plans shall provide preliminary but realistic ideas on who will pay for the services and under what mechanisms (e.g., per transaction fees, subscription models, payers receiving a percentage allocation based on their covered base) The state plan should also consider how program sustainability can be supported by state policy or regulation including payment reforms to incentivize demand for information sharing or contracting requirements to ensure participation of key partners such as labs and pharmacies.

The MiHIN Shared Services plans to provide direct services to sub-state HIE initiatives within the state and to Michigan's payers. These services are outlined on pages 28-31 of the Strategic Plan. The MiHIN Shared Services is not planning to provide HIE services directly to providers, but instead providing efficiencies and leveraging purchasing power to provide sub-state HIEs with the necessary technologies to offer services to every provider in the state and connect to one another for statewide connectivity.

Pages 16-21 of the Operational Plan detail how Michigan will support the MiHIN Shared Services. In the first two years of implementation, the Cooperative Agreement funding will be

utilized. As operations begin, the MiHIN Shared Services will be supported by customers – sub-state HIEs and payers. These customers are the majority on the MiHIN Shared Services Governance Board, which is the organization that is tasked with the full business plan (which includes the plan for sustainability) that has previously been established by the ONC as being due in February of 2011.

## 3 Operational Plan

### 3.1 Executing Strategy for Supporting Meaningful Use

For each of these areas, the Operational Plans shall:

- Outline a clear and viable strategy to ensure that all eligible providers in the state have at least one viable option in 2011;

Pages 32-26 of the Operational Plan describe the strategies for ensuring that all providers in the state have at least one viable option in 2011. Further, the information added in this Amendment in section 2.2 describes the more specific clear strategy for activities that have been introduced in ONC- HIE – PIN – 001.

- Include a project timeline that clearly illustrates when tasks and milestones will be completed;

Pages 6-8 and 32-28 provide the project timeline that clearly illustrates tasks, milestones and interdependencies. The full project plan is available in Appendix F of this Amendment. It is important to note that the timeline in Appendix F is an initial draft, subject to change after a vendor is procured. After a vendor is put in place, the first deliverable of the vendor's contract will be a highly detailed timeline that lists very specific tasks.

- Provide an estimate of all the funding required, including all federal funding and state funding, used to enable stage one meaningful use requirements;

Pages 17-25 of the Operational Plan provides estimates of all funding that is required for the MiHIN Shared Services – including state funding, private funding and federal funding. The only potential source of funding that was not included in the Operational Plan that was submitted on April 30, 2010 is funding from the Medicaid EHR program. In the Planning – Advanced Planning Document that Michigan submitted for approval from the Centers for Medicare and Medicaid, planning funding for the State HIE Cooperative Agreement was denied by the CMS region five office. At the time of this Amendment, the HIT Coordinator is currently working closely with Michigan Medicaid on the Implementation – Advanced Planning Document to ensure that funding from the EHR Incentive program for the State HIE Cooperative Agreement program is included effectively and appropriately.

- Indicate the role both in funding and coordination of the state Medicaid agency in achieving the state strategy;

The role for coordination with Michigan Medicaid is identified on pages 12 and 13 of the Operational Plan.

The role for funding with Michigan Medicaid is identified in this amendment in section 3.1 and will be further detailed when Michigan's Implementation – Advanced Planning Document and the Medicaid State HIT Plan is finalized for approval.

- Identify potential barriers and risks including approaches to mitigate them; and,

Pages 9-12 of the Operational Plan detail potential barriers/risks to this project as well as the possible approaches for mitigation.

- Identify desired technical support and coordination from ONC to support the state strategy.

The level of technical support and coordination desired from ONC is addressed in this section of the Amendment. Michigan is requesting that ONC provide technical support and coordination throughout the Cooperative Agreement project period by sharing best practices from other states, holding regular information sessions, communicating frequently with the HIT Coordinator and providing clear expectations. Many of these support and coordination needs are well underway by the ONC and the technical assistance team. Michigan has benefitted from the informational sessions held via web-conference and the in person conference held in May of 2010.

## 3.2 Project Management Plans

State Operational Plans shall include a robust project management plan with specific timelines, milestones, resources and interdependencies for all the activities in the state's HIE project. States and SDEs shall explain their project management approach including the project plan tasks that are managed by vendors in order for ONC to judge the comprehensiveness and the feasibility of the plans. State plans should also describe the change management and issue escalation processes that will be used to keep projects on schedule and within budget.

Appendix F of this Amendment contains a robust project management plan with specific milestones, resources and interdependencies. The project management plan in Appendix F is based on the information supplied in the Strategic and Operational Plans that were submitted to the ONC on April 30, 2010.

The project plan has two parts – first, the project plan for the planning phase and the project plan for the implementation phase. The planning phase project plan shows a 100% complete status. The implementation project plan shows an overdue status. The critical interdependency of the implementation project plan is the approval of the Strategic and Operational plans. The project plan was based on the expectation that Michigan would have approval of the Strategic and Operational Plans within eight weeks of submission which is by July 1, 2010. Once the plans are approved there will be new dates in the implementation project plan, but the sequence and duration of the tasks will remain the same.

It is important to note that the timeline in Appendix F is an initial draft with high level tasks. After a vendor is put in place, the first deliverable of the vendor's contract will be a highly detailed timeline that lists very specific tasks.

Specific to the timing of the sub-state HIEs and when they will connect, our current project timeline includes sub-state HIEs to begin connecting early on in a phased approach. Also, as outlined in Appendix P and in section 3.4 of this Amendment, each sub-state HIE is at a different place in development. In the first use case pilot of this project, it is expected that two sub-state HIEs will connect. In the second use case pilot of this project it is expected that another 3 will be able to connect. By the end of this project, it is expected that all seven of Michigan's currently operating sub-state HIEs will have the ability to connect to the MiHIN Shared Services.

The project management approach is outlined in the proposal for the State HIE Cooperative Agreement program that was submitted in October 2009. A summary is provided below:

***"The MiHIN Program Office**, created in May 2009, is a joint effort of MDIT and MDCH. The MiHIN Program Office has two focus areas—business needs and technical solutions—that work together to inform and present decision points to a Steering Committee made up of state government officials. The MiHIN Program Office will coordinate and align state government involvement in all ARRA HIT initiatives, including the Medicaid EHR Incentives, the Regional Extension Center, and HIT Workforce initiatives. The state HIT Coordinator leads the MiHIN Program Office.*

*In July 2009, Michigan selected a partnership between Dewpoint Inc. and Strategic Alliance Advisors (s2a) to manage and support implementation of the MiHIN. This team of business, technical, clinical informatics, and project management consultants will staff the **MiHIN Project Control Office**. The MiHIN Project Control Office will provide oversight management for ongoing project administration, maintaining scope and change control, release planning, release management, risk management, issue management, defect assessment, performance metrics for the Implementation contractor, and periodic participation in project strategy and direction as requested."*

The Michigan Department of Community Health will utilize the MiHIN Project Control Office contract for the purposes described above for the interoperability of the public health systems and Medicaid systems projects. The MiHIN Shared Services Governance Board may leverage

the MiHIN Project Control Office contract from the Michigan Department of Community Health in whole or in part for the work described above.

Two key components of the Project Control Office to keep the project on schedule and within budget are the issue resolution and change management processes outlined below.

The issue resolution process is critical throughout all aspects of the project. An issue is an identified event that if not addressed may affect schedule, scope, quality, or budget.

An issue log will be maintained and updated with the following minimum elements:

- Description of issue
- Issue identification date
- Responsibility for resolving issue
- Priority for issue resolution (to be mutually agreed upon by the State and the Contractor)
- Resources assigned responsibility for resolution
- Resolution date
- Resolution description

Issues shall be escalated for resolution from level 1 through level 3, as defined below:

Level 1 – Project Managers

Level 2 – Executive Stakeholders

Level 3 – Executive Steering Committee

An issue is an event that requires an action plan to fix a problem that has occurred, or an uncertainty, stated as a question, which needs to be answered so necessary actions can be taken. Issues, or problems, are expected to occur during the course of a project. Any issue has the potential to affect the progress of the project if it goes unresolved, and it may jeopardize the achievement of project deliverables. Issue Management identifies project issues, ensures an owner is assigned, and sets a due date for resolution.

Issue Management provides a mechanism by which team members can surface, escalate, and resolve issues that jeopardize the attainment of a project milestone or causes significant project risk. A successful Issues Management process ensures that issues are documented and managed across the project consistently, and that timely and effective resolution and communication occur. The early detection and resolution of issues is a key project management role, and provides for open communication channels and aggressive approach by the team. If it is determined that in order for the issue to be resolved a change must be made to either scope, schedule or budget, the Change Management Process will be invoked.

The Change Management process is defined as the process to communicate, assess, monitor, and control all changes to schedule and budget. The change management procedures will handle such things as “out-of-scope” requests or changing business requirements while the project is underway.

Throughout the life of a project, new requirements may be discovered, deliverables may change, and sometimes reasons to make adjustments to the scope of work are identified. Although change is inevitable, a structured Change Management process, when implemented properly and executed consistently, can aide in setting, managing, and more importantly, meeting, stakeholder expectation. The rigorous implementation of a Change Management process is an essential component in controlling the scope of the project. Managing changes to the baseline project schedule is accomplished by incorporating only vital changes, which are

documented and approved through the change control process. This is an iterative process which is triggered through the submission of change requests.

The purpose of a Change Request is to document, track, and control any changes to the project or adjustments to the agreed-upon scope of work for the project. A change may or may not impact the cost or schedule of the project. The Change Request provides a documented trail of changes, and provides information for the assessment of time, resource availability, and cost impact of the change (if any). Change Requests may also be used to document the removal of functionality or a reduction in cost.

The project team members will submit a Change Request under the following circumstances:

- Changes relative to a project schedule variance
- Changes relative to project revenue or cost variance
- Change relative to potentially missed project schedule milestones
- Change that has significant impact on the project scope
- Changes relative to significant technology considerations

Copies of the change management, issue escalation, risk management plan, and communication plan are attached in Appendix G called "Project Management Documentation".

### **3.3 Risk Assessment**

Managing risk is an important element of successfully building HIE capacity to support meaningful use. Within their Operational Plans, States and SDEs shall identify known and potential risks and describe their risk mitigation strategies. Risks should be prioritized using risk severity and probability. Examples of risks that may be included are: changes in the HIE marketplace, evolving EHR and HIE standards, lack of participation of large stakeholders including Medicaid, breach of personal health information.

The MiHIN Shared Services Operational Plan contains a complete risk assessment that prioritizes the probability, details the impact of the risk and provides mitigation strategies on pages 9 through 12.

### **3.4 HIE Architecture and Standards**

Within the operational plans, States and SDEs shall describe the technical approach taken to facilitate data exchange services within the state based on the model being pursued.

Pages 29-36 of the Operational Plan and Pages 26-38 of the Strategic Plan detail the approach Michigan is taking to facilitate data exchange services statewide.

Michigan will build a master patient index by using proven MPI technology that integrates multiple data feeds to identify matches and potential matches for patient identity. Building off of the core concepts of the MiHIN Shared Services which is to utilize the rich expertise of Michigan's sub-state HIEs, the initial data feeds will come from the sub-state HIEs. The plan is to incrementally add new data feeds as they become available, for example, from Michigan's payers. With data from payers and sub-state HIEs nearly all Michigan citizens will be covered.



The only citizen that would not be eventually covered would be a citizen that has never had insurance (including Medicaid) and has never had a medical encounter in the vast majority of Michigan's health care system that participates in a sub-state HIE.

It is recognized that a more authoritative, comprehensive data feed would be preferable. Michigan explored all other avenues for data feeds to the MPI. Michigan is currently exploring the use of the Michigan Care Improvement Registry, which has uniquely identifies 6.5 million of the 10 million citizens. As outlined on page 22 of Appendix J of this amendment, the Michigan HIT Coordinator is pursuing clarification as to the conditions of MCIR's use in the MPI.

Also of note, Michigan explored using the extensive data from the Michigan birth registry which is populated with Michigan's vital records data. After a review of state law, it was found that there are legal restrictions on utilizing this data that would prohibit its use for a statewide MPI. It is the goal of the Michigan HIT Coordinator to continue to explore this current state law to determine what potential legislative remedies potentially exist.

To support the Master Provider Index – again, Michigan will utilize the provider indices of the sub-state HIEs and the provider index information of Michigan's Bureau of Health Professions Licensing system. The bureau of health professions licenses/regulates 32 healthcare occupations in Michigan. Since nearly all provider types are included in the information supplied by the Bureau of Health Professions, it is unlikely that there will be providers that are not covered in the Master Provider Index. Further, the Bureau of Health Professions is nearly complete on a "One-Source-Credentialing" project that will greatly assist providing information to the MiHIN. Please see appendix O for a summary of the Michigan One Source Credentialing project.

The technical architecture in Michigan was developed and fully supported by the sub-state HIEs in Michigan. See appendix P for the sub-state HIE applications to be a part of the MiHIN Governance Board. These applications provide direct attestation from sub-state HIEs that they will commit to support financially and with resources the MiHIN Shared Services. It is clear in the technical specifications provided in the Strategic and Operational Plans as well as this amendment that the proposed MiHIN Technical Architecture will require specific pieces of technology within each sub-state HIE. The sub-state HIEs will receive funding as part of the State HIE Cooperative Agreement to cover the implementation of these pieces of technology. The cost of maintaining this technology in each sub-state HIE will likely be a part of the long-term financial sustainability plan that is due to ONC in 2011. The technology proposed is relevant to the sub-state HIEs and is scalable to meet the sub-state HIEs needs today and in the future. The sub-state HIEs have also found value in the proposed technology as evidenced by their attestation to support the MiHIN, as found in Appendix P.

Throughout the implementation process Michigan will actively pursue making the identity management directories available to other initiatives in order to fully enable a statewide identity management service that can serve multiple known or emerging needs.

As indicated in Appendix P, Michigan's sub-state HIEs are in varying states of readiness. Each sub-state HIE that is seeking to be a part of the governance board has been asked to fill out a

form that shows their technical readiness at a high level. As it shows in Appendix P, two of Michigan's sub-state HIEs are currently ready with an XDS repository. Three have indicated that an XDS repository is part of their implementation plan and are currently preparing to implement this technology. Another two have indicated that the XDS repository is now part of their plan since the MiHIN Shared Services Planning process and are currently in the planning process. The MiHIN Shared Services Budget, found in the Operational Plan submitted on April 30, 2010, includes funding for sub-state HIEs to support the deployment of their XDS repository technology.

The implementation of a Record Locator Service is important to Michigan's goal for statewide health information exchange. During our extensive planning process, Michigan's stakeholders looked at current national standards, particularly those that are involved in NHIN. The XDS standard was selected to support the Record Locator functionality because of its use in NHIN and because it is important to Michigan's stakeholder to use national standards and be compatible with NHIN.

Though it may not be directly applicable to stage 1 Meaningful Use, having a standards based Record Locator Service is likely to be necessary for subsequent stages of Meaningful Use as well as to meet our stakeholder goals for quality and safety. The XDS implementation proposed in Michigan's Strategic and Operational Plan is a very narrow test of the XDS standard - it was meant to be a test of the public health use cases. On page 27 of the Strategic Plan submitted on April 30, one of the technical architecture guiding principles states that Michigan will "Comply with the latest interoperability standards but be practical enough to get something working." If XDS is a standard that is not practical enough to implement, then it would be within our guiding principle framework to make a change.

Michigan's strategy is to prioritize activity to 1) ensure that all providers have at least one option for the first stage of meaningful use through a sub-state HIE and then 2) implement functionality that may be necessary to meet subsequent stages of Meaningful Use and that add value to the healthcare community. Considering that Michigan already has a solid baseline for HIE services, it is anticipated that the first priority will be completed in the third quarter of 2011. Then, the second priority of adding and enhancing the services offered will begin in the fourth quarter of 2011. This strategy will build up the base of robust HIE at a local level by working with sub-state HIEs to meet all Meaningful Use requirements in a way that makes their services reliable, affordable and valuable to all providers in the state. Once there is a strong base for HIE in Michigan, then advanced services (like leveraging XDS to support the Record Locator Service functionality and others) become relevant, useful and a value-add to Michigan's providers.

- **Facilitating Services** - If the state HIE effort is facilitating the statewide coverage of HIE services using a variety of exchange methods, the state plans shall describe the approach of obtaining statewide coverage of HIE services to meet meaningful use requirements and also the processes or mechanisms by which the state or SDE will ensure that the HIE services comply with national standards.



Pages 29-36 of the Operational Plan and Pages 26-38 of the Strategic Plan detail the approach Michigan is taking to facilitate data exchange services statewide. Specifically, pages 32-24 of the Strategic Plan and pages 30-31 of the Operational Plan detail how the MiHIN Shared Services will comply with national standards. Page 31 of the Operational plan specifically addresses the approach for meeting meaningful use requirements as they evolve.

- Directly Offering Services - If the state HIE effort is directly providing or provisioning services (including shared directories or provider authentication services) the state plans shall provide either the detailed specifications or describe the process by which the detailed specifications will be developed. For those plans that don't have a detailed architecture, the updated Notice of Award for implementation will have a requirement to provide the detailed plans at a later date.

The MiHIN Shared Services is planning to provide shared directories and so the detailed specifications and the process for further defining specifications can be found on pages 26 -38 of the Strategic Plan. As part of the MiHIN Shared Services planning process, detailed specifications were drafted and are available in Appendix H “MiHIN Shared Services Interoperability Specifications” and Appendix I “MiHIN Security Architecture and Requirements.”

The approach for developing these detailed standards and specifications included subject matter experts and a workgroup made up of technical experts from a diverse array of Michigan’s healthcare systems (described on page 65 of the Strategic Plan). Also, a “Vendor Technical Collaboration Team” was created so that HIT and HIE vendors could provide specific input to standards and specifications that would create a highly interoperable technical environment. To mitigate any conflict of interest in potential procurement processes, the State of Michigan did not sponsor the Vendor Technical Collaboration Team. More information about the Vendor Technical Collaboration Team can be found in Appendix K.

The use of standards to support HIE enabling technology is a critical aspect of this program and needs to be part of a longer-term framework to support interoperability. Due to the evolving nature of health information technology, standards, requirements related to meaningful use, and standards adoption, there should be an explicit mechanism specified in state plans that ensures adoption and use of standards adopted or approved by the Department of Health and Human Services (HHS) as well as the appropriate engagement with ONC in the ongoing development and use of the NHIN specifications and national standards to support meaningful use. The plans should also explain how the states will encourage any vendors or service providers to follow national standards, address system modularity, data portability, re-use of interfaces, and vendor transition provisions.

The MiHIN Shared Service Operational Plan addresses the specified issues on pages 29-31 and 38-39. Michigan is committed to engage ONC in the ongoing development and use of NHIN specifications and national standards to support meaningful use. Further, the guiding principles listed on page 16 for Governance and on page 27 for Technology specifically address strong commitment to utilize national standards in Michigan. Appendix H “MiHIN Shared

Services Interoperability Specifications” illustrates Michigan’s proposed reliance on national standards. The procurement process will require MiHIN Shared Services vendors to follow national standards and interoperability principles.

Michigan, through the Michigan HIT Coordinator, will continue to examine potential policy levers and work directly with technology stakeholders and trade organizations to find effective ways to encourage all vendors or services providers to follow national standards and interoperability principles. The Michigan HIT Commission has technology vendor representation and as part of the MiHIN Coordinated Governance Structure will be a key resource to developing such policies.

### 3.5 Privacy and Security

Within the Operational Plans, States and SDEs shall develop and fully describe their privacy and security framework including the specific policies, accountability strategies, architectures and technology choices to protect information. The state privacy and security framework shall be consistent with applicable federal law and policies. To assist the states, ONC will provide guidance on security and privacy policies and programs in the near future. The state plan shall contain a description of the analysis of relevant federal and state laws as related to HIE and the plans for addressing any issues that have been identified. If an analysis hasn't been done, the state or the SDE shall provide a description of the process and the timeline for completion. Furthermore, states should describe the methods used to ensure privacy and security programs are accomplished in a transparent fashion. If a complete framework is not available, the state or the SDE shall describe the process they will use to fully develop such a framework.

On pages 47-55 of the Strategic Plan and pages 40-44 of the Operational Plan Michigan lays out a privacy and security framework that will evolve overtime. A full analysis of state and federal laws that pertain to health information exchange can be found in section 6.2 Appendix: Comparative Analysis Matrix in the Appendix of the Strategic Plan. The findings from this analysis are address on pages 51-55 of the Strategic Plan. Appendix 2 of the Operational Plan offers detailed privacy and security policies that address access, authentication, individual choice, audit, authorization and breach. This framework will continue to develop as described on pages 40 – 41 of the Operational Plan.

The technology sections of the Strategic and Operational Plans illustrate Michigan's technology choices and considerations regarding privacy and security. See pages 29-31 of the Operational Plan and pages 26-39 of the Strategic Plan for more details. Appendix I of this amendment "Michigan Information Security Architecture and Requirements" also provides detailed security specifications, technology choice considerations and requirements.

## 4 Appendix A: Letter from Michigan Medicaid Director



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF COMMUNITY HEALTH  
LANSING

JANET OLSZEWSKI  
DIRECTOR

August 1, 2010

David Blumenthal MD, MPP  
National Coordinator for Health Information Technology  
Department of Health and Human Services  
200 Independence Avenue, S.W.  
Washington, DC 20201

Dear Dr. Blumenthal:

I am writing this letter to express my strong support for and coordination with the Michigan Health Information Network (MiHIN), which is the name of Michigan's project under the State Health Information Exchange Cooperative Agreement.

In Michigan, the Medicaid Agency is part of the Michigan Department of Community Health, which is the prime applicant on the State HIE Cooperative Agreement. As such, Michigan's Medicaid Agency has been supportive with direct involvement in the MiHIN from its beginning in 2005.

Medicaid has been at the table when health information technology is planned and implemented statewide in Michigan and locally, as well. Michigan Medicaid has taken a policy stance that supporting Health Information Technology and HIE is right for our beneficiaries, our providers and our entire state.

To put this policy into action, Michigan Medicaid has historically offered incentives for Medicaid health plans to participation in local Health Information Exchanges and has been actively encouraging e-prescribing in Michigan. Michigan Medicaid is working closely with the MiHIN to respond to all HIT opportunities under the American Recovery and Reinvestment Act of 2009 in a coordinated manner. As Michigan's Medicaid Director, I have assigned top staff to explore options for leveraging resources, funding and other policy levers to promote HIT and HIE throughout Michigan. Further, I am prepared to ensure representation from Medicaid on the MiHIN governance board.

I am pleased with the progress and stated direction of the MiHIN and Michigan Medicaid is committed to working with all partners to guarantee success.

Sincerely,

A handwritten signature in cursive script that reads "Stephen Fitton".

Stephen Fitton, Director  
Medical Services Administration

## 5 Appendix B: State of Michigan HIT Adoption Analysis



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## 6 Appendix C “Michigan Provider Outreach Sessions Postcard”



## 7 Appendix D “Medicaid EHR Provider Survey”



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## 8 Appendix E “Description of the Michigan Primary Care Consortium”

The Michigan Primary Care Consortium (MPCC) is a collaborative private/public partnership of organizations committed to improving the delivery of primary healthcare in Michigan and to rebuilding the primary healthcare workforce. The Consortium was organized in 2006 in response to an invitation from the Chronic Disease Division of the Michigan Department of Community Health to primary care stakeholders to collaborate in resolving the system level barriers that were impeding the consistent delivery of effective chronic illness and preventive care in primary care settings.

Since 2007, the Consortium has promoted the transformation of primary care practices to patient- centered medical homes. The Improving Performance in Practice (IPIP) project has provided insight into the difficulties and successes experienced by primary care practices while implementing the model. In 2010, MPCC workgroups are completing initiatives in three major arenas: practice transformation, engagement of consumers of healthcare, and rebuilding the primary care workforce.

A basic assumption of the Consortium is that transformative changes in complex systems are best accomplished through the collaborative efforts of all key stakeholders. MPCC members have a vested interest in primary healthcare and/or health system change and affirm the Mission, Vision, and Guiding Principles of the MPCC. MPCC's members represent diverse organizations:

- Physician organizations and physician hospital organizations
- Businesses and other purchasers of healthcare
- Insurance companies and healthplans
- Professional associations
- Academic programs
- Michigan Department of Community Health
- Quality improvement organizations
- Others

MPCC members are involved in various activities to achieve the overall objective:

<b><i>Comprehensive, coordinated, whole-person care that is adequately reimbursed will be available in every primary care setting in Michigan</i></b>
---

To accomplish this overall objective, the following activities are taking place.

**MPCC Workgroups:** The MPCC white paper series: “Primary Care is in Crisis” provided a framework and recommended actions for three primary areas of focus. Work groups are implementing action plans for nine objectives in 2010. The nine objectives include:



**Michigan IPIP Program:** Improving Performance In Practice or IPIP is a primary care practice transformation program that combines learning sessions with coaching to implement components of PCMH and chronic illness care.

**Michigan Definition of PCMH:** Michigan health plans, insurance companies and primary care professional associations came to consensus on a MI Definition of PCMH based on the Joint Principles of the Patient-Centered Medical Home with four Michigan footnotes.

**Health Plan Incentive Programs:** Michigan payers agreed that beginning in 2010, they would include three specific PCMH components in their incentive programs: extended access, e-prescribe, and registry use. Additional measures are under consideration for 2011.

More information is available at [www.mipcc.org](http://www.mipcc.org)

## 9 Appendix F “MiHIN Shared Services Project Plan”



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## 10 Appendix G “Project Management Documentation”



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## 11 Appendix H “MiHIN Shared Services Interoperability Specifications”



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## 12 Appendix I “MiHIN Information Security Architecture and Requirements”



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## 13 Appendix J “State of Michigan Systems Technical Environment Analysis”



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## 14 Appendix K: Vendor Technical Collaboration Team

The consulting team S2A is now accepting nominations to the MiHIN Vendor Technical Collaboration Team. Nominations will be accepted for both vendor and stakeholder members to the MiHIN Vendor Technical Collaboration Team. While the work of this team will be presented to the MiHIN Technical Workgroup for approval to be included in the MiHIN Architecture Design this is not a State of Michigan sponsored activity. The work of this team will be facilitated by the S2A consultants.

We will hold open nominations for 10 working days from the date of posting on the MiHIN web site. Once the 10 days are up we will select the team and begin work. However we will accept additional nominations after the initial period.

**Background:** Any project with the scope of the MiHIN requires collaboration and involvement from numerous parties. To provide guidance to the project, the current MiHIN leadership is forming workgroups for Governance, Business Operations and Technical Specifications. There will also be sub-workgroups for Privacy and Security, Finance and Performance Measurement. One of the goals of the Technical Workgroup is to develop the system architecture and standards that can be implemented into highly interoperable infrastructure. While following national standards are very important they are not sufficient to implement the necessary infrastructure. Because most national standards are architecture agnostic they fall short of being true implementation specifications.

A successful approach used in other Health Information Exchange (HIE) projects is to engage both stakeholder IT resources and a broad base of Health Information Technology (HIT) and HIE vendors in the design and standards setting process. We are calling this team the Vendor Technical Collaboration Team . In some HIE projects this team might be merged with the Technical Workgroup. However to mitigate any conflict of interest we have decided that we should keep this team separate from the MiHIN Technical Workgroup which will be creating requirements that would eventually become part of an RFP that some of these vendors might bid on. The work of this team will ensure that any design work done by the Technical Workgroup can be implemented by a large majority of the HIT and HIE vendors.

**Charter:** The focus of this Vendor Technical Collaboration Team will be to assist the MiHIN Technical Workgroup and the Project Control Office (PCO) in the development of the MiHIN Backbone architecture, interoperability standards, system security, shared services definition and implementation.

### Why do we need a Vendor Technical Collaboration Team?

- The nature of this project is to create a backbone and state-wide Health Information Exchange infrastructure that is capable of allowing any vendor to interoperate as long as they follow national and state-wide standards
- The success of this backbone hinges on its ability to interoperate with broad array of stakeholder and vendor systems.
- While there are some national standards most of them are developed to be vendor and architecture agnostic. Applying these standards to a particular architecture takes significant work.



- By getting a number of vendor organizations to develop a consensus on how to implement specific functions and services of the backbone we ensure higher interoperability and encourage more competition for specific services going forward
- There is strong precedence for this at the national and at state levels
- The ONC is looking for states and regions to develop standards and submit them for national review and acceptance

### **Goals of the MiHIN Vendor Technical Collaboration Team**

To assist the MiHIN Consultants in:

- the design of the MiHIN Backbone technical architecture
- recommending approaches for the implementation of the backbone
- defining the interoperability standards that should be implemented for the backbone and the integration with all community HIE organizations and EHR vendors
- the definition of the terminology (nomenclature) standards that should be implemented for the backbone
- the development of security standards and processes for the backbone
- the development of shared services definitions and technology deployment
- assisting in the backbone implementation and testing during implementation

### **Participants**

- Co-chairs and Voting Members of the MiHIN Technology Workgroup
- MiHIN Project Control Office Consulting Team (Team Leadership)
- Key State of Michigan Department Staff
- Backbone or HIE Vendors Technical Staff
- EHR Vendors Technical Staff
- Select technical resources from stakeholder organizations

### **Process for Forming the Vendor Technical Collaboration Team**

The Vendor Collaboration Team will be assembled and facilitated by the MiHIN Dewpoint/S2A consulting team. The selection process will encourage broad vendor participation to meet the goals described above. Each of the 30 RFI respondent organizations will be contacted and encouraged to nominate a member of their organization to participate. Other organizations that we know of who can add to the process will also be invited. We will also post this on the MiHIN and Dewpoint web sites and ask for open nominations.

Nominations will be done online via Survey Monkey. Vendors will have 10 working days to respond before we begin meetings but others members can be added later. Please see the Criteria for Selecting Vendors and Guidelines for Membership below.

### **Criteria for Selecting Vendors**

1. Vendors are defined as those organizations that currently have HIT or HIE products, implement open source HIE products, or develop software for interoperable healthcare services and market and sell these products or services
2. Vendors may have full service HIE products or individual products such as security services, master patient indices, messaging gateways or other products

3. Vendors who re-sell other vendors products generally will not be allowed unless they provide significant value-added services such as software enhancements that promote interoperability
4. Vendors must be CCHIT certified or for those products not yet covered by CCHIT certification they must demonstrate commitment to national standards for Health Information Technology interoperability
5. Vendors who have been actively involved in national and regional HIE standards efforts are encouraged to participate
6. Vendors with operating HIE systems being used by Regional Health Information Organizations (RHIOs) or backbone products used by national, state or regional consortiums are encouraged to participate
7. Consultant organizations (other than the PCO consultant team) will not be allowed unless they meet one of the other vendor criteria above
8. Vendors will not be able to develop system requirements and will not be voting members of any MiHIN Workgroup
9. Michigan stakeholder organizations that have existing technology which may be leveraged for the MiHIN are not considered Vendors for the purposes of this process, thus they may be voting members of the MiHIN workgroups.
10. In some cases more than one representative from an organization may be allowed to participate if they bring additional skills to the team.

### **Guidelines for Membership**

1. This is not a sales activity and no vendor sales staff will be allowed.
2. While broad participation from Technical Workgroup and vendors is highly desirable membership will be limited to individuals who bring strong technical skills and specific knowledge to the team.
3. Each member must be impartial in their work on this Collaboration Team in much the same manner as working on development of national standards.
4. Members will be asked to complete a Conflict of Interest and Intellectual Property form with Dewpoint/S2a which will describe their affiliations and protect any intellectual property that they may expose during the course of these sessions.
5. Members will be expected to contribute to the work by performing some limited work assignments such as reviewing and commenting on documents, collecting data to be shared with the team and other tasks. In general the requirement for participation will be limited to about 8 hours per month. Some members may be asked to volunteer to complete more extensive work assignments but this will be voluntary.
6. Vendor organizations may nominate one or more individuals for participation on the Collaboration Team however the Collaboration Team leadership will decide on individual participation.
7. Participation is limited to individuals not organizations. Organizations may not substitute at will for individual members but rather can nominate others for membership.
8. Participation by individuals from vendor organizations will not enhance nor hinder a vendor's opportunity to be selected for any State of Michigan or other MiHIN contracts.
9. Any member, as determined by the Collaboration Team leadership, who is not following these guidelines, may be asked to leave the team.

## 15 Appendix L: 2009 Surescripts Data

## 16 Appendix M: Michigan Health Department Analysis

### % health departments electronically receiving immunizations

100% - The Michigan Care Improvement Registry (MCIR) is an immunization information management system (IIS) developed by the State Of Michigan to assist immunization providers with increasing immunization levels in Michigan. MCIR is maintained by the Michigan Department of Community Health Division of Immunizations. The IIS presently contains in excess of 74 million shot records addressing over 6.5 million patient records. Currently, there are more than 5,415 healthcare facilities (hospitals, pediatric clinics, family practice clinics, OB/GYN, H1N1 provider clinics, and migrant and tribal clinics) 400 public health clinics as well as schools and daycares accessing and submitting immunization information to the MCIR. Currently, the secure web-based system is receiving data via an upload of electronic files, electronic optical scan transfer and manual data entry. The MiHIN Shared Services plans will enable MCIR to support meaningful use by implementing the functionality to receive immunization data utilizing the standards and protocols set forth by the ONC.

### % health departments electronically receiving syndromic surveillance

100% - The Michigan Syndromic Surveillance System (MSSS or Syndromic) is a real-time surveillance system that tracks and monitors chief presenting complaints from emergent care settings. State and local public health officials access the secure web-based system to rapidly detect and track unusual outbreaks of illness. There are currently over 80 facilities (hospital EDs and poison control centers) electronically submitting data to MSSS. Syndromic is maintained by the Michigan Department of Community Health. MSSS receives syndromic data via HL7 format.

### % health departments electronically receiving notifiable laboratory results

100% - The Michigan Disease Surveillance System (MDSS) is the State Of Michigan's system used to identify and track emerging infectious diseases and potential bioterrorism attacks. It allows state and local public health officials to investigate outbreaks and the monitoring of public health trends at a local, regional and state level. MDSS also enables physicians and clinical laboratories to electronically report the occurrence or suspected occurrence of disease, conditions or infection required by the Michigan Communicable Disease Reporting Rule. The system was developed in 2004 and is maintained by the Michigan Department of Community Health (MDCH) Bureau of Epidemiology.

MDSS is a secure web-based system available 24/7/365 to support quick and appropriate responses to public health threats. It is a CDC National Electronic Disease Surveillance System (NEDSS) based system and is compliant with the CDC's Public Health Information Network (PHIN) standards. It is able to receive disease reports through manual upload of transferred files, online web submission and the importation of HL7 laboratory reports.

Currently, MDSS is receiving HL7 electronic laboratory reports from the State Of Michigan Bureau of Laboratories as well as other laboratory partners, such as, the MAYO laboratory, Quest and Labcorp. Electronic laboratory reporting has improved the timeliness of reporting and data completeness accelerating the response time to public health threats and outbreaks including the 2010 H1N1 pandemic.

## 17 Appendix N: Web-Denis Information

## 18 Appendix O: One-Source-Credentialing Project Information

### The OneSource Credentialing Project - Overview

2006-7 CMS Medicaid Transformation Grant Award: 5,208,759

#### **The OneSource Credentialing Project Overview**

The focus of this project is to utilize available technology to optimize capture, processing, and management of healthcare provider data (credentials, licenses, sanctions, disciplinary actions). This will provide administrative simplifications by reducing processing time and costs associated with redundancies, provide the ability to electronically share healthcare provider information, and increase the overall quality of the state healthcare provider pool through more accurate assessment of healthcare provider eligibility using continuously monitored information.

The project targets manual, repetitive, redundancies currently in place for the capture, processing, management and sharing of Michigan healthcare provider data. The concept began with the understanding that healthcare providers are credentialed by, on average, 12 different entities, all of which use unique and often paper application forms, request similar or the same information, follow manual, paper-based processes and provide limited to no ability to quickly and efficiently share information.

#### **The OneSource Credentialing Project and Sub-Components**

The Credentialing Service: Michigan Provider Credentials Center (MiPCC)

This is a vendor-based solution (Medversant Technologies LLC) offers an off-the-shelf service that utilizes technology and standard practices to manage healthcare provider data. The service is NCQA certified as a CVO, URAC certified, and adheres to The Joint Commission guidelines. The service will utilize existing licensing data captured by the Bureau of Health Professions License 2000 database. The initial pilot included Fee-for-Service Medicaid healthcare providers. Medicaid eligible healthcare provider data has been shared with MiPCC and continuous monitoring piloted. Outreach is currently underway or planned for the following state agencies:

- Bureau of Health Professions (primary source verification and related support kicked off July 7, 2010)
- DCH Mental Health (primary source verification) (Outreach is underway)
- Health Professional Recovery Program (Outreach is planned)
- Department of Corrections (Outreach is underway)

#### *Subcomponent: Disciplinary Documents File Conversion*

This subcomponent was designed to establish and implement processes and procedures to share public healthcare provider disciplinary documentation electronically to state agencies (through IRMA) as well to the public (via the web).

The scope includes:

Phase 1: Conversion of historical documents (FY2000 to present) from paper to electronic form; and development and implementation of ongoing process and procedures for conversion (Completed and Closed)

Phase 2: Posting public disciplinary documents to the website: Verify a License

This will reduce costs associated with manual, labor intensive processing of Freedom of Information Act (FOIA) requests as well as reduce the time to surface (find and/or share) this information both internally and to the public.

(Currently in the testing phase in preparation for cut over anticipated Q4FY2010)

*Subcomponent: Michigan Healthcare Provider Records Enhancement*

This subcomponent was designed to ensure that existing healthcare provider records in the licensing database contain the all the required data, this component included: 1) identification of essential data elements; 2) analysis of existing records/data for accuracy and completeness; and 3) update of healthcare provider records as necessary. (Completed and Closed)



## 19 Appendix P: Sub-State HIE Nominations Forms

## 20 Appendix Q: Joint Venture Hospital Laboratories

Established in 1992, the Joint Venture Hospital Laboratories (JVHL) network is comprised of 126 hospital-affiliated laboratories committed to providing managed care plan members and participating physicians with the highest quality, convenient and efficient laboratory services. Lab testing is one of the most vital diagnostic tools for all segments of health care and it is our mission to provide the best in laboratory medicine in support of our communities and health care programs.

The core of the JVHL services are intended to allow the over 125 independent Michigan hospitals and laboratories that make up the JVHL to work together in the billing of claims and HEDIS result reporting for over 15 different health plans. This includes working with over 35 distinct electronic data interchange (EDI) partners and the utilization of ANSI-HIPAA EDI file formats for the transmission of billable claim data and remittance information. The end result in the workflows and data interchanges that the JVHL contracted health plans are able to receive claim and result information from over 125 independent hospitals and laboratories as being from a single provider.

JVHL also fulfills an important role in facilitating the reporting of lab results from the hospitals and laboratories it works with to numerous health plans. A number of contracted health plans require lab result information to fulfill HEDIS reporting requirements, run disease management systems, and carry out physician pay-for-performance programs. PLM plays a key role in the result reporting process by utilizing HIT systems to coordinate collection and consolidate information from over 125 independent providers so that it can be provided to health plans in a uniform electronic format.

In 2009 JVHL processed over 11.9 million services lines, with the highest volume partner submitting over 1.9 million services lines and the lowest volume partner submitting 2 service lines. For calendar year 2009, JVHL also collected and reported to health insurance plans over 9.5 million lab results.

An exciting project for JVHL is the creation of a result repository that is being used to make the reporting of laboratory result information more timely and accurate. This project includes a process that leverages the HL7 EDI standard to collect all outpatient results that are performed by partner laboratories. These results are fed into a result data repository, which is then used to handle the reporting of results to the health plans.

A challenging aspect to working with independent hospitals/laboratories on the Result Repository (PRR) project is that each partner uses different mnemonics to describe the resulted test. To normalize information and be able to report consistent results to health plans, an alias mapping has to be constructed between internal provider mnemonics and CPT/LOINC test codes. Currently, over 10,000 aliases have been setup in order to allow for proper reporting of result information. Another important internal alias mapping project that is in its infancy is to

normalize ordering providers so that all results that are stored in the PRR can be linked to the NPI of the ordering provider.

With 2009 being a year of major growth for the PRR, JVHL processed and stored over 88 million result values that were sent by 34 facilities. The result repository was utilized to report about 30% of the calendar year 2009 JVHL HEDIS results to health plans, which was a major increase over the utilization number for calendar year 2008 which was only 17%. While still early, the 1st Quarter of 2010 is seeing usage of the PRR to fulfill 73% of JVHL HEDIS results that have been reported to health plans in 2010.

More information is available at [www.jvhl.org](http://www.jvhl.org)

## 21 Appendix R – Results from Sub-state HIE Capabilities, Plans and Proportion Survey



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