MiHIN – Business Operations
Meeting Agenda

Meeting Date:	March 23, 2010	**Teleconference #:**	866-274-9016 Code: 241174, web conference information below
Place:	Web Conference and Kellogg Center, Michigan State University Room: Conference 62	**Facilitator:**	Shaun J. Grannis, MD MS FAAFP
Time:	3:00-4:30		

Web Conference: https://premconf.webex.com/premconf/j.php?ED=134811857&UID=1119808942
Meeting Password: mihin8923

Topic 0:	Attendance, Approval of Meeting Minutes (5 minutes)
Topic 1:	Status of Other Workgroups (20 minutes)
Topic 2:	Review of accomplishments to date (20 minutes)
Topic 3	Strategic Plan Review [VOTE] (45 minutes)
Topic 4:	Public Comment

DISCUSSION	0. Attendance, Approval of Meeting Minutes (5 minutes)	
	• Take attendance • Approval of previous meeting's minutes	
ACTION ITEMS	**PERSON RESPONSIBLE**	**DEADLINE**

DISCUSSION	1. Status of Other Workgroups (20 minutes)	
	• Update by Rick Brady	
ACTION ITEMS	**PERSON RESPONSIBLE**	**DEADLINE**

DISCUSSION	2. Review of accomplishments to date (20 minutes)	
	• Presentation by Shaun Grannis	
ACTION ITEMS / DECISIONS	**PERSON RESPONSIBLE**	**DEADLINE**

DISCUSSION	3. Strategic Plan Review [VOTE] (45 minutes)		
	• Discussion facilitated by Shaun Grannis		
ACTION ITEMS / DECISION		**PERSON RESPONSIBLE**	**DEADLINE**

DISCUSSION	4. Public Comment		
	• Open to public for any issue		
ACTION ITEMS		**PERSON RESPONSIBLE**	**DEADLINE**

MiHIN – Business Operations
Meeting Minutes

Meeting Date:	February 23, 2010	**Teleconference #:**	866-274-9016 Code: 241174, web conference information below
Place:	Web Conference and Kellogg Center, Michigan State University Room: Room 106	**Facilitator:**	Shaun J. Grannis, MD MS FAAFP
Time:	3:00-4:30		

Web Conference: https://premconf.webex.com/premconf/j.php?ED=103345802&UID=75298592
Meeting Password: mihin2309

Topic 0:	Attendance, Approval of Meeting Minutes (5 minutes)
Topic 1:	Status of Other Workgroups (10 minutes)
Topic 2:	State HIE Announcement Overview (15 minutes)
Topic 3	Strategic Plan (60 minutes)
Topic 4:	Public Comment

DISCUSSION	0. Attendance, Approval of Meeting Minutes (5 minutes)

	• Take attendance – Done by Co-Chair Sue Moran
	• Voting Member Attendance:
	  ○ Bob Brown-YES
	  ○ Sue Moran-YES
	  ○ Peter Ziemkowski-YES
	  ○ Christopher Beal -NO
	  ○ Leland Babitch-YES
	  ○ Bryan Dort-YES
	  ○ Deana Simpson-NO
	  ○ Sherri Stirn-NO
	  ○ Bernard Han- YES
	  ○ Gary Assarian-YES
	  ○ Michael Bouthillier-YES
	  ○ Betsy Pash-YES
	  ○ Tim Pletcher-YES
	  ○ Paul Edwards- YES
	  ○ Scott Monteith-NO
	  ○ Linda Young-NO
	  ○ Rebecca Blake-NO
	  ○ Mary Anne Ford-YES
	• Other Attendees:
	  ○ Rick Brady, MiHIN PCO
	  ○ Shaun Grannis, MiHIN PCO

	○ Brad Olsen, MiHIN PCO ○ Amber Murphy, MiHIN PCO ○ Frank DeLaura, my1HIE ○ Hank Mayers ○ Jennifer Tomaszczyk, MSU ○ Laura Rappleye, MDCH ○ Jim Collins, MDCH ○ Moira Davenport-Ash ○ Sharie Falan, Western Michigan U. ○ April Araqul, MPRO ○ Kurt Richardson, UMHS ○ Paul Muneio, Promedica ○ Helen Hill, HFHS et al ○ Sharon Leenhouts ○ Jackie Tichnell, MSU ○ Linda Myers, MDIT ○ Patty Clark, MDCH • Minutes of 2-9 approved unanimously

ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE

DISCUSSION	1. Status of Other Workgroups (10 minutes)
	• Rick talked briefly about other workgroups.

ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE

DISCUSSION	2. State HIE Announcement Overview (15 minutes)
	• Presentation by Rick Brady

ACTION ITEMS / DECISIONS	PERSON RESPONSIBLE	DEADLINE

DISCUSSION	3. Strategic Plan (60 minutes)
	• Presentation by Shaun Grannis • Bryan Dort asked what the definition of a community HIE was. Rick stated that a community HIE was any organization that participates in HIE on behalf of an area: it could be a Region based HIE, provider org. HIE, health system HIE, etc. • Bob Brown asked at what level will community HIE be funded by this grant. The response was to the level required to enable cross community HIE related to the use cases being implemented with the limitation of funds available. • There was a discussion on human resources. In general, people were not experiencing a shortage of staff. They were retraining to meet the need for HIT staff. • Bernie Han commented that an additional aspect of risk was risk from lack of user acceptance. It is equally important to the other risks listed. • It was generally thought a good use of resources to be able to get lab results from cross community referrals. An example with UMHS was discussed. • The early need for registries was discussed, in particular by Tim Pletcher and Frank DeLaura. It was generally agreed that registries are important; the standards may be

	lagging to make widespread adoption easy. • Outreach activities were discussed. Bob Brown felt it important to work closely with M-CEITA and perform outreach to the provider level. The group generally agreed, especially in the area of close M-CEITA and MiHIN coordination. • The group requested access to the EHR Early Adopter survey done by the PCO. The group consensus was that a (at least) yearly survey should be done. In addition, a matrix of roles and responsibilities of the various HIE resources documented should be created. • It was again emphasized that members should mute their phones while not talking. If your phone was muted during the meeting, then you had excessive background noise or had put your phone on hold. Putting your phone on hold disrupts the meeting because the hold music makes it difficult to talk.

ACTION ITEMS / DECISION	PERSON RESPONSIBLE	DEADLINE

DISCUSSION	4. Public Comment
	There was no public comment.

ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE

MiHIN Business Operations Workgroup: Other Workgroups' Status

- **March 23, 2010**

Technical

- Architectural plan on workzone
- Validating plan with Vendors via Vendor Technical Collaboration Team
  - No significant changes
  - Better understanding of current ‘state-of-the-art’

Finance

- Finance Principles completed
- Working on detailed capital and operational budget

Privacy and Security

- Defined consent requirements – opt out
- Will define process for ongoing policy work in privacy and security

Governance

- Defining the characteristics (board members, terms, etc) of the 501(c)(3)
- By 12/31: operational governing organization
- Defining criteria of sub-state HIE's that will use MiHIN shared services directly
- Sub-state HIE = Community HIE, public or private

MiHIN Business Operations Workgroup: Recap

- **March 23, 2010**

Michigan Department of Community Health
MDCH
Jennifer M. Granholm, Governor
Janet Olszewski, Director

MICHIGAN DEPARTMENT OF
dit
INFORMATION TECHNOLOGY

Business Operations Goals by April 15

1. Prioritize ONC HIE Services (December 29) ✓
2. Select Use Cases for initial implementation (January 12) ✓
3. Create Value Propositions for Use Cases Selected (January 26) ✓
4. Provide Input and Approve Statewide Business Architecture (February 23) ✓
5. Provide Input and Approve Statewide HIE Strategic Plan (March 23)**<===We Are Here**
6. Provide Input and Approve Statewide HIE Operational Plan (April 6)

Prioritize ONC HIE Services

1. Electronic clinical laboratory ordering and results delivery
2. Electronic public health reporting
3. Quality Reporting
4. Clinical summary exchange for care coordination and patient engagement
5. Electronic eligibility and claims transactions
6. Electronic Prescribing and refill requests
7. Prescription fill status and/or medication fill history

Select Use Cases for initial implementation

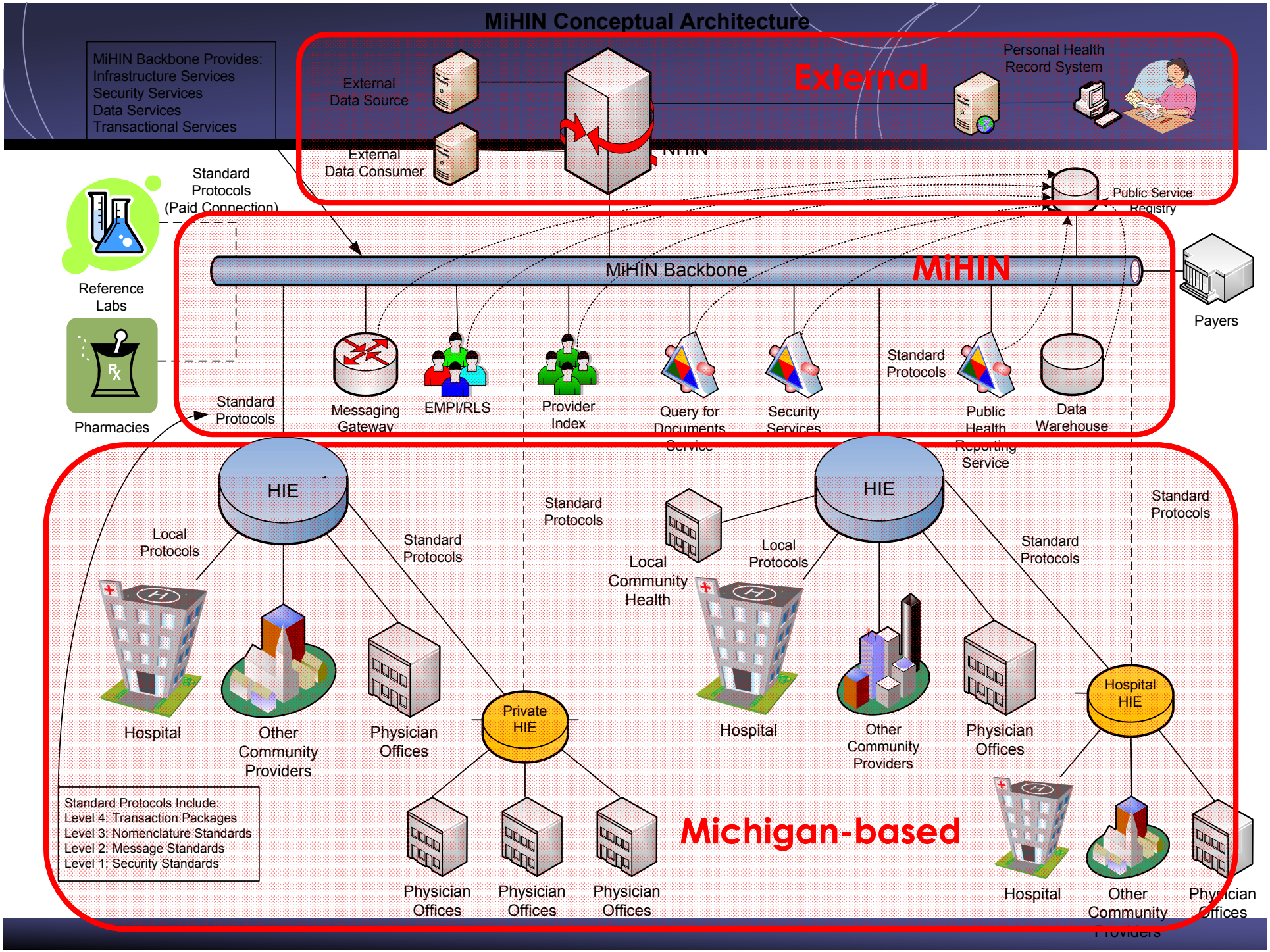
- Electronic clinical laboratory ordering and results delivery
  1. Deliver Lab Results
  2. Deliver Unstructured Results
  3. Deliver Imaging Results
  4. Lab Orders
- Electronic public health reporting
  1. Immunization event to MCIR
  2. Immunization history from MCIR
  3. Syndromic result to MSSS
  4. Reportable laboratory result to MDSS

Create Value Propositions for Use Cases Selected

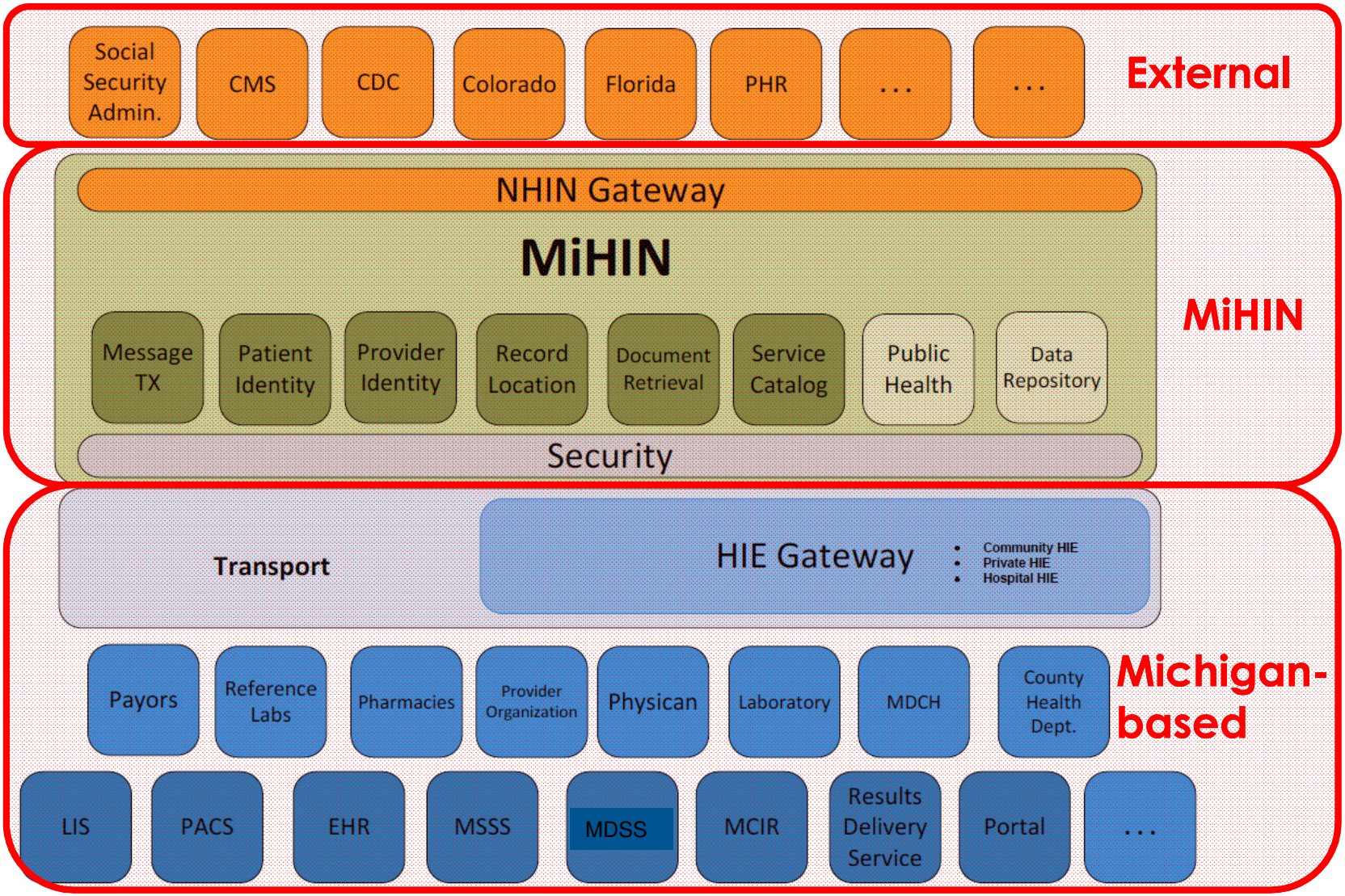
- Twenty-six Value Propositions sent to Finance Workgroup for review and synthesis
- in the areas of Lab Results, Immunizations and Syndromic Surveillance
- Common themes are "*enabling meaningful use*" and "*leverage MiHIN resources such as MPI and Security Services*"

Provide Input and Approve Statewide Business Architecture

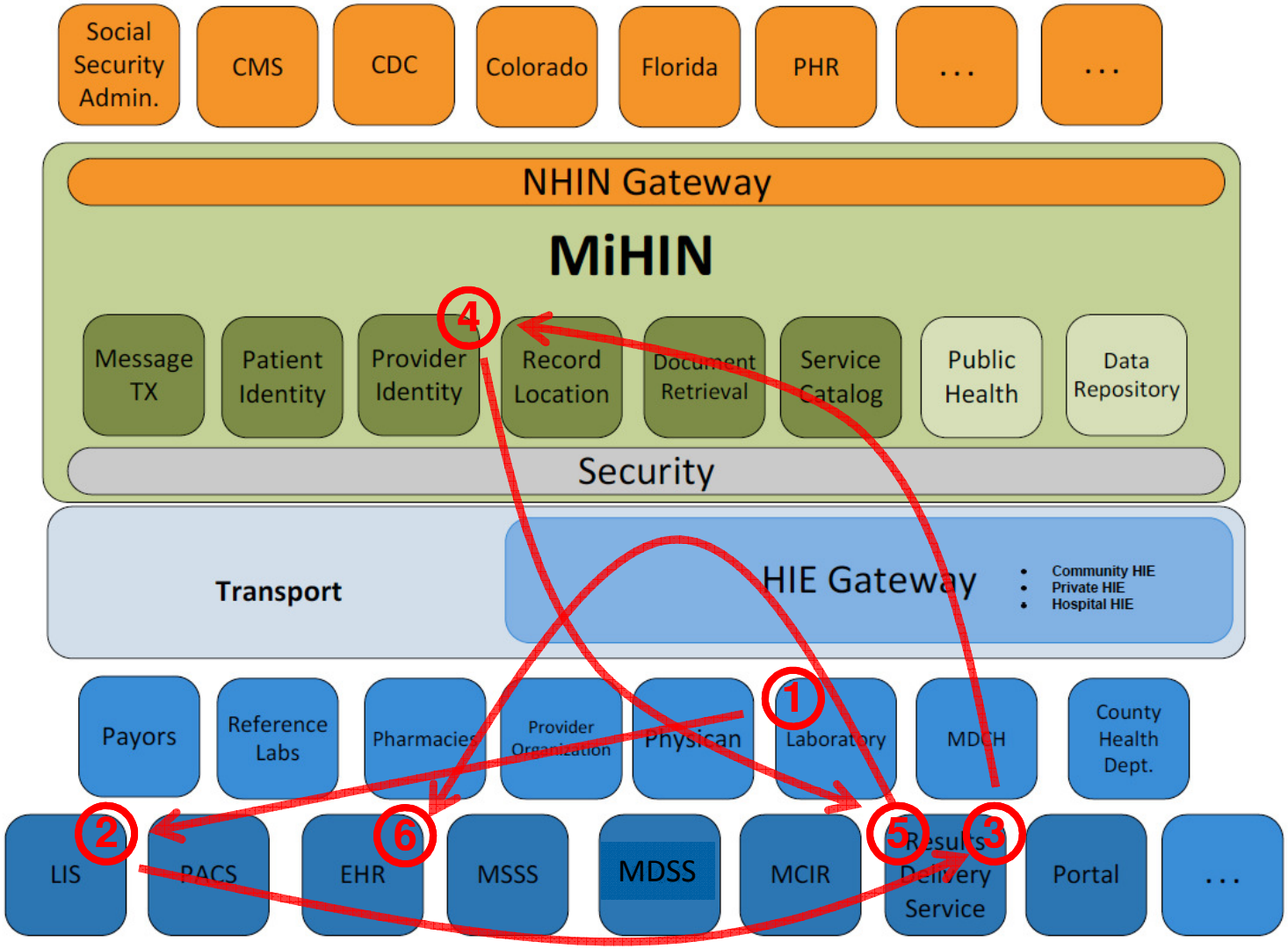
- Scope of MiHIN Business Architecture Actors and Systems
  - Michigan-based health care actors and systems (“internal stakeholders”)
  - MiHIN components and services
  - External health care actors and systems (“external stakeholders”)


MiHIN Conceptual Architecture
MiHIN Backbone Provides:
Infrastructure Services
Security Services
Data Services
Transactional Services
External
External Data Source
External Data Consumer
MiHIN
Personal Health Record System
Public Service Registry
Standard Protocols (Paid Connection)
Reference Labs
Pharmacies
MiHIN Backbone
MiHIN
Payers
Standard Protocols
Messaging Gateway
EMPI/RLS
Provider Index
Query for Documents Service
Security Services
Standard Protocols
Public Health Reporting Service
Data Warehouse
HIE
Local Protocols
Standard Protocols
Hospital
Other Community Providers
Physician Offices
Private HIE
Physician Offices
Physician Offices
Physician Offices
Standard Protocols
Local Community Health
HIE
Local Protocols
Standard Protocols
Hospital
Other Community Providers
Physician Offices
Hospital HIE
Standard Protocols
Standard Protocols Include:
Level 4: Transaction Packages
Level 3: Nomenclature Standards
Level 2: Message Standards
Level 1: Security Standards
Michigan-based
Hospital
Other Community Providers
Physician Offices

MiHIN Business Architecture



Use Case: Results Delivery



Provide Input and Approve Statewide HIE Strategic Plan

- ONC Guidance set requirements for FOA
- Specific Business Operations Workgroup dimensions of the strategic plan
- Currently in progress

MiHIN Business Operations Workgroup

Questions?

2.3 Business and Technical Operations – DRAFT RELEASE CANDIDATE

Business and Technical Operations: Strategic Direction based on Planning Process

PRIORITIZED HIE SERVICES

The selection of use cases for initial implementation on the MiHIN was the result of several weeks of work of the Business and Technical Operations Workgroup. The initial focus was on prioritizing the HIE service priorities documented by the ONC. Several factors were analyzed:

(1) Healthcare Outcomes Meaningfully Improved
(2) Healthcare Workflows Meaningfully Improved
(3) Size of Health Population Effected
(4) Need to Develop Capacity in Michigan
(5) Support Meaningful Use in 2011
(6) Known Financial Sustainability Model
(7) Alternatives Solutions to Achieve Meaningful Use
(8) Scale of Incremental Health Improvements by Adding Statewide Capacity

Workgroup members relied on their expert knowledge of healthcare, along with research done by the MiHIN PCO (see Section 1.1 Environment Scan). The subsequent ranking of the HIE Service Priorities is:

(1) Electronic clinical laboratory ordering and results delivery
(2) Electronic public health reporting
(3) Quality Reporting
(4) Clinical summary exchange for care coordination and patient engagement
(5) Electronic eligibility and claims transactions
(6) Electronic Prescribing and refill requests
(7) Prescription fill status and/or medication fill history

The next step was the selection of use cases for the highest ranking HIE services (labs and public health). The workgroup again relied on their expert knowledge of healthcare and research done by the MiHIN PCO to rank the prospective use cases based on several factors:

(1) Clinical Value
(2) Prevalence of existing electronic transactions of statewide interest
(3) Well-known implementation experience, both in-state and best practices elsewhere
(4) Existing standards
(5) Ability to leverage existing HIE capabilities

The workgroup believed that the top two HIE service priorities should be evaluated for initial implementation. HIE Service Priorities (3) and (4) were important, but lack clear standards at

this time and have no stage I meaningful use requirements. Priorities 5-8 meaningful use needs were thought to be sufficiently met by currently available solutions (e.g. Blue Cross Blue Shield Michigan's WebDENIS, Surescripts). Their ranking reflects the low priority for developing a MiHIN solution for these services.

In the HIE service area of labs and public health, the following use cases were selected for initial implementation:

Electronic clinical laboratory ordering and results delivery

1. **Deliver (Structured) Lab Results**: The results for a laboratory test are sent to the designated recipients in a structured format suitable for consumption by an electronic system. This includes clinical chemistry, hematology, serology and microbiology, hemodynamics, intake/output, EKG, obstetric ultrasound, cardiac echo, urologic imaging, gastroendoscopic procedures, and pulmonary ventilator management.
2. **Deliver Unstructured Results**: Results in a unstructured format (e.g. Text, PDF or Scanned Images) are sent to the designated recipients. The recipient(s) will be responsible for a means to consume the document.
3. **Deliver Imaging Results**: The results of diagnostic imaging are sent to the designated recipients in a structured format suitable for consumption by an electronic system. These are radiology and cardiology images and reports from DICOM sources.
4. **Lab Orders**: an order for laboratory services is sent electronically in a structured format suitable for consumption by an electronic system.

Electronic public health reporting

1. **Immunization event to MCIR**: a provider has administered a reportable vaccine. The information is reported electronically to MCIR, the State of Michigan system for immunization tracking.
2. **Reportable laboratory result to MDSS**: a laboratory encounters a result that is required to be reported to a public health agency. The laboratory sends the required information to the required public health agency in a structured format suitable for consumption by an electronic system. MDSS is the State of Michigan system for disease surveillance.
3. **Immunization history from MCIR**: a provider queries for the immunization history of a patient. Access and consent policies are applied. If allowed, MCIR provides the requested history in a structured format suitable for consumption by an electronic system.
4. **Syndromic result to MSSS**: a patient presents to a healthcare provider at an emergency department or urgent care center for evaluation and/or treatment of any condition. The healthcare provider sends the required information in a structured format suitable for consumption by an electronic system. MSSS is the State of Michigan system for syndromic surveillance.

The proposed use case implementation order was review by the MiHIN Technical Workgroup. They told the Business Operations Workgroup that the implementation order was technically feasible with the possible exception of reporting imaging results. The Technical Workgroup

stated that the size of DICOM images and nascent state of standards precludes the implementation of electronic imaging results reporting for the near future. The Business Operations Workgroup acquiesced to this technical barrier at this time.

Meaningful use will be achieved in incremental steps, investing first in those services not currently provided. Analysis has shown that providers have widely available solutions for eRx and eligibility checking. Early efforts will focus on Laboratory Results and Ordering, and Public Health, two areas without widely available solutions. As meaningful use requirements expand to the areas of clinical document exchange, HIE services will be implemented to meet that need.

Medicaid

Coordination Strategy

Through the coordinated planning process of the MiHIN and the Medicaid EHR Incentive Program, two shared objectives were identified. Both initiatives seek to accelerate Medicaid beneficiaries' coordination of care and streamline eligible professionals' meaningful use reporting requirements through the secure electronic exchange of health information.

The strategies Michigan will take to accomplish these objectives are:

1. To continue the coordinated planning efforts of the MiHIN and the Medicaid EHR Incentive Program
2. To leverage existing State of Michigan health information technology assets
3. To develop electronic services and directories (e.g. MPI, Provider Index) shared between the MiHIN and the Medicaid agency.

Michigan will continue to have members from both initiatives participate in the planning and implementation efforts to ensure the shared objectives are accomplished. The project management of the SMHP and the MiHIN implementation will be coordinated. An overall project plan will be developed to synchronize the timelines of the shared SMHP and MiHIN's tasks and deliverables.

To improve the Medicaid beneficiaries' coordination of care, MiHIN will leverage the data warehouse integration capabilities and extract pertinent administrative and clinical information making it electronically available in a CCD format to Medicaid providers through the Michigan Health Information Network. MiHIN will also leverage the repository capacity and analytical capabilities of the data warehouse to support the quality reporting requirements.

Michigan's Medicaid Management Information System (MMIS), Community Health Automated Medicaid Processing System (CHAMPS) will be enhanced to aid in the administration and monitoring of the Medicaid EHR Incentive Program. CHAMPS will also be leveraged to streamline eligible professionals' meaningful use reporting requirements. Eligible professionals will be able to report directly from their EHRs, sending the data through the MiHIN and into CHAMPS.

The success of the interoperability between the data warehouse, CHAMPS and EHRs will be dependent upon the shared services or directories (Security, Patient and Provider Indexes) of the MiHIN. The Medicaid health IT infrastructure will utilize the MiHIN's core components such as the provider index, the enterprise master patient index and the security services. The sharing of the MiHIN core components will increase efficiencies and reduce the cost of the Medicaid EHR incentive program.

Background

The state's Medicaid agency has been a part of the Department of Community Health since 1996. The integration of the Medicaid agency into the Department of Community Health has fostered many collaborative efforts improving the health care of Michigan citizens. One of the most effective initiatives implemented was the Medicaid supported data warehouse. The data warehouse is a component of the Medicaid Management Information System (MMIS) IT architecture.

The data warehouse integrates 15 separate health-related program areas, encompassing 41 separate data sources, into a single environment. Integrating many of the State's critical programs including Medicaid (fee-for service and manage care), the Women, Infant and Children (WIC) assistance program, the Childhood Lead Poisoning Prevention Program (CLPP), the Michigan Care Improvement Registry (MCIR), and Vital Records has reduced health care fraud, increased the number of children tested for high blood lead levels, raised the number of children receiving immunizations and has improved the coordination of care for the Medicaid population.

Utilizing the data warehouse to improve the quality of care spurred Medicaid's involvement in health information technology projects. Susan Moran, Director of Medicaid Operations and Quality Assurance, is an executive steering committee member of the MiHIN Program Office, serves as co-chair of the MiHIN Business Operations Work Group and is a voting member of the MiHIN Governance Work Group. There is Medicaid representation on the majority of the MiHIN planning work groups. Cynthia Edwards, Director of Medicaid Data Management Division, is a member of the MiHIN Privacy and Security Work Group and Jason Werner with the Medicaid Data Management Division is a member of the MiHIN Technical Work Group. This collaboration with the MiHIN and the Medicaid agency allowed for the natural progression of coordination between the MiHIN project and the Medicaid EHR Incentive Program.

The Medicaid EHR Incentive program is also led by Susan Moran. Several of the MiHIN Program Office staff are members of the Medicaid EHR Incentive Program planning initiative. Beth Nagel, HIT Coordinator, is a member of the EHR Incentive Program planning steering committee. Rick Brady, MiHIN Business Architect, and Laura Rappleye, MiHIN Project Lead, are members of the Medicaid EHR Incentive Work Group. The EHR Incentive Work Group was charged with developing the Michigan Department of Technology Planning – Advanced Planning Document (HIT P-APD). The work group will also assist in the creation of a State Medicaid HIT Plan (SMHP). The coordinated effort between the MiHIN and the Medicaid EHR Incentive Program provides an efficient means to advance EHR adoption and health information exchange.

Public Health

In order to coordinate and align public health requirements for HIE and meaningful use, MiHIN will document the current public health capabilities for HIE and match them to the meaningful use requirements for public health. Needed functions will be assessed to evaluate which may be supported by MiHIN.

The high-level capabilities of SoM public health systems have been documented. Systems responsible for the use cases selected for initial implementation (Immunizations and reportable lab results) will have their technical capabilities documented in detail.

A SoM working group has formed to assess the most efficient way to present public health capabilities to the State via the MiHIN. At this time, three possibilities are being analyzed: (1) A State of Michigan Health Information Exchange, (2) a public health service available as a MiHIN service, and (3) direct access to SoM public health services, but using MiHIN shared services where appropriate (such as security). All three possibilities include leveraging MiHIN shared services (security, MPI, etc).

Leveraging Existing HIE Capacity

Existing HIE capacity will be leveraged by documenting existing capacity, along with those under development across the State. Periodic environment scans will occur to document new capabilities of existing HIO's and to document newly discovered capacity.

The MiHIN will use existing services where technically feasible and appropriate. By its very nature, MiHIN must leverage the regional activities to enable the "last mile". Clinical data will be generated at point of care and will be exchanged locally as possible, but interoperated between two non-local actors via the MiHIN. The purpose of the MiHIN is to enable data exchange between existing resources.

To leverage the existing HIE capacity in Michigan, an analysis of state-wide HIE resources - both public and private - has already occurred. This analysis has informed a ranking of HIE services and their deployment order. A matrix of organizations, roles (consumer, creator, exchanger), localities and services will be created. This will create a central point of information for all parties interested in HIE, regardless of their location in the state, and reduce the entry barriers (time and effort to gain knowledge) to engaging in HIE.

<still working on example. Suggestions solicited>

NHIN Strategy

The State will utilize the NHIN for information exchange between states (government to government) and with federal agencies. The MiHIN will a state-wide accessible NHIN gateway to amortize the cost of gateway infrastructure among users state-wide. Additionally, the shared security services of provider and patient identity services of the MiHIN can facilitate policy enforcement by ensuring intra and inter-state consistency of identification and access rights. Intra-state information exchange will occur via the MiHIN, not the NHIN.

Human Resources

To ensure adequate human resources for HIE in Michigan, the MiHIN will document the expected staffing requirements for the deployment and ongoing support of HIE. The information will be provided to M-CEITA and MCHIT to inform their work. The MiHIN will rely upon the efforts of workforce development programs to implement the requirements documented (i.e. ensure adequate training programs or recruitment efforts to meet expected workforce needs).

During the initial pilot implementations, potential pilot participant's workforce capacity to successfully conclude pilot will be assessed.

Workforce needs for deployment and ongoing operations for HIE state-wide will be evaluated and projected based on the experience of the pilot projects.

Close coordination with Michigan's RHITEC and workforce development initiatives (M-CEITA and MCHIT) will continue. It is thought that the focus at the health system level will be on clinical systems technicians, while the provider level will need more practical small systems technical support. Health Systems and larger provider organizations are pursuing a strategy of retraining current staff to meet the need for HIE technical skills.

Vendor and Program Management

Vendor and program management will occur through a project control office (PCO). The PCO will be guided by governance body policy. The State HIT Coordinator will periodically review PCO and governing entity operations to ensure compliance with the ONC approved cooperative agreement.

It is highly likely that the implementation of the shared services and other MiHIN functions will be developed via vendors and systems integrators. This is due to the developing nature of the solutions available. A Project Control Office (PCO) is responsible for policy implementation and routine day-to-day oversight of program and vendor(s). During the pilot phase, and ensuing build-out of HIE state-wide, the PCO will assist healthcare organizations by providing technical expertise and project management skills.

Risk Management

Risk Management will occur through the creation of a risk plan, documenting risks and mitigation strategies. The PCO will perform a risk analysis and mitigation plan. The plan will cover:

1. Technical risk – e.g., technology doesn't work
2. Process risk – e.g., method for deploying doesn't work
3. Strategic risks – e.g., suboptimal choice of use cases, or unsuitable architecture/sustainability/governance
4. User Acceptance risk – e.g. providers and consumers do not see value in the methods or information shared via HIE

Risk will be cataloged and designed out wherever possible. Mitigation actions will be developed for those risks that could not be designed out.

A peer/public review of the risk catalog and mitigation actions will be performed to ensure adequacy of methodology and scope

Deployment and Outreach Strategy

Deployment

The MiHIN deployment strategy seeks to implement those services in greatest need of capacity to help providers accomplish meaningful use[1]. Existing capacity in a service area across the state will be evaluated to devise the lowest cost method for integrating these existing services with MiHIN shared services. It is possible that some services may not need to be formally integrated on a state-wide level. For example, eRx solutions may be sufficiently deployed through natural market forces to remove any need for MiHIN efforts.

Services will be deployed by implementing a use case utilizing the service. A limited number of pilot participants will be selected based on criteria under development. The criteria will cover technical, operational, financial and policy factors.

Deployed use cases will be limited to the deployment-pilot organizations for the initial deployment period. After three months of successful pilot operations, a six-month limited-production phase will occur. During limited-production, a small number (less than 6) of organizations will implement the use case. This will allow the MiHIN to gracefully scale-up operations and test capacity before wide-scale adoption.

During the deployment phase, organizations interested in implementing the piloted use case will be solicited, evaluated, and selected for the subsequent limited-production phase. Successful completion of the limited-production phase will occur when six months of critical-error-free operations have occurred. The use case and its deployed technologies will then be considered production and will be available to any interested organization.

There will be no cost charged to piloting organizations. Piloting organization will receive funding to help defray the cost of implementing the use case. In the limited-production phase, organizations will not be charged for using MiHIN services, but will not receive funding to implement. It is expected that all organizations would be charged for services in production status.

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[1] These services have been analyzed and ranked by the Business Operations workgroup and approved by the Governance workgroup.

MiHIN Deployment Strategy		HIE Service Area:	Electronic clinical laboratory ordering and results delivery	Electronic public health reporting	Electronic public health reporting	Quality Reporting	Electronic public health reporting	Electronic public health reporting	Electronic clinical laboratory ordering and results delivery	Clinical summary exchange for care coordination and patient	Clinical summary exchange for care coordination and patient
		Use Cases:	Lab Results Delivery	Report Lab Results	Immunization Reports		Immunization	Syndromic		Physician Notes	
Date	Technologies Deployed	Core MiHIN Capabilities	(Structured and Un-	to MDSS	to MCIR	Quality Reporting	history from MCIR	Result to MSSS	Lab Result Inquiry	via CCD	Clinical Summaries
October-10		Security Services,									
November-10		Messaging Gateway,									
December-10		Provider Directory									
January-11	Results Interfaces						Planning	Planning	Planning	Planning	Planning
February-11	Terminology Normalization	Planning									
March-11	Immunization Interface, External Repository										
Phase I END; Cumulative Budget: $4,374,840			Incremental Budget: $4,374,840								
April-11		MPI									
May-11											
June-11											
July-11											
August-11		Shared Services Bus, NHIN Gateway								Planning	Planning
September-11											
October-11											
November-11	XDS (Inquiry, Repository Interface), ADT Interface	XDS Services, RLS									
Phase II END; Cumulative Budget: $10,991,000			Incremental Budget: $6,616,160								
December-11											
January-12	CCD Interface										
February-12											
March-12	CCD Interface										
Phase III END; Cumulative Budget: $15,801,640										Incremental Budget: $4,810,640	

Outreach:

The outreach and communications strategy of the MiHIN focuses on (1) creating a message that can be delivered at the provider level through other organization, such as M-CEITA, the Michigan State Medical Society, and other provider-facing organizations in Michigan; and (2) directly engaging executive leaders across the state that are responsible for their organization's health information exchange.

At a grassroots level, provider-facing partner organizations can develop provider-level knowledge of the ability to exchange information statewide (generally through a local affiliation and subsequent connection to an HIE) and create subsequent provider demand for HIE services.

A central aim of MiHIN is to focus on connecting organizations, not providers. But in light of user-acceptance risk and a need to create demand for HIE services, MiHIN will pursue close and continual work with M-CEITA, and other provider-facing organizations, to educate the provider population of the benefits of cross community HIE.

Technical Assistance to HIOs

To provide technical assistance to HIOs, the MiHIN will use its PCO to provide expert knowledge, along with funding to select pilot organizations to during initial deployment of HIE in Michigan. The knowledge and experience of the PCO will be leveraged to provide planning and implementation assistance to organizations developing HIE capacity.

Monitoring Capacity

The remediation of actual HIE performance in Michigan will be accomplished by periodic environment scans by the PCO, the ongoing maintenance of a HIE roles and responsibilities matrix, and critical review and assessment returned to HIOs across Michigan.