MICHIGAN HEALTH INFORMATION TECHNOLOGY COMMISSION

September 17, 2015

The Michigan Health Information Technology Commission is an advisory Commission to the Michigan Department of Health and Human Services and is subject to the Michigan open meetings act, 1976 PA 267, MCL 15.261 to 15.275
Welcome & Introductions

- **Appointments**
  - **Michael Chrissos** will represent doctors of medicine and will replace Dr. Gregory Forzley.
  - **Randall Ritter** will represent the general public and will replace Dr. Michael Chrissos.

- **Reappointments**
  - **Orest Sowirka** will continue to represent doctors of osteopathic medicine.

- **Commissioner Updates**
2015 Goals – September HIT Commission Update

- Newest Trusted Data Sharing Organizations:
  - Spectrum Health (sponsored by Priority Health)
  - Beaumont Health
- 49 Total “Trusted Data Sharing Organizations” with MiHIN
  - Qualified Organizations: 30
  - Sponsored & Other Sharing Organizations: 19
- New MOAC Identity Management Working Group being formed
  - For participants in Single Sign-On and other identity-related Use Cases
- MOAC Use Case Working Group approved 9 Use Case documents

- Exchange Advance Directives Use Case to enter production Sept. 25
  - Integrated with MiWay Statewide Consumer Directory and Peace of Mind
- Exchange Care Plan / Integrated Care Bridge Record Use Case for MIHealthlink is scheduled to enter production with CCDs on Oct. 1
  - Timeline is aggressive for participants due to implementation challenges
- Exchange Medication Reconciliation at Discharge Use Case entered pre-production on Sept. 1
- Single Sign-On Use Case ready to enter production after final MDHHS legal review
- Receive Immunization History/Forecast Use Case ready to end pilot phase & enter production – date TBD by MCIR
### 2015 Goals – September Update

- More than **404 million** messages received since production started May 8, 2012
  - Have processed as many as **8.3 MLN+** total messages/week
  - Averaging **8 MLN+** messages/week
  - **6-7 MLN+** ADT messages/week; **1.1 MLN+** public health messages/week
- Total 490 ADT senders, 37 receivers to date
  - Estimated **93%** of admissions statewide now being sent through MiHIN
- Sent **.581 MLN+** ADTs out last week (exact match rate approx. 60%)
  - Common Key Service will increase match rate > **90%**
- More than:
  - **554,000** Reportable Lab messages received/sent to MDSS
  - **13 MLN** Immunization messages received/sent to MCIR
  - **61 MLN** Syndromic Surveillance messages received/sent to MSSS
  - **348** Care Plans/Integrated Care Bridge Records (ICBR) per week
  - Presently processing approximately **350,000** Discharges per week (ADT A03)
  - **1.5+** MLN Medication Reconciliations at Discharge/month expected

### QO & VQO Data Sharing

- **6.1 MLN** patient-provider relationships in Active Care Relationship Service (ACRS)
- **5.1 MLN** unique patient records in ACRS
- **540,860** unique providers in statewide Health Provider Directory; **4,454** unique organizations

### MiHIN Shared Services Utilization

- **Medication Management White Paper**
  - Identifies Use Case opportunities around Medications
  - Prioritizes top three (3) Use Cases
  - 3rd Medication Management White Paper event was held August 25:
    - Approximately 55 attendees present
  - 4th/final Medication Management White Paper meeting was September 10
  - Final draft White Paper available for HIT Commission and Governor’s Task Force on Controlled Substances expected around September 22
### Weekly Message Volumes

**Weekly Message Volumes**

<table>
<thead>
<tr>
<th>Date</th>
<th>Submit Immunizations</th>
<th>Submit Reportable Labs</th>
<th>Submit Syndromic Surveillance Data</th>
<th>Submit ADT Notifications</th>
<th>Receive ADT Notifications</th>
<th>Total Messages</th>
</tr>
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<tbody>
<tr>
<td>8/1/2015</td>
<td>107,261</td>
<td>10,333</td>
<td>1,070,990</td>
<td>5,167,887</td>
<td>1,569,898</td>
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<td>9,178</td>
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<td>115,605</td>
<td>11,956</td>
<td>1,311,080</td>
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<td>1,706,908</td>
<td>8,054,787</td>
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<td>8/22/2015</td>
<td>116,708</td>
<td>9,950</td>
<td>1,240,101</td>
<td>5,187,187</td>
<td>1,756,709</td>
<td>8,310,655</td>
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<td>8/29/2015</td>
<td>129,564</td>
<td>9,187</td>
<td>1,058,118</td>
<td>5,043,482</td>
<td>1,765,798</td>
<td>8,006,149</td>
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<tr>
<td>9/5/2015</td>
<td>174,191</td>
<td>10,116</td>
<td>1,116,218</td>
<td>5,175,575</td>
<td>1,826,341</td>
<td>8,302,441</td>
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</table>
Cumulative Message Volumes

<table>
<thead>
<tr>
<th>Date</th>
<th>Submit Immunizations</th>
<th>Submit Reportable Labs</th>
<th>Submit Syndromic Surveillance Data</th>
<th>Submit ADT Notifications</th>
<th>Receive ADT Notifications</th>
<th>Total Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/8/2015</td>
<td>12,488,607</td>
<td>512,889</td>
<td>56,625,913</td>
<td>252,891,156</td>
<td>49,771,375</td>
<td>372,289,940</td>
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<tr>
<td>8/15/2015</td>
<td>12,604,212</td>
<td>524,845</td>
<td>57,936,993</td>
<td>257,800,394</td>
<td>51,478,283</td>
<td>380,344,727</td>
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<tr>
<td>8/22/2015</td>
<td>12,720,920</td>
<td>534,795</td>
<td>59,177,094</td>
<td>262,987,581</td>
<td>53,234,992</td>
<td>388,655,382</td>
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<td>8/29/2015</td>
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<td>543,982</td>
<td>60,235,212</td>
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<td>55,000,790</td>
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<td>9/5/2015</td>
<td>13,024,675</td>
<td>554,098</td>
<td>61,351,430</td>
<td>273,206,638</td>
<td>56,827,131</td>
<td>404,963,972</td>
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</table>

0 50,000,000 100,000,000 150,000,000 200,000,000 250,000,000 300,000,000 350,000,000 400,000,000 450,000,000
**Transmission Production Numbers**

**MSSS - Syndromic Surveillance**
- September: 0.5
- October: 0.5
- November: 2.5
- December: 4.5
- January: 6.5
- February: 4.5
- March: 4.5
- April: 4.5
- May: 6.5
- June: 4.5
- July: 4.5
- August: 6.5
- Total: 5,675,051

**MDSS - Disease Surveillance**
- September: 490,634
- October: 46,340
- November: 5,675,051
- December: 4.5
- January: 4.5
- February: 4.5
- March: 4.5
- April: 4.5
- May: 4.5
- June: 4.5
- July: 4.5
- August: 4.5

**MCIR - Immunization**
- September: 490,634
- October: 46,340
- November: 5,675,051
- December: 4.5
- January: 4.5
- February: 4.5
- March: 4.5
- April: 4.5
- May: 4.5
- June: 4.5
- July: 4.5
- August: 4.5

**Future Transmission Types**
- Newborn Screening CCHD
- Cancer Case Reports
- Birth Defect Reports
- MCIR Query

**Project Updates**

**Privacy and Security: MiLogin-MPI Integration**

MiLogin and MPI working together provide an additional level of security for State of Michigan applications through the use of multi-factor authentication (one-time password) and identity proofing (if needed by the application).

There are several projects that will be accomplished through further integration between the MiLogin system and the Master Person Index that are scheduled for FY16.

a. MDHHS will establish a state-based method of identity proofing as an alternative for users unable to successfully complete the credit bureau based identity proofing.

b. MDHHS will establish a real-time integration of MiLogin with MPI to assist with user management. This will allow MiLogin to be a data source for MPI and MPI to identify sources for MiLogin’s identity proofing.

**Privacy and Security: MiHIN/MiLogin Federation**

DHHS and MiHIN have successfully set up the necessary infrastructure to accomplish Federation. “Federation” means that the State can leverage other systems’ identity and credentialing when their standards equal or exceed those of the State or MDHHS systems, or an organization can leverage the State’s identity and credentialing when the State’s standards equal or exceed those of the organization. Both of these options will be available with the new infrastructure. Federation has the potential to reduce the burden on users of Federated applications as the same username/password can be used to access the systems. With appropriate legal agreements in place, State applications (like CHAMPS or MCIR) can be accessed by organizations using their local systems username and password. The next step will be to establish the legal agreements needed and identify organizations and MDHHS applications that are ready to participate in this new functionality.
# Participation Year (PY) Goals

## September 2015 Dashboard

## Eligible Professionals (EPs)

<table>
<thead>
<tr>
<th>Reporting Status</th>
<th>Prior # of Incentives Paid (July)</th>
<th>Current # of Incentives Paid (August)</th>
<th>PY Goal: Number of Incentive Payments</th>
<th>PY Medicaid Incentive Funding Expended</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIU 2013</td>
<td>1323</td>
<td>1323</td>
<td>1003</td>
<td>$ 27,681,687</td>
</tr>
<tr>
<td>AIU 2014</td>
<td>975</td>
<td>1045</td>
<td>1000</td>
<td>$ 21,901,681</td>
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<td>AIU 2015</td>
<td>41</td>
<td>95</td>
<td>500</td>
<td>$ 1,969,169</td>
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<tr>
<td>MU 2013</td>
<td>1210</td>
<td>1210</td>
<td>1043</td>
<td>$ 10,157,515</td>
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<td>MU 2014</td>
<td>1141</td>
<td>1217</td>
<td>1444</td>
<td>$ 10,234,013</td>
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<tr>
<td>MU 2015</td>
<td>7</td>
<td>26</td>
<td>1702</td>
<td>$ 206,835</td>
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## Eligible Hospitals (EHs)

<table>
<thead>
<tr>
<th>Reporting Status</th>
<th>Prior # of Incentives Paid (July)</th>
<th>Current # of Incentives Paid (August)</th>
<th>PY Goal: Number of Incentive Payments</th>
<th>PY Medicaid Incentive Funding Expended</th>
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</thead>
<tbody>
<tr>
<td>AIU 2013</td>
<td>16</td>
<td>16</td>
<td>15</td>
<td>$ 6,864,231</td>
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<tr>
<td>AIU 2014</td>
<td>3</td>
<td>3</td>
<td>17</td>
<td>$ 3,036,526</td>
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<tr>
<td>AIU 2015</td>
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<tr>
<td>MU 2013</td>
<td>79</td>
<td>79</td>
<td>70</td>
<td>$ 28,089,553</td>
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<tr>
<td>MU 2014</td>
<td>61</td>
<td>61</td>
<td>44</td>
<td>$ 13,069,360</td>
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<tr>
<td>MU 2015</td>
<td>0</td>
<td>0</td>
<td>28</td>
<td>$</td>
</tr>
</tbody>
</table>

## Cumulative Incentives for EHR Incentive Program 2011 to Present

<table>
<thead>
<tr>
<th></th>
<th>Total Number of EPs &amp; EHs Paid</th>
<th>Total Federal Medicaid Incentive Funding Expended</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIU</td>
<td>5,116</td>
<td>$ 186,157,223</td>
</tr>
<tr>
<td>MU</td>
<td>3,151</td>
<td>$ 98,424,940</td>
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</table>

**Key:** AIU= Adopt, Implement or Upgrade   MU= Meaningful Use
2015 Goals – September Update

Federally Funded REC
Supporting adoption and achievement of Stage 1 Meaningful Use with a minimum of 3,724 priority providers across Michigan’s primary care community.

• 3,724(+) Milestone 1: Recruitment of Eligible Priority Primary Care Providers (PPCPs); >100% to goal
• 3,724(+) Milestone 2: EHR Go-Live with PPCPs; >100% to goal
• 3,724(+) Milestone 3: Stage 1 Meaningful Use Attestation with PPCPs; >100% to goal

MDHHS Medicaid MU Program
Supporting providers in Michigan with high volumes of Medicaid patients in attaining Meaningful Use.

• 623- Specialist Sign-Ups: Recruitment of Medicaid eligible specialists (Non-Primary Care)
  • 361- AIUs | 21- 90day MU attestation | Specialist Sign-Up breakdown: Behavioral Health 58%, Dentistry 31%, Optometry 6%, Other 5%
• 651- Stage1Year1(or2) Sign-ups: Recruitment of MEPs in Stage 1 of Meaningful Use
  • 296- AIUs | 122- MU attestations
• 157- Stage2Year1 Sign-ups: Recruitment of MEPs in Stage 2 of Meaningful Use
  • 5- 90day MU Attestation

M-CEITA Provider Metrics
Client data provides insight into EHR adoption and the Meaningful Use landscape across Michigan providers.

• M-CEITA is eagerly anticipating the release of the Modified Stage 2 Final Rule. Among many anticipated changes for providers in 2015, the rule should include the change from a 365-day reporting period down to a 90-day reporting period for all EPs.
• M-CEITA is now offering Technical Assistance designed to assist EPs with understanding and attesting to PQRS program requirements.
• M-CEITA is now offering a new service line designed to assist providers who have been selected for a CMS or MDHHS Meaningful Use audit.

Quality Improvement Initiatives
Expanding our focus to assist providers with future stages of MU, other quality process improvements and public health priorities with an emphasis on EHR-enabled improvements.

• M-CEITA has completed Year 1 activities under the MDHHS/CDC 1305 grant, teaching healthcare teams state-wide how to leverage Health IT to improve HTN & DM management and have been contracted to continue with add’l Year 2 work which includes developing an “eUniversity” for Health IT strategies and tools related to HTN and DM.
• Under the MDHHS/CDC 1422 grant, M-CEITA is providing Technical Assistance to selected MI communities, working directly with healthcare providers and their teams to teach best practices in how to leverage Health IT to improve hypertension rates.
• M-CEITA continues to be an active participant in the multi-state ASTHO Million Hearts Learning Collaborative, partnering with MDHHS and other stakeholders to improve hypertension rates in selected clinics in the Muskegon area.
myHealthButton/myHealthPortal Dashboard

Updates:

6.0 Release (September 2015)
- Upload MiWay Consumer Advance Directives for the Peace of Mind Registry
- View claim/encounter data
- Provide authorizations for the release of protected health information (PHI)
- Upload clinical documents (Continuity Care Documents)
- MDHHS-generated online alerts, notifications and surveys

Outreach Activities (July-September 2015)
- Facebook Promoted Posts
- Facebook Mobile App Installation Ads
- Targeted Desktop Display Advertisement
**September 2015**
**Consumer Engagement Dashboard**

**Research & Evaluation**

**Medicaid Consumer Survey**

A survey will be administered to Medicaid and Healthy Michigan Plan beneficiaries to assess consumers’ level of health engagement and measure current use and interest in health IT solutions.

The survey contains thirty questions on demographics, health engagement, technology engagement (including myHealthButton), and provider use of health technology.

Please see attached for survey questions.

**Stakeholder Collaboration**

**Consumer Engagement Interest Group Call**

September Call: Jamie Davis and Nadine Robin from Louisiana Health Care Quality Forum will be presenting on Louisiana’s statewide health IT education campaign, “Your Health In Your Hands.”

http://www.makemyhealth.me/

**Next Calls**

Tuesday, September 15th
2:00pm – 3:30pm

Number: 1-415-655-0001
Access Code: 191 223 903
Meeting Link:
https://meetings.webex.com/collabs/#/meetings/detail?uuid=M3ZGZRBTCTRJL0HJDLOKA6US7-5781&rnd=533714.19342

Tuesday, October 20th
2:00pm – 3:30pm

**Outreach & Education**

**Michigan Health IT**

The Michigan Health IT website has been the home of the Michigan Medicaid EHR Incentive Program. The site now includes videos and resources to help providers understand how health IT and health information exchange can benefit them and their patients.

Check out the Tools & Resources page: https://michiganhealthit.org/

Coming soon: a webpage designed for patients to educate them on the benefits of health IT and HIE.

**Video**

Since the June release, the “Improving Health in Michigan through Health IT” video has 148 views on its YouTube page.

https://www.youtube.com/watch?v=z2vUT5u97u4

**www.MichiganHealthIT.org**
HIT/HIE August 2015 Updates

• Statewide Initiatives
  • Peace of Mind
  • Blueprint for Health
  • Request for Proposal (RFP) for the Comprehensive Health Plan Contract for Michigan’s Medicaid Health Plans (MHP)
  • MI Health Link
HIT/HIE August 2015 Updates

• Central Themes In Statewide Initiatives
  • Integration of Care
  • Person-Centered Focus
  • Care Coordination
  • Population Health Management
  • Payment Reform
HIT/HIE August 2015 Updates

• Common Barrier:

  • Identifying a consumer throughout the healthcare system.

  • Identifying who should be kept informed regarding the consumers episode of care.

  • Inserting the consumers point of view regarding provider relationships and access to health data.
HIT/HIE August 2015 Updates

• HIT Commission Considerations

  • Support the utilization of the Active Care Relationship Service (ACRS) and Common Key statewide service as a means to achieve MDHHS policy goals.

  • Encourage Michigan healthcare stakeholders to adopt Active Care Relationship Service (ACRS), Common Key statewide service, and utilize the Statewide Health Provider Directory (HPD).
Michigan Identity Management

HIT Commission
September 17, 2015

Cynthia Green-Edwards, RN, BS
Director, Office of Medicaid Health Information Technology
Michigan Department of Health and Human Services
Michigan Department of Health and Human Services Vision

- Promote better health outcomes, reduce health risks, and support stable and safe families while encouraging self-sufficiency
- Align with Governor Snyder’s River of Opportunity
  - focus on people, not programs
  - ensure efficient, accountable and effective government
- IT infrastructure must reflect a person centered view and support the Enterprise Information Management initiative
Network of Networks

Federal

Simple Data Sharing Organizations

MHA
Michigan Health & Hospital Association

Consumer QOs (more coming)

HIE
Qualified Organizations (QOs)

Doctors & Health Systems

Sponsored Organizations

Virtual QOs

Pharmacies (more coming)

Health Plan QOs (more coming)

MiHIN Statewide Shared Services

Priority Health

Meridian Health Plan

PIHPs (8)

AmeriHealth

TOTAL HEALTH CARE

MDHHS Data Hub

Immunization Registry

State Labs

Disease Surveillance

Syndromic

Other State Sources

Enterprise Data Warehouse

Medicaid

Single point of entry/exit

myHealth Button

myHealth Portal
Identity, Access and Credential Management

- Multi-factor Authentication Service
- Provider/Entity Index
- Federated Identity Management
- Single Sign-On (SSO)
- Master Person Index + Common Key Service
- Identity Proofing Service
- Access Management

Secure Transport Layer Services and Digital Credentials
Master Person Index/Provider Index
Common Key Service for Active Care
Relationship Service/Health Provider Directory

TDSO

MiHIN
Michigan Health Information Network

MPI/PI

Medicaid Beneficiary Information

Provider
HPD & ACRS to Common Key

Health Provider Directory

- Physician Organization
- Practice Unit
- Individual Provider
- Patient

Active Care Relationship Service
Key Benefits of MPI/PI

• Provide 360 degree view of a person
  – Enhance data availability by linking multiple data sets
  – Enrich data by providing additional data about a person

• Identify potential duplicate records or other data quality issues

• Allow source system to search for individuals in other systems to reduce data entry

• Provide relationships between individuals
  – Households - parent/child, husband/wife
  – Provider from PI also individual in MPI

• Alert a system of changes to an individual such as death notification or sanctioned information

• Assist in fraud detection

• Enable assessment of longitudinal data from birth to end of life

• Provides ability to analyze results, influence outcomes, reduce costs
  – Tracking population health
  – Quality measures
  – Predictors of behaviors and health conditions
  – Performance monitoring
What is MILogin?

MILogin is an enterprise single sign-on and identity management solution which enables the State to establish, manage, and authenticate user identities.

• Core Functions
  ✓ Enterprise Single Sign-On – one set of credentials for multiple state systems
  ✓ MILogin Account Self Registration and Self Service
  ✓ Customizable Application Access Approval Workflow
  ✓ Identity Federation (between SOM and external Service Providers)
  ✓ Mobile Friendly, ADA Compliant Interface and Integration with Mobile Applications
  ✓ Integration with SOM Active Directories for seamless intranet access (for workers)
  ✓ High Availability, accessibility and scalability

• Additional Capabilities – primarily related to security and compliance requirements
  ✓ Identity Verification and Proofing (via Experian)
  ✓ Multi Factor Authentication (Level of Assurance, via Duo Security)
  ✓ Customized User Interface (Custom UI)
• Each agency maintains its own application security and user identities for online access.
• Same customer (Joan) is forced to use multiple credentials (user IDs/passwords) for accessing state systems.
MILogin Vision

- One customer – one set of credentials to access all state systems online.
- Added security measures such as Multifactor Authentication and Identity Proofing for regulatory compliance and fraud prevention.
MILogin – MDHHS integrations since October 2014

- myHealthButton and myHealthPortal applications
- MiHIN-MILogin Federation Framework
- IMPACT Illinois Provider Enrollment - allows identity and access management for State of Illinois Medicaid providers and staff. Total user registrations since September 04, 2015: 9,654.
- MiSACWIS Mobile (Multi-Factor Authentication functions)
- Desktop Kerberos Active Directory integration for State workers
- MiPage – SOM mobile application, as part of Enterprise Information Management (EIM) and Mobile First strategies
- 8 MDHHS Migrations from legacy SSO to the MILogin solution
MILogin – MDHHS integrations scheduled for FY16

- Master Person Index (MPI). Leveraged MPI as an alternate flow during identity proofing via State trusted data sources
- MDHHS Medicaid application(s) will be federated with the MiHIN Identity Exchange Hub (IEH)
- Third Party Liability (TPL) as a Service for other States
- MMIS Cloud Integration will allow the Michigan to offer services to other States
- BRIDGES/MiBridges will allow Medicaid beneficiaries to log in one time to access benefits and other State services
- As new applications are developed they will use MILogin for identity and access management
- Scheduled 61 MDHHS Migrations from legacy SSO to the MILogin solution
MILogin – Metrics as of 09.11.2015

- Total number of User Accounts: 4,581
- Total number of Identity Proofing Requests: 3,132
- Total number of Multi-Factor Authentication Requests: 5,177
- Total State of Illinois Medicaid providers and staff: 9,654

With the new integrations and migrations scheduled for FY16 these numbers will increase significantly.
Transforming the Healthcare System

- Integrated Care Demonstration for Dual Eligible Individuals (Medicare and Medicaid) – MI Health Link
- Medicaid Behavioral and Physical Health Care Coordination
- Medicaid Expansion - Healthy Michigan Plan
- State Innovation Model – Blueprint for Michigan
- Patient-Centered Medical Home - Michigan Primary Care Transformation Project (MiPCT)
- Pathways Community Hub Model
- Health Homes
- EHR Incentive Payment Program
Questions?

Cynthia Green-Edwards, RN, BS
Director, Office of Medicaid HIT
Michigan Department of Health and Human Services
EdwardsC@michigan.gov
MiHIN Presentation

HIT Commission Update

9-17-2015

Tim Pletcher, DHA
Executive Director
Michigan Health Information Network Shared Services
pletcher@mihin.org
Agenda

1. Brief History of “MiHIN” Prior to ONC
2. ONC Accomplishments & Major Milestone Success
3. Shared Governance Model & Use Case Factory™
4. The Importance of the Statewide Health Provider Directory, Active Care Relationships, and the Common Key process to improve patient matching
5. Linking clinical quality measure reporting to HIE
6. Major planning & convening efforts for 2016 & 2017
7. National organizations & technologies of importance
Statewide Coordination

Duplication of Effort & Expense

Shared Services

- Patients & Families
  - Lab tests & XRAYs
  - Hospitals & Clinics
  - Medications
  - Public Health
  - Specialty Providers
  - Insurance Companies

- Physicians

- Medications

- Public Health
- Specialty Providers

- Health Plans

MiHIN: Shared Services
**Legal Example: Aggregate Duplication**

<table>
<thead>
<tr>
<th># of Organizations</th>
<th>Total Agreements</th>
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<tr>
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<td>(N*(N-1))/2</td>
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</tr>
<tr>
<td>25</td>
<td>300</td>
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<tr>
<td>100</td>
<td>4,950</td>
</tr>
<tr>
<td>1000</td>
<td>499,500</td>
</tr>
</tbody>
</table>
The Michigan Health Information Network (MiHIN) concept kicked off in April 2006 to create what became the Conduit to Care report.

“convene Michigan’s health care stakeholders to speed the adoption of health information technology and promote health information exchange”
Conduit to Care—“a call to action for Michigan”

Phase A
Making the Patient’s Data Available

Tomorrow:
Move healthcare data out of distributed systems to authorized users and exchange patient health care data in a systematic way.

Phase B
Aggregating Each Patient’s Data for Care, Quality & Patient Safety

Future:
Assemble patient records from multiple sources for viewing patient history.

Phase C
Empowering Michigan Citizens

Goal:
“My personal health record.” PHR is part of the overall network of information resources.
Creation of MiHIN Shared Services

• The MiHIN Shared Services will be designed as a network of networks …

• …with local providers connecting to sub-state HIEs which connect to the MiHIN Shared Services”…

• ….and then to the National Health Information Network.
Phase One Statewide Use Cases

- Public Health Reporting
- Health Provider Directory
- Push Alerts & Notification
- Pull/Query Care Summaries
Phase Two Statewide Use Cases

- Public Health Reporting
- Health Provider Directory
- Push Alerts & Notification
- Pull/Query Care Summaries
Query Example

1. Claimant applies for SSA benefits (in-person, phone, web)

2. SSA —
   Claims Rep verifies non-medical eligibility and obtains info about impairments (e.g. treatment providers)

3. SSA —
   Automated request to providers for patient information
   SSA health IT application applies business rules to format information

4. Disability Examiner —
   Reviews electronic medical evidence and renders determination recommendation

MiHIN Common Gateway

Trusted Data Sharing Org
ONC Grant Vision

SoM HIE and MiHIN Shared Services Interoperability Design

Sub-State HIEs

Send/Receive Patient Data

MiHIN Shared Services Bus

Messaging Gateway

User/Provider Index

XDS Registry (RL5)

MiHIN

SoM HIE

XDS Registry (Document Set)

EMPI

Security Services

SAML Assertion

Patient ID PIX/POQ

Security Services

Query for Documents Service

Web Services

XDS Repository

SoM Systems

Interface Engine (Rhapsody)

Requests

Response

State Labs (STARLIMS)

MS5S

MS5S

MCIR

CHAMPS

Data Warehouse

EMPI

User/Provider Directory

Requests

Response
Division of Labor

STATEWIDE SHARED SERVICES

MDHHS Data Hub

MiHIN & the Qualified Data Sharing Organizations

Transparency via HIT Commission Monitoring

Shared Governance via MiHIN Board

State of Michigan

Internal

External
Public Transparency

Health Information Technology Commission

MiHIIN Board of Directors

MiHIIN Management & Core Staff
Executes the Operations Plan

MiHIIN Operations Advisory Council (MOAC)
Oversees working groups that advise MiHIIN
Public vs. Private Only Model

All HIE subject to HIPAA & Michigan Public Health Code

(A) State-wide HIE Under the MiHIN Governance Structure:
Highly transparent & publicly visible model for data sharing based on the MiHIN Community of “Trusted Organizations” & common “Use Case Agreements”
• Broad multi-stakeholder involvement
• State government designated entity
• Should reduce concerns about restraint of trade

(B) Private:
Private data sharing agreements among private parties
Legal Infrastructure Among Trusted Organizations Linked to Use Cases

ORGANIZATION AGREEMENT (QDSOA or VQDSOA)

- Definitions
- Basic Connection Terms
- Basic BAA Terms
- Minimal Operational SLA
- Contracting & Payment
- Cyber Liability Insurance
- Termination

Data Sharing Agreement

Use Case #1

Use Case #2

Use Case #3
Clear Chain of Trust

- Covered Entity
- Business Associate
- Business Associate
- Covered Entity

Trusted Data Sharing Organization

MiHIN
Shared Services
MiHIN’s Role as Curator of the Statewide “HIE” Ecosystem

- Manage statewide legal trust fabric
- Maintain statewide “master data” in Active Care Relationship Service, Health Provider Directory, Trusted Identities, Consumer Preferences
- Connect HIEs, Payers, Pharmacies, DHHS, Federal Government, others
- Align incentives and/or regulations to fairly share data and promote data standardization (via Use Cases)
- Convene groups to identify data sharing barriers, reduce provider burdens, engage consumers, and enable population health
Aligning Priorities

**COMPLEX STATEWIDE DATA SHARING**
- Workgroups
- White papers
- Major Initiatives & Transformation

**TECHNOLOGY**
- VXU
- ELR
- Public Health Reporting
- Health Provider Directory
- ADT
- Push Alerts & Notification
- CCD
- Pull/Query Care Summaries

**MULTI-STAKEHOLDER ALIGNMENT AROUND “USE CASES”**
- TRUST (Privacy & Security)
- COMMON VISION
- STANDARDS
- LEGAL
- COORDINATION
Use Case Creation

Concept

Implementation

Statewide Adoption

HIT

Value

Need

Priority

Policy

Funding & Incentive

Technology
Anyone can submit ideas for use cases: [http://mihin.org/about-mihin/resources/use-case-submission-form/](http://mihin.org/about-mihin/resources/use-case-submission-form/)
Use Case Components

**Use Case Summary** - explains purpose and value proposition/business case for sharing data

**Use Case Agreement** - legal document covering expected rules of engagement (Trusted Data Sharing Organizations sign Use Case Agreements)

**Use Case Implementation Guide** - technical specification that outlines standard format details for data transmission & content
Use Case Factory Hierarchy

- **Story board**: Full learning health cycle inclusive of multiple stories and persona types (providers, patients, researchers, family, etc.)

- **Story**: Persona combined with collection(s) to illustrate a health-related event or situation

- **Collection**: Combination of Use Cases that interact to create a higher-level service

- **Use Case**: A functional data-sharing unit

- **Scenario**: Granular examples of data sharing (submit vs. receive, etc.)

- **Data Standards**
Accelerating Use Cases

Clinical Endorsement & Evidence

Financial Incentives or Disincentives

Use Case

Policy & Regulatory Levers
Scarcity vs. Abundance

- Energy goes into finding data
- Minimal thought on editing & data integrity
- Strategy for going without info
Abundance

• Energy goes into prioritizing what you want

• Lots of thought about quality & editing

• Strategy for effective use
Critical Infrastructure Components

- Patient Provider Attribution Service (ACRS)
- Patient Consent Preferences
- Federated Identity Management (FiDM)
- Gateway Services (e.g. XCA)
- Master Person Index + Common Key Service
- Identity Management
- Health Provider Directory

Secure Transport Layer Services and Digital Credentials
Admit Discharge & Transfer (ADT) Use Case

ADT Notice triggers
Care coordination

Alert!

Schedule follow up visit within 7-14 days

Readmission Avoided

Hospital
Statewide ADT Use Case Example

"Use Case Collection: Statewide ADT Notification Service"
Statewide Health Provider Directory

- Contains Electronic Service Information (ESI) used to route information to providers

- Flexibility to maintain multiple distribution points for single provider or single distribution for organization

- Manages organizations, providers and the multiple relationships between them
Active Care Relationship Service™

Patient Information
- Source Patient ID
- First Name
- Middle Initial
- Last Name
- Suffix
- Date of Birth
- Gender
- SSN – Last 4 digits
- Address 1 & Address 2
- City, State, Zip
- Home & Mobile Phones

Physician Information
- NPI
- First Name
- Last Name
- Practice Unit ID
- Practice Unit Name
- Physician Organization ID
- Physician Org Name
+6 Million Active Care Relationships
1) Patient goes to hospital which sends message to TDSO then to MiHIN
2) MiHIN checks patient-provider attribution and identifies providers
3) MiHIN retrieves contact and delivery preference for each provider from HPD
4) Notifications routed to providers based on electronic address and preferences
New Statewide Use Cases

[Diagrams showing combinations of MED REC, Care Plan, Active Care Relationships, and Statewide Health Provider Directory]
HPD & ACRS to Common Key

Health Provider Directory

- Physician Organization
- Practice Unit
- Individual Provider
- Active Care Relationship Service
- Patient

MiHIN Shared Services
1) Patients are added to Common Key as Providers submit Active Care Relationships
2) The same patients may be attributed to multiple Providers but are linked
3) The same patients may also be a Medicaid beneficiary
4) A similar opportunity exists for data clean up for other plan enrollment files
Alignment of Quality Measures

<table>
<thead>
<tr>
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<th># of Measures</th>
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<tbody>
<tr>
<td>PQRS</td>
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<td>EP eCQM</td>
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<td>43</td>
</tr>
<tr>
<td><strong>Overlap</strong></td>
<td><strong>9</strong></td>
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</tbody>
</table>
Clinical Quality Measurement

- Meaningful Use (MU) Stage 2 requires Medicaid providers to report electronic Clinical Quality Measurements (eCQMs) from a certified EHR
  - CAT-I reports assess individual patient encounters
  - CAT-III reports assess organization efficiency & enable cross-clinic comparisons
- With the certified EHR capabilities for eCQMs, there is an opportunity to reduce provider burdens around quality measures
Current State of Supplemental Data Transfer

PO 1 → Allscripts
PO 2 → NextGen
PO 3 → eCW
PO 4 → Wellcentive
PO 5

HL7 Format

"Group to BCN" Format

HEDIS

Meridian Format

BlueCross BlueShield

NCQA
The Role of DIRECT & EHRs
Public Health Use Case: Vaccinations Using DIRECT

No Change Required!

State of Michigan (SOM Data Hub)

mcir@direct.mihin.org
Benefits of Utilizing MIDIGATE®

• MIDIGATE provides a low-cost way to drastically improve data collection from providers

• Data arrives:
  • Faster – transfer is electronic and instant
  • More complete – all pertinent records are pulled
  • Automatically – no need to send formal requests
  • Formatted – customized structure needed for processing

• Reduces data-collection burden for providers, physicians

• Saves tremendously on labor costs from data collection efforts
MIDIGATE® “Catcher” Modules

Doctor offices & Community Hospitals

HISP

Catcher Module

immunizations@direct.mihin.org

MiDIGATE Handler ‘peels” off attachments

Base Gateway Service
Type of “catchers”

- adts@direct.mihin.org
- meds@direct.mihin.org
- eCQMs@direct.mihin.org
- immunizations@direct.mihin.org
Simplifying Quality Data Collection

**MIDIGATE®**

inbox@direct.mihin.org

“Catch, Detach, Dispatch”

Cerner

Epic

Allscripts

Supplemental Clinical Data File

**“Group to BCN” Format**

BlueCross BlueShield

HL7 Format

**Priority Health**

**HEDIS**

MIDIGATE®

Meridian Format

MIDIGATE®

Priority Health

**MiHIN Shared Services**
Streamlined Report Once Opportunity

Patients

Senders
- Eligible Providers
- Eligible/Critical Access Hospitals

Measure Payload
- Any Quality Measure

MIDIGATE®
- inbox@direct.mihin.org
- "Catch, Detach, Dispatch"

Trusted Data Sharing Organization
- VPN/REST API

Quality Data Mart
- Convert to Desired Format
- Quality Score
- Quality Check
- Store
- Validate

Reporting Layer
- Reports, Dashboards, Comparisons, Mining

Quality Portals
- Medicaid
- Medicare (PQRS)
- Consumers
- Payers
- Providers

Validate Sender NPI and Use Case Agreement

Health Provider Directory

Reports,
Dashboards,
Comparisons,
Mining

Medicaid

Data Warehouse

Medicare
(PQRS)

Consumers

Payers

Providers

MiHIN
Shared Services
New Planning Areas 2016-17

Planning (MiHIN Convening Role)
1. Medication Management
   b. Prescription discontinuation
2. Coordinating Care Coordination
   a. Registering Care Coordinators & establishing them in ACRS
   b. Care plan standardization
3. Quality Reporting
   a. eCQM’s
   b. Gaps in care across payers
4. Consent management
   a. Standardization
   b. Viewing of Active Care Relationships
5. Statewide Consumer Services
   a. Sharing & support for Health Michigan HRA
   b. Peace of Mind Registry
Activities On the Horizon

Organizations

• The Sequioa Project
  • Carequality
  • eHealth Exchange
• CommonWell Health Alliance
• National Association for Trusted Exchange (NATE)
• Workgroup for Electronic Data Interchange (WEDI)

Important Technologies

• Old fashioned HL7 2.x
• Direct Secure Messaging
• HL7 Consolidated Clinical Document Architecture (C-CDA) & NwHIN IHE XCA profile
• HL7 work in Fast Healthcare Interoperability Resources (FHIR)
Questions?

Thank you

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HITC Next Steps

• HIT Commission Considerations

  • Support the utilization of the Active Care Relationship Service (ACRS) and Common Key statewide service as a means to achieve MDHHS policy goals.

  • Encourage Michigan healthcare stakeholders to adopt Active Care Relationship Service (ACRS), Common Key statewide service, and utilize the Statewide Health Provider Directory (HPD).

• Fourth Quarter Availability
Public Comment
Adjourn