Overview

- **Aim:** Outline how the State and the State-Designated HIE, the Chesapeake Regional Information System for Our Patients (CRISP), partnered to implement the Integrated Care Network (ICN) initiative to support value based care delivery and achieve the goals of Maryland’s all-payer hospital rate regulation system.

- **Objectives**
  - Highlight collaboration of the State and HIE in Maryland.
  - Highlight the technology developments under the ICN to support value based care delivery.
  - Discuss goals and progress of the ICN in facilitating cooperative care coordination efforts among health care organizations and providers.
Background

- In 2009, Maryland Health Care Commission (MHCC) and Health Services Cost and Review Commission (HSCRC) designated CRISP as the State-Designated HIE
  - Build and maintain the technical structure to support statewide HIE and the foundation of interoperability to communicate health data among Maryland physicians, hospitals, and other health care organizations and providers
  - Enable communities with regional HIEs to connect to other communities around the State
  - ICN initiative work supports HIE in the development of tools, data, and support services to facilitate care coordination
State Collaboration with HIE

- State serves as members of CRISP’s various Committees

- Work to develop new and innovative use cases

- State convenes an HIE Policy Board workgroup of HIEs and industry stakeholders to develop policies regarding the privacy and security of information exchanged through an HIE

- Advance the use of HIE through engagement with stakeholders, including hospitals, ambulatory practices, behavioral health providers, public health, the State Medical Society, and other State agencies
Background on the ICN

- In 2014, the Care Coordination Workgroup (workgroup) recommended collaborative opportunities for the State and stakeholders to support the goals of the State’s all-payer hospital rate regulation system.

- The ICN initiative was established in 2015 as the result of recommendations from the workgroup:
  - Utilize CRISP to organize the data and identify opportunities for information sharing among providers, including through different care management platforms.
  - Build a data infrastructure and identify target populations.
  - Enable multiple providers to share information, coordinate care, and integrate their efforts to meet the needs of patients.
Goals of the ICN

• Organized around where information is needed
  • Point of Care
  • Care Managers and Coordinators
  • Population Health Teams
  • Patients
  • Common Infrastructure
  • Administrators and Policymakers
What the ICN Does

• Focus on technology development to support care coordination
  • Build on HIE existing infrastructure
  • Align with existing programs and interventions to support high need / complex patients
• Shift from moving entire documents to pulling and deriving specific, important data elements from medical records to display for a clinician within the workflow
  • Support providers to deliver quality care and improve patient outcomes
State Collaboration in the ICN

• Works with CRISP to set goals and objectives for the ICN
• Serves as a member of the ICN Steering Committee
• Participates with CRISP in monthly meetings to discuss the progress of the ICN
• Work with an independent third party to evaluate the ICN
  • Project deliverables are consistent with the objectives of the ICN
  • Identify and evaluate areas for improvements
ICN Developments

• Point of Care
  • Establish ambulatory provider connectivity to CRISP
  • “In-Context Alerts” generate an automatic alert mechanism in the EHR
  • “Patient Care Overview” dashboard of high-value care coordination information

• Care Managers and Coordinators
  • “Smart Router” to deliver clinical data from hospitals and practices to care managers, ACOs and payors
  • Care Alerts utilized to appropriately share specific care management information
  • Patient care management relationships flags to notify a hospital clinician if the patient is in a care management program
ICN Developments cont.

- **Population Health Teams**
  - Patient Total Hospitalizations (PaTH) dashboard summarizes total hospitalizations for patients seen at a hospital in the previous 12 months
  - CRISP Reporting Services tools aggregate hospital and Medicare claims data, identify at-risk patients, and assist with care coordination between hospitals

- **Patients**
  - Smart Router allows an opt out of sharing ambulatory data without being excluded from other CRISP services
  - Develop more granular consent options
  - Develop technology to allow patient’s family and proxies to receive care alert information
ICN Developments cont.

- Common Infrastructure
  - Support performance, reliability, and reporting of the ICN technology
  - Single Application Program Interface (API) Gateway to streamline the requests for routing of information

- Administrators and Policymakers
  - Facilitate care redesign initiatives by establishing a governance structure for care redesign and submitting quarterly and annual program reports to HSCRC and Center for Medicare and Medicaid Innovation (CMMI)
Next Steps

- Align efforts of the State and HIE to support practices participating in value based care programs
  - Increase ambulatory connectivity to share encounter data and Consolidated Clinical Data Architectures (CCDAs) to facilitate care coordination
  - Develop utilization reports using Medicare data to identify high-risk patients and facilitate care coordination
- Improve sustainability through better technology and increased service offerings to increase HIE participation
  - Technology improvements for more complete and accurate data on patients
  - Promote and train providers on the use of CRISP tools to increase utilization
  - Offer core services to behavioral health providers
Thank You!

For more information or questions please contact:

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Appendix
PaTH dashboard

- Allows hospitals to see a summary of the total hospitalizations for all patients seen at their facility in the previous 12 months
- Required the development of a data use policy for this cross-facility sharing of data
- Opt-out option for patients who do not wish to share their data
- Can be sorted to facilitate identification of at-risk patients by a variety of criteria and by line of service
- Utilizes Tableau and is updated monthly
Technology Infrastructure Development

- Flag Patient Care Management Relationships
  - Aims to have notifications sent to CRISP for each patient who is enrolled/dis-enrolled in a care management program

- Share Care Planning Data
  - Created care alerts to share specific care management information when appropriate for a patient who is participating with CRISP
Technology Infrastructure Development

• In-Context Alerts
  • Generates an automatic “alert mechanism” in the hospital’s EHR for clinicians to be notified immediately of high value information
    • Recent hospitalizations
    • Prescription drug monitoring program (PDMP)
    • Care alerts
    • Care coordination information
  • Ability to directly navigate to the full information via single sign-on
Technology Infrastructure Development

- CRISP Reports to support population health
  - Aggregate data from hospitals and Medicare claims
    - All hospitals signed data use agreement with CMS to allow CRISP to utilize the Limited Data Set
  - Incorporate compiled data into CRISP tools to assist with identification of at-risk patients and assist with care coordination between hospitals for shared patients
    - At-risk is defined using common criteria developed by hospitals
    - Shows portion of at-risk patients that are enrolled in care management
NYS Approach to HIT-enabled Quality Measurement

Jim Kirkwood
Director, Division of Healthcare Innovation
Office of Quality and Patient Safety, NYSDOH
Transformation Activities Requiring HIT-Enabled Quality Measurement and HIE activity

- State Innovation Model Grant
  - Advanced Primary Care Scorecard
- Delivery System Reform Incentive Program (DSRIP)
- Medicaid Value Based Payment Roadmap
- MACRA(MIPS)
- CPC+
Future Vision for APC Scorecard

Data Sources
- Payers/APD
- Registries

Data Intermediary (possibly state, payer, third party)

Data Sourcing
- Reporting Services
- Clinical Quality Measurement
- DSR
- Pay for Value

Priority Uses
- Clinical action and population health measurement
- Pt Cohort decisions and support & management
- Program requirements and evaluation
- Cost and quality transparency public reporting

Reporting Formats
- QRDA III/I
- Num Denom

Functions
- Data Sourcing
- Cleansing
- Calculation
- Consistent formatting
- Reporting

From ONC Conference: IT-enabled Quality Measurement (Aug 31 – Sep 1, 2016)
HIT-Enabled Quality Measurement

Background

• New York State is engaged in several state-wide initiatives aimed at achieving the Triple Aim of improving quality, improving population health and reducing the cost of care.

• Measuring the quality, cost and outcomes of care delivery is a critical element of all of these initiatives.

• The New York State Department of Health (NYSDOH) has a particular interest in leveraging HIT and HIE to support quality measurement for these initiatives.

• NYSDOH has conducted a current state assessment to understand existing solutions and unmet needs for HIT-enabled Quality Measurement.

• Based on the findings of the current state assessment, NYSDOH will pursue several parallel projects to increase data quality, close data availability gaps, and identify scalable and reusable technical solutions to meet unmet needs.
HIT-Enabled Quality Measurement

What Do Organizations Need to Do and How Are They Currently Doing it?

**Plans**
- Produce annual HEDIS measure data
- Share measures with providers in P4P programs

**Providers**
- Close gaps in care to improve measures
- Report measures or data for incentive programs
- Use EHRs or aggregators to produce measures
- Receive gaps in care reports from plans

**NYSDOH**
- Measure APC practices and VBP pilots
- Leverage plans’ HEDIS processes

**WHAT**

**HOW**
- Receive *some* EHR and lab data to supplement claims
- Data comes from HIE, aggregators, labs, practices, hospitals
HIT-Enabled Quality Measurement

Characteristics of the Current State

Current State

Data Availability
Data from additional sources is needed

Standards
Inconsistency in file formats, content and standards

Data Quality
Quality of data is inadequate to meet use case needs

Technology
Multiple point-to-point connections
HIT-Enabled Quality Measurement

Characteristics of the Future State

- **Data Quality**: Quality of data is adequate to meet use case needs
- **Standards**: Data delivered in a consistent, structured, consensus-based format
- **Data Availability**: Data are available to entities that need it
- **Technology**: Technology is accessible, scalable and reusable

Accurate, reliable measurement of clinical processes and outcomes
HIT-Enabled Quality Measurement

Future State Building Blocks

- High Quality Data
- Data Aggregation
- Data Delivery
- Attribution
- Enabling Policies
- Standards and Consensus
- Consent Management
- Measure Calculation
- Monitor and address performance
- Support new payment models
- Evaluate new care delivery models
- Robust, accurate measures
- Goal
- Use Cases
# HIT-Enabled Quality Measurement

## Related Projects and their Impact

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIE Data Quality Assessment</strong></td>
<td>Qualitative &amp; quantitative assessment of data quality, related policies &amp; procedures</td>
<td>Evaluate ability of HIEs to support quality measurement</td>
</tr>
<tr>
<td><strong>NYS Medicaid VBP Pilots</strong></td>
<td>Test ability to report measures that require clinical data</td>
<td>Understanding of barriers and solutions for specific measures</td>
</tr>
<tr>
<td><strong>HIE Pilots</strong></td>
<td>Strengthen capacity to support quality measurement; test use cases</td>
<td>Improvement in data quality &amp; evaluation of use cases and technical solutions</td>
</tr>
<tr>
<td><strong>Quality Measurement Clearinghouse</strong></td>
<td>Develop solution to centralize, standardize &amp; deliver data to support quality measurement</td>
<td>Increased data availability for high-priority measures</td>
</tr>
<tr>
<td><strong>Ongoing HIE Activities</strong></td>
<td>Various efforts to support participant quality measurement needs</td>
<td>Increased capacity to support quality measurement; understanding of use cases, barriers, opportunities</td>
</tr>
<tr>
<td><strong>Consensus &amp; Standards</strong></td>
<td>Design specifications for data delivery, ensure knowledge sharing &amp; shared decision-making</td>
<td>Consistency across implementations, ensuring scalability and reusability</td>
</tr>
</tbody>
</table>
Advancing Value-Based Care Through State Collaboration

Working with physicians and payers to leverage a statewide network to identify and close gaps in care

Jeff Livesay
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MiHIN is a network for sharing health information statewide for Michigan
Network of Networks:

MiHIN Statewide Shared Services

Health Plans

MI Disease Surveillance System
MI Syndromic Surveillance System
MDSS
MSSS
Immunizations
MDHHS Data Hub
State Labs
Chronic Diseases
Data Warehouse
Medicaid
Single point of entry/exit for state

Provider Organizations

43 Provider Organizations

Health Information Exchanges (HIEs)

Consumer-facing Organizations

Federal

Other Data Sharing Orgs

Health Plans

Pharmacies
(more coming)

Consumer-facing Organizations

Other Data Sharing Orgs

Providers & Health Systems

Health Information Exchanges (HIEs)
Health Information Exchanges in MI

[Diagram showing various health information exchange networks and records in Michigan, including UPHIE, ANTS Health, PatientPing, Northern Physicians Organization, GLHC, MiHIN, and others.]
"One and Done"- Easier, Simplified, Predictable Data Sharing

- **Sign once for legal Interoperability**
  - Common legal framework across the state
  - Transparent data usage for each use case

- **Connect once for technical integration**
  - MiHIN network includes all of healthcare: HIEs, HISPbs, health plans, the state and the federal agencies

- **Publish once for authoritative sources**
  - Patient/provider delivery preferences easily registered, centrally managed

- **Report once for reuse & reduction of duplicated efforts**
  - Messages can be routed to multiple destinations – no duplicate interfaces or repeat reports
Issues in Quality Landscape

• Increasing **provider burden**
  • More and more reporting requirements

• **Variation** in transport, calculation and reporting methods
  • Custom solutions and loose requirements

• Performance feedback is **not actionable**
  • Data often fragmented, out-of-date

• Measure **alignment**
  • Only moderate overlap of measures across programs
Alignment of Quality Programs

<table>
<thead>
<tr>
<th>Measure Set</th>
<th># of Unique Measures</th>
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<tbody>
<tr>
<td>PQRS</td>
<td>281</td>
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<tr>
<td>eCQM</td>
<td>93</td>
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<tr>
<td>HEDIS®</td>
<td>93</td>
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<tr>
<td>AHIP - CMS</td>
<td>88</td>
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<tr>
<td>Medicaid</td>
<td>51</td>
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<tr>
<td>QRS</td>
<td>43</td>
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<tr>
<td>CPC+</td>
<td>22</td>
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<tr>
<td>PPQC</td>
<td>27</td>
</tr>
<tr>
<td><strong>Overlap</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

This work made possible by funding from the Michigan Department of Health and Human Services

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Understanding **Report Once**

- Report Once for quality measures enables physicians to:
  - Send data once for reporting to multiple programs
  - Reduce duplicate interfaces and reporting
  - Reduce workload burden

- Initial focus on measures with highest overlap between main measure sets

- Offer one service that accepts all types of measure data
Supplemental Data – Status Quo

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Allscripts → OakInd Southfield Physicians
NEXTGEN → hvpa
Wellcentive → United Physicians
eClinicalWorks → NORTHERN PHYSICIANS ORGANIZATION

Priority Health
HEDIS

Meridian Format

HL7 Format

“Group to BCN” Format
Gaps in Care Reports – Status Quo

Priority HEDIS Engine

Meridian HEDIS Engine

BCBSM HEDIS Engine

Priority Portal

Meridian Portal

BCBSM Portal

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Quality Measure Data Flow

One format and one location for:

- Providers to send quality measures
- Payers to submit Gaps in Care
- Providers to close Gaps in Care
Physician Organizations

Other Provider Recipients

Supplemental Data

Close Gaps in Care

Gaps in Care Feedback

MiHIN

Payers

Patient Attribution, Matching

Standardizing Gaps in Care Closure
Quality Measure Information

QMI

MI MU
MIPS
CPC+
SIM
HEDIS (PPQC)

QRDA
APS
Bridge
QMI – Michigan Medicaid MU

- Attesting to quality component Michigan’s Medicaid Meaningful Use program requires submission of quality report files (QRDAs)

Data Flow

Provider ➔ QRDA ➔ MiHIN ➔ SoM Data Warehouse

Partners

[MDHHS logo]
[Altarum Institute logo]

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QMI – MIPS

• Attesting to quality component MIPS program requires submission of quality report files (QRDAs)

Data Flow

Provider → QRDA → MiHIN → CMS Portal

Partners

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QMI – SIM

- SIM program requires monthly submission of supplemental clinical data to allow MDC to calculate measures on SIM patients
QMI – HEDIS

• Physician-Payer Quality Collaborative created a data flow to facilitate the transfer of supplemental clinical data from provider organizations to payers in a standardized way
Michigan-built Standards

• Michigan has created standards *where none existed*
• Quality Data Formats
  • Statewide shared format for All-Payer Supplemental (APS) clinical data
  • Establishing standard for Gaps in Care (GiC) data
• Report Once
  • Single, standard connection
  • Centralized, standard point of collection
  • Distribute in standard way based on relationships
  • Report in standard way for SIM quality reporting
  • Standardize core set of measures to evaluate
Michigan’s comprehensive framework for Quality Measure Information:

- Aligns multiple quality programs, measures
- Allows additional organizational and measure alignment
- Is jointly designed and deployed by MDHHS and MiHIN
- Includes growing variety of stakeholders
- Is fully in production supporting “report once” capability
- Offers multiple transport mechanisms and format options for maximum flexibility
- Greatly reduces provider reporting burden
- Enables and emphasizes actionable quality improvements, not just reporting
Thank you!

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Compliments:  pletcher@mihin.org

Complaints:  complaints@yahoo.com
Thank you!

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