Welcome & Housekeeping

• All stakeholders in New Mexico’s healthcare community are welcome
• We will record today’s webinar
• Lines will be muted as we begin
• To comment or to ask a question, please ‘raise your hand’ and unmute your line, or
• Direct your question or comment (to everyone, to the presenter, or to the host) in the chat box
Agenda

• **News & Information** – Thomas East, PhD, CEO/CIO; and Michelle Bowdich, Director of Outreach & Communications

• **Special Presentation:** *HealthInfoNet’s use of HBI Solutions for Analytics and Reporting* – Devore S. Culver, Senior Consultant, HealthInfoNet, Portland, Maine

• **User Tips and Feedback:** – April Salisbury, MBA-HCM, Director of Education and Training
A new NMHIC Collaboration

New Participants

- Women’s Specialists of New Mexico (clinical portal)
- Radiology Associates of Albuquerque (clinical portal and DSM)

NMHIC News

https://versatilemedanalytics.com/
NMHIC News

New Organizations in contract discussions:
- NM Orthopedics

New Data Feeds:
- Artesia General Hospital (in process)
- Memorial Medical Center (in process: ADT, Labs, Radiology)
- Taos Holy Cross (interfaces from their new EHR in testing, including a new one for Radiology)
- Lovelace Health System (Most of their old interfaces are migrated over to their new EPIC EHR. Notes interface is in development.)
- New Mexico Cancer Center
- Radiology Assoc. of Albuquerque - Reports (in development)
- True Health and Anthem are now sharing their rosters.

NMHIC News & Information

Michelle Bowdich
Director of Outreach and Communications
NMHIC HIE
New ADVISORY COMMITTEE Member

James Lilly, NM HSD

- James is the State Deputy CIO with the Human Services Division in Santa Fe.
- He has an extensive background in healthcare IT and we are fortunate to have him join our team.
- We expect to see James at our next Advisory Committee meeting, April 11th.

NMHIC HIE Is Coming To Las Cruces

- Memorial Medical Center and it’s physician group have signed contracts with NMHIC.
- The hospital will be providing a full set of data.
- MMC has invited the NMHIC team to join them at the Dona Ana County’s BOXER March
  
  (Colorectal Screening Awareness Event- See Next Slide)
**NMHIC Consumer Outreach Event**

**NMHIC Consumer Outreach Materials**

**Spanish/English Fold Out Cards**

- **Join Us for Doña Ana County's 1st Ever**
  **BOXER MARCH SCREEN TO SAVE**
  **TO PROMOTE COLORECTAL CANCER AWARENESS**

**Saturday, March 24, 2018**
**10:00 AM to 1:00 PM**
**at the Plaza de Mesilla**

**Fun Activities and Prizes!**

**FREE**
Colorectal Cancer (CRC) test kits to complete at home

- A fun, New Mexican style march through a giant inflatable colon
- Testimonials from CRC survivors
- Information about CRC, diabetes, and other chronic illnesses
- Free sugar, cholesterol, and blood pressure screening
- Prizes awarded to the best boxer shorts and largest team participating in the Marcha

For more information about this event and how to register, please contact Karla at 575-546-5065 or KSONDG@NMSU.edu

**NMHIC Consumer Outreach Materials**

**Spanish/English Fold Out Cards**

¡Te gustaría repetir esa prueba de detección?  
¡Por supuesto, no!

**New Mexico Health Information Collaborative**

El Cambio Estatal de Información de Salud (HIE)

Los resultados de su prueba deben seguirlo a donde sea que reciba atención. Solicite a sus doctores que se unan al NMHIC HIE.

**New Mexico Health Information Collaborative**

The Statewide Health Information Exchange (HIE)

Your test results should follow you to wherever you go. Ask your provider to join the NMHIC HIE.
NMHIC HIE RADIO Interview
Rebekka VanNess- Silver City
Today’s Healthy Community, KURU
89.1 FM  www.gmcr.org

NMHIC Outreach Video Links-YouTube

• Timothy Washburn (Eli Story):
  https://youtu.be/uf4Hy0gHGq4
• Kevin Carey (Aunt Liz):
  https://www.youtube.com/watch?v=EiyxUhP4aBQ
• Kevin Carey (Interoperability):
  https://youtu.be/79lhgv8OwFY
• Dale Alverson, MD, (Imagine):
  https://youtu.be/0YvgsitJ0WQ
The HBI analytic and reporting platform.

HealthInfoNet Overview

Devore S. Culver
Senior Consultant

March 20, 2018
Who Is HealthInfoNet (HIN)?

MISSION: To deliver trusted health information exchange services that help the healthcare community create lasting system-wide improvements in the value of patient care.

- Nationally recognized as a leading Health Information Exchange (HIE)
  - Positioned to expand connectivity to pharmacies, social service agencies, health plans, etc.
  - Positioned to expand services to New Hampshire and Vermont and connect to other health systems nationally, e.g. Boston, Florida, etc.
  - Only HIE in the nation whose portal the Veteran’s Administration has direct access to
- An independent Maine-based non-profit health information services organization incorporated in 2006
- Board of Directors comprised of statewide leaders
- Trusted convener with strong community support
What is in HIN’s Data Repository?

- Patient Identifier, demographics & PCP (registration data)
- Encounter/Visit History
- Laboratory and Microbiology Results
- Vital signs (new data)
- Radiology Reports
- Adverse Reactions/Allergies
- Medication History from Pharmacies & Medicaid Claims
- Diagnosis/Conditions/Problems (primary and secondary)
- Immunizations (primarily adult)
- Documents (Discharge summaries, office notes, reports, etc.)
- Social Determinant Data (transportation, housing, etc.)
- Continuity of Care Documents (CCD)
- Claims Data (MaineCare)
HIE Connections - 700+

- Acute Care Hospitals: 18
- Critical Access Hospitals: 16
- Mental Health Hospitals: 1
- Ambulatory: 464
- Behavioral Health: 143
- FQHCs: 68
- Post-Acute Care: 46
- VA Locations: 12
- Labs: 5
- Health Systems: 5
- Emergency Medical Service: 3
- Pharmacy: 2
- Payers: 1

HealthInfoNet’s 2017 HIE Statistics

- 16.5+ million Inbound messages/month
- 85,000 Patient lookups/month
- 45,000 real time Patient encounter notifications/month
- 500,000
  Data transmissions sent to Maine CDC in support of Electronic Lab Reporting, Syndromic Surveillance and Immunization Reporting (Meaningful Use Measures)/month
- 7 TB CDR Central Data Repository size
- 8+ GB a day Central Data Repository (CDR) daily growth
Patients Accessed

Unique Users
Scope of Services

HealthInfoNet Services

• Health Information Exchange

• Real-Time Notifications

• Government Health Reporting

• Analytics, Reporting & Measurement
Service Portfolio Descriptions

• **Health Information Exchange** - Manage near real time connections to electronic medical record systems across the state of Maine to aggregate patient level clinical, encounter and diagnostic coding data that is then standardized and organized around individual persons so that providers engaged in treating patients have a central resource for accessing patient specific information to support coordination of care and treatment decisions.

• **Notification Services** - Provide near real-time notifications via e-mail and daily reports to providers and care management staff for specific events of care such as admission to the hospital or emergency room, discharge from the hospital or emergency room, discharge from skilled nursing facilities, etc. This service is being expanded to include the delivery of reports pushed to the provider related to specific event of care.

Service Portfolio Descriptions

**Government Health Reporting**

• **Automated Laboratory Reporting** - Serving hospital and reference labs in meeting State of Maine reporting requirements to notify Maine CDC when specific lab results indicate the existence of one of seventy two diseases that are mandated for timely reporting by the State.

• **Syndromic Surveillance** - Continuous reporting of events of care presenting at hospitals and clinics where the chief complaint provided by a patient indicates possible event of a disease or condition that requires review/intervention by the Maine CDC for public safety and health.

• **Immunization Reporting** - Reporting adult and pediatric immunizations documented in physician practices and hospitals to the State of Maine Immunization Registry.

• **Public Health Incidence Reporting Dashboards** - Near real time reporting on statewide incidence of key diagnostic and clinical conditions including diabetes, hypertension, body mass index.
Service Portfolio Descriptions

- **Accountable Care Data Services** - Provide near real time data export on patient event of care activity (admission, discharge, transfer) and selected clinical data (lab results) for patients that are being managed under an accountable care risk contract arrangement.

- **Predictive Analytics and Reporting** - Near real time predictive analytics based on clinical, encounter and social determinant data to support risk stratification for care management of defined patient populations. Areas of risk projection include future twelve month probabilities for inpatient hospitalization, 30 day readmission, emergency department admission and eleven areas of clinical diagnosis and clinical events. Statewide population reporting includes near real time dashboards for incidence and management of diabetes and hypertension for all Maine residents and inpatient and emergency services utilization for Medicaid members.
This chart shows that the selected hospital has 81% of market share for orthopedic surgery cases within County.
This chart shows that volumes for orthopedic surgery for the sample hospital are declining for both outpatient and inpatients and market share for inpatient orthopedic surgery within their service area is declining.
Population Risk Management Dashboards:
Population Profile

This chart shows that for the selected health system there are 81 patients who have >70% chance of an ED visit, inpatient admission, and being high cost within the next 6 months.

The map shows where these patients originate.

The most common Diagnoses for these patients are Hypertension and Diabetes.

Population Risk Management Dashboards:
Patient Lists By Risk Level

A list of the high risk patients from the previous dashboard can be produced.

And individual patients selected for further review.
The summary above shows that this 59 year old female had 5 inpatient admissions, 14 ED visits, and 36 outpatient visits in the last 12 month period.

The chart shows the timing of each encounter along with the risk scores increasing over time.

For the patient listed on the previous slide we can see the list of chronic Dx, the outpatient medications, the abnormal lab results, and the list of most recent encounters by associated facility.
Readmission Risk Management Dashboards:
Readmission Risk Profile

These charts show distribution of patients by chronic disease, service line, and diagnostic category.

The map shows where these patients originate.

This visuals shows the number of inpatient encounters by 30 day readmission risk level.

Readmission Risk Management Dashboards:
Readmission Risk Patient List

Multiple filters to retrieve a patient encounter list and associated risk scores.
MaineCare Utilization Reporting Tool - Background

- MaineCare’s “ED Collaborative” Care Management program was using a hospital generated “ED visit census fax workflow,” to identify members who were using the ED inappropriately.

- The hypothesis was that if provided the data required, HIN could build a process that is more reliable, timely, and efficient than the hospital census fax information.

- MaineCare began to provide HIN monthly batch claims data (eligibility, medical, pharmacy) to integrate with the HIE Clinical Data Repository and Mater Person Index.

“MaineCare Utilization Reporting Tool” Overview
Data Parameters

- **Data Use** - Permission received from all Hospitals to make data available to MaineCare for the specific “use-case”.
- **Data Scope** - Dashboard excludes HIE data during times of discontinuous eligibility (i.e. No data that the payer does not have legal access to under HIPAA is available).
- **Timeliness** - Dashboard is updated overnight with the previous days HIE data and revises daily eligibility changes provided by MaineCare claims data daily update process.

Access Parameters

- **Access** - the reporting solution is built within the HIE architecture and uses the same security and audit parameters (VPN, authentication, etc.).
- **User Management** - user accounts are provided and management per client request within the scope of the project.
- **Reliability** - the solution resides in both test and production environments
User Interface Design

Data Output Design
Interactive Visuals

Encounters by Hospital

- Southern Maine Health Care Emergent: 1411
- York Hospital Emergent: 183
- Mercy Hospital Emergent: 656
- Maine Medical Center Non-Emergent: 128
- Mid Coast Health Services Non-Emergent: 70
- Southern Maine Health Care Non-Emergent: 144
- Mercy Hospital Non-Emergent: 61
- York Hospital Non-Emergent: 54

Custom Analysis

Top Primary Diagnoses

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Emergent</th>
<th>Non-Emergent</th>
</tr>
</thead>
<tbody>
<tr>
<td>R07.9</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Z31.21</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>R10.9</td>
<td>15</td>
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<td>10</td>
<td></td>
</tr>
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<td>K11.2</td>
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<td>M64.5</td>
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<tr>
<td>J44.1</td>
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</tr>
<tr>
<td>R31</td>
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<td>A41.9</td>
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<tr>
<td>K10.13</td>
<td>3</td>
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</table>
Custom Data Export

CDC User Interface Design
Data Output Design

Measure Name | Numerator | Denominator | Percent
--- | --- | --- | ---
HIN 38: Comprehensive Diabetes Care: Hemoglobin A1c or Fasting Plasma Glucose Measure Ending 2017-09-30
Normal (HbA1c < 6% or FPG 80-125 mg/dL) | 120000 | 125000 | 72.0%
Pre-Diabetes (HbA1c 5.7-6.4; or FPG 100-125 mg/dL) | 12500 | 125000 | 9.95%
Diabetes Poor Control (A1C > 9.0; or FPG > 200 mg/dL) | 5500 | 125000 | 4.39%
HbA1c and FPG Not Available | 3500 | 125000 | 27.99%

Interactive Visuals

Measure Sub-Categories

- Diabetes Good Control (A1C 6.0-8.0; or FPG 126-199mg/dL) 38.13%
- Diabetes Poor Control (A1C 9.0+; or FPG > 200mg/dL) 15.60%
- HbA1c and FPG Not Available 26.83%
- Pre-Diabetes (A1C 5.7-6.4; or FPG 100-125mg/dL) 9.83%
- Normal HbA1c (A1C <5.7; or FPG 80-99mg/dL) 7.24%
### Interactive Visuals

<table>
<thead>
<tr>
<th>Measure Name</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>NQF 59: Comprehensive Diabetes Care: Hemoglobin A1c or Fasting Plasma Glucose</td>
<td>4875</td>
<td>12059</td>
<td>40.43</td>
</tr>
<tr>
<td>Normal HbA1c (A1C &lt;5.7 or FPG 80-99mg/dL)</td>
<td>873</td>
<td>12059</td>
<td>7.24</td>
</tr>
<tr>
<td>Pre-Diabetes (A1C 5.7-6.3 or FPG 100-125mg/dL)</td>
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<td>12059</td>
<td>9.83</td>
</tr>
<tr>
<td>Diabetes Good Control (A1C 6.4-8.9 or FPG 126-199mg/dL)</td>
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<td>12059</td>
<td>38.13</td>
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<tr>
<td>Diabetes Poor Control (A1C 9.0+ or FPG 200+mg/dL)</td>
<td>1640</td>
<td>12059</td>
<td>13.60</td>
</tr>
<tr>
<td>HbA1c and FPG Not Available</td>
<td>3235</td>
<td>12059</td>
<td>26.83</td>
</tr>
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</table>

### Measure Overview

**NQF 59: Comprehensive Diabetes Care: Hemoglobin A1c or Fasting Plasma Glucose**

**Overview:**
The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) whose most recent HbA1c level during the measurement year was greater than 9.0% (poor control), or if missing an HbA1c result, whose most recent Fasting Plasma Glucose (FPG) is greater than 200 mg/dL, or who was missing both results, or if neither an HbA1c nor an FPG test was done during the measurement year.

**Denominator:**
Patients 18-75 years of age by the end of the measurement year who had a diagnosis of diabetes (type 1 or type 2) during the measurement year or the year prior to the measurement year.

**Numerator:**
Patients whose most recent HbA1c level is greater than 9.0%, or, if the HbA1c result is missing, whose most recent Fasting Plasma Glucose (FPG) is greater than 200 mg/dL, or who is missing both results, or for whom neither an HbA1c nor FPG test was done during the measurement year. The outcome is an out of range result of an HbA1c test, indicating poor control of diabetes. Poor control puts the individual at risk for complications including renal failure, blindness, and neurologic damage. There is no need for risk adjustment for this intermediate outcome measure.

**Exclusions (optional):**
- Exclude patients who did not have a diagnosis of diabetes, in any setting, during the measurement year or the year prior to the measurement year.
- AND Exclude patients who meet either of the following criteria:
  - A diagnosis of polycystic ovaries, in any setting, any time in the patient's history through December 31 of the measurement year.
  - A diagnosis of gestational or steroid-induced diabetes, in any setting, during the measurement year or the year prior to the measurement year.
Next month’s webinar

**SAMHSA and CFR 42 part 2**

**patient consent**

**April 17, 2018**

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**Next Time**

- Not an HIE User yet?
  Direct inquiries to Michelle Bowdich, (505) 938-9909 or michelle@nmhic.org

- Next date:
  04/17/18
  11:30-12:30 pm