New Mexico Health Information Collaborative (NMHIC)
The Statewide Health Information Exchange (HIE) Network

Thomas East, PhD, CEO
NM Chapter of American College of Physicians
November 6, 2015
What is a Health Information Exchange?

- Technology and services to make sure health information is available when and where it is needed.
- “Interoperability”- the ability of systems to exchange and use electronic health information from other systems without special effort on the part of the user.
We Are All About Interoperability
Why use a Health Information Exchange?

• 18 different doctors in your lifetime
• >65 years old- 28 different doctors
• Your health is dependent on equivalent of 200 pieces of paper in almost 19 different locations.

Average values for the US from the Practice Fusion survey conducted via omnibus survey April 17-18, 2010. The GfK OmniWeb survey is a weekly national web survey of US households. Interviews were conducted from among a nationally representative sample of 1,035 adults age 18 or older.
EHRs and the “Tower of Babel”
Healthcare Interoperability Today
Perfectly informed healthcare for New Mexico
New Mexico HIE - How It Works

Integrated Clinical Record, EMPI and Vocabulary Services

Interoperability Services
- V2.x, CCD, CCDA
- XDS / XDR

Workflow Integration
- Secure Messaging
- Single Sign On (SAML)
- Send to my EHR
- Query Retrieve
- Event Notifications
- Mobile

Hospital
Clinician Office
Diagnostic Tests & Imaging
ER (Emergency Department)
CentennialCare
Clinical Portal
Remotely Hosted by Orion Health
NMHIC – Status

- **HIE – Orion System Live since 5/2015**
- Data from Jan. 2013 forward
- >150M Messages in clinical data repository
- Over 1.5 Million patients- All of Centennial Care
- 3.6 M Messages inbound each month
- 52K public health reporting transactions per month
- Direct secure messaging now available
- eHealth Exchange gateway will be live soon
NMHIC – Participation Fees

$125/bed/yr

No recurring fee to send data. One time fee for interfaces

$150/provider/yr  $0.20/member/month
Public Health Reporting

• Since 2010, NMHIC has been contracted by NMDOH to provide Emergency Department Syndromic Surveillance Reporting and Notifiable Conditions/Reportable Laboratory Results Reporting.

• Current status
  – NMHIC is currently providing Reportable Laboratory Results on behalf of 23 hospitals or reference laboratories (52%), and is currently onboarding an additional 15 hospitals or reference laboratories for meeting MU2 reporting requirements.
  – NMHIC is currently providing ED Syndromic Surveillance data on behalf of 24 hospitals (67%), and is currently onboarding an additional 8 hospitals for meeting MU2 reporting requirements.
  – Starting to work with ambulatory care settings on required public health reporting
Participating Organizations

Hospitals / Health System

- UNM Health System
- Presbyterian Health System
- Lovelace Health System
- Memorial Medical Center
- Los Alamos Medical Center
- Christus St. Vincent Regional Medical Center
- Gila Regional Medical Center
- Holy Cross Hospital
- Nor-Lea General Hospital
- San Juan Regional Medical Center
- Sierra Vista Hospital
- Union County Hospital

Diagnostic Service Centers

- Laboratory Corp. of America
- Quest Diagnostics
- TriCore Reference Labs
- X-Ray Associates of New Mexico

Payers

- Molina Healthcare
- United Healthcare
- New Mexico Health Connections

<table>
<thead>
<tr>
<th>Data Provider Only</th>
<th>Data Provider and user of HIE portal</th>
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<tbody>
<tr>
<td>Portal User Only</td>
<td>Contract signed, in queue for implementation</td>
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</table>
Participating Organizations
Provider Groups

ABQ Health Partners
Hematology Oncology Associates
InnovAge
Jeffrey D. Miller, MD
Monica Luna, DOM
NM Oncology Hematology Associates
NM Cancer Center
200 Christus St. Vincent Community providers
NM Orthopaedics
NM Primary Care Association
(Represents FQHCs)
Rio Abajo Family Practice
Sandia Neurology PC
Surgical Oncology & Gastroenterology Associates
Taos Clinic for Children and Youth

Data Provider Only
Data Provider and user of HIE portal
Portal User Only
Contract signed, in queue for implementation
Interested Organizations

- DaVida Healthcare
- De Baca Family Practice Clinic
- First Choice Community Healthcare
- First Nations Community HealthSource
- Genesis Healthcare
- Gerald Champion Regional Medical Center
- Guadalupe County Hospital
- Kindred Hospital
- La Clinica De Familia
- Las Cruces IPA
- Miner’s Colfax Medical Center
- Presbyterian Medical Services
- Santa Fe Imaging
- Southwest CARE Center
- Southwest Gastroenterology Associates
- Rio Arriba Community Health Council
Core HIE data

• Demographics
• Allergies
• Medications
• Immunizations
• Insurance
• Procedures
• Problem List
• Encounters (Visits) & Diagnoses

Note: Data available varies by organization
# NMHIC HIE Data Providers & Elements

<table>
<thead>
<tr>
<th>NMHIC HIE Portal data elements</th>
<th>ABQ Health Partners</th>
<th>Christus St. Vincent (Santa Fe)</th>
<th>Lovelace Health System*</th>
<th>Presbyterian Healthcare Services**</th>
<th>Holy Cross Hospital (Taos)</th>
<th>TriCore Reference Laboratories</th>
<th>UNM Hospitals***</th>
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*The NMHIC HIE Portal includes clinical data from January 2013 to present (unless noted otherwise).*
EMR / HIE Workflow Options

1. Discrete Bi-Directional Data
   Integrated with EMR
   Physician stays in EMR

2. Portal Embedded in EMR
   (Physician Single-Sign On to Portal)

3. Stand Alone Portal
Example Integration (Cerner)

Single Click access to Clinical Portal
Example Integration (Epic)
Single Click access to Clinical Portal
Privacy and Security

• Information within the NMHIC HIE is subject to Federal and State Privacy and Security Regulations which includes HIPAA, HITECH and other regulations.
• Information is encrypted at rest and in transit.
• Access is limited to authorized users only.
• Security meets industry standards such as SSAE16 (auditing), ISO 27001 and EHNAC
Patient Consent

New Mexico is an Opt-Out State: Data can flow into the HIE without patient consent.

Patient’s control who can access the record

[Image: Patient writing on a medical document]
Examples of NMHIC HIE
Looking at the Patient’s Chart

- Patient Context Bar
- Portal Mail Indicator
- Document Tree
- Patient Demographics
- Windowlets
Medical History at a Glance
### Complete Blood Count W/Differential Cumulative

<table>
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<th>Ref. Range (Units)</th>
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<tr>
<td><strong>WBC</strong></td>
<td>4.0-10.0 (K/uL)</td>
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<tr>
<td><strong>RBC</strong></td>
<td>4.10-5.90 (M/uL)</td>
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<tr>
<td><strong>Hemoglobin</strong></td>
<td>13.2-17.2 (g/dL)</td>
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<tr>
<td><strong>Hematocrit</strong></td>
<td>39.0-50.0 (%)</td>
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<tr>
<td><strong>MCV</strong></td>
<td>78.0-100.0 (fL)</td>
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<tr>
<td><strong>MCH</strong></td>
<td>28.0-32.0 (pg)</td>
</tr>
<tr>
<td><strong>MCHC</strong></td>
<td>33.0-36.0 (g/dL)</td>
</tr>
<tr>
<td><strong>RDW</strong></td>
<td>11.5-14.5 (%)</td>
</tr>
<tr>
<td><strong>Platelet Count</strong></td>
<td>130-400 (K/uL)</td>
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<tr>
<td><strong>MPV</strong></td>
<td>7.4-10.4 (fL)</td>
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<tr>
<td><strong>Neutrophils</strong></td>
<td>42.0-75.0 (%)</td>
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<tr>
<td><strong>Lymphocytes</strong></td>
<td>21.0-51.0 (%)</td>
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<tr>
<td><strong>Monocytes</strong></td>
<td>4.0-12.0 (%)</td>
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<tr>
<td><strong>Eosinophils</strong></td>
<td>0.0-5.0 (%)</td>
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<tr>
<td><strong>Basophils</strong></td>
<td>0.0-2.0 (%)</td>
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<tr>
<td><strong>Anisocytosis</strong></td>
<td>1+</td>
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</tbody>
</table>

Complete Blood Count W/Differential Graph

Information is available from 11/01/2011 to 11/04/2011

Source: Hospital A Medical Center (1)  OHCP (3)

WBC (K/uL) Showing from 11/01/2011 to 11/04/2011

RBC (M/uL) Showing from 11/01/2011 to 11/04/2011
Notifications

- Notify By Direct Secure Messaging
- Notify By Email
- Notify By Portal Messaging
- Notify By SMS Text Message
- Notify in Daily Summary Email
- Notify in Daily Summary Portal Messaging
- Notify in Daily Summary SMS Text Message

Subscriptions for patients

- Notification
  - Inpatient Admission
  - Inpatient Discharge
  - Patient is admitted to ED
  - Patient is discharged from ED
  - A new document (imaging report) is available
  - Final Radiology Report is available
  - Final Laboratory Result is available
  - Final Microbiology Result available
  - Interim Microbiology Result available
  - A new document is available

You can alternatively subscribe to notifications differently for each type of relationship with the patient.
Inpatient Admission - EncounterEvent

notifications@nghic.org

9:58 AM (4 minutes ago)

to me

A patient for whom you are recorded as the Referring Physician and Attending MD has had recent activity at NHIC.

To view the detail for this event, please log into the NHIC HIE Portal at https://demo.portal.nmhc.org.

To unsubscribe, please change your subscriptions within the NHIC HIE Portal by opening the Notifications menu and utilizing My Subscriptions.

To contact support, please call the NHIC Help Desk at (505) 938-9999 or email us at help@nmhc.org

From: System

To: April Salisbury

Subject: Inpatient Admission - EncounterEvent

Patient: 1000003456 NOTIFICATION, PATIENT 1

A patient for whom you are recorded as Referring Physician and Attending MD has had recent activity at NHIC.

Patient 1 NOTIFICATION (Identifier CSV-StVincen/000000003) was admitted as an inpatient at facility CSV-StVincen (ward 560) on Jan 20, 2014. To unsubscribe, please change your subscriptions within the NHIC HIE Portal by opening the Notifications menu and utilizing My Subscriptions.

To contact support, please call the NHIC Help Desk at (505) 938-9999 or email us at help@nmhc.org
NMHIC – HIE Testimonial

“I had a complicated patient today who had lots of labs done elsewhere, I was able to look at them all and make a hypothetical diagnosis on that basis, which I could not have done at all without this interface. THANKS!!!!!!”

7/10/2015  5pm (first day being live)

“Thank you, I am using this for about 30% of my patients and it is a huge time saver!!!” 7/16/2015... less than one week being live

“If I had known how useful this was I would have signed up a year ago. It makes my life so much easier to be able to track labs more effectively than my patients can with their portal interfaces. Your interfaces is fast, easy to use, and seems to know nearly everyone I see. I love that I can access labs and tests from UNM and Pres and ABQ in one place. This is an incredible tool. Thank you for providing it!” 8/4/15

Dr. Sally L. Harris
Albuquerque’s Best Docs 2006 - 2015
Best Doctors in America 2009- 2014
Questions?
Contact us:

Call: (505) 938-9909

Email: info@nmhic.org
Visit: www.nmhic.org
If there are 4 min left....

• We were asked to play this music video about provider frustrations with EHRs
• NMHIC is committed to a better health information and interoperability experience.
• letdoctorsbedoctors.com