Overview and Outline

• NMHIC HIE - What It Is and How It Works
• Data Providers and Data Elements
• NMHIC Status and Outreach Update
• What the NMHIC HIE Offers
• Privacy & Security and Patient Consent
• NMHIC’s role in telehealth in NM
• 5 year outlook of the NMHIC and its possible developments
• Examples of NMHIC HIE/ Demonstration
• Q & A
NMHIC Vision
Perfectly informed healthcare for New Mexico
What is Interoperability?

• ONC follows the IEEE definition of interoperability as the ability of systems to exchange and use electronic health information from other systems without special effort on the part of the user.

• Interoperability Vision for the Future—An interoperable health IT ecosystem makes the right data available to the right people at the right time among disparate products and organizations in a way that can be relied upon and meaningfully used by recipients.
We Are All About Interoperability
Mission Statement

Innovative services, technology, analytics and research to provide high quality, comprehensive, secure information and knowledge when and where it is needed to facilitate optimal healthcare for New Mexicans.
Different EHRs of Different Healthcare Provider Organizations can’t easily “talk” to each other to share information.
New Mexico HIE - How It Works

- **Clinician Office**
- **Hospital**
- **U.S. Department of Veterans Affairs**
- **Indian Health Service**
- **New Mexico Department of Health**

**Integrated Clinical Record, EMPI and Vocabulary Services**

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

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

**Secure Messaging**

**Workflow Integration**

**Encryption**

**V2.x, CCD, CCDA**

**XDS / XDR**

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**Query Retrieve**

**Event Notifications**

**Mobile**

**Hospital**

**Clinician Office**

**Diagnostic Tests & Imaging**

**Emergency Department**
Remotely Hosted SAAS by Orion

Dedicated physically secure facility with redundant power, cooling, and network

Scaleable, redundant application services

Central Data Repository

Internet connected Healthcare Provider

Healthcare Data Providers

Internet
Solution: Core HIE – High Level

Health Information Exchange (HIE)

ORION HEALTH

Hospital with EMR
Clinic with EMR
Other HIEs

ORION RHAPSODY

Health Information Exchange (HIE)

HL7/CCD, XDS, SSO

Seamless integration with EHRs
- User Subscribed Notifications
- Send to My EHR
- Portal embedded within EHR

ORION HEALTH INTEGRATION ENGINE

HIE Platform
Web-based access to the longitudinal patient record
- Demographics
- Labs, Rads
- Encounters
- Allergies
- Diagnosis
- Transcribed documents
- Medications
- Problems
- Procedures
- Immunizations
Direct Secure Messaging
Patient Privacy & Consent

Notifications & Subscriptions
- Secure Inbox
- E-Mail
- Mobile

Physicians
Privacy Officers

HTTPS
Core HIE data

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

Note: Data available varies by organization
• 3/31 Went live with a completely new version of software with expanded functionality and support for new MU2 required interfaces.

• Brought 5 new hospitals on to CDC Syndromic Surveillance Reporting.

• Current status
  – 23 of 44 (55% of beds) Hospitals and Labs with Electronic Lab Reporting
  – 22 of 37 (72% of beds) Hospitals with ED Syndromic Surveillance Reporting
  – 19 of 37 (54% of beds) Hospitals with CDC Syndromic Surveillance Reporting
  – All but 5-6 of remaining hospitals in queue for laboratory and emergency department reporting.
Value/Benefits of HIE

• Access to each patient’s health information with patient consent
• The patient doesn’t have to keep remembering and repeating their health history
• Improved situational awareness regarding patient’s health and use of health systems, better coordination of care
• Better evaluation capability and improved efficiency in making diagnosis and management plans
• Decrease unnecessary duplication of tests
• Readmission avoidance
• Other Benefits: Data Analytics, Public Health, PCMH, ACO
Current NMHIC HIE Data Providers

- ABQ Health Partners
- CHRISTUS St. Vincent Regional Medical Center
- Holy Cross Hospital, Taos
- Lovelace Health System
- Presbyterian Healthcare Services
- TriCore Reference Laboratories
- University of New Mexico Hospitals
- San Juan Regional (In testing)
- Quest Diagnostics (In implementation)
- LabCorp Labs (In Implementation)
# Current NMHIC HIE Data Providers

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<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>
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*Version: 5/22/15*
NMHIC – HIE Status

- **HIE – Live**
  - History Backload from Jan. 2013 forward
    - >140M Messages Loaded
    - Over 1.5 Million patients loaded- All of Centennial Care
    - Seven data providers/organizations (27 feeds)
  - Clinical Portal will have Core Functionality
  - CCD/CCDA exchange
  - Single Sign On
- Direct secure messaging now available
- eHealth Exchange gateway will be live Fall 2015

NM Hospital Beds Providing Data

- **Data Providers**
  - 2204 (48%)
- **Not Providing Data**
  - 2426 (52%)
Who is joining the exchange?

Eight rural hospitals, seven clinics, one national laboratory, one statewide diagnostic imaging organization, and the New Mexico Primary Care Association will be on board in the next few months. Several other organizations have expressed interest and are currently in contract review.
EMR / HIE Workflow Options

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

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

- Stand Alone Portal
Example Integration (Epic)

Single Click access to Clinical Portal
Example Integration (Cerner)

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) and ISO127001
Privacy and Security Services

- Privacy and Consent Management /Auditing
- HIPAA and HITECH Privacy and Security Training
Patient Consent
Patient’s HIE Consent Decision

**Give Consent**
Full access to all information by that organization.

**Do Not Give Consent**
- Consent Not Granted
- Decision Not Made, or
- Consent Has Been Withdrawn

Information is in NMHIC HIE, but no access is permitted unless “Break the Seal” conditions exist. Break the Seal is available for limited time and is audited.

**Opt Out**
No access to any information by anyone, even in an emergency.

“Patient not found” Overrides any previous consents given.
Patient Consent - “Breaking the Seal”

• Emergency “break the seal” is possible
• Limited access for 30-minutes
  – can be repeated but for that specific situation only
• Attempts to obtain written consent should always follow
• Highly audited
• NOTE: If the patient has “opted-out,” their HIE record cannot be viewed under any circumstance
NMHIC and Telehealth

• Discussions with Net Med Express about virtual integration of portal with telehealth application for tele primary care.

• Discussion with project ECHO about how the HIE may fit their needs
NMHIC Future Directions
Connecting Health and Care for the Nation
A Shared Nationwide Interoperability Roadmap
DRAFT Version 1.0

http://www.healthit.gov/policy-researchers-implementers/interoperability
10-Year Overarching Goals and Objectives for Expanding Interoperable Health IT Infrastructure

3 Year Agenda (2015-2017)
Send, receive, find and use a common clinical data set to improve health and health care quality

6 Year Agenda (2018-2020)
Expand interoperable health IT and users to improve health and lower cost

10 Year Agenda (2021-2024)
Achieve a nationwide learning health system
Strategic Objectives
- Initiatives

Customer Perspective

- **Provide Essential Data for Transitions of Care**
  - Get data from rural and critical access hospitals (Rural Hubs)
  - Get data from physician practice groups
  - Get a transitions of care record from all sources

- **Provide Access When and Where Needed**
  - Onboard users from Hospitals, Providers, Payers
  - Develop reporting services
  - Implement HealtheWay gateway for SSA and VAH
  - Develop connections to bordering states (HIE-HIE)

- **Provide Excellent Public Health Reporting**
  - Upgrade public health reporting services
  - Onboard new HL7 2.5.1 Interfaces
  - Onboard new Syndromic surveillance feeds

- **Delighted Customers**
  - Outreach Activities to improve LCF/NMHIC image
  - Monitoring, support and recovery of users
  - Training
  - Advisory Committee Formation
  - Annual customer satisfaction survey
  - Routine rounding with customers
A Common Clinical Data Set

- Patient name
- Sex
- Date of birth
- Race
- Ethnicity
- Preferred language
- Smoking status
- Problems
- Medications
- Medication allergies
- Laboratory test(s)
- Laboratory value(s)/result(s)
- Vital signs
- Care plan field(s), including goals and instructions
- Procedures
- Care team members
- Immunizations
- Unique device identifier(s) for a patient’s implantable device(s)
- Notes/narrative
Strategic Objectives

- Initiatives

Financial Perspective

- Be Sustainable
  - Increase Revenue
    - Add more participating organizations
    - Explore new markets (payers, behavioral health, long term care)
    - Evaluate collaborative opportunities
    - Consider value added services
      - Analytics (secondary data use)
      - Prescription Monitoring Program Access
      - Advanced Directives
      - Imaging services
  - Minimize Expense
    - Only add new expense when there is new revenue associated
  - Increase the margin
    - Increase margin to help fund growth and expansion
Principle-Based Interoperability:
Working Toward a Long-Term Vision with Near-Term Wins
Open Platform

A massively scalable data engine and a new open framework
Live Demonstration of NMHIC HIE Portal
Questions?
How to contact us

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