



New Mexico Health Information Collaborative

The Statewide Health Information Exchange (HIE) Network

NM Legislative Health and Human Services Committee



Thomas East, Ph.D., CEO/CIO

September 26, 2018



Perfectly informed healthcare for New Mexico



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 & use electronic health information from other systems without special effort on the part of the user.



NMHIC Services and Participants



Other Stakeholders

MCOs

NEW MEXICO DEPARTMENT OF HEALTH

Other Payers

Other HIEs

Data Analytic Services

Notification Services

Workflow Integration Solutions e.g., SSO & PMP

Integrated Clinical Record:
Clinical Portal, Clinical Data Repository, Master Patient Index, and Vocabulary Services

Communication Services
Communicate
Direct, Secure Messaging

Regional & National Interoperability Services
HL7 INTERNATIONAL, CCD/CCDA Exchange, XDS/XDR, IHE, eHealth Exchange

Delivery Systems

ER Emergency Departments

Hospitals

Diagnostic Service Providers (Lab & Radiology)

Clinician Offices

Long-term, Home & Hospice Care Providers

Ancillary Care Providers (Many without EHRs)

Behavioral Health Providers (Portal & Direct)

NMHIC HIE Benefits

Appropriate, timely sharing of vital patient information can better inform decision making at the point of care and allow providers to:

- View an integrated real-time clinical record from NM and the surrounding area.- An essential foundation for population health management.
- Receive notifications of clinical events such as ED or hospital admission or discharge
- Avoid readmissions
- Avoid medication errors
- Improve coordination of care
- Improve efficiencies
- Improve diagnoses
- Decrease duplicate testing
- Reduce costs
- Streamline referrals
- Improve the patient experience





UNM

DEPARTMENT of EMERGENCY MEDICINE

David Glass, MD, EMT-P
Resident Physician
Department of Emergency Medicine
University of New Mexico Hospital
USAF Reserve Pararescue Team Leader

NM Health Information Exchange is a powerful tool that is improving the quality and safety of care every day in New Mexico

*“Our team had a patient with severe vaginal bleeding arrive in OB Triage. She had received all of her prenatal care at another hospital. **Getting access to her records made all the difference.**”*

*The following day, our team was called down to the EDRU (ED resuscitation unit) for a 37 week pregnant patient in a MVC (Motor Vehicle Collision) and **I was able to get consent, log in, and gain access to much needed prenatal care information** because we needed to admit her immediately to our institution.*

*The OB service had no idea this portal existed and have been impressed with the **speed and efficiency that I've been able to gather medical information.** In fact, they have asked me to contact my EM point-of-contact about how they can gain access.” 4/16/2016*



Managed Care Organization Effectively Using NMHIC

May 6, 2018

“Our team has created an advanced analytic system that uses data from health plan claims and the New Mexico Health Information Exchange to identify and stratify members who are at health risk, and intervene before avoidable health issues occur.”

Dr. Mark Epstein / Chief Medical Officer, True Health New Mexico



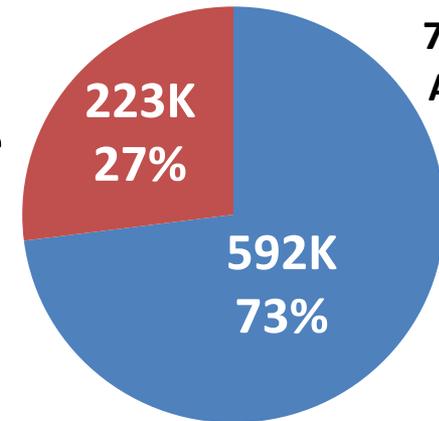
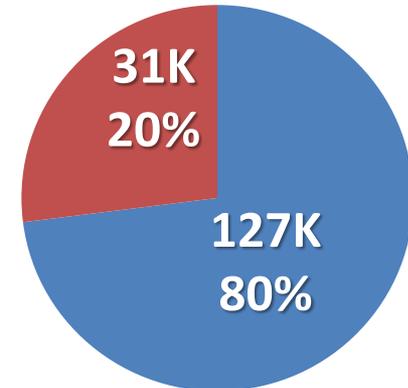
NMHIC – Status

- **HIE – Orion System Live since 5/2015**
- Data from Jan. 1, 2013 forward
- >4B Messages in clinical data repository
 - 25,552,743 encounters
 - 65,219,592 lab panels
 - 548,581,468 lab results
 - 632,064 Path and Radiology Reports
- 100 M Messages inbound each month
- Over 1.7 Million patients--All of Centennial Care
- Public health reporting (Since 2011)
 - 145K ED admission reports/mo.
 - 32K Electronic Lab Reports/mo.
- Direct secure messaging available
- eHealth Exchange gateway (Sequoia Project) now available

**NM Hospital data extrapolated from NM IBIS 2014 data
This includes acute and specialty hospitals
Does not include IHS or Tribal facilities*

- Data Providers
- Not Providing Data

80% NM Inpatient Admissions in NMHIC*



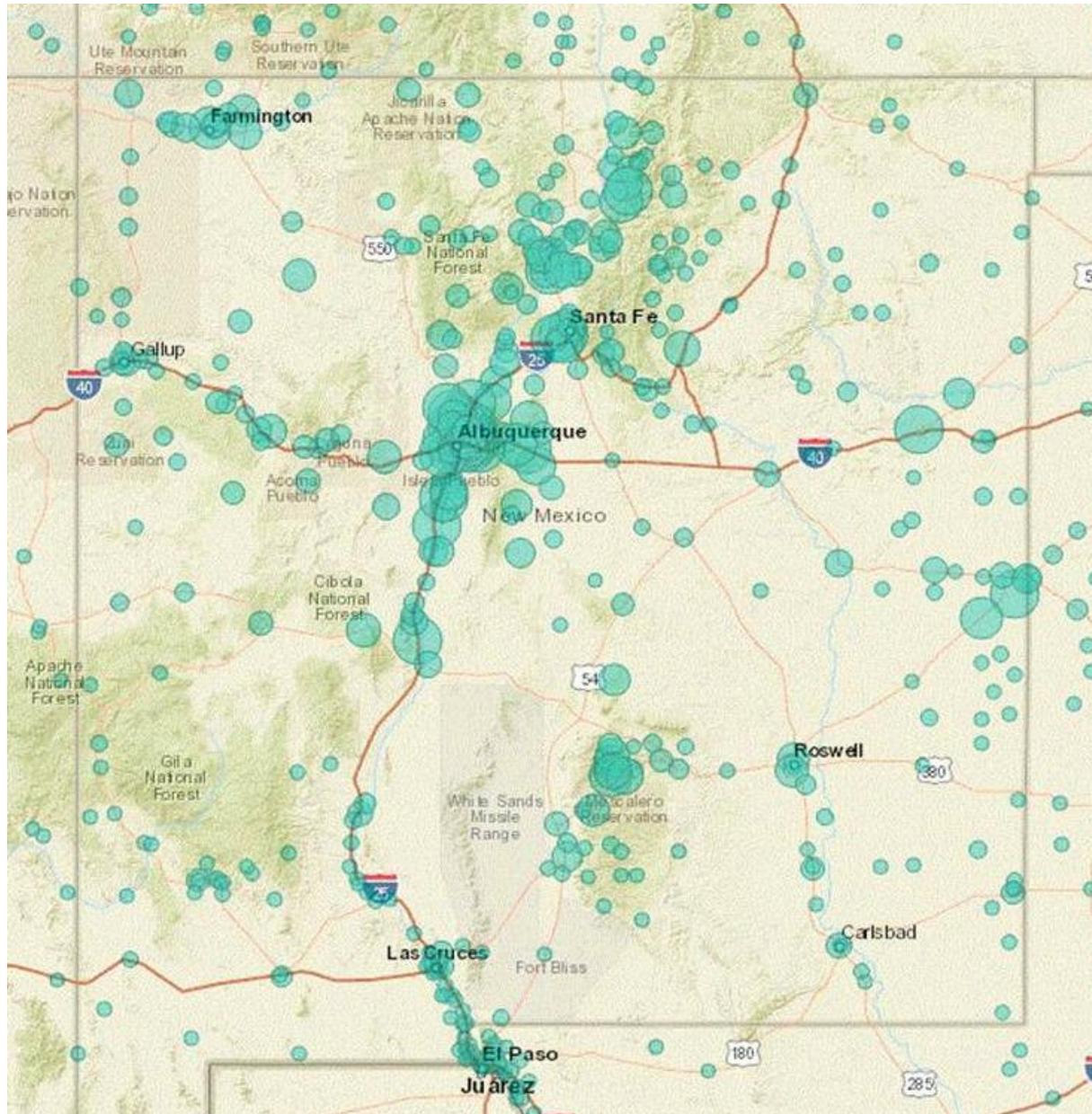
73% NM ED Admissions in NMHIC

2018 Data

ORION
HEALTH™



NMHIC HIE Patient Location and Encounters



Core HIE data

- Demographics
- Allergies
- Medications
- Immunizations
- Insurance
- Lab Data
- Encounters (Visits) & Diagnoses
- Radiology Data
- Procedures
- Problem List
- Clinical Notes

Note: Data available varies by organization





Data Providers and Data Elements

As of August 2018	Patient Summary Data Elements									Document Tree Reports				Start Date
	Patient Demographics	Allergy List	Encounter History	Diagnoses	Medication Orders	Insurance Information	Immunizations	Procedures	Problems	Laboratory Results	Pathology Reports	Radiology Reports	Patient Notes	
NMHC HIE Portal Data Providers														
Anthem Medicare Advantage	X													01/2018
Artesia General Hospital	X	X	X	X		X				pending	pending	X		08/2018
BCBS NM (Centennial Care MCO)	X													09/2014
Christus St. Vincent Regional Medical Center	X	X	X	X		X		X		X	X	X		01/2013
Cibola General Hospital	pending	pending	pending	pending		pending								td
DaVita Medical Group	X	X			X	X	X		X			X	X	01/2013
Holy Cross Hospital	X	X	X	X	X			X		X	X	X ⁷	pending	01/2013
LHS - Lovelace Heart Hospital	X	X	X	X	X			X ⁵		X	X	X	X ⁵	01/2013
LHS - Lovelace Medical Center	X	X	X	X	X			X ⁵		X	X	X	X ⁵	01/2013
LHS - Lovelace Rehabilitation Hospital	X	X	X	X	X			X ⁵		X	X	X	X ⁵	01/2013
LHS - Lovelace Roswell Hospital	X	X	X	X	X			X ⁵		X	X	X	X ⁵	01/2013
LHS - Lovelace Westside Hospital	X	X	X	X	X			X ⁵		X	X	X	X ⁵	01/2013
LHS - Lovelace Women's Hospital	X	X	X	X	X			X ⁵		X	X	X	X ⁵	01/2013
Memorial Medical Center	X	X	X	X		X		X		pending	pending	X	pending	06/2018
Molina Healthcare (Centennial Care MCO)	X													09/2014
New Mexico Health Connections	X													03/2016
PHS - Dr. Dan C. Trigg Memorial Hospital	X		X	X		X				X	X			01/2013
PHS - Española Hospital	X		X	X		X				X	X			01/2013
PHS - Kaseman Hospital	X		X	X		X				X	X			01/2013
PHS - Lincoln County Medical Center	X		X	X		X				X	X			01/2013
PHS - Plains Regional Medical Center	X		X	X		X				X	X			01/2013
PHS - Presbyterian Hospital	X		X	X		X				X	X			01/2013
PHS - Presbyterian Medical Group (PMG)	X		X	X		X				X	X			01/2013
PHS - Rust Medical Center	X		X	X		X				X	X			01/2013
PHS - Socorro General Hospital	X		X	X		X				X	X			01/2013
Presbyterian Healthplan (Centennial Care MCO)	X													09/2014
Quest Diagnostics										X	X			12/2016
Radiology Associates of Albuquerque												X		06/2018
San Juan Regional Medical Center	X	X	X	X		X		X		X ⁸	X ⁸	X		10/2016
TriCore Reference Laboratories										X	X			01/2013
True Health New Mexico	X													01/2018
United Healthcare (Centennial Care MCO)	X													09/2014
UNM - Sandoval Regional Medical Center	X	X ⁶	X	X		X		X ⁶		X	X			01/2013
UNM Hospital	X	X ⁶	X	X		X		X ⁶		X	X			01/2013
X-Ray Associates of NM												X		11/2016

Start Date Exceptions:

⁶ 09/2017

⁵ 01/2013-08/2017
⁸ 08/2017

⁷ 09/2017

¹ 05/2018
³ 01/2013-08/2017, 08/2018-

Bringing NMHIC Analytics to the HIE Community

Utilizing HIE data, NMHIC has made great strides in its analytics offerings in terms of content and availability.

- Customized data services (e.g., HEDIS quality analysis)
- Securely delivered HIE extracts available by subscription
- Publishing on the NMHIC website and Google Data Studio (pending)
- “Explorers”

[Home](#) » [Analytics at NMHIC](#) » NMHIC Participants' Outside Utilization Metrics

NMHIC PARTICIPANTS' OUTSIDE UTILIZATION METRICS

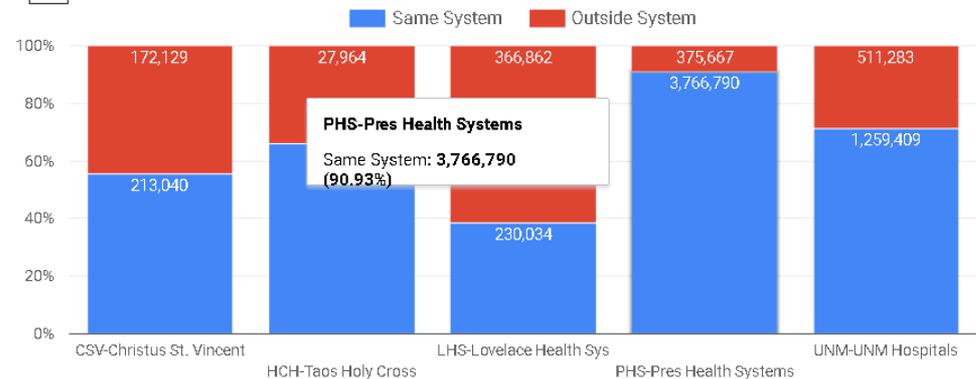
Data from NMHIC's Health Information Exchange provides useful comparisons of inside vs. outside utilization patterns among participating major managed care organizations. Below is a summary of key outside utilization numbers for the major health systems participating since inception.



NMHIC HIE Facility Groups

Same Health System vs. Outside Visits, 2017

Number of Encounters (for Patients Having Encounters in System in 2017)



Google Data Studio



NMHIC Analytics: Patient Migration (cont'd)

Patient Gender

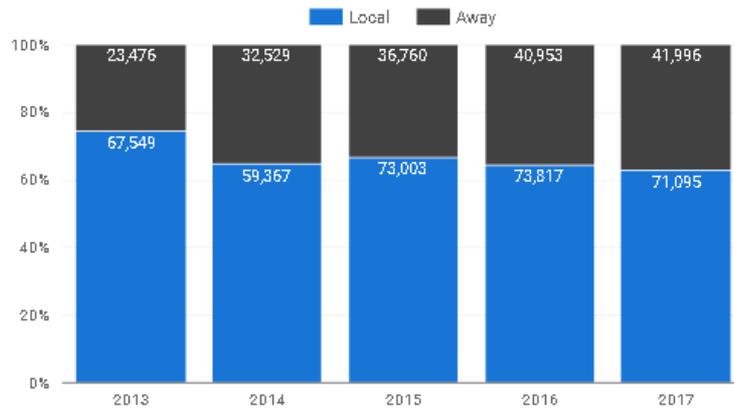
Age Group

NMHIC HIE Patient Migration: Santa Fe County

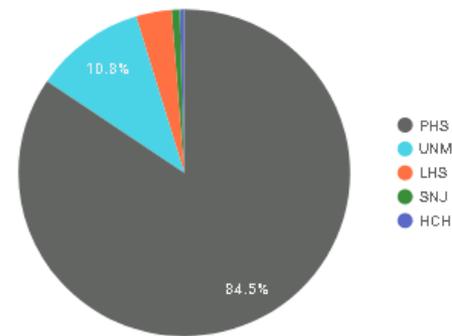
Share of Encounters, Local vs. Away

Encounter Type

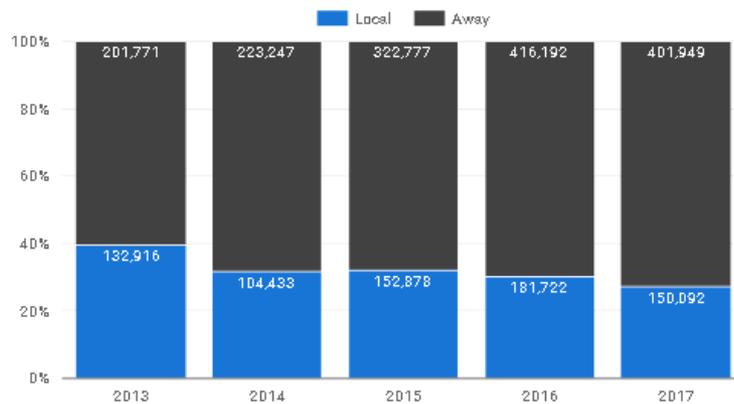
Number of HIE Patients



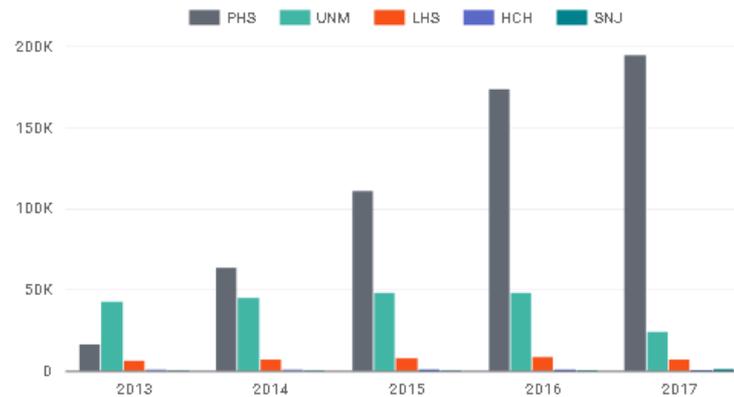
Away Encounter Facility Shares (Latest Year)



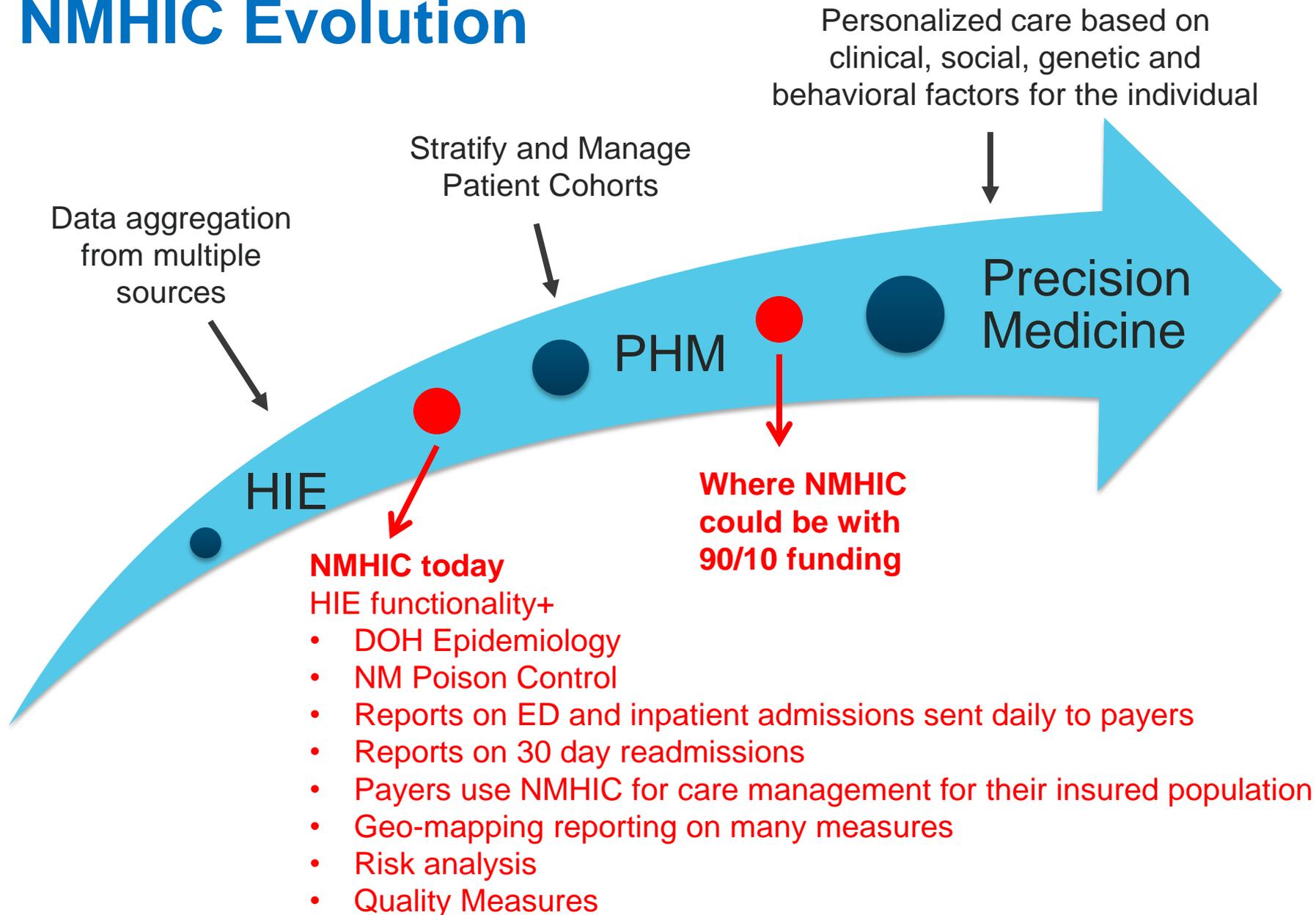
Number of Encounters



Away Encounter Patients Trend



NMHIC Evolution



NM Medical Disparities 2018

- Substance use disorders and overdose (drugs and alcohol)
- Injuries (motor vehicle and others)
- Self Harm
- Mental Health Status
- Social Determinates (Food, Shelter, Transportation, Poverty, Education)

2018 The State of Health in New Mexico, NM DOH

<https://nmhealth.org/publication/view/report/4442/>



Substance use disorders and overdose (drugs and alcohol)

Available now or with additional funding

- Prescription Drug Monitoring Program integrated into the HIE portal making it easier for providers to utilize.
- Working with DOH on grants to gather specific information and provide real time notification of substance use events.
- Working with DOH on grants to create predictive models that will identify those at high risk for substance use disorder.
- Effective communication between Medical, Behavioral Health, First Responders, Criminal Justice and Prison System.
- Homeless Registry.
- Availability of social determinates of care.



Injuries

(motor vehicle and others)

Available now or with additional funding

- Medical records including medication and problem list available for first responders and emergency department.
- Real time data for epidemiological studies (frequency, types of injuries, costs (if an all payer claims database is available, downstream procedures related to accident, etc.).
- Outreach to the public using a personal health record.



Self Harm

Available now or with additional funding

- Medical records including medication, problem list and social determinates of care are available for first responders, emergency department and hospitals.
- Effective communication and care coordination with Behavioral Health, Primary Care, Social Services, etc.
- Real time data for epidemiological studies.
- Predictive models for persons at risk for self harm.
- Homeless registries.



Mental Health Status

Available now or with additional funding

- Medical records including medication, problem list and social determinates of care available for behavioral health providers.
- Behavioral health problems and medical treatment available for primary care and specialists, hospitals, first responders, criminal justice.
- Limited criminal justice records available to behavioral health.
- Notifications to behavior health providers of medical care events (admission to hospital, ER, etc.).
- Homeless registry.
- Prescription Drug Monitoring Access in NMHIC Portal.



Social Determinates (Food, Shelter, Transportation, Poverty, Education)

Available now or with additional funding

- A statewide platform for sharing standardized social determinates of care.
- Homeless registry.
- Statewide care coordination between medical care, behavioral health, K-12 school nurses, first responders and a variety of social services.
- Real time data for epidemiological studies.



Person-Centered Initiatives in Centennial Care 2.0

Initiatives that NMHIC can directly support today



MCO Care Coordinators focused on High-Need Members

Care Coordination at Provider Level

Full Delegation Model with Value Based Purchasing Arrangements

Shared Functions Model with Providers and Community Partners

Use of Community Health Workers, Community Health Reps and Peer Support Specialists

Supportive Housing Specialists and Justice-Involved Liaisons

Expanded Access to Home and Community Based Services

300,000 Members Served in Patient-Centered Medical Homes

Home Visiting Pilot for Prenatal, Post Partum and Early Childhood Services

Health Homes for Members with Complex Behavioral Health Needs



NMHIC Sustainability

Projections show sustainability is dependent on full participation by:

- Large hospitals and health systems
- Regional hospitals/hubs
- Large provider groups
- Centennial Care Managed Care Orgs
- Other payers (commercial, Medicare, etc.)



Full Medical Record Interoperability in New Mexico



Match
\$1M



\$9 M 90/10 Funds

Value for NM

↑ Quality

↑ Safety

↓ Cost

*Full value is only
seen with full
participation*

Estimated Annual Value to NM that is Financial and Measurable

Prevent Unnecessary 30-day Readmissions	\$7,810,205
Reduce avoidable Adverse Drug Events (ADEs) –Inpatient	\$2,073,297
Avoid Duplicative Testing and Imaging	\$13,619,776
Avoid Duplicative Consults	\$1,169,140
Reduce Length and Complexity of Stays	\$2,450,260
Reduced burden for collecting, managing and distributing medical records (providers)	\$3,141,360
Reduced burden for collecting, managing and distributing medical records (hospitals)	\$4,751,635
Total	\$35,015,673

Full Medical Record Interoperability in New Mexico

Value for NM

↑ **Quality**

↑ **Safety**

↓ **Cost**

References for Analysis:

The Business Case for Interoperability and Health Information Exchange HIMSS 8/2014

Gartner Study done for Arkansas extrapolated for New Mexico- Appendix D

<http://www.himss.org/ResourceLibrary/genResourceDetailPDF.aspx?ItemNumber=32781>

Similar results seen with financial analysis done by UNM Health Economist and a third party actuarial analysis for the NM Department of Health for the State Innovation Model project. Both showed a quick and significant return on investment.

Full value is only seen with full participation

Proposal for HITECH 90/10 Interoperability Funding

- Connect hospitals, long term care, first responders, nursing homes, home care, hospice, pharmacies, complementary medicine (chiropractic, acupuncture, curanderas, etc.), and providers (medical, behavioral health, therapies (physical, occupational, speech, etc.)).
- Connect providers in neighboring states and regional specialists (i.e. Mayo Clinic, Specialists in Houston, Phoenix and Denver).
- Value Added Services
 - Upgrade Orion Population Health platform to Amadeus
 - Statewide Care Coordination
 - Analytics (quality measures, gaps in care, population health, predictive analytics).
 - Community Medication Reconciliation
 - Homeless registry
 - Support for a variety of registries
 - Advance Directive-Creation and central management
 - Clinical Decision Support (rapidly disseminate best practices)
 - Expanded Notifications (public health and infectious disease)
 - All payer claims database linked to clinical data

Connectivity and some value added services can be implemented with a NM match of \$1M, Federal match of \$9M... but we only have 3 years left on funding (ends 2021). Recurring funding will be needed for ongoing operating costs for value added services.



Our Request

- **Recognize the great value and future potential of NMHIC- a shared resource for all of NM.**
- **Understand that NMHIC can provide a statewide infrastructure to support a wide variety of important health initiatives from population health management to precision medicine.**
- **(\$1M) 10% Match of NM State funds for \$9M in Federal funds from HITECH act to expand participation to the entire state and implement value added functionality.**
(Must be done in next 2 years as funding ends in 2021.)
- **Incentives or requirements are essential to get all providers to participate and to see the full value for New Mexico.**
- **\$1M/yr. in recurring state funds for operating expenses.**

Thank you for your consideration

