

**New Mexico  
Health  
Information  
Collaborative  
– Statewide  
Health  
Information  
Exchange  
established  
access for  
participants  
& longitudinal  
patients  
records for  
state residents**

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Orion Health Case Study:  
New Mexico Health  
Information Collaborative

**New Mexico**



## The Customer

The New Mexico Health Information Collaborative (NMHIC) has created a secure exchange of patient health information among different and unrelated healthcare organizations and electronic health record systems. Its Health Information Exchange (HIE) is growing rapidly, receiving data on over 1.8 Million patients, 85% of emergency department admissions, and 88% of overall admissions. Organizations across the care spectrum are participating, including:

- 39 hospitals (26 providing data)
- Over 23 physician groups
- Medicaid, Medicare, and commercial payers
- Laboratories and imaging centers
- Home health and hospice
- Emergency Medical Services (EMS)
- Public Health

As a member of the Strategic Health Information Exchange Collaborative (SHIEC), NMHIC participates in the patient-centred-data home strategy of sharing information across state lines, and offers a gateway to the national eHealth Exchange.

## The Challenge

The HIE's initial mission to foster data exchange among diverse institutions has evolved to creating a truly complete health record for each individual. NMHIC's stated aim is "to provide high quality, comprehensive, secure information and knowledge when and where it is needed to facilitate optimal healthcare for New Mexicans." The organization seeks to become the primary, trusted source of information for all state health entities.

Realizing this vision is a complex undertaking and poses several critical challenges:

### Getting everyone onboard

Comprehensiveness ultimately requires that nearly all providers share information. That scale will generate enormous benefits through highly coordinated care and robust analytics to support value-based approaches. "Because of the magnitude of these benefits, all entities really need

to be feeding the exchange, including the major health systems," observes Bindu Purushothaman, Chief Information Officer at Optum, adding that "All win as the HIE strengthens and expands services."

Accommodating Rapidly Expanding Data Sets Healthcare is moving well beyond basic claims and clinical data and is increasingly able to collect a wealth of "non-traditional" data types such as social determinants, behavioral, and public health. This expansion is fueled by initiatives such as the Trusted Exchange Framework and Common Agreement (TEFCA) and CMS programs encouraging social data capture.

### Supporting secure communications

Private and secure information among all constituents is a must. Solutions must adhere to national requirements related to protected health information as well as transmission standards such as Direct.

### Ensuring workflow integration

Caregivers are frustrated when data capture, queries, alerts, and other functions are implemented in ways that do not fit clinical workflow or integrate with multiple EHRs. Optum CIO Purushothaman noted, "Physicians have no time to log into different systems. NMHIC HIE feeds straight into our EHR – information delivered at the right place and right time, letting caregivers focus on patient care."

### Evaluating the options

From the outset, NMHIC understood that managing data at scale is paramount to building the comprehensive, continuously updated longitudinal record. Many systems are proposed as solutions, and the landscape can be confusing: EHRs, consulting firms, niche technology vendors, national organizations.

While each option provides important contributions, all share problems that prevent them from being the

data management foundation required. None has anywhere near the state-wide reach to be the trusted, scalable data repository. Notification of a patient readmission to a hospital different from the discharging one is difficult if not impossible for EHR systems to handle, especially with still highly-limited interoperability. Pinpoint, real-time data needs are not the province of emerging national networks like CommonWell.

## The Solution

After thorough investigation of various options, NMHIC several years ago adopted the Orion Health platform as its data management backbone. The HIE is successfully leveraging three components of the Orion portfolio:

### Clinical Data Repository

The NMHIC HIE repository builds on Rhapsody foundation, widely deployed in HIEs. It consolidates data from a variety of clinical sources to build a unified record of a patient's demographics, history, procedures, medications, problems, and much more. Users access information easily via the Orion Health Clinical Portal. The database has attributes critical to broad success:

- Clean and real-time data. Optum's Purushothaman highly values the HIE's ability to amalgamate and structure information, since "incoming data from various systems is never clean. With the HIE, we can work with one clean data set." In addition, "timeliness of data is critical" for managing at-risk care. The HIE's "real-time clinical data feeds" avoid many problems associated with "typical 60-90-day lags in obtaining clinical or claims data."
- Extensive enough to power analytics. True Health New Mexico has created advanced analytics using data from health plan claims and the NMHIC HIE. Dr. Mark Epstein, CMO, says the result is to "identify and stratify members who are at risk and intervene before avoidable issues occur," which "facilitates highly coordinated and individually customized care."

- Consolidated and readily accessible. Teddi Rivera, SOAR Specialist, Albuquerque Heading Home, describes how frequently the homeless are "unable to recall which providers they have seen." She is able to gather complete information in one step for disability applications by "using the HIE to request records from the listed providers ... It has saved me time."

### Communicate

Communicate is an easy-to-use, fast and secure electronic communication service for transmission and receipt of protected health information. Communicate operates like email, but with point-to-point encryption. It supports multiple document and data formats, overcoming an obstacle encountered by systems such as EHRs, which generally only permit CCD documents in messaging. Maria McKay, Medical Operations Manager, First Choice Community Healthcare, explains, "With the HIE's secure messaging, I am able to send the referral and get a response within a few seconds, as opposed to waiting 48 hours to call the clinic and follow up. It saves time and streamlines the referral."

### Amadeus

NMHIC plans to augment its solid foundation with addition of Orion Health's Amadeus platform. Building on the Rhapsody base, Amadeus "future-proofs" by managing the growing levels of non-traditional data needed for population health management, and feeding it in real-time to analytics engines. The Amadeus technology recognizes that four essential data requirements must be met:

- Curated from multiple sources
- High-volume and continuous
- In various formats that must be normalized
- Dynamic - including a growing set of social determinants of health (SDOH) data



As a physician, this [NMHIC HIE] is by far the most useable and helpful tool for improving direct patient care by filling in the gaps in data.

**Heather Brislen,**  
MD, Lagom Health, LLC

## The Results

A few examples represent the wide-ranging and measurable benefits users are deriving from the Orion Health/NMHIC platform:

- True Health's annual hospital admission rate is 41-43 admissions per 1,000 members – significantly below both the “well-managed” mark of 50+ per 1,000 and the New Mexico commercial average of 55. The 30-day “all-cause” hospital re-admission rate now runs at half of national and local benchmarks.
- New Mexico Poison and Drug Information Center cites several instances of accessing the portal during emergencies to review a patient's history. That knowledge has avoided improper diagnoses or administration of costly antidotes – in one case \$1,300 per dose.
- Anthem Health used HIE data to update “at the last minute” HEDIS submissions that generated improved reimbursement rates.

Optum's CIO believes strongly that organizations must be proactive in working with NMHIC HIE. Noting that some do not perceive value in return for the data they feed, she recommends commitment: “form a dedicated group to support the effort, bring exchange data back, and utilize it for high-value outcomes.”

## Future Developments

The Orion Health/NMHIC partnership envisions further expansion into analytics and care applications for population health management as well as new types of health data such as an All Payer Claims Database. The organization is well on the way to achieving status as the trusted repository for the state.

## Orion Health

At Orion Health, we are building thinking software for life. Our new generation eHealth software provides an open platform that seamlessly integrates local, regional, and national data, making it more readily available to doctors, nurses, specialists and patients themselves. We believe that our software, built on new generation technology, will give everyone healthier, happier and longer lives.

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