HealthInfoNet Ensures the Rapid Delivery of HIE Services to Maine Patients and Their Healthcare Providers
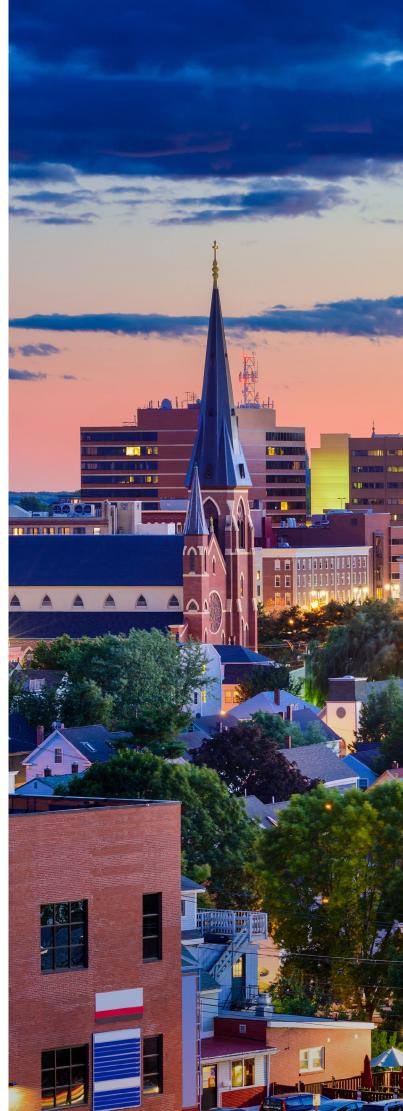
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Orion Health Case Study: HealthInfoNet

Maine

hinfonet.org

ORION HEALTH

Customer Name
HealthInfoNet

Town, State, Country
Portland, Maine, United States of America

Organisation Type
Statewide Health Information Exchange (HIE)

Population
Approx. 1.53 million, plus 300,000 out-of-state visitors

Products Implemented
Healthier Populations, a population health management suite

Key Benefits
- Connects 37 acute care hospitals (100 percent of Maine hospitals) and 450 ambulatory practices
- Connects 90 behavioral health agencies and 30 long-term facilities
- Connects 44 skilled nursing facilities and 12 home health agencies
- Connects 57 FQHC sites
- Connects 98 percent of Maine residents
- Currently sends over 300,000 data transmissions per month to Maine CDC
- Includes 3,500 active clinical users
- Facilitates 60,000 patient data queries per month
- Delivers 17 million inbound messages per month
- Delivers 40,000 real-time patient-encounter notifications per month
- Accommodates 80,000 patient lookups per month

The Customer

Established as a result of a feasibility study that found strong support for a new health information network, HealthInfoNet, a non-profit 501(c)(3) organisation, operates Maine's health information exchange (HIE), a standardised electronic system that gives its users the ability to share patient health information securely. The fee that the HIE's members pay to participate in the exchange provides HealthInfoNet's operating capital.

The Challenge

"A non-profit organisation that runs an HIE— that was our vision," said Shaun Alfreds, chief operating officer, HealthInfoNet. "The non-profit status would give this organisation access to grants and philanthropic donations that would empower it to offer its HIE to more provider groups and win funding for precision medicine/ predictive modeling initiatives."

To achieve this vision, HealthInfoNet had to be supported by two critical elements:

1. Innovative technology that enables scalability
2. A centralised aggregation model that brings together patient health information provided by hospitals, health systems, and big data sets

"Our providers needed access to their patients' statuses—whether they were seen within the providers' health systems or elsewhere—and be able to prospectively identify high-risk patients," said Alfreds. "We realised that if we could enable providers to establish prevention-focused care management programs before lower cost patients became higher cost patients, we would be giving our members the ability to manage downside risk, which would support the cost of their HIE subscription and further enhance the sustainability of our program."

This meant that HealthInfoNet would need a flexible, scalable platform and advanced privacy solution that could handle various data sets, prepare the HIE for larger volumes of information like social and genomics data sets, aggregate all data types in one place to avoid unnecessary data movement and risk duplication while performing analytics, and—as the organisation continued to find more and more creative ways to use its data—give multiple applications and user types fast and secure access to the HIE's data in real time.

The Solution

After a lengthy selection process, HealthInfoNet chose Orion Health's Healthier Populations suite for its HIE. Featuring an integration engine, physician portal, data repository, and customisable notifications, the suite empowers HealthInfoNet's members to improve their clinical workflows, care coordination, and quality of care while satisfying Meaningful Use requirements. Users can aggregate a patient's disparate data into a single record, participate in real-time clinical information sharing, and benefit from semantic interoperability via HL7 protocols. This interoperability makes patient-level data standardisation—and the integration of providers with different data types—possible, while facilitating notifications that support population health and public health initiatives for quality measurement tracking and reporting.

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> HealthInfoNet enables our office to quickly and efficiently obtain medical records—especially to track down prior diagnostic imaging for our pulmonary patients. It also supports our physicians to ensure ease of continuity of care for patients transferred between our intensive care unit and other facilities.
>
> **Patient Service Representative,**
> Mid Coast Medical Group, Maine

The Results

An extraordinary level of adoption followed HealthInfoNet's implementation of the Healthier Populations suite. Not only have all members maintained their subscriptions since the organisation began offering its HIE, but HealthInfoNet boasts a year over year adoption rate of 60 percent, which has earned it national recognition as an operator of one of the leading HIEs in the U.S. On average, some 62 percent of patients in Maine were seen at two or more unaffiliated facilities (i.e., physicians' offices or hospitals) connected to the HIE in the 24 months leading up to August 2016. Additionally, HealthInfoNet offers national connectivity, and it is the only organisation to give the Department of Veterans Affairs direct access to an HIE.

"Today, our database is very rich, boasting records for 1.53 million lives in Maine—which equates to some 98 percent of the lives in the state—as well as some 300,000 out of state lives," said Alfreds. "In addition to connecting the CDC, Department of Veterans Affairs, Medicaid, Medicare, Consolidated Imaging, NorDX, and 100 percent of Maine's 37 acute care hospitals, our HIE also connects 450 ambulatory practices, 90 behavioural health agencies, and 30 long-term facilities, which equates to some 80 percent of the primary care practices—and about 35 percent of all multi-specialty practices—in the state."

The results have been impressive. One Maine hospital used the HIE and a predictive analytics solution to realise—when compared to the state-adjusted rates—a 15 percent reduction in ER visits and a 13 percent reduction in 30-day readmissions. And in December 2016, HealthInfoNet released the preliminary findings of an impact study of its HIE on 20 behavioural health agencies, and the outcome exceeded all expectations.

"We tracked a cohort of 443 patients for the six months before and after these 20 agencies started using Orion Health's tools," said Alfreds.

"In the six months after implementation, we saw a $6 million reduction—a savings of $13,500 per patient—across the board. We even age, severity, and seasonally adjusted the numbers, and the data was clear: These were real reductions in total costs and direct consequences of the improved chronic-illness management and analytics that Orion Health's Healthier Populations suite makes possible."

Future Development

Pending final review by its board of directors, HealthInfoNet plans to deploy Orion Health's Amazon Web Services hosted solution Amadeus, a precision medicine platform that leverages an open and scalable database to capture, store, and align patient information from multiple providers and payers. Additionally, HealthInfoNet plans to adopt the following Orion Health products:

1. Coordinate and Amadeus Analytics, applications that ensure the timely delivery of insightful patient information to healthcare professionals
2. Medicines, a solution for managing medications and generating prescriptions
3. EMR Connect, an application that provides rapid access to an organised, filtered view of a patient's shared record

"HealthInfoNet is excited to continue offering value-added services and tools to support providers in their IT adoption and use of data," said Alfreds. "Our ultimate goal is to expand HealthInfoNet and its analytics services further into regional and national markets, and we believe Orion Health will be a key partner on our journey."

Orion Health

Orion Health is a global leader in healthcare technology. Hundreds of thousands of clinicians in 15 countries use our healthcare information technology solutions every day to improve clinical workflow, decision-making and patient care for more than 100 million patients. We offer population health solutions across the whole healthcare landscape, from integrating electronic health records to care pathways and medicines management.

Find out more at: orionhealth.com

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