CASE STUDY

Improving Care Coordination by simplifying the exchange of information during transitions of care

TOPIC

Care Coordination, HIE Integration

ORGANIZATION TYPE

Physician Group

CUSTOMER

Northern Physicians Organization

Challenge: Ensuring accurate and up-to-date patient health information is available and distributed among all providers with active care relationships with patients to improve the coordination of healthcare services.

Solution: Northern Physicians Organization partnered with iNTERFACEWARE® to facilitate faster, more effective communication among providers by enabling the transfer of electronic patient information from physician practices and skilled nursing facilities to Michigan's statewide HIN.

Results: By enabling their member organizations to provide updates and receive notifications about their patients as they move through care transitions, Northern Physicians Organization was able to qualify for financial incentive rewards through Blue Cross® Blue Shield® of Michigan's Physician Group Incentive Program.

CASE STUDY

Traverse City-based **Northern Physicians Organization** (NPO), a large physician organization in the state of Michigan, is targeting care coordination to drive high-quality outcomes and reduce the cost of care delivery.

"Better coordination of care services between our physicians and other providers is central to our goal of helping our members achieve the Triple Aim objective of improving the patient experience of care (both quality and satisfaction), improving the health of populations, and reducing the cost of care," explains Dr. Peter Sneed, NPO Board of Directors.

Comprehensive care coordination involves collaboration between many different service providers, including physicians, nurses, pharmacists, behavioral health specialists, insurance plans, community-based organizations, and many more.

A primary focus of care coordination activities is to reduce the possibility of breakdowns in care delivery due to a lack of communication and information exchange involved in care transitions. Essential to this objective is the ability to exchange electronic information about different aspects of care.

In support of this initiative, NPO partnered with iNTERFACEWARE to deploy the Iguana® integration engine to ensure accurate and up-to-date patient health information is available and distributed among all providers with active care relationships with a particular patient.

"Our commitment to invest in information technology enables us to communicate as well as, if not better than, most communities around the country," Sneed states. *"Our partnership with iNTERFACEWARE allows us to continue to improve and expand upon those efforts."*

The Challenges of Communication

Serving primary care physicians, specialists, skilled nursing facilities, and community mental health agencies across the largely rural population of Northern Michigan, NPO faces challenges when it comes to facilitating the exchange of information.

"In our region, there are a large number of disparate electronic medical records (EMRs), which complicates information exchange," explains Marie Hooper, Executive Director at NPO. *"It's a challenge of process. Different practices, hospitals, and post-acute care facilities all have different workflows. We have to be able to accommodate for all of these processes."*

Despite the challenges involved, the consequences of poor transitions of care between providers due to the lack of appropriate information are too severe both in terms of risk to the patient and unnecessary costs.

Medication errors, duplicative diagnostic tests, unnecessary emergency room visits, and preventable hospital admissions and readmissions are all symptoms of fragmented care resulting from the lack of access to necessary information.

Partnering to Improve Access to Information

In addition to the need to manage a multitude of EMRs and the corresponding differences in data formats, a limited amount of internal IT resources compelled NPO to search for an interoperability partner rather than just a product.

Ed Worthington, IT Director at NPO, had prior experience with iNTERFACEWARE's Iguana integration engine at a previous position at a Michigan hospital through a trusted vendor relationship.

"Iguana came highly recommended by a vendor that I worked with at a previous position. Based on the breadth of integration required for their solution, I was confident in Iguana's ability to handle multiple formats and to perform any required data transformations," Worthington states. *"What I really liked however, was iNTERFACEWARE's professional service offerings. With a small IT staff this really made the difference for me."*

Statewide HIN

At the center of care coordination efforts in Michigan sits the Michigan Health Information Network (MiHIN), which supports the statewide exchange of health information to make valuable data available at the point of care.

Beyond ensuring that effective technology and data models are in place for electronic exchange of health information, MiHIN offers an extensive set of services that are integral to improving transitions of care across the state.

These services are designed to result in better care coordination through:

- Improved post-discharge transitions
- Prompt follow-up with patients
- Faster, more effective communication among providers

As a legally Qualified Organization (QO) to participate in official statewide health information exchange through MiHIN, NPO is leveraging several of these services.

Admission, Discharge, Transfer Notifications

In many respects, admission, discharge, transfer (ADT) notifications are the foundation to improving care coordination through the exchange of health information. ADT notifications are sent when a patient is admitted to a facility, transferred to another facility, or discharged from a facility. The notifications are sent to update physicians, care management teams, and other caregivers on a patient's status.

About MiHIN

The Michigan Health Information Network (MiHIN) is a public and private nonprofit collaboration. MiHIN supports the statewide exchange of health information and makes valuable data available at the point of care.

Since December 2010, MiHIN has administered the technical and business operations of Michigan's State Health Information Exchange Cooperative Agreement program, which was created by the Office of the National Coordinator for Health Information Technology.

MiHIN's goal is to streamline the flow of healthcare information, making it so patients are never far from their personal medical records.

ADT notifications are also used to identify patients who are frequent users of the healthcare system. This allows providers to direct those patients towards clinical and non-clinical interventions with the goal of reducing unnecessary usage by preventing avoidable emergency room visits and hospital readmissions.

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> **Dr. Peter Sneed,** NPO Board of Directors

ADT NOTIFICATION PROFESSIONAL SERVICES PROJECT

iNTERFACEWARE's professional services team was contracted by NPO to support the sending of notifications from several skilled nursing facilities on the status of patients' care transitions.

Upon completion of the project, the Iguana integration engine was successfully used to:

- Retrieve ADT messages from several long-term post-acute care EMRs including Netsmart, MatrixCare, and PointClickCare.
- Transform the ADT messages for conformance with the MiHIN specifications.
- Validate ADT messages against the conformance requirements.

Once all records have been validated, the newly transformed ADT messages are sent onto MiHIN for insertion into the statewide ADT service environment.

Before the ADT notifications can be routed to the attributed providers for each patient, MiHIN must first identify which providers need to receive updates about the health of each patient.

Active Care Relationship Service™

MiHIN's Active Care Relationship Service™ (ACRS™) solution identifies providers who are actively caring for a patient. ACRS promotes improved transitions of care by enabling providers to receive notifications when there are updates to the status of a patient's health or care plan.

ACRS enables organizations to submit data files which record the care team relationships attributing a particular patient with healthcare professionals (attending, referring, consulting, admitting, primary care physician, etc.) at that organization.

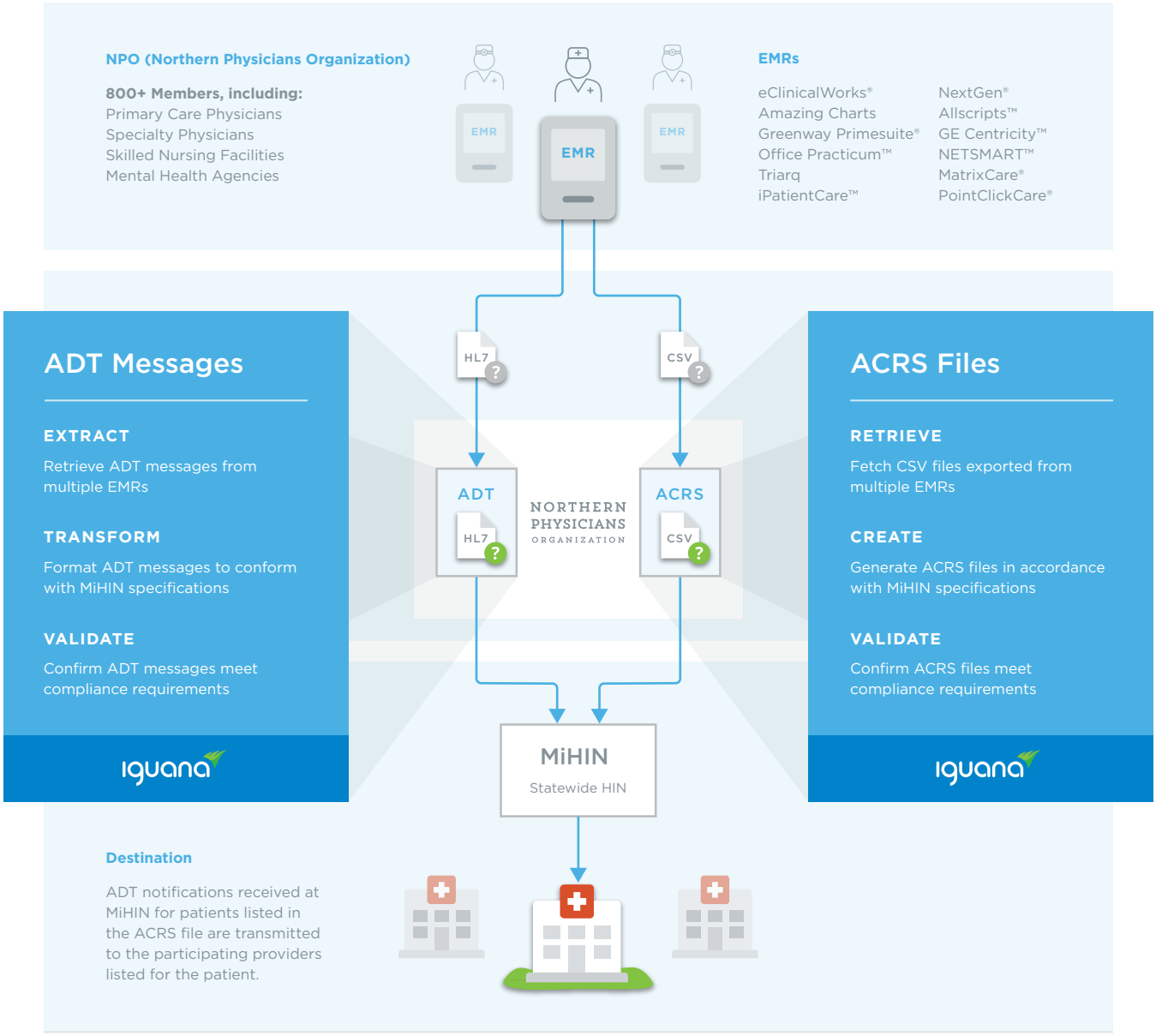
When MiHIN receives an ADT notification from a hospital or long-term post-acute care facility, the patient and providers who are on that patient's care team are looked up using the ACRS. MiHIN then looks up the providers in the statewide Health Provider Directory (HPD) to obtain the delivery preference for each of those active care providers to determine the transport method by which the providers wish to receive the ADT notifications.

MiHIN notifies each provider who has an active care relationship with a patient upon the following ADT events:

- Patient is admitted to the hospital for inpatient or emergency treatment.
- Patient is discharged from the hospital.
- Patient is transferred from one care setting to another.
- Patient's demographic information is updated by a participating organization.

ACRS PROFESSIONAL SERVICES PROJECT

iNTERFACEWARE's professional services team was contracted by NPO to submit data files to MiHIN to document the care relationships between a particular patient and healthcare professionals from over 50



The Role Of Iguana Within NPO: iNTERFACEWARE's Iguana integration engine was used to facilitate the transfer of patient-provider attribution (ACRS) files and admission, discharge, transfer (ADT) information to MiHIN. As a result, NPO members are able to provide and receive updates on the status of patients as they transition between providers.

organizations including physician practices, skilled nursing facilities and mental health agencies.

Using the Iguana integration engine, the project successfully met the following deliverables:

- Extract the input CSV files from several EMRs: eClinicalWorks®, NextGen®, Allscripts™, Amazing Charts, GE Centricity™, Greenway Primesuite®, Netsmart™, Triarq, Office Practicum™, and iPatientCare™.
- Create the necessary ACRS patient-to-provider attribution files.

- Validate all records against MiHIN conformance requirements.
- Generate error notification and process completion reports.

Once the ACRS attribution files are validated to conform to the MiHIN requirements, the files are sent to MiHIN to create new recipients in the statewide ADT service environment.

> "Every project has been delivered on-time, on-budget, and was well-documented."
>
> **Ed Worthington,** IT Director at NPO

"The work done by iNTERFACEWARE's professional services team directly supports our goals for improving care coordination. Information exchange is vital to achieving our objectives of more informed care transitions," Worthington said. *"They've always been professional and extremely helpful. Every project has been delivered on-time, on-budget, and was well-documented. As a result, I've recommended them to others and will continue to do so."*

Incentives, payment models, and the future

In order for any care transformation to take place in healthcare, the financial incentives and payment models must be properly aligned to drive changes to care delivery.

As the U.S. healthcare system continues to transition from the traditional fee-for-service reimbursement model to one based on value and performance metrics, organizations are in a better position to implement comprehensive care coordination solutions.

In fact, there is likely no surviving the emergence of these new models without effective care coordination across multiple providers.

In Michigan, programs like the Physician Incentive Group Program and the Patient-Centered Medical Home are critical to the alignment of payment and care delivery reform.

Physician Group Incentive Program

The Blue Cross Blue Shield of Michigan's Physician Group Incentive Program (PGIP) supports and facilitates practice transformation through initiatives to reward physician organizations for improved performance in healthcare delivery.

In recent years, PGIP has expanded to include initiatives that promote care coordination among primary care and specialist physicians. Physicians who meet quality and population-based care measures are eligible to receive higher value-based reimbursements.

One such initiative is the Health Information Exchange (HIE) Initiative. The HIE Initiative supports physician organizations that participate in the statewide data sharing use cases, such as the ADT Notification and ACRS services established through MiHIN.

Through the projects completed by iNTERFACEWARE's professional services team, NPO was able to successfully meet the requirements of the HIE Initiative and therefore qualify to receive the incentive rewards.

"Incentive programs like the Physician Group Incentive Program are critical for our organization and our members," Worthington explains. *"The incentive rewards from these projects enable us to advance this important work and continue to make the structural and process changes needed to improve healthcare quality."*

Patient-Centered Medical Home

In partnership with physicians and physician organizations, Blue Cross Blue Shield of Michigan (BCBSM) launched the nation's largest regional Patient-Centered Medical Home program.

The PCMH model places a strong emphasis on coordination of care activities across all aspects of the patient's care experience. PCMH-designated physicians earn value-based reimbursement, for office visits to compensate them for the extra time and effort required to practice as a medical home.

One of the core initiatives focuses on the coordination of patients' care across the health system through a process of active collaboration and communication between providers, caregivers, and the patient.

NPO is authorized by BCBSM to train and nominate their members practices for the PCMH-designation on an annual basis. In 2016, nearly 40 NPO-member physician practices were awarded this designation.

"The Patient-Centered Medical Home model is instrumental in promoting improvements to care coordination efforts by aligning those efforts with reimbursements based on quality measures," Hooper states. *"We are proud to have so many members achieve the PCMH-designation and are committed to ensuring they receive the reimbursements they deserve."*

In 2017, in comparison with non-PCMH practices, PCMH practices across the state of Michigan experienced the following results[1]:

- 19% fewer adult ER visits
- 25% fewer adult ambulatory care sensitive inpatient stays
- 23% fewer adult primary care sensitive ER visits
- 20% fewer pediatric primary care sensitive ER visits
- 15% fewer overall pediatric ER visits

1. "Media Fact Sheet: 2017 Patient-Centered Medical Home," Value Partnerships, July 11, 2017, http://www.valuepartnerships.com/wp-content/uploads/2017/10/2017-PCMH-Media-Fact-Sheet.pdf (November 1, 2017)

Social Determinants of Health

Social determinants, the circumstances in which people live and work, have a significant effect on health. It is commonly thought that social-environmental factors have a greater impact on health than the level of quality of healthcare they receive.

The State of Michigan is implementing a social services tool to try and reduce the number of hospital admissions from at-risk populations. Through a web portal, users will be asked a series of social determinant questions and the answers will be used to develop the appropriate care pathways.

NPO will be partnering with iNTERFACEWARE to participate in this project. Using data from both NPO's ADT database and the social determinants survey database, a number of reports will be generated including a comparison of ER visits of surveyed patients versus non-surveyed patients and the top five diagnoses of patients with more than one ER visit.

"I'm proud of the work our professional services team has accomplished using Iguana for a leading physician organization like NPO," said Eliot Muir, CEO at iNTERFACEWARE. *"I look forward to our participation in future projects like the social determinants of health initiative. It's a testament to the role that first-class integration can have on driving quality improvements as well as reducing the cost required to do so."*

With iNTERFACEWARE's support, NPO qualified for incentive rewards that are reinvested to improve the quality of healthcare.

About iNTERFACEWARE®

Founded in 1997, iNTERFACEWARE's mission is to deliver the fastest means to transfer data between disparate healthcare systems. Globally, over 800 healthcare providers and vendors rely on iNTERFACEWARE's KLAS-rated Iguana® integration engine to improve their access to critical patient, administrative, and financial information.

www.interfaceware.com

About Northern Physicians Organization

Northern Physicians Organization (NPO) is a physician-led group focused on aligning doctors' processes, communications, best practices, and ideas. NPO has over 500 physician members across Northern Michigan from practices of all sizes and specialties. Founded by local physicians in 1984, NPO enhances the practice experience by providing support, information, and education to ensure that all practices run smoothly and efficiently.

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