shasta networks

Electronic Health Record System Transition

From Start to Finish, Shasta Networks Leads and Optimizes Integration for Northern Inyo Healthcare District

Challenge: Northern Inyo Healthcare District (NIHD) scheduled an EHR transition to Cerner® for May 2021. This major system change included coordinating more than a dozen vendors and nearly 40 new and transitioning complex interfaces. The challenge was to build, test and troubleshoot with all vendors to meet the go-live deadline. Four weeks before go-live, unexpected roadblocks occurred in testing with multiple vendors, threatening to cause major project delays.

Solution: Shasta Networks' team led the way in identifying optimal solutions by coordinating and rapidly implementing translations, reviewing contract obligations, and suggesting alternatives to complete testing and gain approvals in time for go-live.
High-profile solutions included custom programming to migrate legacy data, correlating conflicting MRNs for radiology, and identifying and remapping of point of care locations.

Staying on Top of Evolving Systems & Technology

Northern Inyo Healthcare District is a 25-bed Critical Access Hospital with a 24-hour emergency department as well as patient-centered primary care services, diagnostic imaging, rehabilitation services, and eight specialized outpatient clinics that serve the heart of the Eastern Sierra.

As one of Inyo County's largest employers, NIHD features state-of-the-art medical equipment that requires the very latest technological updates to stay on pace with the evolution and advancements of the healthcare industry. Not only has Shasta Networks provided NIHD with its on-premise interoperability platform and managed integration services since 2003, but NIHD has trusted Shasta with three EHR conversions during that time as well – including its most recent May 2021 transition to Cerner CommunityWorks.

> **"We would need to hire three or four very expensive technical people to provide the support and expertise Shasta Networks brings to the table. We receive a huge value and ROI from our work with them."**
>
> — Bryan Harper, ITS Director/CISO, Northern Inyo Healthcare District

NIHD's requirements for its EHR transition to Cerner included maintaining the legacy EHR production environment, constructing new HL7 interfaces to its ancillary systems, and retaining full visibility into its messaging infrastructure – all in a six-month time frame.

For its aggressive implementation timeline requiring proactive and on-budget solutions, NIHD chose Shasta's Ascent Platform, the most comprehensive HIT interoperability platform available, accompanied by Shasta's Professional Services. By virtue of its technology and services, Shasta was able to deliver the following:

- Automated conformance validation and progress tracking across the network of HL7 integrations
- Built-in executive dashboards for highly detailed and customizable KPI visualizations
- Managed services including full-service implementation support (consultation, technical resources, project management, training), plus a range of flexible and scalable post go-live support options that can be customized to NIHD's future needs

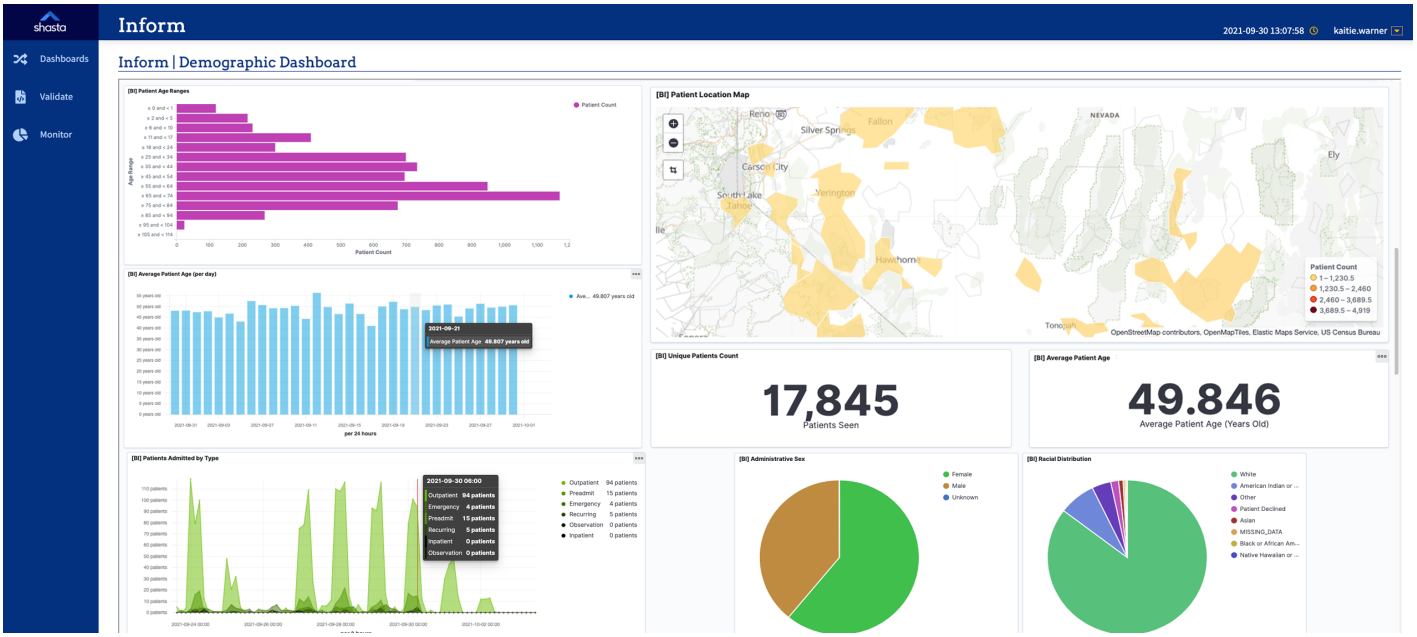
With Shasta Networks as its partner, NIHD enhanced its ability to optimize operational and financial performance, staying focused on the core business while Shasta expertly navigated all HIT obstacles.

EHR Transition Success Factors

Complex project coordination **13 vendors**	Interface change requests w/testing **48-hour turnaround**
Integrations completed **37**	**Original go-live achieved**

> **"From security pieces to server upgrades, Shasta Networks is spot-on with their processes and targeting of timelines – which is much appreciated in this industry. Unlike many other vendors, you will never hear the team at Shasta say they will make something happen and then fail to deliver."**
>
> — Dee Booth, ITS Application Administrator, Northern Inyo Healthcare District

*A view of Shasta Networks' 5th generation platform **Ascent** that empowers your team with countless advantages of proven HIT interoperability, automation, data flow visualization, performance dashboards and more.*



EHR Data Migration, Skillfully Solved

One of the most challenging and complex HIT issues during this project was the migration of historical clinical data to Cerner CommunityWorks. Migration was necessary for 60,000 charts, with some as large as 400 pages, including text, tables, images and other documents. Patients' clinical data was not available in discrete form. NIHD needed the right technology, resources and guidance to ensure full and accurate transfer of disparate data elements from the former EHR.

During the migration process, a bug was discovered that caused PDF charts to not render at all or to render with overlapping text areas, making them almost completely unusable in a patient care setting. NIHD could not risk having some patient histories missing or illegible.

NIHD and Shasta reviewed the contracts to ascertain obligations and explore data exchange options. It was determined that the charts could be retrieved from the source EHR in HTML format, converted to PDF, and embedded in HL7 ORU messages for final delivery.

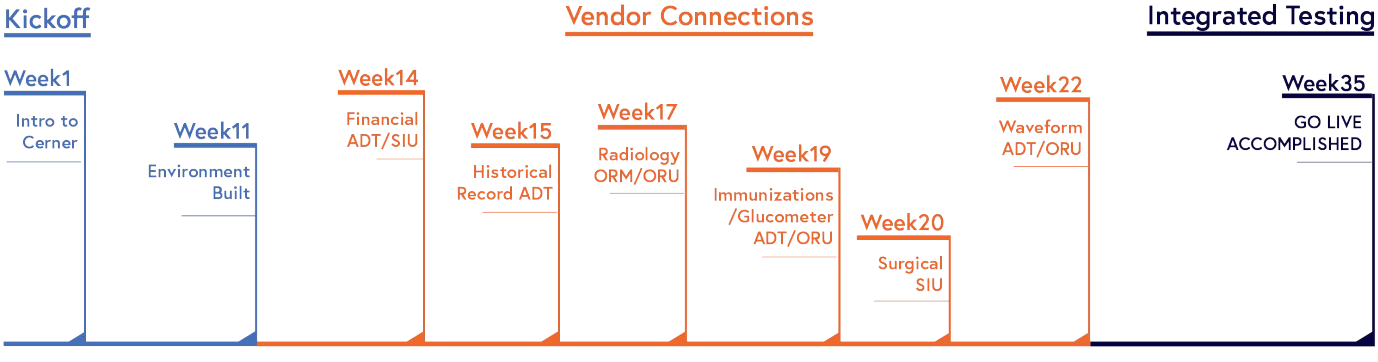
The challenge then became converting HTML source data into PDF for delivery to the new EHR. Shasta worked with the legacy vendor and received several examples of HTML charts. Shasta then quickly constructed a proof-of-concept program that navigated and manipulated the HTML file hierarchy, created the PDFs, and transmitted them to the Cerner ORU interface.

Bandwidth, storage and processing power emerged as major issues in accommodating the migration. The circuit speed between NIHD and Cerner's hosted EHR was not fast enough for the data transfer when coupled with all the other transition-related network activities. Further, the hosting contract did not account for the storage required to stage all the files. Finally, the processing power available on-site was not sufficient to convert and transfer all charts in time for go-live.

With the go-live date less than two months away, Shasta collaborated with NIHD stakeholders to come up with an alternative solution, a content management system in use at other Shasta customer sites. NIHD requested and received access to historical patient charts in the legacy EHR for one year and moved ahead with the content management vendor. This approach helped NIHD avoid lengthy contract negotiations to get additional bandwidth and storage.

The ultimate result: While empowering users with a variety of platform modules to eliminate or minimize interoperability challenges and roadblocks, Shasta's team, working closely with NIHD, streamlined processes and broke down technical barriers for much-improved collaboration and long-term satisfaction.

> **"As our go-to partner and advocate, we position Shasta Networks at the forefront of all our integrations, security challenges and upgrades – even with other vendors and partners. We've never seen our interfaces stand up and go live as fast as they have with Shasta Networks."**
>
> — Bryan Harper, ITS Director/CISO, Northern Inyo Healthcare District



Anticipate Client Needs, Exceed Expectations

Much more than an interoperability vendor, Shasta served as the HIT integration partner that kept NIHD moving forward toward peak performance. Shasta's team, processes and tools, all centered around its platform, provided the insight needed to offer highly proactive and effective HIT solutions, including the following:

- **ADT Change Request:** When NIHD requested the addition of ADT (admission, discharge, transfer) data to an ancillary system, Shasta was able to leverage its platform, resulting in a more cost-effective option and a 75 percent reduction in delivery time.

- **Radiology MRN Issue:** Mismatched Medical Record Numbers from previous EHR systems caused issues for the various radiology systems, including RIS, PACS, Worklist, and reading groups. Shasta coordinated with five stakeholders, including the EHR and the radiology participants, to define an MRN workflow that would allow each system to send and receive the MRNs in their respective required fields. Remapping various data types allowed all systems to link new and historical data in their respective systems.

- **Point-of-Care Location:** Lacking documentation, Shasta analyzed the POC vendor's data to locate the key identifier and remap to the EHR specification, eliminating the need for an additional build with the POC vendor. Changes and testing were completed in time for go-live.

- **Public Health Reporting:** With in-depth knowledge and established relationships with California's Department of Public Health, Shasta guided and collaborated with Cerner through state-specific reporting requirements for immunizations. When interface issues arose associated with unformatted, historical CVX data, Shasta maintained contact with the state to automate testing and eliminate errors.

- **Executive Dashboarding:** Shasta's customizable dashboards offer real-time, web-based reporting and include flexible filtering and design options. Having views into the business enabled improved decision-making, as noted by Bryan Harper, NIHD ITS Director/CISO: **"We had no visibility into HL7 views, and only one report before. This was a solution identified by Shasta that we didn't even know how much we needed – we have visibility into everything now."**

> **"Shasta Networks can fix what other vendors can't. Every person we've worked with on the Shasta team has amazing skills and is very transparent. They are true collaborators and bring potential issues to us well in advance, along with viable solutions."**
>
> — Bryan Harper, ITS Director/CISO, Northern Inyo Healthcare District

Expert Project Management & Long-Term Support

Drawing from the strength of a 17-year trusted partnership, the Shasta team worked in tandem with NIHD to manage the project from start to finish, ensuring seamless execution and a successful transition to the Cerner EHR system.

Shasta employed a dedicated Technical Project Manager and Interface Engineer to implement all interfaces for this transition. The TPM served as the face of the project in all meetings and communications, keeping track of multiple vendor contacts and open interface items that needed to be addressed.

When interface issues were identified near the go-live date, Shasta held additional meetings with the EHR and associated vendors to troubleshoot and propose solutions. The Interface Engineer was made available to complete all approved changes within two business days, when a turnaround of 1-2 weeks is considered standard for most HIT companies. Without Shasta's involvement, flexibility and timely delivery, the EHR transition faced a serious risk of not meeting the go-live date.

Post go-live, Shasta Networks provides managed services including 24/7 monitoring of all the NIHD interfaces using the Shasta platform – serving as a first line of support for errors that require opening a ticket with a vendor, or other situations needing immediate attention. With Shasta as their HIT partner, NIHD doesn't need to dedicate a staff member to this role and can focus on other priorities.

Value adds of Shasta's leadership:

- **Management of project allowing hands-off approach for NIHD**
- **Highly skilled technical resources**
- **Advisory role on optimizing data flows and workflow efficiency gains**
- **Turnaround of two business days on all interface change requests**
- **Proactively avoiding costly delays that could threaten on-time go-live**
- **Managed services for security and system updates, technical support after go-live**

Results & Outcomes

On-time implementation: The Shasta team's proven expertise informed the project plan, facilitated end-to-end project management, and met the go-live date even while addressing complex issues that were not originally in scope.

Manpower savings: In handling the complications with unreadable PDF files for legacy clinical data transfer, Shasta prevented the need to engage unbudgeted assistance from a third party.

Quick turnaround: Shasta provided a highly efficient turnaround of two business days on all interface requests, including testing and implementing, in contrast to the industry standard time of 1-2 weeks.

Client satisfaction: Shasta prioritizes client needs and timelines at every step, with dedicated project management support and technical expertise. As a trusted vendor with a long working relationship together, NIHD fully intends to keep leveraging Shasta Networks well into the future.

Innovation in action: Shasta Networks utilized their fifth-generation Ascent platform during the NIHD project. Ascent is built for and with clients to go far beyond standard interface engines to solve complex challenges and provide industry-leading support. Empowering users with a variety of modules to eliminate or minimize interoperability challenges, Ascent streamlines processes and breaks down barriers for heightened integration in healthcare.

Visit **shastanetworks.com/ascent-platform** to learn more or schedule a demo.

Shasta Networks provides a broad range of expert HIT services for healthcare organizations.

To explore what Shasta Networks can do for you to drive peak performance, visit **shastanetworks.com** or call **(541) 488-6820**.