



Success Story

Northwood Health Systems

Notable Solutions Automates Patient Workflows at Northwood Health Systems

Improves Patient Care, Streamlines Operations and Supports Compliance Requirements

Cradled in the Ohio River Valley, Wheeling West Virginia is home to Northwood Health Systems, a leader in providing quality care for patients of all ages with emotional problems, intellectual disabilities, mental illness and drug and alcohol addictions. Privately held, Northwood has more than 500 employees and serves 3,000 patients at more than 19 clinical and residential facilities located across three counties in northern West Virginia.

Focused on integrating solid business principles with sound clinical practices, Northwood embarked on an IT strategy to streamline its administrative functions and to integrate clinical records into one harmonious system anchored by NSi™ AutoStore® from Notable Solutions and Microsoft SharePoint.

Meeting Regulatory and Compliance Challenges

Like all healthcare facilities, Northwood has faced many challenges in recent years with increased regulatory requirements, an expanding patient load due to the Affordable Care Act, changes to billing and operational processes and requirements for electronic health record (EHR) technology to achieve Meaningful Use qualification from the Department of Health and Human Services.

The Northwood IT department first deployed a robust SharePoint content management system which stores all medical patient information and other business documents related to day-to-day operations. While the SharePoint solution was perfect for content management and retrieval, it lacked an enterprise capture and input solution.

The Northwood IT group was also dealing with a variety of disparate products for paper and electronic uploading to SharePoint, putting even more pressure on the team to find an advanced, yet easier way to streamline data capture and retrieval.

One Solution Unifies Business and Clinical Data

Northwood IT Director, Tom Dzmura, was charged with tackling the challenge. After determining the required outcomes to the mission, he selected NSi AutoStore, an enterprise capture solution which securely integrates Northwood's various input sources, from paper to electronic files, and provides a unified platform for both clinical and business workflows that support Northwood's mission.

Phase I of the implementation introduced NSi AutoStore into Northwood's business processes. "We retrofitted the existing Accounts Payable and Human Resources (SharePoint) libraries first, knowing that the Medical Records project was going to be a huge effort – with more than 3.9 million papers in our previous ECM," says Dzmura. "We then transitioned our clinical records into the new system."

Northwood processes an average of 500,000 documents annually and with support from Notable Solutions was able to design a system that intelligently identifies, processes and securely routes documents into SharePoint.

"On average, we handle more than 10,000 documents per week which are submitted in all sorts of ways to the input process. They are captured either in batches or individually, each with a unique barcode or a standard OCR header on the first and subsequent pages. Then they are processed, sorted and split as necessary by Notable Solutions," Dzmura adds.

The inbound documents processed by NSi AutoStore originate from a mixed-fleet of 50 multi-function peripherals (MFPs), WebApps, Microsoft InfoPath, or a host of other electronic workflows. Notable Solutions supports 25 plus workflows assisting in automating the scanning and electronic inflow, organizing patient information, including Medical Necessity Assessments (MNAs), Treatment Plans, Progress Notes, etc. from referral sources, lab work, RX and other providers, as well as administrative systems like Accounts Payable and Human Resources.

"We've had SharePoint in use as our CORE medical records document imaging repository for about two years, but have now been able to build in some very nice user interfaces in SharePoint to permit easy search and retrieval of the medical records cataloged in the patient folders and an export utility for Medical Records extraction and submission to other providers or legal entities," Dzmura says.

The new system is not only secure, protecting all patient and administrative records, but also greatly increases collaboration among staff, critical in point of care situations where quick and secure access is needed.

With Notable Solutions' improved processing speed and accuracy, scanned clinical documents are part of the patient's COMPLETE chart in minutes rather than hours.

Dzmura also points to the flexibility of the solution as a key factor. Particularly, when at one point in the project Northwood needed to process thousands of documents simultaneously they were able to leverage NSi AutoStore's multi-server architecture to load balance the work.

A document imaging 'server farm' allowed Northwood to send larger documents to the least busy of two large document OCR engines and small documents to the least busy of four small document OCR engines which helped get the smaller, more numerous documents processed quickly while pushing the 200+ page jobs through a separate OCR pathway.

"Notable Solutions provided us with a true enterprise class solution," notes Dzmura. "We were able to easily and intelligently scale the solution to support our large volume at no additional cost to the operation. We're happy to say - we loved the flexibility and ease with which NSi AutoStore and the Notable Solutions' team was able to support our mission!"

Benefits for Patient Care, Administration and the Compliance Team

With an integrated system for managing business, administrative and clinical records, operations have been streamlined and become more efficient which logically affects the level of patient care as well as maintains Northwood's position with regulatory compliance.

According to Dzmura, Northwood's top three IT goals are to leverage advanced technology to provide safe, efficient, cost effective healthcare; to create innovative solutions to deliver safe, quality care to increase the bottom line; and to eliminate tasks that are repetitive and error prone and replace them with technology solutions.

"The NSi AutoStore integration with SharePoint works perfectly. We've built in a lot of monitoring to be able to identify what part of the process the document is currently in when we're asked to track one and whether submission is needed for documents that fail a component process and need to be dealt with separately," says Dzmura.

According to a member of Northwood's Regulatory Compliance group, clinical charges in the EHR are constantly audited as they're entered to ensure that there's supporting documentation in place and that for every documented service, a corresponding EHR charge is in place. This happens automatically every hour. As a result, the clinical staff no longer has to wonder when their documents will come off the audit list because the cycle time from submission to patient record is so short - typically within minutes. Everything is tracked centrally so the document lifecycle is known from the time of submission to storage in SharePoint.

The near-real-time nature of the NSi AutoStore/ SharePoint Document Imaging Repository has revolutionized communication of patient data across the three counties in rural West Virginia that Northwood serves.

Having documents submitted at a location over an hour's drive away being made available securely in minutes for review by all clinical staff as a part of the patient's medical record has greatly increased collaboration and saved precious time. Because of that, Therapists, PAs, CNPs, or Case Managers who submit documents at remote sites can have their clinical documentation available for review by senior Psychology and Medical staff almost instantly as part of the patient's chart.

"Northwood prides itself on the high level of services and patient care we bring to our communities," adds Dzmura. "With this advanced system, we are definitely supporting that mission at all levels."



North America +1 240 268 8100
Europe +49 (0) 6441 67138 0
Latin America +55 11 824 532 30
www.notablesolutions • twitter @notablsolutions

Copyright ©2014 Notable Solutions Inc. All rights reserved. AutoStore is a registered trademark of NSi. All other product names and logos are trade and service marks of their respective companies. All specifications are subject to change without notice. This brochure, its content and/or its layout must not be changed without prior permission of Notable Solutions, inc. (NSi).