

# Northwell Health

Lake Success, New York



New York State's largest healthcare provider and private employer, Northwell Health comprises 23 hospitals, 665 outpatient facilities and more than 18,500 affiliated physicians caring for more than 2 million patients annually. Its 66,000 employees, including more than 16,000 nurses and 4,000 employed doctors, are focused on changing healthcare for the better by making breakthroughs in medicine at the Feinstein Institute for Medical Research. Northwell Health is also a training ground for the next generation of medical professionals at the visionary Donald and Barbara Zucker School of Medicine at Hofstra/Northwell and the Hofstra Northwell School of Graduate Nursing and Physician Assistant Studies.

The health system prides itself on its use of technology that allows for a single, seamless patient record accessible by clinicians and patients across the enterprise. Northwell Health's ability to leverage technology to improve outcomes as well as achieved operating efficiencies and effectiveness has resulted in 10 of its facilities being named to the 20th annual Most Wired list from *Hospitals & Health Networks* magazine.

## Studies in Success

Just Associates Saves Health System \$500,000 By Accelerating, Improving Duplicate Resolution



Just Associates is a healthcare consulting firm that provides superior value to clients through improved data integrity. We have the process expertise and systems knowledge to deliver tailored, value-added solutions that improve your financial outcomes and business processes, support delivery of quality patient care, and meet your diverse stakeholders' expectations through improved patient matching.

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Rebecca Way, RHIA  
Director of Revenue Cycle Business Operations  
Northwell Health



## Tread Carefully with Third Party Data Utilization

Third party data can be leveraged to supplement information available from the health system, resulting in an increase in the prove rate of confirmed duplicates. However, because third-party data is not 100 percent accurate, it should be used prudently. For this reason, Just Associates only uses third party data from highly reliable and trusted sources and follows strict QA protocols. This lets them maximize the benefits of third party data while avoiding the pitfalls that create more data integrity issues than it addresses.

## Challenge

Northwell Health was growing rapidly, thanks to an aggressive acquisition pace that saw four new facilities joining the health system in a single year. This meant integrating millions of patient records into its complex network of information systems—a cumbersome, multi-step and largely manual merge process that integrated patient data from each new facility into the health system’s electronic master patient index (EMPI) before pushing it out to applicable downstream systems.

Exacerbating the challenge was a lack of interoperability between the downstream systems. This made it extremely difficult to keep the data synchronized across all systems once integration was complete.

“It’s very complicated and acquisitions were happening very rapidly... creating a snowball effect of issues,” said Rebecca Way, RHIA, Director of Revenue Cycle Business Operations at Northwell Health. “...The longer it went on, the more visits we had in the system, the longer it took to move each visit and get appointments and bills ready for every patient.”

After two attempted clean-ups with limited success, the decision was made to bring in a third-party firm with the expertise to manage the efficient eradication of duplicates within an infrastructure that required something more than a cookie-cutter approach. In particular, Northwell Health learned the hard way that scripting, which is a common solution to merging large volumes of patient data, was not going to work in the long run.

“In our smaller cleanup efforts, the vendor used scripting. While that worked for a while, it eventually slowed down our clinical systems. It’s not fun to have the CIO call you and say, ‘stop whatever you’re doing,’” said Way. “So, we couldn’t work with anyone that relied on scripting. We just can’t do it that way. It has to be one system at a time.”

“Just Associates was willing to work with us, and we knew that they were familiar with all the systems we have. It was the right fit for us,” she added.

“The Just Associates process for validating and resolving duplicates resulted in an 88 percent prove rate,” said Way. “It saved us at least \$500,000 and was complete in a quarter of the time we would have needed to complete it internally.”

**Rebecca Way, RHIA**  
Director of Revenue Cycle Business Operations  
Northwell Health



## IDMaster®: A Remote Solution to Duplicate Resolution

IDMaster is Just Associates' proprietary duplicate record workflow software that facilitates the rapid and efficient review of possible duplicate record sets, segregating questionable matches for additional research in the client's secondary systems or third-party data sources. Confirmed duplicates are queued up for merging in primary and secondary systems. IDMaster incorporates strict QA protocols throughout the process and generates production, productivity and summary statistics. Just Associates' industry-leading data integrity experts utilize IDMaster to provide a complete, outsourced MPI management solution.

## Solution

Just Associates' identity integrity team first undertook a Validity Review by leveraging IDMaster® (see sidebar), its proprietary duplicate record workflow solution, to remotely review approximately 270,000 potential duplicate pairs. This involved a multi-step data reconciliation process that started with using data provided by Northwell Health. Then, when validity wasn't proven using that data, third-party data was leveraged to research additional patient information. For the remaining unresolved pairs, additional research was conducted in the financial and patient information systems in use at the health system to determine if they were true duplicates—rounding out an approach which ultimately increased the final prove rate.

All proven sets were merged, along with those previously confirmed by Northwell Health. Electronic merges were performed on confirmed duplicate pairs, followed by manual demographic updates to ensure the merged information would flow properly to key downstream systems.

To ensure validity accuracy, Just Associates conducted a quality review on all pairs prior to merging. This helped ensure the integrity of the merged data before it touched any Northwell Health system.

“What would have taken us several years and over 13 full-time employees was completed by Just Associates in well under a year,” said Way.

## Results

During the data reconciliation project, Just Associates verified that 85 percent of the pairs it reviewed were true duplicates. An additional 3 percent were confirmed as not the same patient, resulting in an overall final reconciliation rate of 88 percent.

“The Just Associates process for validating and resolving duplicates resulted in an 88 percent prove rate,” said Way. “It saved us at least \$500,000 and was complete in a quarter of the time we would have needed to complete it internally.”

According to Way, her team was able to complete 275 merges each day, compared to Just Associates' 1,000 daily merges. That acceleration alone helped Northwell Health realize a cost savings of \$500,000 that would otherwise have been spent on dedicating internal resources to the duplicate resolution project.

“We were just boiling the ocean,” she said. “Just Associates was able to very quickly catch us up, so my team can do other things...Patient identification has taken on a whole new meaning for our group. We are able to work proactively with the sites to prevent the creation of new duplicates through education and implementing best practices.”