

UW Medicine

Seattle, Washington

Challenge

UW Medicine was working toward establishing a unique Epic Enterprise identifier for each patient within the full health system. Achieving that goal required moving Northwest Hospital, a nationally-recognized 281-bed community hospital, onto the same Epic registration system in place at its flagship facilities, UW Medical Center and Harborview. During the planning stages, it was determined that a cleanup of the Epic master patient index (MPI) was necessary to remove any duplicate medical records and avoid damaging the integrity of the merged databases.

Northwest Hospital “was basically taking all of its patient medical record numbers and loading them into our MPI,” said Sally Beahan, RHIA, MHA, Director of Health Information Management (HIM) for UW Medicine. “We needed to identify any that already existed in our system, so they could be merged and the MPI integrated as much as possible.”

The other catalyst behind UW Medicine’s decision to clean up its MPI was its participation in several Accountable Care Networks (ACNs). Said Beahan, “we are sharing data across those ACNs and that is problematic when your MPI isn’t pristine.”

Studies in Success

UW Medicine and IDManage®

Working Toward a Unique
Epic Enterprise ID



University of Washington Medicine (UW Medicine) is a Seattle-based academic health system comprising four hospitals — University of Washington Medical Center, Harborview Medical Center, Northwest Hospital & Medical Center and Valley Medical Center—that admits more than 63,000 patients annually. It also provides outpatient care for more than 1.3 million patients each year at its 14 UW Neighborhood Clinics and other primary and specialty care facilities. Top-ranked in Washington State and Seattle by U.S. *News & World Report* on its 2017-18 Best Hospitals list and recognized by *Becker's Hospital Review* as one of the “100 Great Hospitals in America,” UW Medicine is affiliated with the award-winning UW School of Medicine.

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Sally Beahan, RHIA, MHA
Director of Health Information Management
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The proprietary methodology employed by Just Associates leverages both internal hospital/health system data and information from third-party sources to resolve a higher number of duplicates than others on the market. This innovative and comprehensive approach to MPI cleanup consistently delivers prove rates that exceed the industry standard, in some cases as high as 90 percent.

Solution

To ensure a pristine pre- and post-merger MPI, UW Medicine engaged the patient data integrity experts at Just Associates to undertake a comprehensive cleanup. Just Associates had already successfully completed several MPI cleanup projects for the health system, including one involving approximately 97,000 potential duplicate records and another involving more than 82,000. During the latter project, the firm resolved more than 72,000 duplicates for a prove rate of nearly 90 percent.

The latest project entailed providing files of confirmed duplicate pairs to be reconciled in Epic and marking confirmed false positive matches as known non-duplicates. The health system also deployed *IDManage*[®], Just Associates' robust ongoing MPI support service (see sidebar), to resolve any duplicates created in the merger's immediate aftermath, as well as to support cleanup of ACN records prior to their integration into its main MPI.

Just Associates' experts conducted an initial review of more than 31,000 possible duplicates utilizing data elements from UW Medicine's Epic system, as well as data from external, third party data sources. 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, third-party data and referential matching techniques are not 100 percent accurate and should be used prudently, with strict QA protocols.

Supplemental research was also performed by Just Associates' patient identity experts on pairs requiring additional information to validate whether the record was a true duplicate. In addition, demographic update files were provided to UW Medicine for key elements on confirmed duplicate pairs for updates in Epic after the batch merge processing.

An important aspect of the project was determining best practices related to record matching within the MPI. UW Medicine had been generally utilizing the out-of-the-box settings for Epic's matching algorithm, with some adjustments. Most EHRs use basic or intermediate algorithms that rely primarily on deterministic matching. Doing so can result in an unacceptably high number of false alarms (two records are incorrectly identified as belonging to one person) and, more importantly, false negatives (a true duplicate is missed).

“We looked to Just Associates to provide expertise from a best-practice perspective on whether our current settings were right for us,” said Beahan. “That, to me, was one of the huge benefits of this project — really understanding more about the patient matching algorithm.”

Results

During its most recent *IDManage*-centric project for UW Medicine, Just Associates reviewed approximately 31,100 possible duplicate pairs. Approximately 23,400 were confirmed as either duplicate or non-duplicate and subsequently resolved in the Epic system for a prove rate of 75 percent. The remaining 25 percent had insufficient information or data integrity issues, or they required additional research before they could be validated — a rate significantly higher than the 10-20 percent normally seen by Just Associates' experts. The typical cause was inadequate information, with many containing only four of six key data elements (Last Name, First Name, Middle Name, Gender, Date of Birth and Social Security Number).

“We benefited from seeing through *IDManage* where the issues were coming from, identifying the duplicates and the issues that were creating the duplicates,” said Beahan, adding that the actionable business intelligence reports provided by Just Associates helped inform her strategy and planning for keeping duplicate rates under control.

“I want to know how many staff I'm going to need to keep up with the duplicates,” she said, noting that after the cleanup was complete, they turned on new functionality in the Epic system that allows end users to mark merges or potential duplicates. Even with that, however, it is an uphill battle to dedicate the appropriate resources.

“It's great, but we have had a hard time keeping up with the staffing level we have,” Beahan explained, “...so we are looking to implement *IDManage* on an on-going basis because the service combines Just Associates' technology and trained staff. The efficiencies they bring are definitely beneficial.”

She continued, “If I can reduce staff time [spent] manually looking up and matching records and use *IDManage* to do that work more efficiently, I can re-direct my staff to work the really tricky [pairs] left over. It would also free up staff to work on overlays and overlay corrections which are very tedious.”

Read how other leading healthcare provider organizations have used Just Associates for quantifiable, bottom line results.

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About *IDManage*

IDManage® is an ongoing MPI support service from Just Associates for partial or full ongoing duplicate resolution. When coupled with Just Associates' expertise and proven track record of decreasing data integrity issues and minimizing the ongoing costs of maintaining patient data quality, healthcare organizations that leverage *IDManage* will realize the many benefits that come with a consistently clean MPI and accurate patient matching.

[Click here for additional information on *IDManage*](#)

For additional information, contact Just Associates at:

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