



## Inova Reduces Duplicate Medical Record Creation Rate to Less than 3% Using Smart Identity Management Solutions®

### Inova Health System

#### SITUATION OVERVIEW

##### CHALLENGE

- Cleanup existing central database
- Install software to prevent and correct duplicate record creation
- Provide detailed reports on identity errors
- Significantly reduce error creation rate

##### SOLUTION

- QuadraMed Smart Identity Management Solutions
- Professional cleanup by QuadraMed MPI team

##### RESULTS

- Reports generated by SmartID and MPIspy
- Duplicate creation reduced to less than 3%

The American Health Information Management Association has long been an advocate of healthcare provider organizations maintaining a clean master person index (MPI). With the increased emphasis on patient safety and quality care, and the advent of initiatives such as Meaningful Use, health information exchange, and accountable care, the need to ensure the integrity of patient medical records has never been greater.

### INOVA SELECTS QUADRAMED

Inova Health System is a multi-facility healthcare provider located in Northern Virginia. Well respected for its high level of quality care, an internal review conducted in 2006 indicated its hospital group, with one exception, was creating duplicate medical records at an unacceptably high rate.

“Our creation rate at the time was unacceptable,” said April Whetsell, RHIA, CCS, who is Inova’s MPI System Administrator. “The sole exception was Inova Loudoun Hospital, which was at less than three percent. The reason for its lower creation rate was that QuadraMed had performed a MPI cleanup in 2002 before the hospital became part of the Inova system.”

After a thorough review, Inova selected QuadraMed Smart Identity Management Solutions for its central database cleanup and to provide a suite of Enterprise MPI (EMPI) data integrity management applications.

A cleanup process, provided by QuadraMed, was completed in 2007, primarily for Inova’s multi-facility campus in Fairfax, and its hospitals in Alexandria, Fair Oaks and Mount Vernon, Virginia. The QuadraMed team performed an MPI data assessment using SmartScan®. This software features a proprietary probabilistic algorithm, SmartPAL®, which has a proven 98-percent effective rate for duplicate record identification.

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The team then used QuadraMed SmartMerge® to manage workflow and document project activity. After the cleanup was completed, QuadraMed SmartID® was installed to help prevent creation of duplicate records at patient registration. Coupled with installation of the company's MPIspy® and SmartMerge software to identify and resolve patient identification errors, Inova had a total identity management solution for ongoing data integrity.

## INOVA ACHIEVES RESULTS, SETS AMBITIOUS GOAL

When the cleanup and software installation were complete, Inova achieved an almost immediate reduction in the number of duplicate medical records its registrars created. In mid-2011, the System was performing in the low three-percent range.

"We have reduced our duplicate record creation rate to 2.79 percent as of August 2011," said the MPI Administrator. "Our goal by the end of the year is a MPI Existence Error rate of two percent or below within a database of about 2.85 million records."

## HIGH VALUE PLACED ON CLEAN MPI

A clean MPI reduces risk, gives confidence to clinicians using electronic medical records to access clinical information, helps to reduce potential billing errors, and enables information

## INOVA HEALTH SYSTEM AT A GLANCE

Multi-facility system headquartered in Falls Church, Virginia

**1,753** hospital beds

Annual Inpatients: **99,000**

Annual Outpatients: **469,000**

Annual ED visits: **469,000**

exchange by ensuring each patient has only one complete record in the database. Inova Health System leadership takes this very seriously.

"QuadraMed's EMPI technology has helped us achieve our goal of ensuring each patient who receives care anywhere within the Inova Health System can be accurately identified under one unique EMPI number," said Inova CIO Geoff Brown. "This is a requirement to ensure all clinical information is available to the physicians, nurses and others for patient care. Patient safety is our number one priority at Inova and a clean, accurate MPI is the foundation of our success today, and in the future as we implement new technology."

The administration of the MPI also receives a high priority across the enterprise. "The MPI management function is a centralized

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*April Whetsell, MPI Systems Administrator*

# case study

INOVA HEALTH SYSTEM

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responsibility for the entire health system and is staffed by highly trained and experienced professionals whose sole focus is identity management,” the MPI Administrator noted. “No one else merges records. We have uniformity in the policies and procedures across the health system, consistency in the review and merge process, and nearly immediate communication.”

The Inova MPI Team focuses on concurrent management of the MPI by preparing a weekly report for registration managers that provides details on every merge and every duplicate that was created the prior week.

“We extrapolate the details at creation; those that should have been preventable,” she said. “The report is broken down by facility and registrar, and we periodically present managers with a trending report that shows registrars who had a particular volume of errors so the managers can take corrective action. There is also a monthly meeting with the Registration Directors, and an annual Executive Summary is prepared for Inova Executive Leadership.”

## MOVING FORWARD

There are two other important initiatives underway. “We are developing a policy and procedure to manage errors from a potential fraud perspective,” Whetsell continued. “This is not about identity theft, but rather about people who inconsistently



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*Geoff Brown,  
Chief Information Officer*

represent themselves from facility-to-facility in such a way that it creates duplicates.

“We are also developing an aggressive management strategy to focus attention on overlay records – single records that contain treatment information for more than one patient. QuadraMed MPIspy software makes this process easier by providing real time, immediate notification of potential overlay creation. This enables rapid intervention and correction before errors can impact patient safety.

“Overlays are complicated and can take quite a bit of research,” April Whetsell said. “But at Inova, patient safety comes first, and a clean MPI is the MPI Team’s sole focus.” 🔄

Further information about QuadraMed Smart Identity Management Solutions for EMPI/MPI cleanup, prevention and identification of duplicate medical records is available at [www.quadramed.com](http://www.quadramed.com) or by contacting your QuadraMed representative.