

Case Study

HOW 4MEDICA DELIVERS THE HIGHEST QUALITY
PATIENT DATA FOR THE BEST PATIENT OUTCOMES

Protecting Patients During a Massive Merger: How Boston Medical Center Safeguarded Patient Identity and Ensured a Safe Epic Go-Live

EVERY RECORD IS A PATIENT

When Patient Identity Becomes a Patient Safety Issue

Behind every duplicate record is a real person: a patient whose medical history, medication list, and allergy information may be fragmented across multiple identities. When records don't match, the consequences aren't just administrative. Clinicians may make decisions without a complete picture. Medications may be prescribed without full knowledge of what a patient is already taking. Test results can be misattributed. For Boston Medical Center, the stakes were deeply personal: this is a safety-net hospital serving some of the most vulnerable patients in the community.

The Story

A Merger That Doubled the Risk

During a major hospital merger, Boston Medical Center consolidated multiple patient populations into its existing Epic environment, effectively doubling its total patient volume. The initiative brought together data from disparate source systems and registration workflows, each with different conventions and histories. The result was a significant volume of potentially mismatched and duplicate patient records.



CHALLENGE

Following a massive merger that doubled its patient population, BMC faced a non-negotiable Epic requirement: reduce a 9.8% patient mismatch rate to below 3% or risk patient safety and catastrophic operational delays.

SOLUTION

4medica MPI and IdentiMatch™. Working as an extension of BMC's team, 4medica replaced manual data stewardship with a scalable, automated solution directly into Epic, protecting patients and preserving the go-live timeline.

OUTCOMES

2.6% mismatch rate achieved in under 30 days. 177,000 potential duplicates eliminated. Patient safety protected ahead of schedule.

Case Study

Epic has an established requirement: BMC had to reduce its patient data mismatch rate from 9.8% to below 3% prior to go-live. This wasn't just a data quality benchmark, it was a patient safety threshold. Every unresolved mismatch represented a potential gap in a patient's clinical record, and every gap introduced risk at the point of care.

From an executive perspective, failing to meet this threshold would cascade far beyond the EHR. Go-live delays would impact payer contract synchronization, staffing and union schedules, and the broader clinical integration timeline, ultimately affecting the hospital's ability to serve its patients without disruption.

Executive Highlight: "Failure to meet Epic's 3% mismatch threshold risked cascading consequences - not just to payer contracts and union staffing schedules, but to the safety and continuity of care for every patient in the merged system."

The Human Cost

Why Manual Approaches Weren't Enough

BMC had merged with two hospitals and absorbed a third defunct patient population, creating three additional sources of patient data across different health information systems. The sheer volume of potential duplicates - approximately 177,000 records - made traditional manual approaches untenable.

Hiring temporary data stewards would have taken months, produced inconsistent results, and placed an enormous burden on an already-stretched HIM team. More importantly, every week spent on manual cleanup was another week that patients remained at risk of fragmented records. BMC's leadership recognized that this wasn't a problem they could solve with more headcount, they needed a partner who understood both the technical complexity and the human stakes.

Automation Over Staffing: "Traditional manual cleanup would have required months of staffing and produced inconsistent results. 4medica delivered a repeatable, auditable model in under 30 days."

Case Study

The Partnership

Automated Data Stewardship That Puts Patients First

BMC implemented 4medica's MPI and IdentiMatch™ to automate patient matching and data stewardship decisions at scale. But this wasn't a "set it and forget it" deployment. 4medica worked alongside BMC's team as a strategic partner, understanding the unique complexities of the merger and tailoring the approach to BMC's specific patient populations and workflows.

To operationalize these decisions inside Epic, BMC utilized a dedicated HL7 merge interface. 4medica combined its established matching algorithms with IdentiMatch's decisioning capability to determine which records should be merged and in what direction. 4medica then generated a real-time HL7 message stream that Epic could ingest to execute merges automatically, ensuring that every patient's record was made whole, not just counted as resolved.

This architecture elevated the work of BMC's HIM and data integrity teams. Rather than spending months buried in manual record-by-record review, these professionals could focus on the clinical data governance and patient safety oversight that their expertise uniquely supports.

Technical Differentiator: "By generating a real-time HL7 message stream directly into Epic, 4medica enabled large-scale cleanup without manual intervention, ensuring patient records were unified accurately and safely, and freeing BMC's team to focus on higher-value patient data integrity work."

The Impact

Safer Records, Stronger Foundation

The results went beyond meeting a technical threshold. By resolving 177,000 potentially duplicate records, BMC ensured that clinicians across the newly merged system could trust the data in front of them, giving every patient a single, complete, accurate identity from day one.

Case Study



Rapid Compliance: Reduced mismatch/unmatched records from 9.8% to 2.6% in under one month.



Massive Cleanup: Resolved approximately 177,000 potentially duplicate records - each one a patient made whole.



Timeline Protection: Met Epic's <3% patient safety threshold ahead of schedule.



Cost Avoidance: Prevented months of delay and associated millions of dollars in operational impact.



Sustainability: Replaced slow, inconsistent manual stewardship with a repeatable, auditable automated model - elevating the HIM team's role from manual cleanup to strategic data governance.

”

“4medica's IdentiMatch™ didn't just give us a report of what was wrong; it actually drove the resolution through our HL7 interface. Seeing our mismatch rate drop from nearly 10% to 2.6% in less than a month was incredible. It protected our timeline and, most importantly, it protected our patients. It turned a potential project-stopper into a major win for our integration strategy.”

— Diana V. Norcross, Director, Health Information Management,
Boston Medical Center

THE BOTTOM LINE

177,000 patient records made whole. One partner. Under 30 days.