

CASE STUDY:
**EXTENDING THE ENTERPRISE ID
WITH IMT THRESHOLD ANALYSIS™**

AdventHealth's promise is to help people feel whole: body, mind and spirit. This whole-person approach to health care ensures that patients get the care they need, regardless of where they are treated with health care services offered in almost a dozen states.

That's why AdventHealth engaged IMT to deploy enterprise master patient index technology in 2014 and has now extended this deployment to ensure enterprise consumer-centric data supports AdventHealth's mission.

As AdventHealth's patient population continues to grow, integrating new patient identity sources came with challenges, including variations in the completeness and quality of source data. This presented the opportunity to re-evaluate thresholds for optimum efficiency and accuracy to better identify twin and trauma patients.

AdventHealth turned to IMT to conduct a Threshold Analysis™ review to fine-tune the EMPI's automated patient record matching and linking to reduce the task load and rapidly accommodate new data sources. This is empowering AdventHealth to expand the patient portal to accelerate consumer engagement and support the organization's mission.

“The Enterprise Master Person Index has been invaluable in linking our various computer applications together to ensure all person data is matched across our enterprise. It is the heart of our patient portal which allows patients to locate all their information regardless of which system it is in.

We are taking the EMPI to the next level with our Active EMPI/Golden Record project to allow us to quickly share person demographic updates throughout our systems.”

Steve Rheaume, Executive Director
of Revenue & Administrative
Systems, AdventHealth

BENEFITS

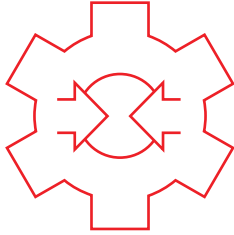
- ▶ Streamlining the data through an EMPI has helped AdventHealth extend its “Know Me” commitment to understanding each patient’s unique history and needs. With the enterprise identifier (EID) created by the EMPI connecting all source-level data through IBM InfoSphere Master Data Management, AdventHealth creates a single view of the patient.
- ▶ This single view allows patients to simply confirm the accuracy of their data rather than needing to repeat it, which streamlines care and improves satisfaction. Patients managing chronic conditions at multiple care delivery sites appreciate this simplicity and are encouraged that their provider does indeed “Know Me.”
- ▶ The resulting single, connected view of patient data allows registration staff to quickly update and propagate any changes throughout the system with just a couple of clicks. That means clinicians can see the most current, accurate enterprise-wide data that underpins patient safety, consumer engagement, and cost-effective care and wellness services.
- ▶ Threshold Analysis™ goes one step further to assess auto-link and clerical review thresholds to reduce the rates of false positives and false negatives. This increases AdventHealth’s confidence in sharing data with multiple departments within its own network and more broadly with regional HIE initiatives.

With AdventHealth growing to better serve its communities over the past decade, the tech stack now includes 15 EMR versions, including 3 Cerner and 4 Athena, plus long-term care and home care systems. The active EMPI propagates the EID to these systems, as well as a patient portal and the State of Florida Health Information Exchange. The Active EMPI project will expand the number of systems which both contribute and consume EMPI data.

The recent Threshold Analysis™ means that AdventHealth now experiences:

- **Lower data stewardship costs**, thanks to a finely tuned algorithm that can uncover more duplicates or records that may have been erroneously linked during the registration process. As a result, the data can be confidently used for population health, analytics, business intelligence, and other initiatives.
- **A 60% reduction in tasks volume** to a much more manageable load that requires less staff time. This translates into more accurate data presented via the EID. More records are now grouped together to provide a comprehensive view of all patient encounters.
- **Boosted patient confidence**, as patients now see all their data and records in a single place when they log in to the patient portal. Caregivers are similarly more confident in understanding their patients’ full histories.
- **Decreased exposure to data breaches**, as only correctly linked records are made available to the patient and caregivers. Safeguarding patient privacy and avoiding data breaches is essential, as fines for HIPAA data breaches can range from \$100 to \$50,000 per record with a maximum penalty of up to \$1.5 million per year for each violation. These fines are only part of the cost and don’t reflect the internal costs to investigate a breach, nor the potential reputational harm.
- **Minimized duplicate testing** as a result of records being linked with the latest results available to support clinical care. Studies show that 15 to 30% of all outpatient tests are repeated due to a lack of access to the previous test results, and 20% of all hospital radiology tests are duplicates, wasting \$20 billion each year.

HOW IT WORKS



EVALUATE AUTO-LINK AND CLERICAL REVIEW THRESHOLDS

IMT Threshold Analysis™ uses advanced, proprietary statistical techniques to evaluate auto-link and clerical review thresholds.

Through the user-friendly Pair Viewer interface, technical and business teams can efficiently and securely evaluate matched records between existing weights and newly regenerated weights. The results of these decisions are then applied to recommend new thresholds that support the corporate vision and strategies.



PERFORM PROACTIVE IMPACT ASSESSMENTS

IMT Threshold Analysis™ can also be used to proactively perform impact assessment on introducing new data to the EMPI, and to modify filters and algorithms to mitigate possible false positive scenarios related to twins and other household members with similar names.

THE RESULTS

AdventHealth is poised to integrate more data elements, particularly as it expands the patient portal and digital front door strategy. Threshold Analysis™ can assess the potential impact of introducing new attributes or sources into the system. But most importantly, the EMPI and EID are furthering AdventHealth's mission to extend the healing ministry of Christ, bolstering lifelong patient relationships with whole-person care to meet physical, mental, and spiritual needs.

With a sacred mission of Extending the Healing Ministry of Christ, AdventHealth is a connected system of care for every stage of life and health. More than 80,000 skilled and compassionate caregivers in physician practices, hospitals, outpatient clinics, skilled nursing facilities, home health agencies and hospice centers provide individualized, holistic care. A shared vision, common values, focus on whole-person health and commitment to making communities healthier unify the system's 50 hospital campuses and hundreds of care sites in diverse markets throughout almost a dozen states. For more information about AdventHealth, visit AdventHealth.com, or [Facebook.com/AdventHealth](https://www.facebook.com/AdventHealth).