

With our flagship *DataInFormation<sup>SM</sup>* suite of solutions for Image Labeling, Data Annotation, NLP Calibration and Form Data Capture, Liberty Source is proud to serve a wide range of clients across many industry verticals. Our *Solution Briefs* provide a snapshot of the challenges clients bring to us, and the outcomes we achieve for them.

## Healthcare Payer Data Synchronization

Industry	Insurance / Healthcare Payers	Data Type	Relational DB
Project Duration	6 Months	Ongoing?	Fully Implemented

### Challenge

Healthcare payer organizations will often find themselves in a situation where Member data is stored in multiple databases across legacy platforms. This becomes problematic when reporting from these siloed systems is inconsistent across enterprise users – caused by what should be common data elements in each source being out of alignment. The issue becomes a significant impediment to artificial intelligence and business intelligence implementations when either a single data source is selected, or when multiple data sources cause unpredictable model output.

### Solution

Using existing extracts produced by 3 legacy repositories, a database schema and stored procedures were designed to record Member data element differences between the source systems. Whenever an update is received from a source, the Member data tables are updated and then comparison processes are executed. Program logic populates a Discrepancy table with references to the “point in time” version of the source data that is in disagreement. A control table maintains which data elements are to be compared between which source systems. The Discrepancy table is updated during the compare process to log instances where a Member record exists in one system but not another, was missing in a system but now is present, a Member data element is missing or discrepant between the sources, a previous discrepancy has been updated and is still discrepant and a previous discrepancy is now resolved.

### Outcome

The system is now fully implemented into the company’s daily production cycle. Standard operational reports are produced for each daily run showing data volumes processed for each stage in the comparison process. Discrepancy Reports are produced and sent to the respective source system Data Stewards so they can perform remediation tasks to correct and align Member data. In addition, a Member Data Scorecard is published to encourage / motivate colleagues to bring the Member data into alignment.

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