

CASE STUDY

How a Healthcare Services Provider Reached 99.95% Data Accuracy

Data quality controls, validations and automated error handling across an end-to-end processing pipeline, fixing errors at the root instead of downstream.

OVERVIEW

From Inconsistent Data to a Pipeline Stakeholders Trust

The client is a US healthcare services provider whose operations depend on its primary data processing flows. Records move from ingestion through processing and on to the teams and systems downstream.

The Challenge

Data quality was inconsistent across those flows. Error rates were elevated, bad records created friction for downstream operations, and delivery checkpoints drew frequent scrutiny from stakeholders. The client needed quality built into the pipeline itself, not caught after the fact.



A near-perfect 0.05% record error rate turned critical stakeholders into champions and set the stage for expanded modernization initiatives.



JRD Systems

JRD's own statement, not a client quote.

— WHAT WE DELIVERED

Four workstreams, one reliable pipeline



Data Quality Controls

- Engineered data quality controls across the end-to-end processing pipeline
- Applied the same standards at every stage, from ingestion to output
- Designed the controls for systemic stability, not one-off fixes



Validation Rules

- Implemented validations throughout ingestion and processing workflows
- Stopped bad records before they reached downstream teams
- Made data integrity checkable at every step



Automated Error Handling

- Built automated routines to catch and handle errors as they occur
- Reduced the manual effort of chasing failed records
- Kept the pipeline running when individual records failed



Root-Cause Remediation

- Traced recurring errors back to where they started
- Fixed causes in the pipeline rather than correcting outputs
- Optimized data integrity across ingestion and processing

— THE RESULT

Accurate Data. Stable Pipeline. Confident Stakeholders.

The error rate fell to 0.05% of processed records, for 99.95% data accuracy. At a recent executive status update, client stakeholders, including leaders known for close scrutiny, praised the turnaround in pipeline reliability and output precision.

99.95%

Data accuracy achieved

0.05%

Record error rate

End-to-end

Controls from ingestion through processing