

Data Architecture Modernization Boosts Hospital Foundation's Efficiencies, Collaboration

ABOUT THE CLIENT

This hospital foundation promotes high-quality, cost-effective, accessible healthcare by strengthening their state's healthcare workforce and improving the public's health.

CHALLENGE

This hospital foundation recognized the need for a strategic shift in its data architecture to support growing customer needs. Their once cutting-edge on-prem data warehouse, responsible for collecting and analyzing patient claim data, was now outdated and difficult to maintain. It forced workarounds and patchwork solutions that threatened their ability to serve more than 110 area hospitals in pursuit of the mission of improving health care quality and transitions of care across the region.

- Hospitals needed faster, more frequent access to quality metrics and de-identified claims data from across the state.
- Rich, de-identified data could drive research and improve patient outcomes, yet wasn't available in a secure platform easily accessible to member hospitals.
- The foundation needed stabilized data warehousing processes that ensured data quality with on-time data releases.
- Safeguarding data security and replication was essential to preserving business continuity while meeting National Institute of Standards and Technology (NIST) security requirements for the Federal Information Security Management Act (FISMA).

The foundation needed more than a technical upgrade. They needed to improve how healthcare data could be shared and utilized across the region.

STORY HIGHLIGHTS

- **Data warehouse cloud migration**
A strategic cloud migration eliminated the difficulty of maintaining an aging, on-prem data warehouse and opened the door for future scalability.
- **Data process automation**
Automation enables easier business reporting, on-time monthly delivery of analytics and data to member hospitals, and effortlessly generated quality metrics, marketing insights, readmission measures, and community health assessments.

SOLUTION

Resultant partnered with the hospital foundation to transform their data infrastructure and build a solution that functions similarly to a health information exchange (HIE).

Hospitals can collaborate to improve patient care through a shared data repository in the cloud. Unlike a true HIE, there is no real-time data exchange and this sharehouse also contains hospital discharge and trauma registry data.



Modernized infrastructure through a strategic cloud migration to Snowflake created a robust, scalable platform.



Expanded data access through a secure data sharing environment enables hospitals to use their own technology to connect with de-identified data from across the state.



Migrating from an expensive Azure-Synapse solution to a cost-effective Snowflake solution saved the foundation a significant amount annually in infrastructure costs.



Automated data warehouse processing through WhereScape and sophisticated data integration via Alteryx dramatically streamlined operations.

Our approach combined technical expertise with [healthcare industry knowledge](#) to turn what was once a laborious effort into a systematic, reliable flow of information, all accomplished with a nimble team that respected the foundation's resources while delivering enterprise-level results.





Results

The transformation [extends far beyond technology](#), strengthening the foundation's position as the backbone of a collaborative healthcare ecosystem improving patient care across the state.



Process automation gives staff more time for new data services and solutions to benefit hospitals and their patients.



Data integrity tools ensure validity of data analysis and metrics using Alteryx and Validatar.



Stabilized systems guarantee monthly data updates that help hospitals identify quality of care issues for improved processes.



Flexibility enables the foundation to more easily expand services and ingest data streams beyond hospital claims data.



Business insights from Alteryx guided the integration of specific data points into the data warehouse, expanding community health analysis capabilities.



The foundation gained the ability to execute in-house patient matching algorithms, eliminating dependence on outside vendor software.

FUTURE

This work supports the foundation as an essential partner to every health care provider in the region. More than simply providing accurate data, it enables collaborative improvement of patient care across traditional competitive boundaries, advancing smarter health care and building momentum for stronger patient outcomes.

REACH OUT TO RESULTANT TO LEARN HOW YOUR STATE CAN ADOPT A SIMILAR ROI FRAMEWORK THAT IS CUSTOMIZED TO YOUR SPECIFIC NEEDS.

[Schedule a consultation](#) today!