

HEXAWARE

Data Modernization in Healthcare: Building a Robust Domain-Driven Data Hub for a Leading Medicaid Managed Care Organization

Empowering Healthcare Access Through Scalable
Managed Care Solutions

Case study



Client

| Client

- Challenge
- Solution
- Benefits
- Summary

A Trusted Leader in Healthcare Solutions
 One of the largest publicly funded payer organizations in the United States, this Medicaid-Managed Care provider serves low-income and special-needs populations, drawing on decades of experience to improve access to care. Our client supports millions of members across multiple states, offering high-quality, award-winning managed care health plans. These include Medicaid, Medicare, long-term services and supports (LTSS), behavioral health, and pharmacy benefit management.



Challenge

Client

| **Challenge**

Solution

Benefits

Summary

Navigating Complexity in a Fragmented Data Landscape

In today's healthcare world, payers are grappling with managing vast and complex data ecosystems to ensure operational efficiency, maintain regulatory compliance, and drive sustainable healthcare innovation. The sheer volume and fragmentation of data present both a challenge and an opportunity.

Our client faced several critical challenges, including:

- **Data Storage:** Managing distributed environments led to complexity, resource duplication, and high maintenance costs, contributing to operational inefficiencies and technical debt.
- **Data Governance:** Weak governance frameworks, unclear domain ownership, and persistent data quality issues hindered compliance and decision-making.
- **Data Lineage:** Manual dependencies and inefficient reporting mechanisms created bottlenecks in tracking data flow, slowing insights and complicating compliance efforts.
- **Data Virtualization:** The absence of a unified view of data limited actionable insights and created fragmented access across the organization.

These challenges highlighted the urgent need for a transformative solution to modernize their data ecosystem and support their mission at a scale.



Solution

- Client
- Challenge
- Solution**
- Benefits
- Summary

Modernizing Data Infrastructure with a Domain-Driven Approach

To address these challenges, Hexaware partnered with the client to embark on a comprehensive data modernization journey. The goal was to unify disparate data sources, simplify complex data landscapes, and build a foundation for real-time analytics.

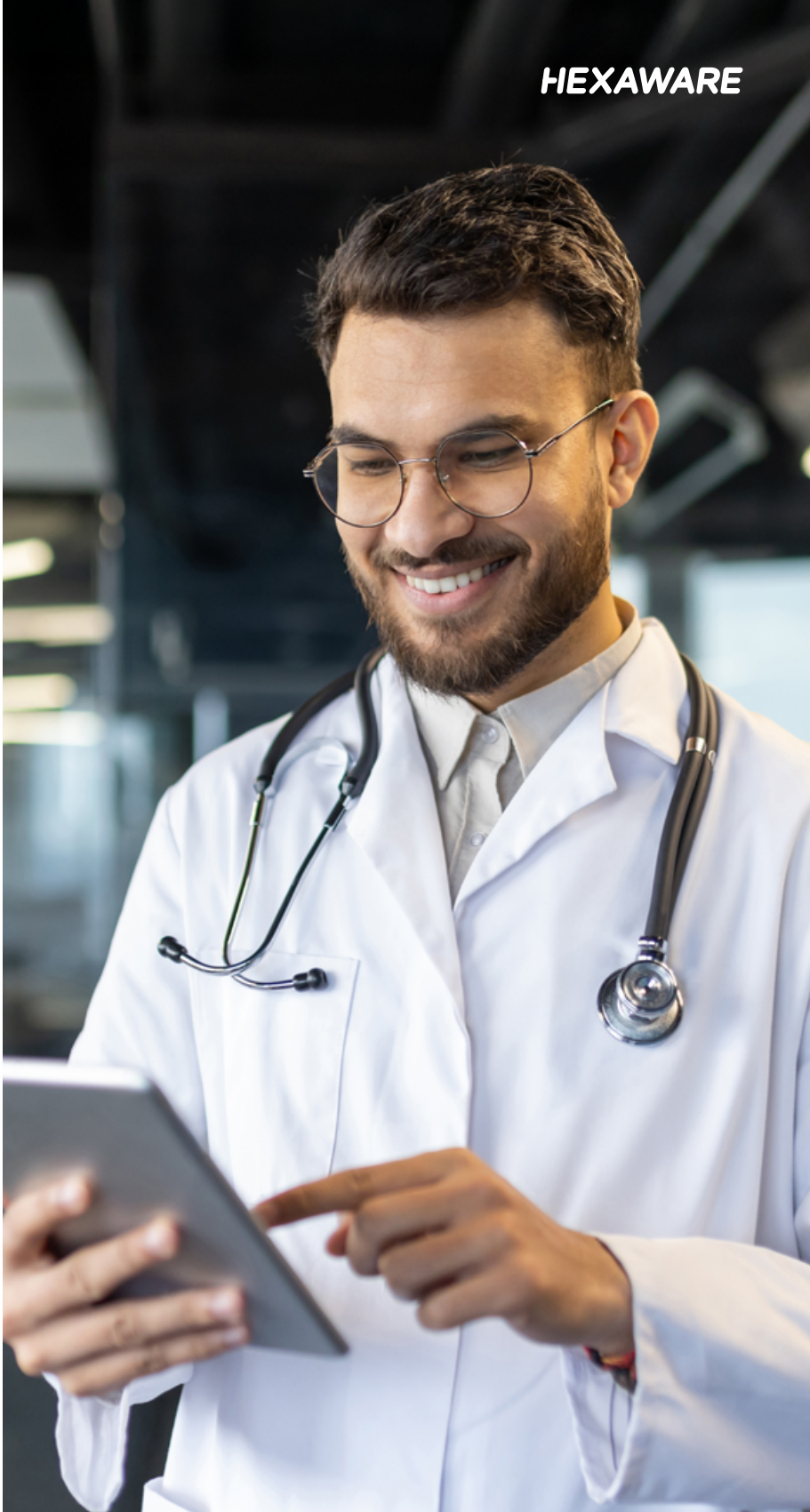
Key initiatives included:

- **Enterprise Domain Hub (EDH):** Designed and implemented a centralized, domain-specific data hub to streamline and organize critical business information—spanning member, provider, claims, clinical, and appeals & grievances data. This enabled faster regulatory reporting, reduced manual dependencies, and enhanced operational efficiency.
- **Databricks Migration:** Transitioned various consumption hubs to the Databricks platform, ensuring scalability, performance optimization, and alignment with business requirements.
- **Data Virtualization/Marketplace:** Integrated a self-service, on-demand data access solution across multiple data sources, empowering business users to retrieve and analyze data instantly.

- **Business Semantic Layer (BSL):** Developed a simplified, business-friendly data access layer to bridge the gap between technical data structures and business users, enabling self-service analytics and reducing reporting backlogs.
- **Synapse Migration:** Migrated workloads, ETL processes, and security frameworks to the Databricks platform, enhancing performance and scalability.

Technologies Leveraged

To create a scalable and efficient data ecosystem, the modernization initiative leveraged cutting-edge technologies, including Hadoop, Azure Synapse, Databricks, Power BI, and Tableau.



Benefits

- Client
- Challenge
- Solution
- Benefits**
- Summary

Driving Efficiency, Compliance, and Business Empowerment

The transformation delivered significant value to the client:

- **Modernized Data Ecosystem:** Achieved 50% faster data availability, 30% cost savings, and a future-ready architecture.
- **Enhanced Data Governance:** Improved compliance, data reliability, and reporting cycles by ~40%.
- **Self-Service Data Access:** Enabled a 3x increase in self-service reporting capabilities, empowering business users with actionable insights.
- **Scalable and User-Friendly Environment:** Reduced maintenance overhead while supporting evolving business needs.



Summary

- Client
- Challenge
- Solution
- Benefits

| Summary

Redefining Patient-centric Care and Operational Efficiency with Data-Driven Innovation
The healthcare industry is at a crucial point where data-driven innovation can redefine patient care and operational efficiency. By embracing a domain-driven data hub, our client not only overcame their immediate challenges but also positioned themselves for long-term success in a competitive landscape.

Their journey serves as a testament to the power of modern data architectures in driving efficiency, compliance, and innovation. As the industry continues to evolve, organizations that prioritize data modernization in healthcare will be better equipped to deliver value-based, patient-centric care and foster healthier communities.



About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at <https://www.hexaware.com>.

Get in touch