

## CASE STUDY

# How Banner Health is Accelerating Digital Transformation with Innovaccer's Technical Platform Accelerators

### Overview

Today, the top technology barrier to overcome in healthcare is access to clean, centralized, and shareable data to achieve interoperability. Health systems are looking for a cloud-native, interoperable data and analytics platform to connect to virtually any HIT system, including EHRs, and unify its data to make it useful across care settings. Across a care journey, there are multiple touchpoints between a patient and the provider which requires clean, accurate, and standardized data to ensure proactive engagement.

Banner Health—one of the top health systems in the country—identified redundancies in its IT backbone, refined its data archival strategy, and streamlined applications with intelligence layers to reduce technology costs. With more than 10,000 providers and 3 million patients in their network, Banner Health realized the need for data integration and normalization to drive better care, financial and experiential outcomes.

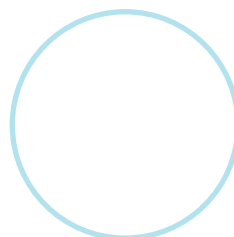
Banner began a search for a technology platform that could assemble data from disparate sources and systems, including clinical, supply chain, financial, and legacy on-premises data warehouses, to provide

actionable insights at the point of care and improve clinical, financial, and operational outcomes.

Enter: The Innovaccer® Health Cloud powered by the Best-in-KLAS Data & Analytics Platform.

The Innovaccer Health Cloud's Data Activation Platform combined with its technical platform accelerators enabled Banner Health to aggregate data from multiple sources such as EHRs, claims, labs, pharmacy and many more and then normalize it for downstream usage at point of care.

Using an integrated, comprehensive, and interoperable health cloud, Banner deployed a single-enterprise data lake to close care gaps and access actionable, data-driven insights aimed at improving care delivery. The network gained an enterprise data fabric within its budget and achieved a 70% reduction in IT infrastructure costs with \$4 million by moving to a SaaS-based model. It condensed more than 10,000 ad-hoc reports by converting them into around 800 user-friendly enterprise metrics, which resulted in easier access to actionable insights.



## Results by the Numbers

# \$4M

Savings through vendor consolidation

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# 70%

Reduction in pop health IT infrastructure costs by moving to a SaaS-based model

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# 800

User-friendly enterprise metrics condensed from 10,000 ad hoc reports

### **Leveraging KLAS Research's #1 Data & Analytics Platform to Integrate and Normalize Data**

Today, the top technological barrier for health systems is to get clean, centralized, shareable data to achieve interoperability. Banner Health, one of the largest nonprofit healthcare systems in the country, wanted to accelerate value-based care transformation by improving decision-making and engaging providers and patients with accurate data and access controls. The health system faced a set of challenges to deploy sophisticated data aggregation mechanisms within its IT infrastructure:

Disconnected systems leading to data silos

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Lack of secure exchange of health information between disparate systems for patients

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Inefficiency due to multiple vendors working in silos

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Data inconsistency between applications and duplication of patients records

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High IT Infrastructure costs due to a complex technology ecosystem

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Poor data quality and gaps in patient care



#### At-a-glance

- 30 hospitals
- 3 million patients
- More than 10,000 healthcare providers



#### Challenges

- Data aggregation and normalization from multiple systems
- Lack of automation to notify coding gaps to stakeholders
- Siloed vendors reduced efficiency
- Data inconsistency between applications and duplication of patients records
- High IT Infrastructure costs due to a complex technology ecosystem
- Lack of data quality and gaps in patient care



#### Solutions

- The Innovaccer Health Cloud and Data Activation Platform
- Innovaccer's Data Integration and Normalization Accelerator
- EMPI Module
- Pre-built Connectors

Banner Health determined that they needed to upgrade their infrastructure to better serve their patients in the communities they served. This included managing the surge in critically-ill patients, monitoring bed capacity, and tracking staffing needs and resources across the enterprise. After assembling and examining data from multiple systems, including clinical, supply chain, financial, and legacy on-premises data warehouses, they concluded that the quality of their data, its scalability, and the speed to generate actionable insights were falling short of meeting their goals.

The health system then began searching for technology solutions that can help integrate healthcare data from a variety of sources and systems spread across 30 hospitals in six different states. The intervention required to meet the challenges did not stop at just integrating the data but also creating a single unified data model which can be accessed, modified, and analyzed to generate insights for many uses cases across the health system to improve care quality, patient experience and meet the goals for quality, cost, and utilization measures.

### Implementing a Single Enterprise Data Fabric with Innovaccer Health Cloud

Banner Health leveraged Innovaccer's Data Activation Platform to create a unified data model, simplify data, speed time to assessment and reduce overall operating costs. The unified data platform accelerated time to value for Banner Health and helped them achieve data ingestion and normalization within a record time of six weeks.

Banner also leveraged the EMPI module, the data-enabled platform, which combines medical records from multiple sources to create a 360-degree longitudinal view of the patient, eliminating duplicate data. The module combined records based on data such as demographics, claims, invoices, episodes, and risk scores, and included heuristic methods to account for errors such as misspellings.

The solution deployed by Banner Health quickly identified the needs and challenges of their systems. It provided much-needed support to their care managers so they could optimize operations to reduce the burden on the care teams; insights to the physicians to gain a 360-degree whole-person view of the patients; and helped Banner Health achieve significant improvement in their quality, reporting, and meeting clinical and financial goals. Banner Health has been able to reduce the cost of its IT infrastructure by up to 70% and has been able to generate savings of \$4 million.

As an integral part of their digital transformation journey, Banner Health was looking for a data and analytics platform to create unified patient records that drive comprehensive, preventive, and whole-person care solutions for patients across the care continuum.

The health system wanted to integrate clinical and payer data distributed across its multiple practices, hospitals, and systems. As a part of the "digital-first" approach, and to gain a more comprehensive view of its network, Banner Health was looking for a solution that could generate actionable insights to enable population stratification, advanced analytics, and customizable dashboards.

Banner Health not only transformed patient care but also drove significant savings in its IT operating expenses. The health system saved \$4 million through vendor consolidation, contributing to a total of \$5.7 million in savings in annual IT costs. With robust analytics, it condensed more than 10,000 ad-hoc reports by converting them into 800 user-friendly enterprise metrics, resulting in easier access to actionable insights.

Using an integrated, comprehensive, interoperable health cloud, Banner Health was able to:

Ingest, clean, and normalize clinical, financial, supply chain, and administrative data

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Assign a unique patient identifier through a robust EMPI module

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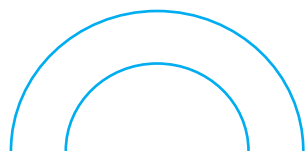
Switch to flexible workloads to increase savings

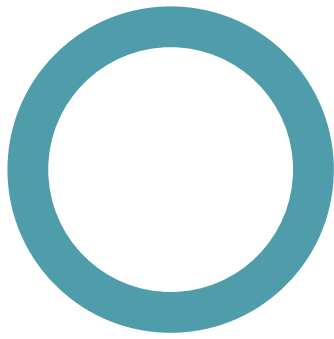
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Leverage pre-built connectors to accelerate time to value

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Secure and compliance focused hosting to ensure data privacy and security





## About Innovaccer

Innovaccer Inc., the Health Cloud company, is dedicated to accelerating innovation in healthcare. The Innovaccer® Health Cloud unifies patient data across systems and care settings, and empowers healthcare organizations to develop scalable, modern applications that improve clinical, financial, and operational outcomes. Innovaccer's solutions have been deployed across more than 1,600 care settings in the U.S., enabling more than 96,000 providers to transform care delivery and work collaboratively with payers and life sciences companies. Innovaccer has helped its customers unify health records for more than 39 million people and generate over \$1 billion in cumulative cost savings. Innovaccer is the #1 rated Data and Analytics Platform by KLAS, and the #1 rated population health technology platform by Black Book

For more information, please visit [innovaccer.com](https://innovaccer.com)