Driving Positive Change:
Connected Data Helps Intermountain Healthcare Deliver Value-Based Care

"Informatica makes a tremendous difference in the way we’re able to leverage our data to provide better, more effective healthcare."

**Michael Beiene**
Director, Data Analytics
Intermountain Healthcare

<table>
<thead>
<tr>
<th>Goals</th>
<th>Solution</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplify end-user access to data and reduce redundant reporting by discovering and inventorying data assets from across the organization</td>
<td>Use Informatica Enterprise Data Catalog to scan and catalog data from Oracle-based enterprise data warehouse and provide user-friendly search capabilities</td>
<td>Helps improve population health in Utah and southern Idaho, providing tools to help people live healthier lifestyles</td>
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<tr>
<td>Drive digital transformation and patient engagement with Digital Front Door, a set of online tools to help patients take a more active role in their health</td>
<td>Deliver high-throughput ingestion and verification of patient data using Informatica Data Engineering Integration and Informatica Data Engineering Quality</td>
<td>Loads 300 CSV files in 10 minutes, a task that previously would take a week</td>
</tr>
<tr>
<td>Easily locate, better understand, and provision all patient-related data across a complex data landscape</td>
<td>Informatica Professional Services helps replace legacy ETL platform with modern iPaaS solution using Informatica Intelligent Cloud Services and Informatica PowerCenter</td>
<td>Empowers patients by making it easier for them to access health information, contact their doctors, understand their bill, and receive financial assistance</td>
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</tbody>
</table>
Informatica Success Story: Intermountain Healthcare

With abundant sunshine and easy access to outdoor recreation, Utah frequently ranks near the top of “healthiest states” lists. With a long history of using data analytics to assess and improve patient care, Intermountain Healthcare is working to keep these trends going by improving population health throughout the communities it serves.

The largest healthcare provider in Utah and southern Idaho, Intermountain is leading the region’s transition from fee-based to value-based healthcare. Unlike a traditional fee-for-service model, value-based billing charges patients not for individual services, but for the healthcare provider’s overall contribution to their health. Understandably, the value is much more difficult to measure, requiring data from electronic medical record (EMR) systems, claims data from insurance companies, and patient data from affiliate care providers. To determine appropriate billing for value, Intermountain needed to bring all this information together.

Utah is one of the fastest growing states, and its population has more than doubled since Intermountain was founded in 1975. Today, data is a necessary component of Intermountain’s growth strategy. Faced with ever-increasing data volumes and new demands for clinical and operational analytics, Intermountain needed to simplify end-user access to data, improve data quality, and reduce redundant reporting. It also needed to quickly ingest and process patient data to drive digital transformation and support its Digital Front Door initiative, a new portal that gives patients digital tools to help them take a more active role in their healthcare.

“To successfully transition to value-based care and improve population health while supporting our growth strategy as a business, we needed to get more value out of our data, and do it faster,” says Michael Beiene, Director, Data Analytics at Intermountain Healthcare. “The need to combine different sources of data and make data available for analytics in near real time is vital.”

Accelerating time to value with help from Informatica Professional Services

For years, Intermountain used an ETL tool for batch processing, but the software was beginning to show its age. Intermountain decided to switch to Informatica PowerCenter based on its high analyst rankings and widespread use in healthcare environments, but it wanted more than just a replacement ETL tool.

Although Intermountain has been slow to move to the cloud, it was beginning to shift in that direction, moving to Workday for HR and Salesforce for CRM. When Informatica suggested that Intermountain complement Informatica PowerCenter with Informatica Intelligent Cloud Services to support its integration
Platform as a Service (iPaaS) requirements, Intermountain recognized the wisdom of this approach. It decided to speed time to value by using pre-built Informatica Cloud Connectors for Salesforce, Workday, and flat files.

“We chose Informatica because we felt it could solve most of our data challenges, either on premises or in the cloud,” says Siju Nedungadappallil, Data Architect at Intermountain Health. “We see Informatica Intelligent Cloud Services as being able to close the gap between the well-known capabilities of PowerCenter and newer technologies as they come out.”

Informatica Professional Services helped Intermountain segregate the datasets and establish access controls and permissions for different users, strengthening data security and compliance.

“Informatica Professional Services made a tremendous difference in how we upgraded and implemented our data management strategy,” says Biene. “Anyone can provide a tool, but to have a partner that can tell us all where it all fits, how to strategize, and how to see the future, that’s where Informatica Professional Services have been really, really helpful.”

Intermountain began converting approximately 5,000 batch jobs to use Informatica PowerCenter, Informatica Cloud Data Integration, or a combination of both. Data is fed into a homegrown, Oracle-based enterprise data warehouse that draws from approximately 600 different data sources, including Cerner EMR, Oracle PeopleSoft, and Strata cost accounting software, as well as laboratory systems. Affiliate providers and other partners often send data in CSV files via secure FTP, which IICS loads into a staging table before handing off to Informatica PowerCenter for the heavy logic.

“There’s really no learning curve with Informatica Intelligent Cloud Services,” says Dallin Rogers, Data Architect at Intermountain Health. “It’s so simple and intuitive. It reads a file and builds a table, even if there are a lot of columns and we don’t have all of the information regarding the data types. I can load 300 CSV files in 10 minutes. In the past, that would have taken me a week.”

AI-powered Data Cataloging for fast access and discovery

As Intermountain moves into precision medicine, preventative care, and predictive analytics leveraging data from medical devices connected to the Internet of Things, the ability to quickly locate information and understand where it came from will be critical. With data growing too fast for manual stewardship, Intermountain decided to use the AI-powered Informatica Enterprise Data Catalog (EDC) to easily discover, understand, and catalog data from its data warehouse and other enterprise applications such as the
Enterprise Patient Record system and provide 250 analysts and hundreds more business users including data stewards with a simple search capability.

"Informatica Enterprise Data Catalog is enabling us to build a single inventory of all the data we possess spanning multiple data sources to drive more effective data-driven business transformations such as cloud migration and data governance, as well as democratize the use of data for patient-care analysis," says Beiene. "Users can easily find the data they need and collaborate on various data assets, as well as use the end-to-end data lineage capabilities in EDC to support HIPAA and other regulatory compliance stipulations. We are now partnering with our analytics community to open up data visibility further and unleash the power of EDC."

Empowering patients and improving population health

To support its digital transformation and Digital Front Door initiative, Intermountain is using Informatica Data Engineering Integration and Informatica Data Engineering Quality to deliver high-throughput ingestion and verification of patient data. By making that data available on the portal in near real time, Intermountain is making it easier for patients to access their health information, contact their doctors, understand their bill, and receive financial assistance. Meanwhile, Intermountain is using that data to improve population health in Utah and Southern Idaho, enabling people to live healthier and more fulfilling lives.

"Informatica makes a tremendous difference in the way we’re able to leverage our data to provide better, more effective healthcare," says Beiene. "And it’s not just about the technology. Informatica is a strategic partner, telling us where it all fits and what’s coming in the future. For an organization that’s focused on patient care, that partnership is extremely valuable."

Inside The Solution:

- Informatica Data Engineering Integration
- Informatica Data Engineering Quality
- Informatica Enterprise Data Catalog
- Informatica Intelligent Cloud Services
- Informatica Cloud Data Integration
- Informatica PowerCenter

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