

# In pursuit of a single source of unified patient data

Building trusted longitudinal data pipelines to help improve patient health outcomes and operational efficiency



Healthcare providers' ability to tap into modern technology for better health outcomes and adapt to new business models is closely linked to how well they can manage their core data.



**There is no greater challenge for healthcare organizations than ensuring that their digital transformation along with better data management will improve patient outcomes, increase operational efficiency and productivity, and better financial results.**

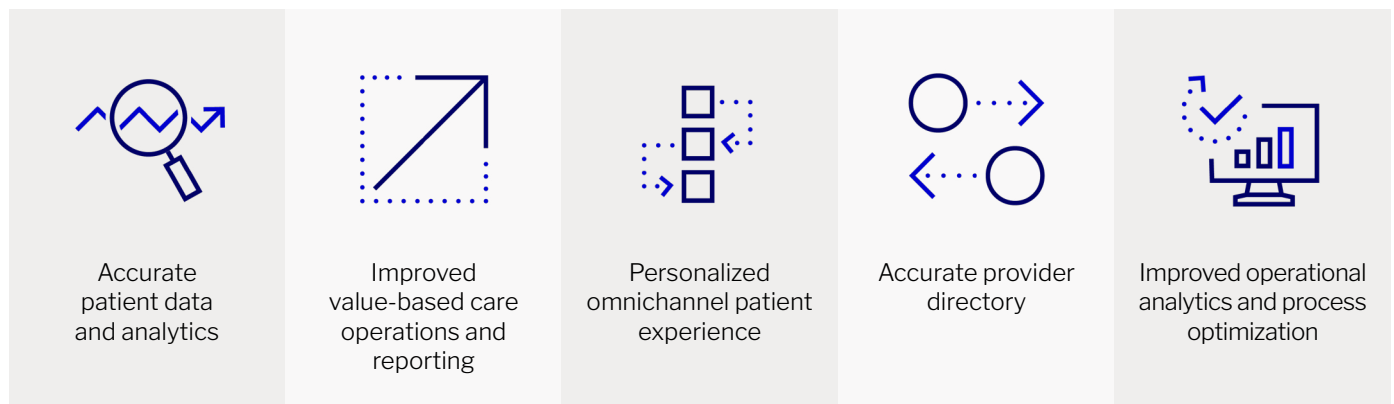
- IDC



Meanwhile, in the continued effort to realize patient outcome improvements and increase operational efficiency, healthcare organizations today are highly focused on technology-driven advancements.

Not surprisingly, data analytics is front and center in one of ways technology is helping move healthcare delivery forward. Accurate and timely data is needed to drive insights and support a wide range of clinical and operational activities. This includes the delivery of emerging patient-centric care models such as next-best action for treatment, facilitating operational efficiency and compliance efforts, delivering personalized, omnichannel experiences for patients, and more.

### Data-driven uses cases



Making these goals a reality requires a holistic, near-real-time, and 360-degree view of patient, provider, and industry data, which is connected and available across the full healthcare continuum.

To successfully provide a single source of unified healthcare data, healthcare organizations will need to build the capability to develop longitudinal data pipelines that bring together large volumes of data from a range of sources, clean and organize that data, and fuel advanced analytics in ways that deliver actionable insights.

## The data challenge in healthcare

Fragmented, outdated, and poor-quality patient data hinders the ability to meet today's care delivery and operational demands in a number of ways. Inaccurate and incomplete data prevents timely, reliable insights needed to support improved health outcomes.

At the same time, data errors and quality issues make operations inefficient, leading to wasted clinical and staff time, and delays in insurance and patient payments, as well as reporting.

Ultimately, patient care and patient and provider experiences suffer.

Meanwhile, growing volumes of this fragmented data coming from a wide set of siloed systems and environments makes data management a complex, manual, and inefficient process, draining data management team resources.

And while these challenges aren't new to healthcare, they are complex and require a new approach.

## 4 industry trends to help modernize healthcare data management



### 1 Data harmonization.

Organizations are investing in core capabilities to assemble longitudinal data pipelines. This requires data harmonization across EHRs and other systems of record, as well as third-party datasets such as IDeD and DeIDed.

### 2 Move to distributed environments.

Patient data needs to be managed in a secure, distributed environment with the goal of meeting the patient where they are. This may include data from provider systems, claims, in-home health, and personal wellness devices, among others.

### 3 Data management automation and standardization.

Automation and standardization in data management are needed to enable trusted insights at scale. Considering the shortages of data engineers and data scientists, this data management automation is ever important in assisting existing resources to perform more value-added work.

### 4 Platform standardization.

Increased focus on platform standardization to support the creation of consistent AI/ML models across clinical operations and the patient care spectrum. Standardization in this way also supports data enrichment and the inclusion of third-party data sets.

## From data insights to meaningful actions

Large volumes of validated, enriched data sets are needed to deliver improved insights generated from analytics solutions, and empower clinical and operational teams with meaningful next steps and actions for improvement. To get there, **data must be harmonized, deduped, and standardized**, a highly resource-intensive process made simpler through automated data quality management.

The goal of this process is to **unify and cleanse multisource, complex data** into a single source of trusted information. By bringing in historical clinical or demographic data related to patients, tied together through consistent master data and taking advantage of predictive analysis, healthcare providers can more proactively help their patients.



For example, a physician could review a patient's medical history, see how effective treatment efforts were and their costs, and recommend a revised treatment plan that is more proactive and better suited to the patient's needs. They could also review what worked for a demographic sample and use that information for individual care.

The availability of longitudinal data is also a key enabler for the transition to value-based care, where better outcomes at lower cost is the goal. Many insurers are linking capitation and pay-for-performance programs with these kinds of efforts because a healthier patient is a great goal by itself, but **better health also means lower healthcare costs**.

Access to a single source of unified patient data fuels analytics and creates **a range of new opportunities to promote the advancement of care and operational optimization efforts**, including:



Empowering physicians with insights that support more proactive and preventive care



Activating operational insights to drive efficiencies across payer and provider performance and spend management



Enabling emerging care models with more accurate metrics on outcomes and costs



Improving knowledge worker productivity



Reducing claims errors and delays

That's where Reltio and Google Cloud come in. Organizations that choose the MDM solution from Reltio, which is natively built on Google Cloud and integrated with its [Healthcare API](#) and [BigQuery](#), can move their healthcare data management initiatives into the future.

## Reltio + Google Cloud enable data-driven insights

Industry-leading healthcare organizations that have adopted Google Cloud and Reltio's joint solution have seen various benefits such as:



- More reliable insights from analytics that drive better treatment decisions
- Personalized, consistent experience across channels in near-real time
- Improved provider data management and increased clean claims
- Increased ability to identify population cohorts and design programs to improve engagement
- Improved confidence in data protection and increased satisfaction with communications management, leading to greater patient trust and loyalty

## Build trusted longitudinal data pipelines

Reltio offers the **industry's first cloud-native SaaS master data management (MDM) platform** to unify and standardize multisource data into a trusted source of information for operational and analytical systems. An API-driven modern architecture supports real-time operations and decision making, and a built-in graph database provides views of complex relationships and hierarchies with ease.

As part of the core platform, the Reltio for Healthcare velocity pack includes an out-of-the-box, industry-specific data model (HIPAA-compliant and HITRUST-certified) and configurations so that combined with Reltio's delivery methodology, it delivers value in as little as 90 days.

Reltio enables data enrichment with **built-in integration to the National Provider Identifier (NPI)** data service for enriched provider data, and the **integration with Google Cloud Healthcare API FHIR store** helps to enable improved patient matching and associated data. With our API-led connectivity, healthcare organizations can integrate with applications and third-party data sources to enable key use cases.



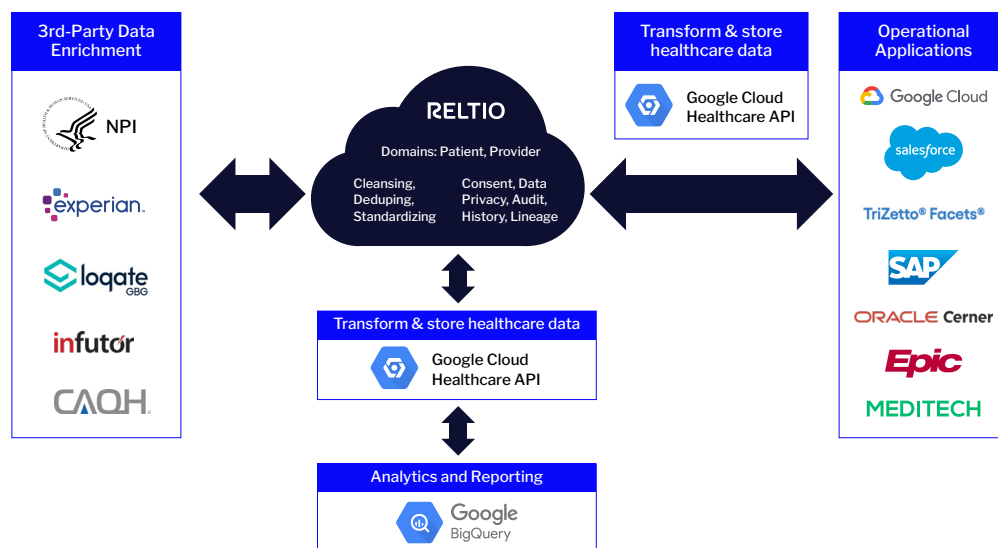
## How the combined solutions work

Unified patient, provider and healthcare organization data supplied by Reltio and a longitudinal patient record provided by Google Cloud Healthcare Data Engine, together deliver the trusted data pipelines to fuel better care and operational decisions.

Reltio unifies, cleanses, and enriches data in near-real time to enable advanced analysis within Google Cloud BigQuery of any process, transactions, or IoT events. Reltio's integration with Google Cloud Healthcare API FHIR store allows for **improved patient matching and incorporating associated data in near-real time**.

Reltio's integration with Google Cloud Healthcare API and Healthcare Data Engine allows for extensive data integrations to build the insight-ready, comprehensive, timely data pipelines with minimized effort.

With better quality data, healthcare organizations can ultimately make better business decisions and focus on delivering better patient outcomes and experiences.



### WHY GOOGLE CLOUD

Google Cloud accelerates every organization's ability to digitally transform its business. We deliver enterprise-grade solutions that leverage Google's cutting-edge technology – all on the cleanest cloud in the industry. Customers in more than 200 countries and territories turn to Google Cloud as their trusted partner to enable growth and solve their most critical business problems.

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### WHY RELTIO

At Reltio, we believe data should fuel business success. Reltio's cloud-native master data management (MDM) SaaS platform unifies—in real time—core data from multiple sources into a single source of trusted information. Leading enterprise brands—from more than 140 countries spanning multiple industries—rely on our award-winning solution to turn data into their most valuable asset.

To learn more, visit <https://www.reltio.com/solutions/industries/healthcare/>

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