

# Analytics for Value-Based Care and Business Models

A Healthcare Data Analytics Hub can drive better outcomes and increase competitive advantage





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To compete effectively and reduce costs and risks while advancing improved member outcomes in an increasingly competitive marketplace, healthcare planners and decision-makers need real-time and predictive insights into every aspect of operations and care delivery. Practically speaking, those insights require better access to data — from inside and outside the organization — that often resides in multiple incompatible systems. Realistically speaking, decision makers in the C-suite also know that they need to find a way to enable access to those insights without adding more to the plate of an overburdened IT organization.

The remedy for this situation lies in the creation of a Healthcare Data Analytics Hub that operates alongside existing systems of record (SoRs). A Healthcare Data Analytics Hub combines the critical features required to enable real-time and predictive insights: data access, processing, and healthcare analytics. It consolidates and harmonizes data from disparate systems, including those supporting population health management, claims, costs, outcomes, providers, customer experience, and more. Even more importantly, a Healthcare Data Analytics Hub puts access and control directly in the hands of analysts and other non-IT professionals, effectively eliminating the need for users to engage with IT to gain insights and accelerating the organization's ability to respond more nimbly with differentiated insights across the member and patient journey.

# Overview

Change is hardly foreign to the U.S. healthcare industry. For years, even decades, the industry has seemingly been in the midst of a transformation. Payer relationships with customers and healthcare providers are constantly evolving, as are provider networks, customer demands, and federal and state regulations.

Attempts to control the escalating costs of providing care have been ongoing, yet these costs continue to rise. It's not just the changing demographics of consumers or that the delivery of care is bound up in more costly procedures and devices. Much of the problem is structural: in a rapidly changing world, the cost of operations grows because of the complexity of the ecosystem supporting the payment, delivery, and management of care in an environment where outcomes are significantly impacted by external factors, most notably social determinants of health (SDOH).

However, these costs may be addressable through better ways to analyze information in a collaborative manner — both among members of a given healthcare ecosystem, including payers, providers and the service and technology providers delivering operational and management support, as well as with external entities such as the Centers for Medicare and Medicaid Services (CMS) whose activities impact the ecosystem.

## Shifting dynamics demand flexibility

Well before the advent of the COVID-19 pandemic, the US Healthcare system was shifting from a fee-for-service to value-based model, with a more open marketplace, greater regulatory oversight, new payer and provider business models, and operational practices adjusting to support this approach. Through a value-based approach, risk could be reduced by spreading costs across a

larger population; costs themselves could be managed through a bundled payments approach. But identifying the members of that larger population requires data and insights. Similarly, bundled payments can work well but provider organizations need a better understanding of what services are required — to what degree, in what provider location — under different circumstances.

The COVID-19 pandemic put significantly more pressure on the healthcare ecosystem to gain the insights necessary to drive these changes. While it exposed the increased business risk facing U.S. healthcare payers, prompting them to focus on membership growth and financial performance, it also heightening the need for better interoperability and greater data sharing between payers, providers, members, and patients. A new set of priorities has begun to emerge:

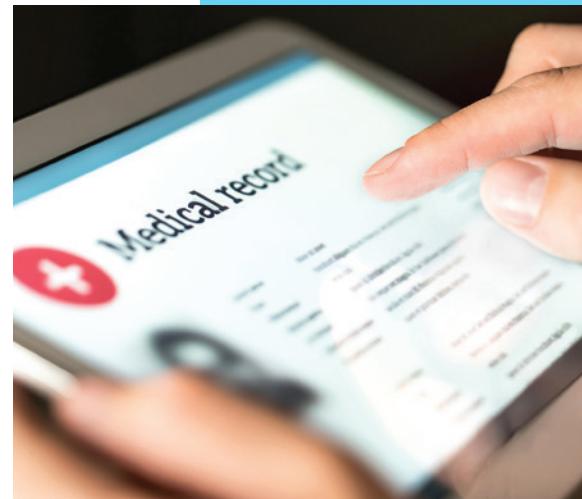
- Accelerate and adapt to value-based care and payment programs
- Improve the member experience and retention so as to seize on the consumerization of healthcare
- Include and integrate virtual care options
- Implement interoperability and data sharing rules as rapidly as they are finalized by CMS
- Optimize claims processing and fraud identification to reduce risk, costs, and penalties

Gartner emphasizes the need for healthcare CIOs to minimize care and administrative costs to succeed in a highly competitive consumer health ecosystem. Data and analytics, however, play a central role in empowering organizations to respond to these new and perennial market dynamics and priorities and to foster verifiable trust with others in the ecosystem by enabling transparent insight into shared data.

# Insight and interoperability are the new imperatives

The role of data and analytics in healthcare — in managing population health, claims, costs, outcomes, and more — has become more and more crucial as the ecosystem moves to a value-base care model. Predictive analytics is essential to understanding the underlying drivers of cost and to identifying fraud, waste, and abuse. Predictive analytics can help reduce high-cost, low-quality care, improve star ratings, HEDIS measures, and HCC risk scores. It can help find and plug care quality gaps, optimize clinical networks, improve the efficiency of payment processes, and predict a range of outcomes, costs, and events. More than 90% of payers and providers responding to a poll conducted by the Society of Actuaries believe that predictive analytics is the key to effective healthcare management.

However, the systems and the broader networks providing data-based support services have become more specialized and fragmented. Useful data exists in a wide range of repositories, from legacy claims processing systems to systems securing walled-in provider data; from member and patient engagement systems to government systems providing SDOH data; from third-party provider systems supporting virtual care to cloud-based systems holding data captured from consumer medical devices in the field. The amount of data is staggering, but integrating the data that predictive analytics can mine for actionable insight can be elusive and costly. IT teams are too often overburdened and cannot integrate all the systems that data, actuary, fraud, and claims analysts want to draw from. And without ready access to data they need, these professionals cannot make critical business decisions directly impacting costs and optimizing member outcomes and experiences.



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# Connect the dots with a Healthcare Data Analytics Hub

A Healthcare Data Analytics Hub provides integration and security features specific to healthcare data integration, management, and analytics that enable organizations to create large datasets comprised of data pulled in from other internal or external healthcare systems of record (SORs). As a system separate from the SORs, the Healthcare Data Analytics Hub also enables users within the organization to run healthcare analytics without interacting directly with the raw data on the SORs. Not only does this eliminate any risk to the integrity of the data on the SORs, but the data brought into the Healthcare Data Analytics Hub can be appropriately masked for compliance with HIPAA and other regulations.

For the healthcare ecosystem a Healthcare Data Analytics Hub provides other important benefits: Unlike a traditional analytics hub, data lake, or data warehouse, a Healthcare Data Analytics Hub facilitates the extraction and analysis of datasets from often siloed and proprietary clinical, revenue cycle management, and core administrative systems through self-service features that individual users within a healthcare organization — your business and operational analysts — can use to gather and analyze the data their particular inquiries require without the aid of the IT department. Users can simply drag and drop icons from menus to consolidate the datasets they need and then run the analyses they want to run.

## Actian Avalanche: Actian's Healthcare Data Analytics Hub

As a Healthcare Data Analytics Hub, the Actian Avalanche™ hybrid-cloud data warehouse, integration and management platform stands out, offering an all-in-one solution for healthcare analytics, processing, and integration. Running on-premises or in the cloud, Actian Avalanche provides built-in support and pre-defined integration templates for the broadest set of healthcare data types, workflows, maps, and EDI standards, enabling users to pull data from a wide range of SORs — without having to depend on the IT department. By building on the integration features and functionality found in Actian DataConnect, Avalanche enables non-IT decision makers and analysts to perform zero-code self-service data ingestion and dataset preparation using a drag-and-drop interface. Once the datasets have been selected, the Avalanche analytic engines are flexible enough to enable users to work with whatever data integration, visualization, and analytics tools are already familiar. As for pedigree? Actian Avalanche is built on Actian technologies like DataConnect that thousands of payer and provider organizations and healthcare information and technology service providers have trusted for more than a decade.



# With an Actian Avalanche Healthcare Data Analytics Hub you can address many of today's pressing operational priorities:

## Accelerate claims processing and accuracy

Throughput and accuracy matter. Having the ability to process claims efficiently and without error has a direct impact on an organization's costs and on claims processors' ability to bring on new revenue generating clients.

With built-in data integration, transformation, processing, and automation, Avalanche enables you to increase claims processing throughput by as much as 80%. You can identify and remediate errors and omissions in real time while processing and analyzing EDI claims data, comparing coding standards, member records, plan eligibility, payment integrity, and historical data.

## Protect against healthcare fraud

CMS estimated that fraud accounted for \$350B in healthcare costs in 2020 —a loss that translates into both direct and indirect costs to payers, providers, and consumers. Performing predictive analytics with the Avalanche Healthcare Data Analytics Hub presents an opportunity to identify bad actors *pre-payment*, thus avoiding the high costs of recovery *post-payment*.

Reducing the incidence of fraud *pre-payment* requires data, insight, and the ability to identify questionable claims quickly. A well-integrated payer portal built on a Healthcare Data Analytics Hub is key to this effort, as it can enable providers and healthcare insurance policy holders to streamline and accelerate the processes of data ingestion from a wide range of claims, clinical, and operational sources in advance of analysis and reimbursement. With built-in self-service integration and real-time operational analytics, Avalanche makes it

easy to analyze new claims in the context of historical and provider data to discover fraudulent patterns and submissions. Analysts can combine the datasets without IT intervention and control their analytics projects themselves, gaining better insights and accelerating the automation of remediation mechanisms. At the same time, legitimate claims can be processed and approved in a timely manner to improve customer satisfaction.

## Optimize provider networks

As health plans look to increase coverage of preventive maintenance, behavioral health, telemedicine, and new care services, payers need a true and comprehensive view of both existing and potential network members. They also require accurate, real-time information about the total cost of care. By understanding the cost, quality, and efficiency of individual healthcare providers, payers can prioritize high-value providers and create networks that best serve their members.

With an Actian Avalanche Healthcare Data Analytics Hub, payers can leverage the cloud to access and enrich, process and analyze, and then automate and act on consolidated provider performance data — identifying the best-fit provider partners with which to build provider networks capable of delivering better member outcomes consistently, efficiently, and cost-effectively.

## **Simplify Member, Partner, and Provider Onboarding**

Onboarding can often be a complex and time consuming process. New members, providers or partners are often inundated with countless requests for documents — requests made more complicated by the need to comply with data and regulatory requirements such as HIPPA and evolving CMS requirements. An inefficient onboarding process not only increases operational costs, but also can result in lost revenue, delayed reimbursements, and increasing provider network leakage (out-of-network). Additionally it can directly impact both provider and member satisfaction, which is ever more critical in an increasingly open, competitive, and consumer-oriented healthcare market.

The digitization of workflows can automate and optimize onboarding processes for members, partners, and providers. To be effective, though, these digital workflows must integrate seamlessly with existing internal and external data systems, which too often involves individual projects focused on complying with an evolving patchwork of oversight and protocols.

With an Actian Avalanche Healthcare Data Analytics Hub you can streamline these high-volume, back-end processes using a platform with built-in integrations to other common systems and data repositories. You can simplify and accelerate the process of onboarding new members and provider partners, reduce costs and error rates, and improve data accuracy and productivity.

## **Cain a 360-degree view to improve member acquisition, experience, retention**

For payers and providers alike, new customer/member acquisition, retention, and competitive switching strategies are a critical part of growth and success. To effectuate those strategies, though, all parties must be able to act intelligently on tailored, real-time member insights. As a result of the increasing consumerization of healthcare

— manifest in the growth in individual ACA memberships, an increasingly competitive Medicare Advantage marketplace, new competition from large payers and retailers offering their own networks and select services — consumers increasingly expect their health insurance plans to offer a seamless experience. Payers and providers unable to anticipate consumer expectations and respond effectively will suffer.

Customers have a variety of choice options and health plans must compete for long-term growth. Healthcare organizations trying to analyze member interactions and behaviors to improve acquisition and retention rates can struggle to aggregate data from operational ERP and CRM systems, member data sources, social channels, and marketing tools. Without real-time access to data from all these sources, it's not possible to gain the insights desired.

The Actian Avalanche Healthcare Data Analytics Hub simplifies and accelerates member 360 analytics and ROI. It consolidates and enriches data from disparate internal and external systems, processes and analyzes large datasets, and delivers actionable insights that can drive member acquisition and retention. It can optimize customer interactions, improve customer and partner satisfaction, and increase your ability to compete effectively in an ever more competitive healthcare market.





## Summary

Data is key to insight, and organizations throughout the healthcare industry need more of both. But organizations also need better ways to gain insights from the data they have — or could have, if they could only access it easily and share it in a timely manner. The challenges arising from the ongoing evolution of the healthcare industry — from the adoption of new models of care delivery and value-based payments to the adoption of new rules mandating how organizations interact — require all members of the industry to rethink the way they operate internally as well as the ways in which they cooperate externally.

For organizations throughout the healthcare ecosystem, the Actian Avalanche Healthcare Data Analytics Hub overcomes the challenges inherent in the drive to make the most of healthcare analytics. It enables payers, providers, and technical service providers to share data in a frictionless manner and to perform the healthcare analytics they need more efficiently and effectively. Member, partner, and provider onboarding processes are greatly simplified through the data integration features of Avalanche, and unified datasets comprised of member data culled from all these sources facilitate an organization's ability to engage with individuals and precisely targeted populations more effectively.

Contact [Actian](#) to see how the Actian Healthcare Data Analytics Hub can help your organization accelerate and improve its valuebased care and payments initiatives and solutions. For more on the Healthcare Data Analytics Hub, visit our web page:

[www.actian.com/solutions/healthcare-analytics](http://www.actian.com/solutions/healthcare-analytics)



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