

# Delivering patient-centric care with data + AI

Building a smarter and more innovative healthcare ecosystem starts by unlocking the power of data and machine learning. Today's leading healthcare organizations are leveraging intelligent analytics capable of processing diverse, population-scale data sets, and cutting through their complexity, to move clinical research forward, provide real-time patient insights and enable personalized care.

## Leading healthcare organizations power innovation with Databricks



Improved medication adherence by using ML to analyze 70 million prescriptions and personalize patient outreach



Deployed AI models to assist claims adjudicators in validating rebate claims, leading to reduced rebate wastage



Provided physicians with individualized disease risk profiles for 100k+ patients through the analysis of population-scale genetic and EHR data

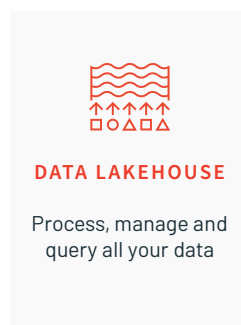
## Improve patient care with a health lakehouse on Databricks

Bring together all of your healthcare data into a single, open and collaborative platform, that supports all of your data, analytics and AI workloads, from data engineering to business intelligence and data science.

### All your healthcare data

EHR	Semistructured	→
Genomic	Structured	→
Billing and payments	Structured	→
X-Rays	Unstructured	→
MRIs	Unstructured	→
Physician notes	Unstructured	→
Pathology slides	Unstructured	→
Audio and video	Unstructured	→
Medical IoT	Unstructured	→

### Reliable, real-time processing



### Analytics capabilities for every use case

- Dashboards for clinicians
- Recommendations and chatbots on patient portals
- Knowledge graphs for researchers

DATA CHALLENGE	DATABRICKS SOLUTION
<b>Healthcare data is siloed and hard to integrate:</b> Processing various forms of data across disparate EHR systems and data sources can be slow and error-prone, impacting downstream analytics.	<b>Longitudinal view of patient health:</b> Connect structured and unstructured data from EHRs, wearables, imaging platforms, genome sequencers, and more to deliver a complete view into patient health.
<b>Traditional analytics can't scale:</b> Inability to scale processing and analytics to meet the needs of an entire population impedes the ability to efficiently deliver patient care to the masses.	<b>Analytics and AI at population scale:</b> Leverage the cloud and a unified analytics platform to scale analytics and machine learning for millions of patients.
<b>Reproducibility is error prone:</b> The lack of repeatable analytics and machine learning workflows adds an unnecessary DevOps burden that slows innovation.	<b>Clinical reproducibility and compliance:</b> Secure, collaborative analytics environment that streamlines the machine learning lifecycle and enables regulatory-grade MLOps.

## Databricks healthcare customers



## Data + AI use cases in healthcare

Across the healthcare landscape, data and AI is providing the insights and predictive capabilities to personalize care, automate claims and payment processing and improve patient engagement.

**Administrative Process Automation:** Automate business processes driven by claims and EHR data with real-time streaming EHR and claims processing pipelines, machine learning and easy-to-use clinical dashboards.



Claims and Revenue Cycle Automation



Fraud and Waste Detection



Streamline Administrative Workflows

**Population Health:** Predict broader health risks by analyzing social, behavioral and environmental factors at population scale.



Identify impact of Social Determinants of Health



Identify and Manage Undiagnosed Chronic Disease



Build Predictive Risk Models

**Patient Engagement:** Optimize patient care cycle by creating tailored experiences across digital channels.



Reduce Churn Through Member 360



Reduce Healthcare Costs With Benefits Recommendations



Proactively Monitor Patient Health With Digital Apps

To learn more visit us at [dbricks.co/healthcare](https://dbricks.co/healthcare)

## The Databricks Impact

Databricks enables healthcare organizations to drive innovations in patient care while reducing management overhead through detailed analysis of disparate and complex data, machine learning and AI.

### Accelerate innovations for groundbreaking care

Our healthcare-focused open-source projects (Glow for genomics and Smolder for ingesting EHR and claims data), and data science solution accelerators provide validated tooling that you can roll into production today. They are the fastest way to uncover new treatment programs and identify opportunities to improve patient care at a massive scale.

### 30-70% gain in productivity

**Impact:** More productive data scientists reduce the time needed to develop a new AI model.

### 1.6x better compute consumption

**Impact:** Reduces infrastructure costs for critical workloads by >60%.