

# Data Quality Without Compromise for Healthcare & Life Sciences

## Trust your data for faster discovery and safer care

In healthcare and life sciences, trustworthy data is essential. Every decision that shapes care, research, operations, and compliance relies on information that's complete and accurate. Yet data is scattered across EHRs, claims systems, labs, imaging files, clinical devices, trial systems, and real-world evidence sources, making quality gaps difficult to detect and prevent.

- 82% of healthcare professionals are concerned about the quality of data received from external sources
- 95% of physicians say getting the right clinical information at the right time is very important

## When Data Fails, Care & Research Suffer

Low-quality data compromises safety, efficiency, and scientific progress:

- **Clinical risk:** Missing vitals, incomplete labs, documentation gaps, and inaccurate timestamps delay care and distort patient risk
- **Fragmented operations:** Mismatched or missing fields across EHRs, claims, labs, imaging, and device data weaken coordination and analytics
- **Research delays:** Incomplete cohorts, drift across trial datasets, and inconsistent real-world evidence slow studies and threaten validity
- **AI degradation:** Models for acuity, length of stay, readmission, staffing, forecasting, and cost-of-care deteriorate when data is unreliable
- **Regulatory exposure:** HIPAA, FDA, QMS, and GxP requirements demand validated, traceable pipelines that fragmented systems struggle to maintain

## Trusted Data Strengthens Care, Research, and Operations

When healthcare data is complete and consistent, organizations make faster, safer decisions:

- Clinical decisions improve
- Research accelerates
- Operations run more efficiently
- AI models become more reliable

## Why Legacy Tools Fall Short

Legacy data tools fall into two groups:

1. Rules-based data checking
2. Metadata-only observability tools

Rules-based validation and metadata-only observability tools cannot keep up with the volume, variability, and regulatory requirements of healthcare data. They catch surface issues but miss anomalies such as distribution shifts, documentation changes, or inconsistent device data.

The result is a reactive loop where teams only catch issues after they become problems.

Healthcare and life sciences institutions are stuck in a **data quality doom loop**: writing rules, chasing alerts, discovering issues too late, then scrambling to write more rules.

Anomalo breaks the loop, providing the trusted data foundation that modern healthcare and life sciences organizations need to improve outcomes and operate with confidence.

## Comprehensive Coverage for Every Kind of Data

**Structured data:** Monitor and validate mission-critical datasets, from clinical encounters and lab results to claims data and EHR records, using AI-based anomaly detection to ensure patient safety and operational accuracy.

**Unstructured data:** Extend monitoring to clinical notes, physician logs, and research documents that inform regulatory compliance reporting (such as HIPAA or GxP).

**AIDA, Anomalo's Intelligent Data Analyst:** Explore and explain your data using natural language. AIDA helps teams investigate anomalies, find patterns, and take action before issues impact patient outcomes or revenue cycles.



# The Automated Data Quality Platform for Healthcare and Life Sciences

Anomalo’s unsupervised machine learning understands how your data behaves and monitors it continuously for unexpected changes. It learns the natural patterns in clinical and operational datasets, including seasonality, census shifts, claim cycles, trial cohort variations, and changes in clinical documentation.

## Healthcare and life sciences organizations use Anomalo to:



**ENSURE CLINICAL ACCURACY**  
Detect missing vitals, incomplete lab results, irregular coding patterns, and unlinked encounters



**IMPROVE REVENUE CYCLE AND CLAIMS INTEGRITY**  
by identifying unexpected changes in CPT and ICD coding, missing claim attributes, eligibility gaps, and reimbursement accuracy



**SUPPORT REGULATORY, AUDIT, AND COMPLIANCE READINESS**  
through schema change detection, anomalies, and PHI exposure risks for HIPAA, FDA, QMS, and GxP requirements



**IMPROVE AI AND MODEL PERFORMANCE**  
with detection of demand anomalies, clinical pattern shifts, inconsistent acuity or risk scores, trial cohort drift, and gaps in real-world inputs

## AI-Ready Data

Anomalo helps healthcare and life sciences organizations keep clinical, operational, and research models reliable by detecting shifts in the data that feeds them. It learns how datasets evolve over time and flags issues early, so teams can intervene before predictions or workflows are affected.

### With Anomalo, healthcare and life sciences teams can:

- **Detect shifts** in clinical, operational, and research datasets that impact model performance
- **Catch issues in unstructured sources** such as documents and reports to identify risks like PII exposure, inconsistencies, or gaps that could influence downstream AI
- **Maintain stable inputs** for forecasting, risk scoring, and cohort modeling
- **Reduce the risk** of silent model drift in clinical and operational settings

## Powering Mission-Critical Healthcare Data

VillageCare is a community-based, not-for-profit organization headquartered in New York, serving over 36,000 members including senior citizens and individuals needing continuing care.

“It’s very helpful that Alation is linked to Anomalo. We don’t have to create special licenses because our stewards can just check alerts in Alation against any table, view, or object.”

— Diana Melnikov, Data Governance Manager at VillageCare

A partnership that prioritizes patients: Anomalo automated data quality for VillageCare’s 36,000 members, turning hours of manual reconciliation into instant alerts within Alation to ensure trusted insights for critical care decisions without taxing analyst resources.



Ready to break the doom loop? [Learn how Anomalo helps ensure data accuracy, compliance, and trust.](#)