

# Data Integration Done Right: The Engine of Medicaid Transformation



## State health and human services agencies face a perfect storm.

They are navigating tightly managed eligibility, rising hospital subsidies, and the expansion of managed care. On top of that, federal legislation now enforces strict cross-program coordination, such as SNAP verification and Social Security (SSN) number requirements.

The biggest hurdle? Fragmented data. When technology operates in silos, scattered across disparate platforms for management, logging, observability, and security, states can't see the full picture. This siloed approach blocks real-time decision making, undermines the ability to deliver evidence-based interventions, and hurts the very people Medicaid serves.

Modernization isn't just strategic; it's essential. But states don't need a disruptive, rip-and-replace overhaul to fix it.

## The Cost of Disconnected Data

During the recent unwinding period, **69% of disenrollments were procedural**, meaning people lost coverage due to paperwork issues, not necessarily ineligibility. Integrated data systems are critical to closing these gaps and ensuring eligible residents stay covered.

## A Phased Approach to Modernization

States can achieve meaningful results without the disruptions of a wholesale transformation. By building incrementally on existing platforms, states can address critical gaps in data integration and analytics step-by-step.

This phased approach minimizes disturbance. It allows state agencies to demonstrate value early, building the organizational confidence needed for the ambitious initiatives that will ultimately improve service delivery for millions.

## The Power of a Unified View

True success comes when you integrate multiple datasets into one secure view, including Medicaid data (e.g., eligibility, claims, Rx, needs assessments, etc.), human services data (e.g., SNAP, Temporary Assistance for Needy Families (TANF), and child welfare), and public health records (immunizations, population health, etc.), and potentially education (e.g., K-12) and workforce records (e.g., employment and wage information).

This integration reduces blind spots and enhances cross-program visibility. It facilitates coordinated interventions and ensures equitable services. Given the federal support for Medicaid information systems, it makes sense to start building a multi-agency solution with the state's largest, most complex program.

## The Value of a Modern, Purpose-Built Platform

There are a plethora of data and analytics solutions available on the market, so many that selecting a partner can be incredibly difficult for state leaders. However, generic data models cannot meet the specific needs of state health agencies. States need a platform built for public sector healthcare, one that has built-in alignment with federal adherence and state priorities.

A modern, purpose-built platform specifically for government programs allows states to:

### **Streamline Federal Adherence and Reporting:**

Manually mapping data for Transformed Medicaid Statistical Information System (T-MSIS), CMS scorecards, and other mandatory reporting is resource-intensive. A modern platform offers pre-built data structures that align with federal standards. These standardized tables can automatically populate required metrics for work compliance, eligibility verification accuracy, and program integrity measures, enabling agencies to demonstrate compliance in real time rather than waiting on quarterly or annual reporting cycles.

### **Coordinate Care Intelligently:**

A modern data and analytics (D&A) platform can help states move beyond fragmented data points. Clinical groupers can connect those data points and enable comprehensive, episode-based analysis, revealing patterns in care utilization and gaps in service delivery. These analyses can support whole person care and value-based payment arrangements.

### **Innovate with Flexibility:**

Need to support a new initiative such as a waiver program or postpartum extension? Customizable, program-specific data layers allow agencies to implement new initiatives or modify existing ones seamlessly, rapidly, and responsively to new priorities or federal regulations without extensive system reconfiguration.

### **Predict and Prevent:**

Comprehensive beneficiary intelligence delivers longitudinal, holistic patient records across programs, addressing coverage gaps and improving population health outcomes. These records allow states to predict who needs intervention before a crisis hits and coordinate care more effectively. By integrating data across systems and identifying trends toward severe comorbidities or emergency visits, agencies can intervene early, improving outcomes and reducing costs.

### **Make Data-Driven Decisions:**

A purpose-built platform tailored to program and policy priorities can give agency leadership the tools to navigate complex policy landscapes. Customizable analytics generate real-time insights on policy impacts, resource allocation, and population health trends, informing every element of program strategy and design and helping guide policymaking.

Federal funding is becoming more restrictive and compliance requirements more complex. Implementing analytics designed specifically for public sector healthcare ensures states maintain their commitment to serving vulnerable populations while demonstrating fiscal responsibility and program effectiveness to stakeholders at all levels of government, particularly CMS.

# The Tech Building Blocks: Lakehouse Architecture, AI, and Governance

Just as the strongest buildings have exceptional architecture at their foundation, states need the right data architecture to deliver their goals.

## The Foundation

**Lakehouse architecture** combines the scale of a data lake with the governance and performance of a data warehouse. This model eliminates fragmentation and silos by providing one architecture for integration, storage, processing, governance, sharing, analytics, and AI. A lakehouse structure that complies with Federal Risk and Authorization Management Program (FedRAMP) High authorization and has proven government deployments is critical too.

The lakehouse model enables states to manage structured and unstructured data in one place, seamlessly integrating eligibility data, claims information, health information exchange (HIE), provider records, and administrative datasets scattered across siloed systems. It supports real-time processing with low latency and secure “mini-lakehouses” can be built for specific programs, departments, and/or organizations within state agencies. Lakehouse architecture capabilities provide state agencies with a secure foundation for sensitive beneficiary data and cross-agency integration.

## Advanced Analytics and AI

As data continues to multiply, states need AI and machine learning (ML) to help staff make sense of it. State agencies need a platform designed to adopt the latest AI and ML models without compromising governance or security. A future-proof AI foundation enables:

- **Predictive Analytics:** Identify individuals at risk of losing coverage before it happens. By analyzing patterns in employment data, healthcare utilization, and socioeconomic indicators, as well as identifying emerging health crises or social determinants of health issues, the model can trigger proactive interventions.
- **Fraud Detection:** Using anomaly detection models, states can spot suspicious activity across multiple data streams in real time. Advanced tools can analyze patterns in benefit usage, provider billing, and work hour reporting, and cross-reference externally to flag suspicious activities while minimizing false positives.
- **Policy Modeling:** Modeling anticipated impacts of policy changes helps leaders make data-driven decisions that maximize positive outcomes.

## Robust Governance

States need a governance backbone that helps navigate evolving federal requirements and address data management challenges at a more rapid and frequent pace. An ideal platform should provide:

- **Compliance and Audit Capabilities:** Lineage tracking and audit logging are essential to addressing enhanced verification requirements. Automatically capture how the data moves, is transformed and used across systems as well as who accessed what data, when, and for what purpose for visibility into access patterns, transformations, and usage. This creates an audit trail that satisfies compliance mandates and enables agencies to quickly respond to oversight requests.
- **Access Control:** Attribute-based access control is key to allowing data sharing permissions that respect operational needs and privacy requirements. Enforce precise sharing permissions to restrict access to sensitive medical records or individual patient identifiers while enabling necessary data flow of specific datasets to specific roles.

- **Policy Enforcement and Data Classification:** Use innovative policy enforcement to power automatic classification and protection of sensitive data aligned with federal and state regulations. Automatically apply retention policies, encryption, and access restrictions to ensure consistent handling of SSNs, medical records, financial information, and other protected data types according to security protocols.
- **Compliance and Risk Management:** Utilize continuous monitoring to identify compliance risks proactively, minimizing potential violations. Automatically generate detailed compliance reports and alerts, empowering leadership to address concerns quickly and demonstrate proactive governance to federal oversight agencies.
- **Cross-Platform Data Integration:** Govern data across existing assets without wholesale replacement. This adds a governance layer across existing investments, enabling centralized control for compliance and security while supporting phased modernization and consistent policies across platforms.

## Three Ways to Make Rapid Progress

State agencies are reimagining what’s possible for state healthcare programs, but legacy tools can only take them so far. Here are three ways states can start a modernization journey today:

1

**Align Your Vision:** Launch workshops and interviews to document current data assets, governance, and reporting capabilities, and management information gaps then co-design a future vision aligned with your policy and program goals. Identify pain points and create a roadmap for incremental modernization that addresses short-term and long-term wins.

2

**Assess Your Data:** Conduct a targeted data inventory cataloging datasets across Medicaid, human services, and public health. Assess their quality and interoperability and highlight gaps in governance, security, and metadata before broader adoption. Prioritize high-value programs like maternal or behavioral health to focus resources on the areas of greatest impact.

3

**Get started with a rapid, high-impact implementation:** Launch a six- to nine-month modernization proof of concept (PoC) demonstrating the value. Target a high-impact use case—like rural health analytics—to showcase rapid insights, measurable efficiency gains, and improved decision-making to build stakeholder confidence.

It is time for states to move from planning to progress. With the right data and analytics platform, your state can turn fragmented data into connected intelligence, supporting smarter policy, and driving better care for your residents.



## About Gainwell

Gainwell Technologies is the nation's leading provider of digital and cloud-enabled solutions across all 50 states, US territories, and the human services and public health ecosystem. With our 13,000 experts, practitioners, and clinicians, we are uniquely positioned at the intersection of technology and healthcare providing unmatched value through our suite of innovative products and solutions created to solve our clients' most complex challenges. We are mission-driven and outcome-focused, committed to building trusted, lasting relationships, and delivering results beyond the expected. Learn more about our people and capabilities at [gainwelltechnologies.com](https://gainwelltechnologies.com).

## About Databricks

Databricks is the Data and AI company. More than 20,000 organizations worldwide — including adidas, AT&T, Bayer, Block, Mastercard, Rivian, Unilever, and over 60% of the Fortune 500 — rely on Databricks to build and scale data and AI apps, analytics and agents. In the Public Sector, over 450 of the largest federal, state and local agencies rely on Databricks. Headquartered in San Francisco with 30+ offices around the globe, Databricks offers a unified Data Platform that includes Agent Bricks, Lakeflow, Lakehouse, Lakebase and Unity Catalog. Databricks model is fundamentally different from fixed or seat-based licenses. Instead of being locked into today's features, customers enjoy a platform that grows and evolves with their business needs, giving them access to every innovation Databricks delivers. Customers avoid technical debt and stay ahead by leveraging a modern, unified data and AI platform designed for rapid evolution.

