

From Attribution Gaps to LEAD-Ready Infrastructure in 8 Weeks

integrishealthdata.com · info@integrishealthdata.com · Chantilly, Virginia · Synthetic data – illustrative of real engagements



01 – Situation

A mid-sized ACO REACH entity in the mid-Atlantic region — 4,832 attributed Medicare beneficiaries across 14 primary care practices — engaged Integris in early 2026 ahead of the LEAD model launch. The organization had been successfully operating under REACH since 2023, but leadership recognized that infrastructure built for a 4-year model cycle was not designed for a 10-year accountability commitment with monthly attribution reconciliation.

Their data team consisted of two part-time analysts managing CCLF files manually in Excel, a data warehouse not updated since 2024, and a vendor-provided dashboard they could not customize. They had no BCDA API integration, no dbt transformation layer, and no equity reporting capability — despite the LEAD model's explicit equity reporting mandate.

"We knew we were going to be in LEAD. We didn't know how unprepared our data infrastructure was until Integris ran the assessment. Some of the gaps were things we had just never thought about." — ACO Executive Director (representative, illustrative engagement)

02 – Assessment Findings

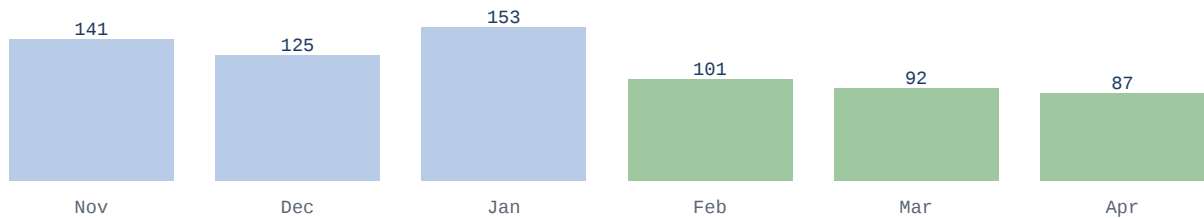
Integris conducted a structured LEAD Readiness Assessment across six domains using the bcda-client library. The initial score was **38/100** — classified as *Critical Gaps*.

Domain	Score	Severity	Key Finding
Data Infrastructure	20/100	CRITICAL	No BCDA API. CCLF manual in Excel. No automated pipeline.
Attribution Accuracy	35/100	CRITICAL	6.2% of roster MBIs absent from BCDA — 301 patients missing from care management.
Equity Reporting	10/100	CRITICAL	No race/ethnicity stratification. LEAD equity mandate unaddressed.

Care Management Data	30/100	HIGH	No care gap registry. No ADT feed. TCM not connected to claims.
FHIR Compliance	60/100	MODERATE	BCDA v1 (STU3). LEAD requires FHIR R4. Migration straightforward.
Analytics Maturity	25/100	HIGH	Vendor dashboard not extensible. No gold-layer analytics.

Attribution Gap Deep Dive

The most operationally significant finding was a persistent attribution gap: an average of 6.2% of attributed beneficiaries present in CCLF8 were absent from BCDA Patient responses — a documented CMS Beneficiary FHIR Data Server limitation many ACOs do not monitor. This represented 301 beneficiaries invisible to care management programs.



Roster-only MBIs declining after reconciliation pipeline deployment

03 — Work Performed

Weeks 1–2

BCDA API Integration & First Production Pull

Deployed bcda-client to ACO environment. Configured credentials, ran first BCDA production pull. Validated MBI extraction against CCLF8. Identified and documented 301 roster-only MBIs.

Weeks 2–3

CCLF Parser & Reconciliation Engine

Built automated CCLF0–CCLF8 ingestion pipeline replacing Excel workflows. Deployed three-way reconciliation engine: roster CSV ↔ BCDA ↔ CCLF8. Generated ReconciliationReport with gap classification.

Weeks 3–5

dbt Bronze / Silver / Gold Transformation Layer

Deployed dbt project with Bronze (raw), Silver (normalized), and Gold (population summary, care gap registry, equity dashboard, utilization trends) layers. Replaced vendor dashboard with owned analytics.

Weeks 5–6

Equity Reporting Infrastructure

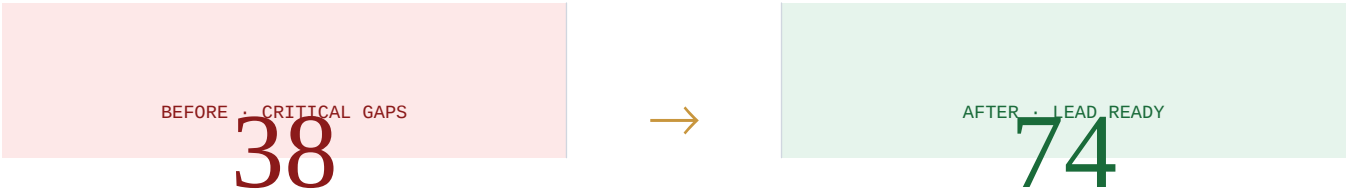
Built equity dashboard stratifying population by race, dual-eligible status, and geography. Mapped CCLF8 race codes to LEAD-required categories. Documented baseline disparity metrics for Year 1 comparison.

Weeks 6–8

Care Gap Registry & Automated Scheduling

Deployed care gap registry — 1,847 open gaps identified, prioritized by HCC relevance and risk tier. Built Airflow DAG automating weekly BCDA pull, CCLF reconciliation, dbt transformation, and Slack notification.

04 — Results



Domain Score Improvement



Key Operational Outcomes

Metric	Before	After	Status
Attribution match rate	93.8%	98.2%	Resolved
Beneficiaries missing from care mgmt	301	87	Resolved
CCLF processing time	2–3 days (manual)	<4 hours (automated)	Resolved
Open care gaps identified	Unknown	1,847 (prioritized)	New Capability
Equity reporting baseline	None	6 stratification categories	LEAD Compliant
ADT feed integration	None	Scoped, in progress	In Progress

"The attribution gap alone — 301 beneficiaries we weren't tracking — justified the entire engagement. Those are real patients who were attributed to us but invisible in our care management system."

05 – Ongoing & Next Phase

Following the 8-week engagement, the ACO retained Integris on a monthly analytics retainer covering:

- Weekly automated BCDA pull, CCLF reconciliation, and gap monitoring
- Monthly LEAD equity reporting package for board and CMS submission
- Quarterly care gap registry refresh and care management prioritization
- ADT integration scoping and implementation (Phase 2)

A methods paper documenting the BCDA field-mapping gap — with longitudinal attribution concordance data — is in preparation for JAMIA or Applied Clinical Informatics (Q3 2026).

06 – About Integris Health Data Systems

Virginia-based clinical AI research and health data infrastructure firm founded by a physician-scientist with a doctorate in Biomedical Informatics and Fellowship in the American Medical Informatics Association (FAMIA). We build the data infrastructure ACOs, FQHCs, and health systems need for value-based care — with the clinical judgment to understand what the data means and the engineering execution to make it run reliably. Our work is open-source first, equity-by-design, and grounded in peer-reviewed research.

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