Case Study

Internal Audit Review of a Commercial Value-Based Care (VBC) Program

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1. Background

- **Organization:** Integrated Delivery Network (IDN) contracting with a large national commercial payer.
- **Program Type:** 5-year upside/downside shared-savings agreement for ~50 k covered lives. Quality, cost, and patient-experience metrics drive quarterly incentive payments.
- **Why Audit Was Requested:**
    - First downside-risk year is approaching.
    - CFO and Compliance Officer want assurance that financial settlements, quality scores, and risk-adjustment factors are accurate and defensible.
    - Prior analytics flagged unexplained care-management spend spikes in two regions.

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2. Audit Objectives

Provide reasonable assurance that:

1. **Contractual requirements** (patient attribution, quality metric definitions, financial reconciliation) are met.
2. **Operational controls** ensure accurate, complete, and timely data for performance reporting.
3. **Predictive-analytics models** used for risk stratification are valid, monitored, and effectively drive targeted interventions.
4. **Provider incentives** align with VBC goals without creating fraud-and-abuse exposure.

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3. Scope & Key Risks

Domain	Key Risks	Illustrative Questions
Data Integrity	Inaccurate member attribution, missing encounters, faulty risk scores	How reliable is the data pipeline from EHR/claims to the payer portal?
Quality Metrics	Mis-coded screening completions	Are logic edits properly applied in the analytics platforms?
Cost & Shared Savings	Incorrect PMPM benchmarks, unapproved carve-outs	Does finance reconcile payer settlement files to internal cost-accounting?
Predictive Analytics	Model drift, unvalidated SDoH variables	Is there documented model-validation with clinical input?
Compliance & Ethics	Stark / AKS violations in bonus design	Do provider comp plans comply with commercial insurance regulations?

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4. Workplan

Phase	Step	Activities & Deliverables
Planning	1. Engagement Kickoff	Charter, stakeholder map, confidentiality agreements
	2. Contract & Metric Deep-Dive	Read contract, payer technical specs; map to objectives
	3. Risk Assessment Workshop	Heat-map risks; set materiality & sampling strategy
Fieldwork	4. Data Pipeline Walkthrough	Source-to-target mapping, data-quality tests on history to match payer contract period
	5. Predictive Model Validation	Replicate risk-stratification model on hold-out sample (data not part of predictive model); assess calibration
	6. Control Testing – Quality Metrics	Re-compute 5 high-impact Star measures on stratified sample
	7. Control Testing – Cost & Savings	Re-trace PMPM benchmark calculation; vouch claims exclusions; recalculate shared savings for Q1–Q2
	8. Provider Incentive Alignment	Review compensaton plans, bonus pools; interview 6 physicians; test for AKS/Stark exposure
	9. Governance & Monitoring	Evaluate VBC Steering Committee minutes, KPI dashboards, model-drift monitoring logs
Reporting	10. Synthesize Findings	Risk-rank issues; quantify $ impact; craft actionable recommendations
	11. Management Action Plans	Facilitate remediation workshop; secure deadlines & owners
Follow-Up	12. 90-Day Validation	Test high-priority remediation items (e.g., data-quality controls, model monitoring scripts)

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5. Expected Outcomes & Value

1. **Reliability Assurance:** Leadership gains confidence that Q1-Q2 shared-savings payment (projected $6.2 M) is supportable and free from material error.
2. **Model Governance Roadmap:** Clear ownership, monitoring cadence, and drift-threshold alerts for risk-stratification algorithms.
3. **Control Enhancements:**
    - Automated data-quality checks (completeness, timeliness, validity) embedded in ETL (data integration process that takes raw data from multiple sources, processes it, and loads it into a destination system)
    - Updated provider-bonus policy language to mitigate AKS risk.
4. **Strategic Insight:** Heat-map of under-performing cohorts (groups of patients who share common characteristics and are analyzed, managed, or measured together for care quality, cost, and outcomes) guides population-health investment.

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6. Lessons Learned

- **Cross-functional collaboration** (Audit + Data Science + Clinical Ops) accelerates issue remediation.
- **Iterative validation** of predictive models is essential; one-and-done validation is a hidden liability.
- **Transparent provider incentives** reduce compliance risk and enhance stakeholder buy-in.
