

HiLabs Product Caselet – APM – Campus Hiring 2025–26

Instructions

Solve any ONE of the two problem statements below. Prepare a 6–8 slide (or equivalent PDF) submission addressing the deliverables listed. Focus on product thinking, prioritization, clarity, and a feasible go-to-market approach.

Problem Statement 1: Creating a Single Source of Truth for Provider Data

Case Overview

In the U.S. healthcare system, accurate and up-to-date provider data (information about doctors, nurse practitioners, and other clinicians) is critical for ensuring member access and regulatory compliance. Provider information is fragmented across multiple systems and often contains duplicates, outdated records, and inconsistencies.

Key data sources

- NPES (National Plan & Provider Enumeration System)
- PECOS (Provider Enrollment, Chain, and Ownership System)
- AMA Masterfile (credentialing & specialty verification)
- Care Compare (provider performance)
- State-level exclusion & licensure databases

Problem Statement

Create a unified platform that acts as a Single Source of Truth (SSOT) for provider data across the U.S. healthcare ecosystem. The platform should aggregate and standardize data from federal and state sources and continuously maintain accurate provider information for health plans and payer organizations.

Required capabilities

- Automated identification, matching, and reconciliation of provider records across disparate sources (entity resolution).
- Detection and flagging of discrepancies (e.g., mismatched addresses, specialties, affiliations) with confidence scoring and source-weighting to select the most reliable 'version of truth'.
- Continuous data quality monitoring via automated API refreshes and scheduled web validation checks.
- Provider and payer feedback interface for verification and corrections, with audit trails and data provenance.
- Searchable UI (e.g., search by NPI) showing reconciled provider records, confidence scores, and source breakdowns.
- Downstream API integrations to push verified records into payer/provider systems.

Deliverables (6–8 slides)

- Assumptions & Context: restate the problem and list assumptions.
- Target Users & Stakeholders: 2–3 user personas and their pain points.
- Solution Overview: product vision and core value proposition.

- Technology / Data Flow: high-level ingestion, reconciliation, and validation flow.
- Key Features (MVP Scope): prioritized features and wireframes of critical screens (search by NPI, record view, API actions).
- Success Metrics & Business Impact: measurable KPIs (accuracy %, time saved, compliance improvements).
- Go-To-Market Strategy (brownie points): pilot approach, target buyer personas, pricing signal for first health plan.
- Pitfalls & Future Enhancements: data privacy, integration complexity, advanced analytics (fraud detection, performance scoring).

Problem Statement 2: Designing a Risk & Rate Benchmarking Intelligence Platform

Case Overview

Payers need transparent insights on provider rates, network risk, and quality to negotiate contracts, manage network adequacy, and control costs. Recent CMS mandates (TiC / MRFs and Hospital Price Transparency) enable access to negotiated rate data which, when combined with claims and directory data, can power strategic analytics for contracting and network management.

Problem Statement

Design a Risk & Rate Benchmarking Intelligence Platform for payers that helps network executives, network managers, and contracting teams make better decisions using TiC/MRF data, claims, and provider directories.

Core capabilities to demonstrate

- Rate Benchmarking: compare provider negotiated rates vs. market/peer averages and flag outliers.
- Risk Scoring: risk-adjusted cost-per-member trends and concentration risk across geographies/specialties.
- Network Adequacy Visualization: heatmaps and gap analysis by county & specialty.
- Interactive Dashboards & Reports: ability to filter by region, specialty, and time window for contracting negotiations.
- Data Integration: ingest TiC/MRF files, normalize formats, and join with claims/enrollee data for risk-adjusted metrics.

Deliverables (6–8 slides)

- Assumptions & Problem Context: payer pain points and assumptions.
- User Personas & Needs: network executives, network managers, provider contracting teams – their key questions.
- Solution Overview: product vision and value for each persona.
- Data Flow & Analytics Framework: how TiC/MRF, claims, and directories are combined and normalized.
- Key Features / MVP Scope: Rate Benchmarking tool, Risk Scoring dashboard, Network Adequacy heatmap.
- Success Metrics & Business Value: negotiation impact, cost savings, reduction in risk concentration.
- Pitfalls & Future Enhancements: MRF volume/standardization issues, predictive modeling, integration with quality scores.

Appendix / References

Key Data Sources

- NPES – National Plan & Provider Enumeration System
- PECOS – Provider Enrollment, Chain, and Ownership System
- AMA Masterfile – Credentialing and specialty verification
- Care Compare – Provider performance and public transparency
- Transparency in Coverage (TiC) / Machine-Readable Files (MRFs)
- Hospital Price Transparency data
- Claims and enrollee data (for risk-adjusted metrics)
- State-level exclusion & licensure databases

Recommended Reading & References

- Provider Directory Data Management & the Cures Act
- CMS Provider Data Catalog and Network Adequacy Regulations
- Payor Price Transparency (CMS) – <https://github.com/CMSgov/price-transparency-guide>
- Hospital Price Transparency (CMS) – <https://github.com/CMSgov/hospital-price-transparency>