

Atlas Commercial Platform

Drug Policy, Pricing, Reimbursement & Cost Optimisation — Case Study

Overview

Atlas is a concept prototype demonstrating product ownership of a large-scale, backend-heavy healthcare commercial platform: a browsable formulary and pricing catalog, a policy knowledge bank, a cost-optimisation workflow, and a consolidated analytics dashboard — built around the structure of the Abu Dhabi healthcare market (DOH, Daman/Thiqqa, Malaffi, ADHICS, PDPL).

The Business Challenge

Payers and provider networks manage thousands of formulary, pricing, and reimbursement rules that change frequently. That policy is usually trapped in spreadsheets and PDFs, disconnected from the tools staff actually use day to day, and rarely comes with a defensible calculation behind the numbers reported to leadership. The challenge is to translate ambiguous, high-stakes business rules into a system that is scalable, auditable, and genuinely useful to the people who touch it daily — not just a report.

My Role

Acting as Product Owner, I defined the platform's information architecture across six functional areas, designed the formulary rules data model and multiple rule patterns (threshold-based, registry-checked, biomarker-gated, weight-based dosing), and built the KPI framework with full calculation transparency for governance reporting.

Platform Structure

- Product Overview — mission, market context, and four user personas each expressed as user stories ("As a ____, I want ____, so that ____"), directly traced back to the hiring brief this concept responds to.
- Policy Assistant — a knowledge-bank interface with two modes: a general Q&A chat that answers only from uploaded source documents with citations, and a Guided Drug Finder that takes a diagnosis, dosage, and insurance plan and returns ranked formulary options.
- Formulary & Pricing Catalog — 25 drugs across 12 therapeutic classes, filterable by institution type (government vs. private) and tier, sortable by price. Any drug governed by a multi-condition rule has a one-click drill-down into its exact IF/AND/THEN logic.
- Rule Version & Audit History — a version timeline for each rule (effective date, what changed, who approved it), plus a point-in-time evaluation example making explicit that a claim is judged against the rule version in effect on its date of service, not whichever version is live today. This addresses the core operational risk in any commercial-rules platform: keeping pricing and reimbursement logic auditable while the underlying policy keeps changing.
- Cost Optimisation — an interactive savings calculator (cost inputs → projected annual savings) feeding a four-stage kanban pipeline (Flagged → Under Review → Approved → Actioned), so cost management is a workflow, not just a report.
- Dashboard — consolidated analytics: top-line KPIs, formulary mix, claim volume and denial reasons, spend by therapeutic category, and claims aging.

- Dictionary & KPI Definitions — a shared glossary (including Abu Dhabi-specific terms: DOH, Daman, Thiqa, Malaffi, ADHICS, PDPL) plus a full calculation methodology for every KPI and delta shown on the platform.

User Personas

Each persona is expressed as a user story, and each story is checked in the prototype against what was actually built — including one honestly flagged gap (the optimisation pipeline's "Actioned" total isn't yet wired to the Dashboard's Savings Identified KPI).

- Commercial & Formulary Policy Owner — browses and filters the formulary catalog, and simulates a rule change against historical claims before it goes live.
- Cost & Reimbursement Operations Lead — sizes a savings opportunity with real cost/volume inputs, and tracks it from flagged through to actioned.
- Clinical Policy Reviewer — works exception cases with full rule trace attached, and gets sourced answers to policy questions without searching PDFs.
- DOH / Payer Leadership — reviews top-line KPIs with a defensible calculation behind each one, for governance reporting.

Projected Impact

Metric	Baseline	With Atlas
Formulary rule change cycle time	3–4 weeks	2–3 days
Claim turnaround (average)	5.1 days	2.9 days
Denial rate from formulary mismatch	14.2%	8.6%
Identified annual savings	—	AED 9.1M

All figures are illustrative sample data, generated to be internally consistent for demonstration — not sourced from any real organisation. Full calculation methodology for every KPI is documented within the platform's Dictionary & KPI Definitions section.

Skills Demonstrated

- Translating ambiguous business/clinical rules into structured, testable, multi-pattern product logic
- Designing for auditability under change — version history and point-in-time rule evaluation, not just current-state logic
- Information architecture for a multi-persona enterprise platform (catalog, workflow, assistant, analytics, reference)
- KPI and calculation-methodology design for regulated, financially material healthcare products
- User-story-driven scoping, validated against the actual build with gaps honestly disclosed
- Cross-functional backlog ownership across policy, operations, clinical, and leadership stakeholders
- UAE / Abu Dhabi regulated-healthcare domain fluency (12+ years — Cleveland Clinic Abu Dhabi, Burjeel Hospital)