



HEALTHCARE · BACK OFFICE

Denial Resubmission Classification

A large UAE healthcare provider used Quantum One to decide which denied claims to resubmit and how — a 12–18% improvement in net denial rate on the claims it covers.

IMPACT

12–18%

Net denial rate improvement among claims with a relevant denial reason

60–70%

Productivity gain, measured against the annual cost of labor

9–10%

Working capital reduction, from the average annual denial-rate improvement

CLIENT PROFILE

CLIENT

A large UAE healthcare provider

REGION

United Arab Emirates

SCENARIO

Back office

INDUSTRY

Healthcare

COMPANY TYPE

Healthcare provider

CHALLENGES

- The provider faces roughly 6% insurance reimbursement denials annually, creating revenue leakage, manual operational load, and delays in cash collection.
- Resubmission delays cause time limits to expire, and classifying a denial between Internal Complaint and Correction is time-consuming.
- There is limited visibility on which claims are worth prioritizing, and a high workload for supervisors and officers produces inconsistent outcomes.

APPROACH

An AI-driven recommendation engine classifies denied claims and prioritizes them by expected remittance outcome, guiding the team through the optimal resubmission strategy.

It runs on three models: a router that decides how a claim should be handled, a predictor of expected recovery, and a payment predictor at activity level.

BENEFITS

- Resubmission Type Router — Internal Complaint, Correction, or Not for Resubmission
- Resubmission Success Predictor — expected recovery ratio at claim level
- Activity Payment Predictor — payment probability score per activity
- Claims prioritized by expected remittance outcome

MVP FUNCTIONALITY

- The user uploads a spreadsheet and triggers the analysis; the output is immediately available for download.
- Predicted probabilities are calculated using a combination of historical pattern recognition and rule-based logic.
- An analytics tab provides insights across different dimensions — for example a breakdown of the five most frequent denial reason codes.

TIME TO PRODUCTION

Stage	Quantum One	Typical process	
Problem definition	1 week	2–3 weeks	
Proof of concept	2–3 weeks	4–6 weeks	
MVP	4–6 weeks	8–12 weeks	
Scale-up	1–2 months	3–4 months	
Maintenance	Ongoing	—	

TAKE THE NEXT STEP

Speak with our experts to discuss tailored AI solutions for your industry

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