Idea Accelerator: Rate Contract Optimization

AT-Innovation

HCA Healthcare℠

Rate Contract Optimization

Idea Accelerator

25Mar2024

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3. Engagement Plans
4. Discussion

Project Overview

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RSO Project Overview

Problem Statements

- PCA strategic pricing held back by limited tools, creating extra work and suboptimal yield
- MAW does not have scenario optimization features incl. recalculation, trends, or comparison
- PCA requests extra SPS models for each contract, preventing SPS from modeling new contracts

Business Goals

- Price more, price faster – increase efficiency to generate and optimize more scenarios
- Reduce SPS re-model requests for the same contract – exchange for more PCA pricing
- Real-time PCA/SPS collaboration to improve communication and alignment

Business Impact

- Est. $53M – $106M revenue lift
- Free SPS capacity to model more

Judging Success

- **Increase revenue yield compared to baseline – price smarter**
- Increase pricing scenarios generated – price more
- Decrease SPS model revisions per contract – price faster

Discovery Scope

What's in scope?

- Hospital-based contracts, commercial payors
- NPPO contract type, Inpatient service lines
- **AI Training:** UHC Dallas 3/1/24
- **Validation:** UHC Denver 9/1/24 renewal

- **Product scope**
  - **From:** PCA receives MAW revision from SPS
  - **To:** PCA returns MAW guidance to SPS, repeat until contract agreement and entry for signing

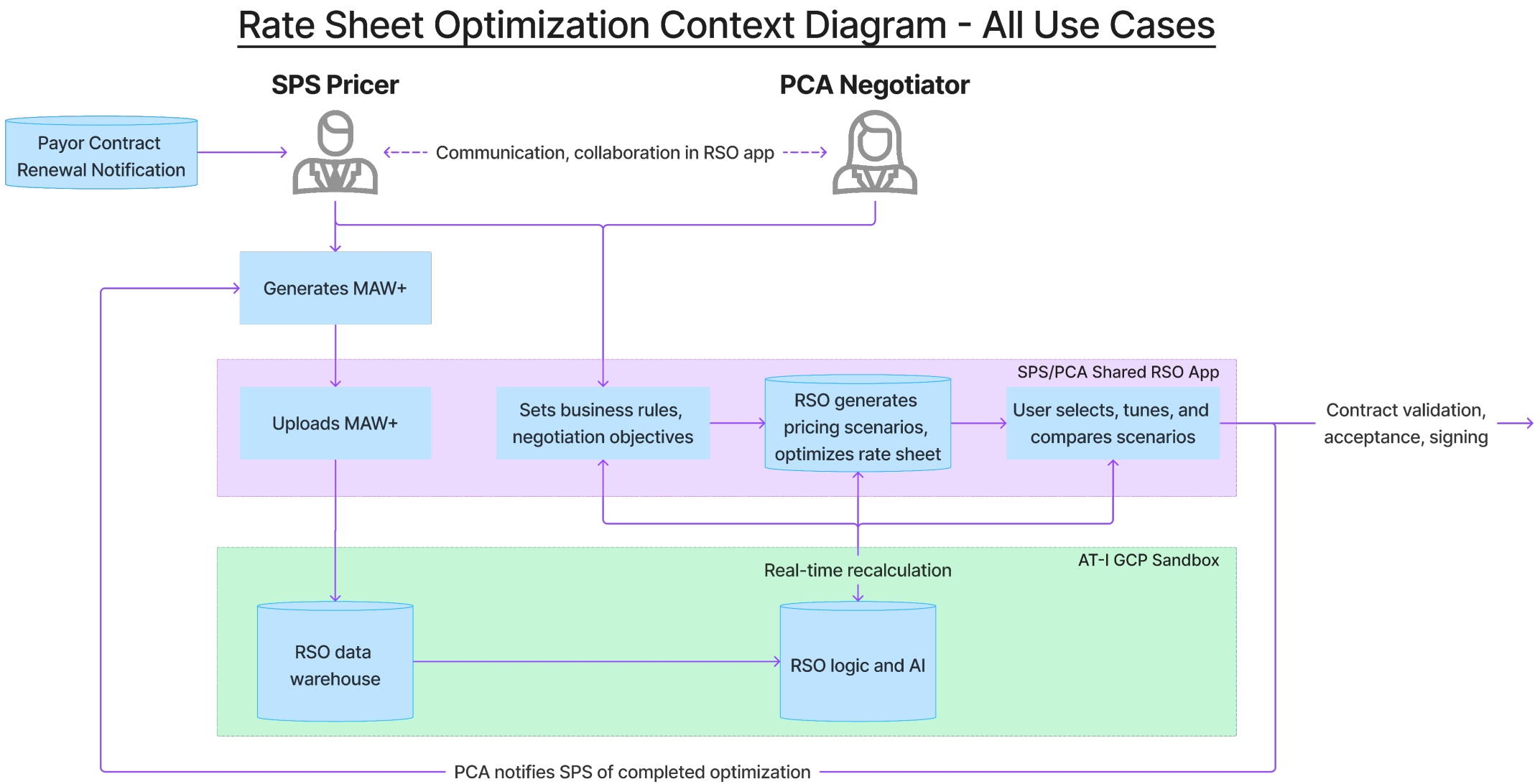
What's out of scope?

- All other contracts, sites, payor types - for now
- SPS MAW generation – optimize as-received MAW
- ADS modeling changes
- IT systems integrations

- **Changing existing PCA negotiation processes**
- **Replacing MAW**

*See rationale in slide notes

Overall Context Diagram



Learnings Since Last Meeting

Rate Sheet Optimization (RSO)

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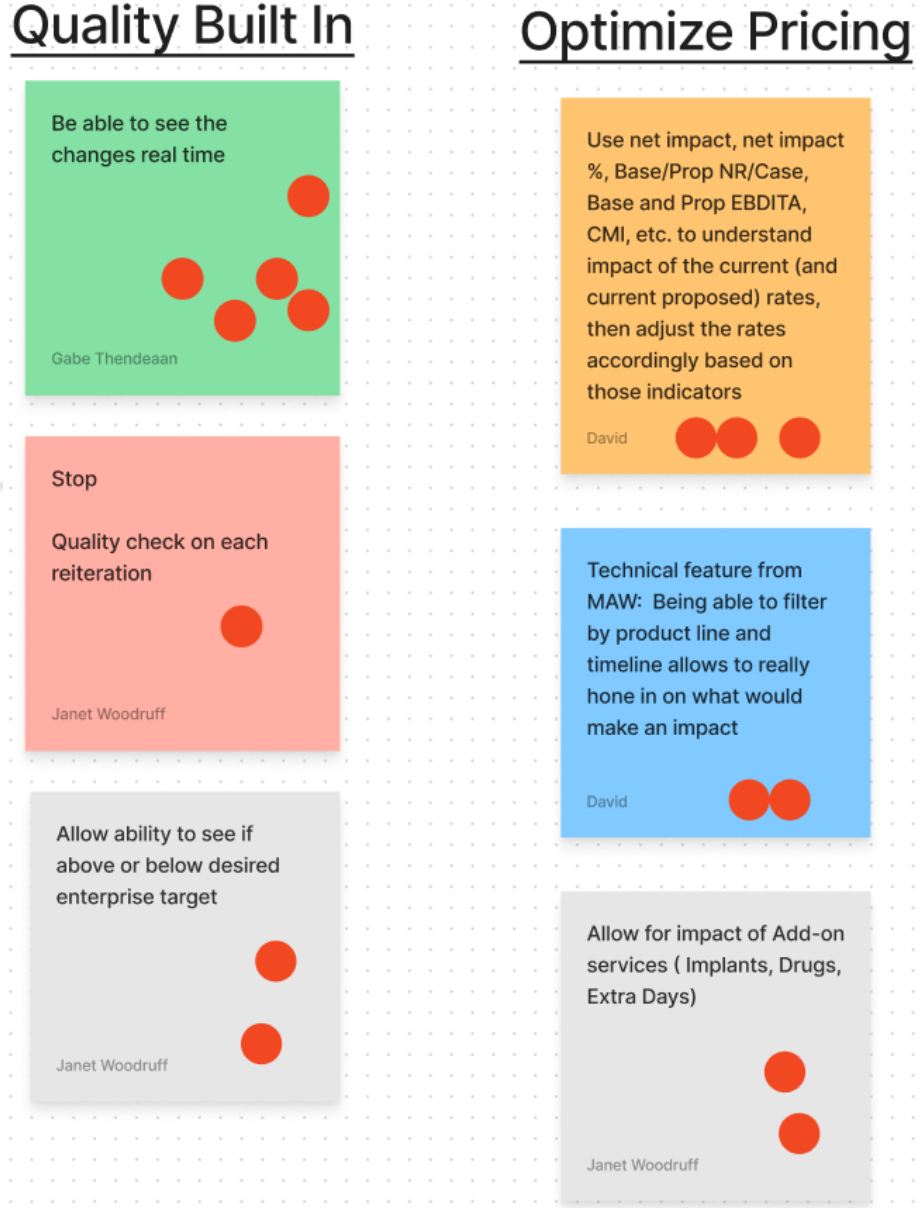
Workshop 1 26Mar

What We Did

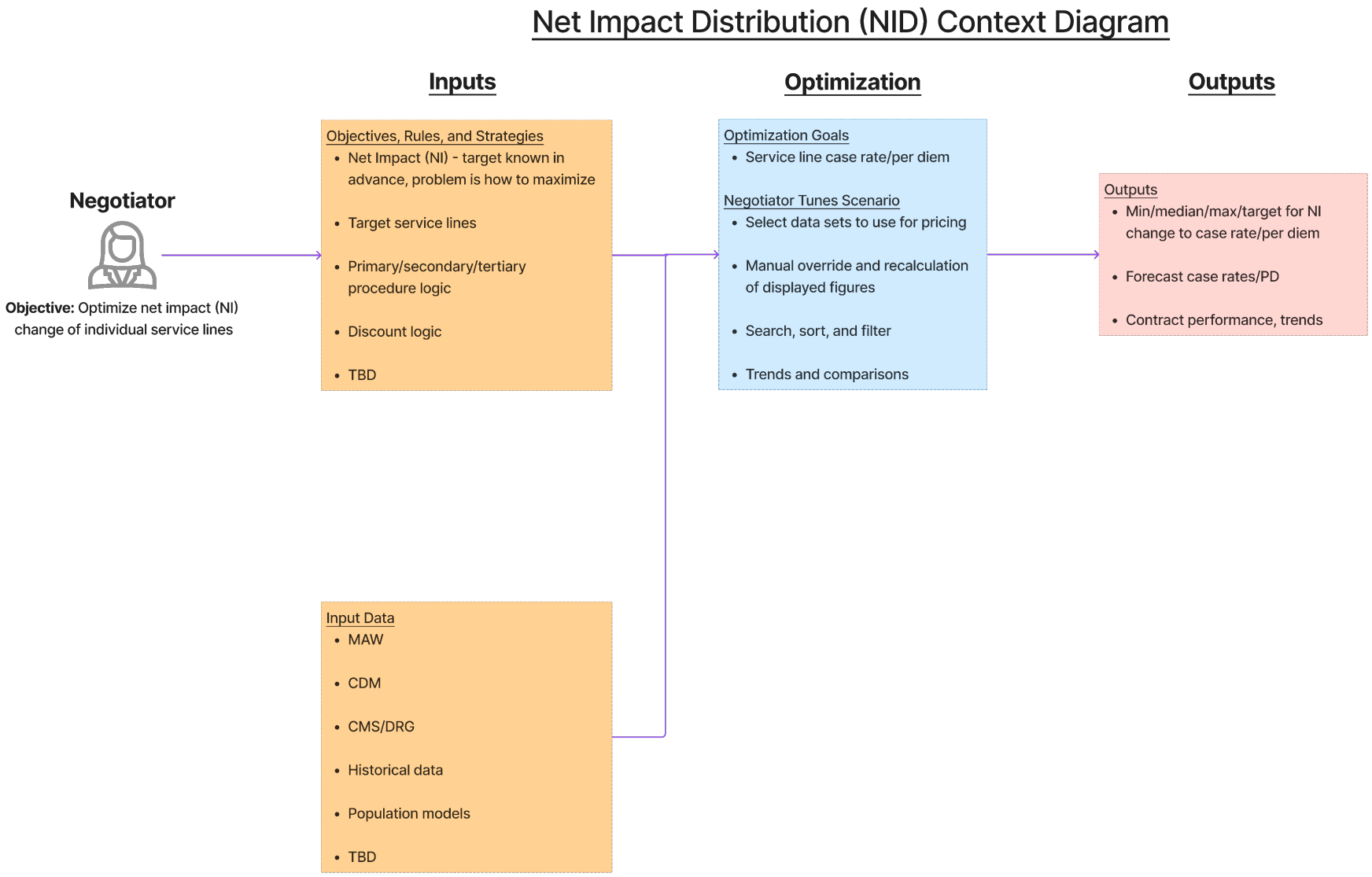
- Start, Stop, Continue
- MAW screenshot discussion – problem/feature mapping
- Desired UX discussion

What We Learned

- Real-time recalculation with quality and data validation built in
- Challenge of identifying which business rules and KPIs to optimize around, and when
- Add-ons generate significant attention



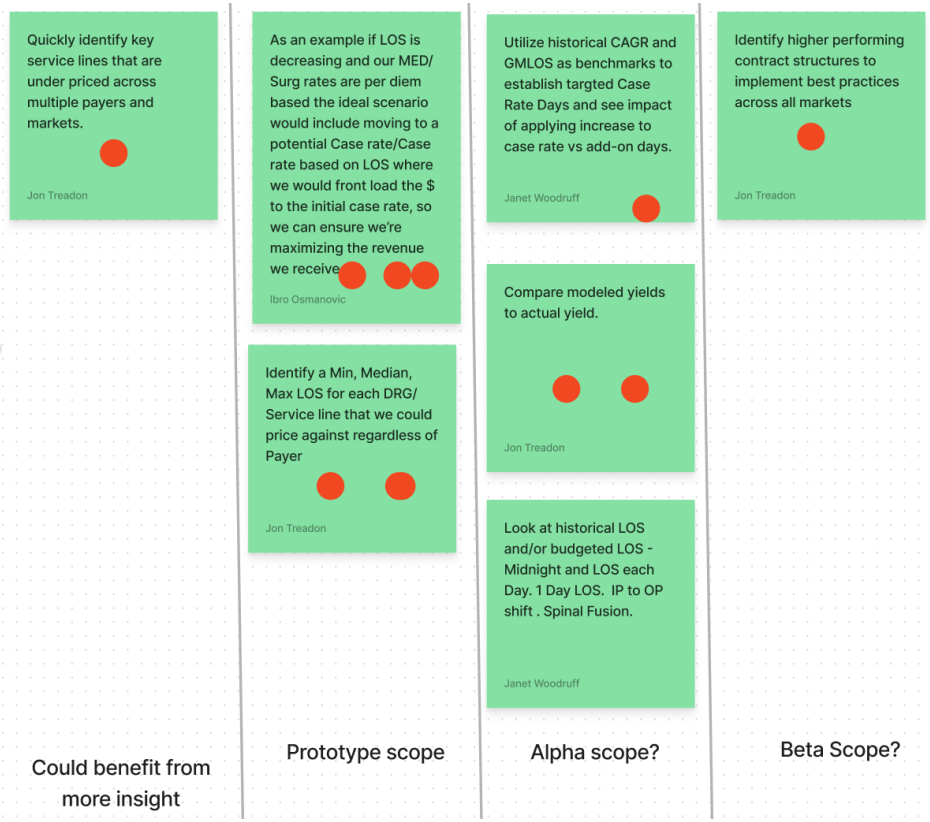
Net Impact Distribution Context Diagram



Workshop 2 28Mar

What We Did

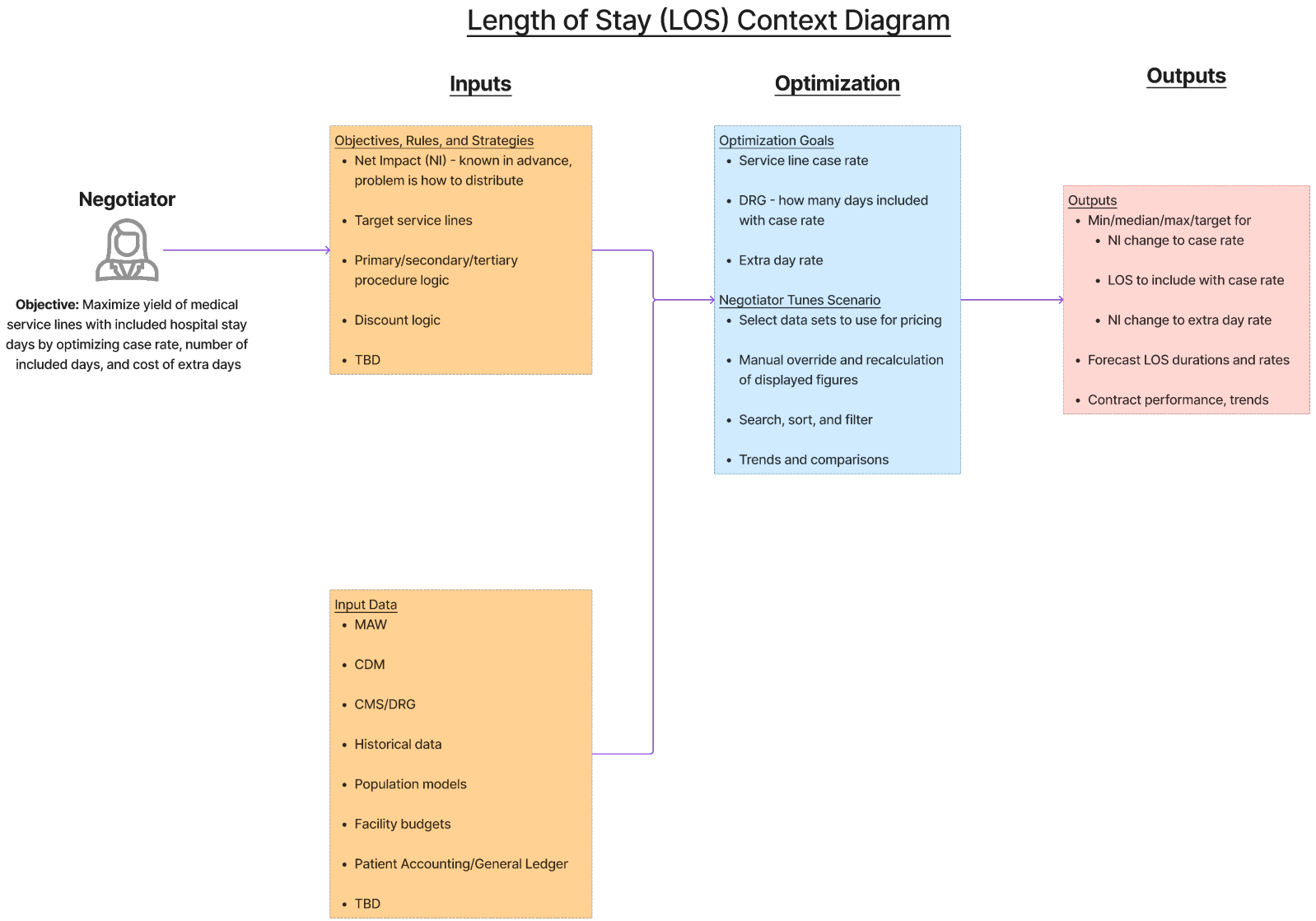
- Workshop 1 recap – Add-Ons again get attention
- Narrow Add-Ons to Extra Hospital Days/Length of Stay
- Ideal Negotiation Outcomes discussion



What We Learned

- Pricing optimization extremely sensitive to Add-Ons cost and structure
- Length of Stay (LOS) is a great self-contained use case with strategic impact (Inpatient > Outpatient care shift)
- Need to learn more about constraints to optimize around

Length of Stay Context Diagram



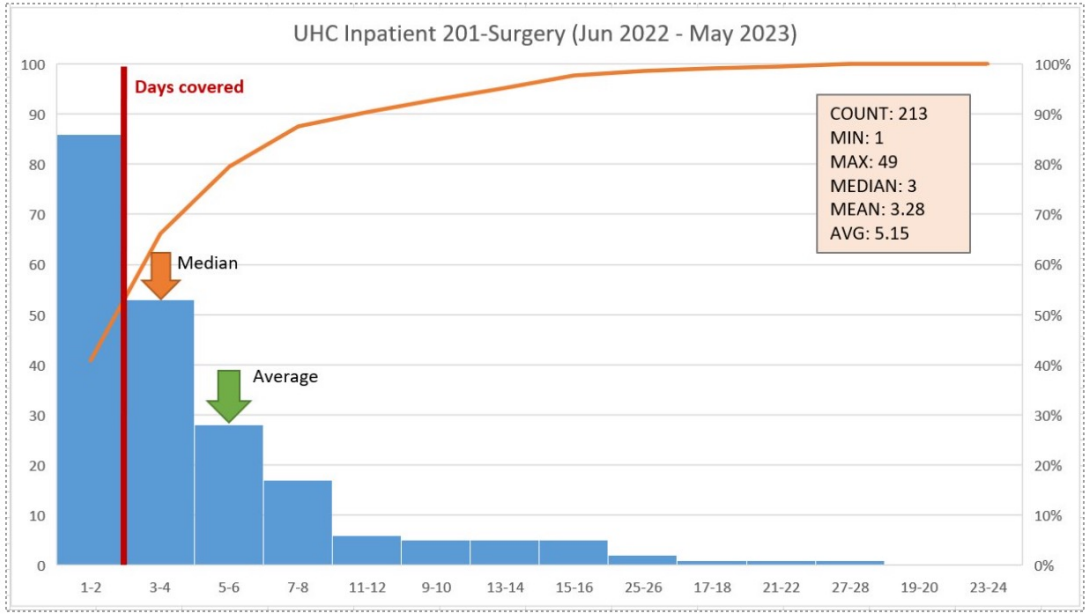
Workshop 3 01Apr

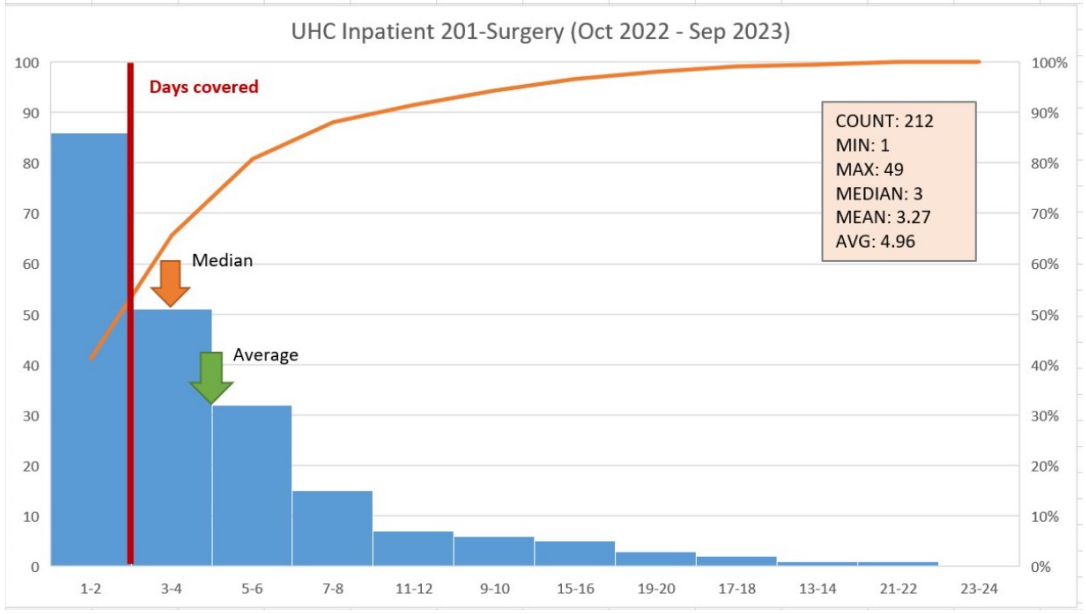
What We Did

- LOS Context Diagram review – do we understand?
- Pricing strategies deep dive with focus on LOS

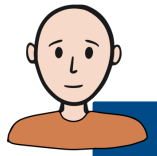
What We Learned

- Everything is connected – SL rate, structure, add-ons, etc. – can't price in a vacuum
- Trend analysis with historical data provides immediate value
- We win when we use all our data to price more, price smarter





Workshop 04Apr: Personas and Solutioning



PCA: Macroeconomist

SPS: Microeconomist

Shared RSO Workspace

- **Set negotiation framework**
- **Sensitivity analysis**
- **Trends and forecasting**
- **Compare and collaborate**

<u>Objective: Define personas and solution designs for RSO, and prioritize features</u>

- **Negotiation objectives for each persona**
- **Which data is needed, and how it's used**
- **Use case definition – journeys within LOS/NID**

Engagement Plans

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Rate Sheet Optimization (RSO) Crawl, Walk, Run

Workstream	Crawl	Walk	Run
GCP Cloud Environment	Manually upload export of data source into GCP Bucket	Automate data ingestion from Share Drives and or other various systems	Replicate Concuity data into GCP & expand to all contract types
Data Warehouse	Input from 2-3 data sources • MAW+ • WIRD+ • TBD	Define & implement additional data • ADS • CMS • EDW • BUCA Avg	Expand data based on colleague feedback Detach from ADS & become the new 'source of truth' system for pricing
Net Impact Distribution Logic (Trends, Forecasts)	Optimize UHC pricing with focus on add-ons (implants, drugs, extra hospital days) • Focus on extra days • Inpatient NPPO Service Lines • Update rates based on more recent Length Of Stay trends	Build upon & iterate Optimized Pricing and add new use cases beyond Net Impact including AI/ML Forecasting • Service line growth analysis • Population change forecasts • Risk limiters	Expand trends and forecasting based on new data & expand RSO to all commercial payors and contract types
Pricing Analysis Tool (Real-time, Comparisons, Collaboration)	Build & deploy a prototype User Interface that allows colleagues to 'tinker' with the pricing	Continue to build out the user interface based on colleague feedback & prioritization	Integrate further into Concuity and add features discovered during crawl & walk

Rate Sheet Optimization Engagement Plan

WIP

RECOMMENDED PRE-WORK:
Team makeup (RACI), Stakeholder and resource availability commitment, Interview participants

***Presentations:** All stakeholders / decision makers required for presentations
All presentations are alignment sign-offs

★ **Presentation*** ● **Current Status**

Objectives: RSO MVP, Future-state PCM UX, implementation proposals

19 Weeks	Month 1 2/26-3/22	Month 2 3/25-4/19	Month 3 4/22-4/28	Month 4 5/01-5/18
	Initiate	**Discover**	**Innovate**	**Innovate**
PCM UX Study ➢ ACTIVITIES ❑ DELIVERABLES	**Activities:** ➢ Review PE discovery ➢ Interview stakeholders and SME for E2E experience goals ➢ Review UHC renewal contract and map to rate negotiation process **Deliverables:** ❑ Engagement plan, RASIC ❑ Interview guides ❑ Target user personas and prioritized jobs to be done ❑ E2E scope, top-level future reqs	**Activities:** ➢ Workshops to align future business process and tech reqs ➢ Map UX requirements to each persona and use case ➢ Prioritize use cases for dev **Deliverables:** ❑ Future-state journey maps and data structures ❑ Process automation and standardization recommendations ❑ Product roadmap – from/to plan	**Activities:** ➢ Draft Information Architecture ➢ Wireframing ➢ Validation test planning **Deliverables:** ❑ Future-state application data structure and data flow maps ❑ Low-fidelity wireframes for key personas and use cases ❑ User test plans for design validation	**Activities:** ➢ Refine Information Architecture and Wireframes ➢ Alpha user testing and requirements verification ➢ Discover data and tech architectures for current tech solutions used by SPS and PCA **Deliverables:** ❑ High-fidelity wireframes ❑ Interaction design reqs ❑ Future-state data and systems architectures
RSO MVP ➢ ACTIVITIES ❑ DELIVERABLES	**Activities:** ➢ Review PE discovery ➢ Interview stakeholders and SME for UHC static MAW optimization use cases ➢ Discover origin of MAW data including Rate Sheets and SPS projections **Deliverables:** ❑ Engagement plan, RASIC ❑ Interview guides ❑ Target user personas and prioritized use cases ❑ RSO scope, top-level MVP requirements ❑ Model input data requests	**Activities:** ➢ Model and code top UHC use case ➢ Workshop to validate RSO MVP use case and planned ML approaches ➢ Stage live data into GCP ➢ RSO UX design study **Deliverables:** ❑ MVP RSO models, code, and baseline comparison ❑ Proposal for MVP arch. and SW bill of materials ❑ GCP data platform ❑ RSO UI wireframes	**Activities:** ➢ Refine MVP RSO model ➢ Develop MVP UI ➢ CI/CD and data pipeline development in GCP ➢ Enterprise architecture reviews ➢ Validation test planning **Deliverables:** ❑ Alpha RSO release ❑ Approved solution architecture and SW bill of materials ❑ GCP dev env ready with live data and approved tools ❑ Alpha user test plans for usability and rate optimality	**Activities:** ➢ Alpha user testing ➢ Alpha model, data pipeline, and UI refinements ➢ Add Staging and Production envs, automate testing ➢ Begin modeling second MAW use case **Deliverables:** ❑ Beta release all tech ❑ Complete GCP env suite ❑ Basic QA suite and unit tests

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Discussion

Use Case to Prototype

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