

Digital Value scorecard - What matters the most?

MT33

A tool to iteratively improve and successfully implement

Remote Patient Monitoring service after cardiothoracic surgery



Patients use digital and wearable healthcare devices to report outcomes after cardiothoracic surgery

Requires **Implementation** in Clinical Practice

Proper outcomes and cost analysis and visualisation methods

- Avoid complications
- Continuous monitoring
- Reduce report burden
- Objective assessment

For real-time assesement of Value

- Inappropriate visualization
- Inadequate interpretation
- Large amount of data

Participatory Value Assessment

Problem: Define the set and frequency of PROMs to collect using RPM devices

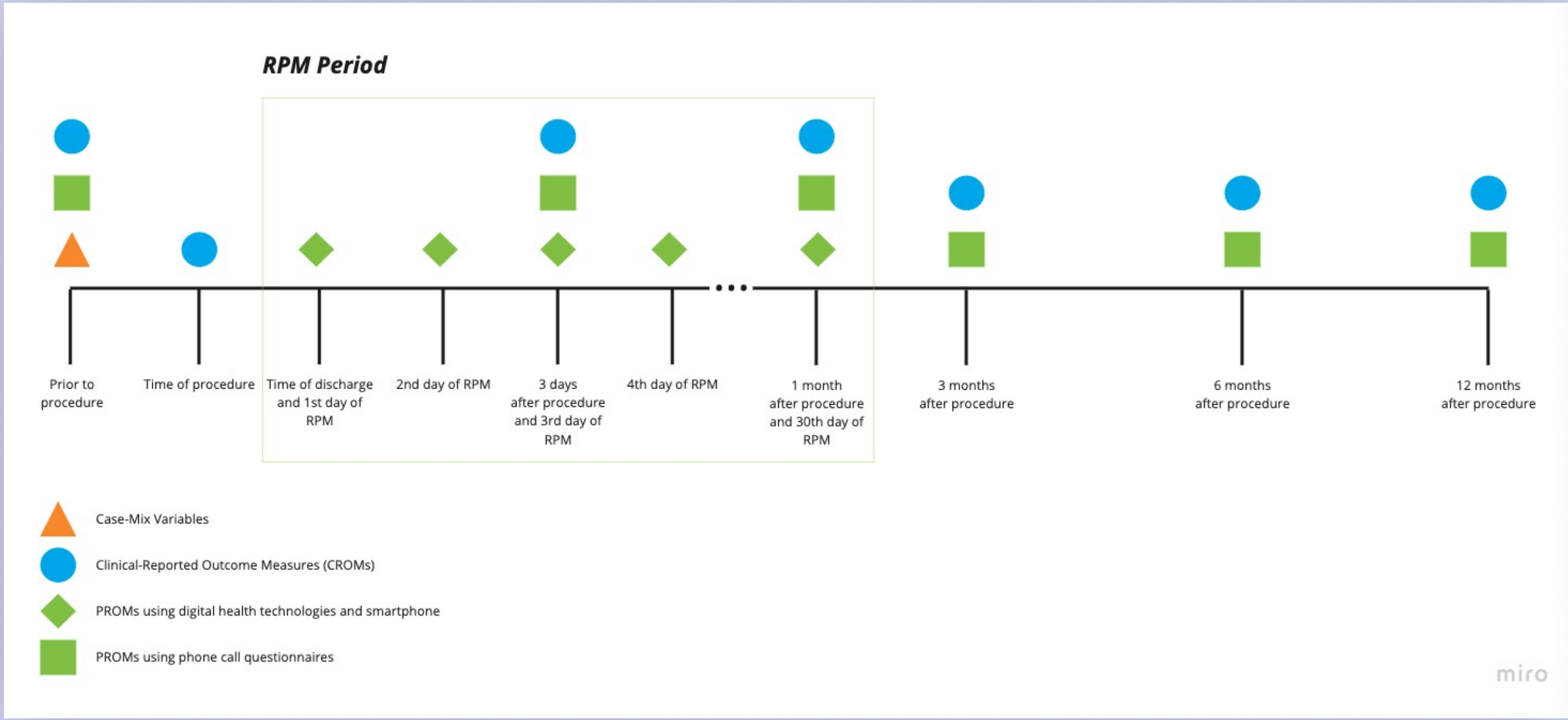
Plan: Combine ICHOM Heart failure PROMs Set with clinical databases
Search for RPM devices

Act: Design and implement Digitized Patient Pathway
Identify cost measurements

Observe: Run pilot with 32 patients and collect feedback

Reflection:

- (1) Patients feel safe due to calls from nurses when values are not good
- (2) Practitioners assess outcomes using stability periods
- (3) The most relevant PROMs (lower stability days): pain (3.8), steps (6.5), and heart rate and blood pressure (12.4).
- (4) On average, a 30-day RPM-based follow-up service costs €280 per patient (Human Resources (85% of total cost; +6h additional patient time)
- (5) Data Envelopment Analysis (DEA) allows technical efficiency analysis
- (6) Requires validation with more healthcare professionals



Value for Health Scorecard

Patient ID 26

Male
52 years

Qual.(EQF): 5
Work: Employed

Distance to Hospital
277 km

Personal Income
Unknown

Surgery-related Information

Operative Urgency
Elective

Surgery Type
Valvular

Complications
Bleeding ☒ Yes
CNS ☐ No
Cardiac ☐ No
Infective ☐ No
Renal ☐ No
Respiratory ☐ No

Additive EuroSCORE
7

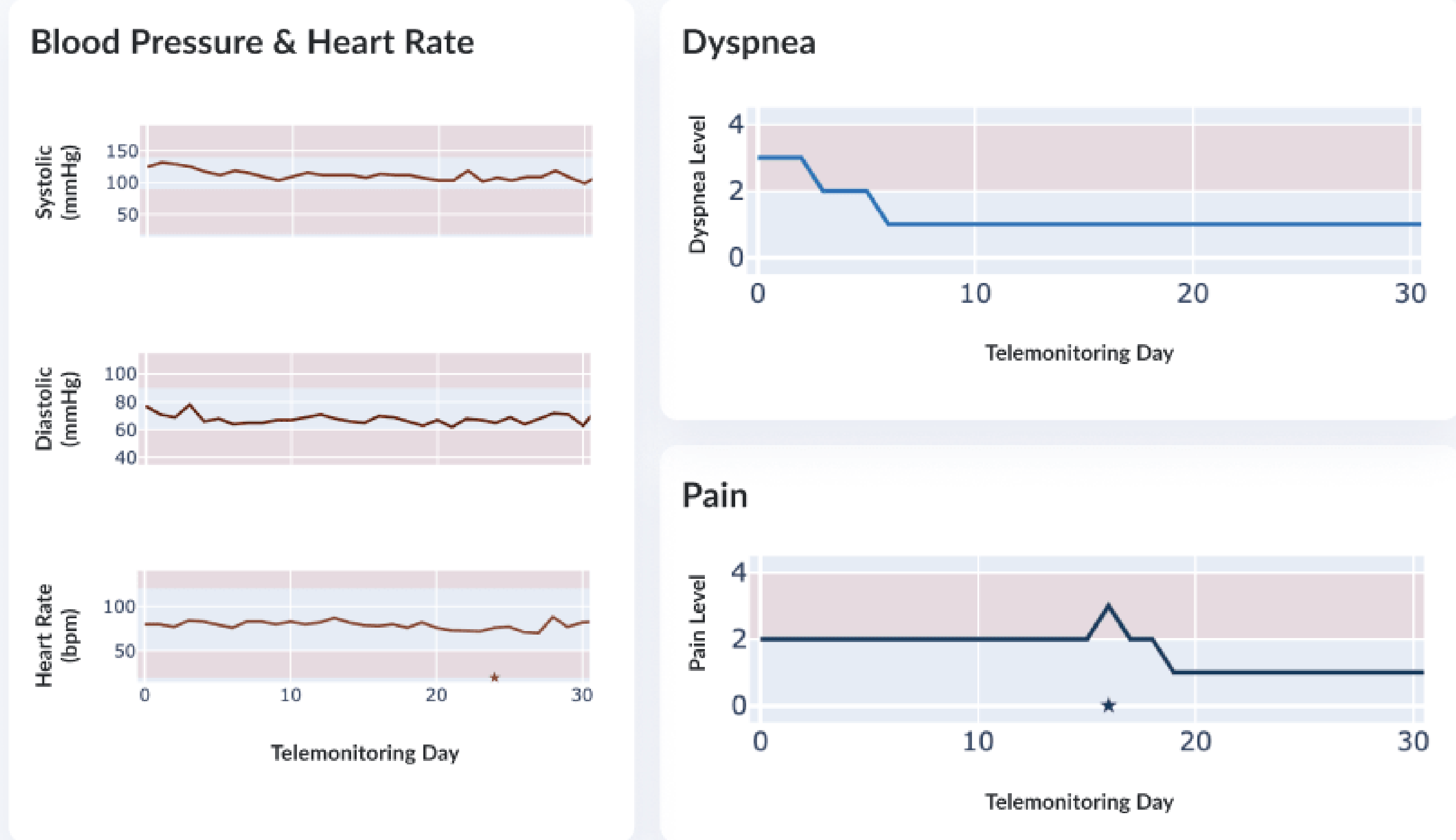
Hospital Stay
8 days

Logistic EuroSCORE
7.43

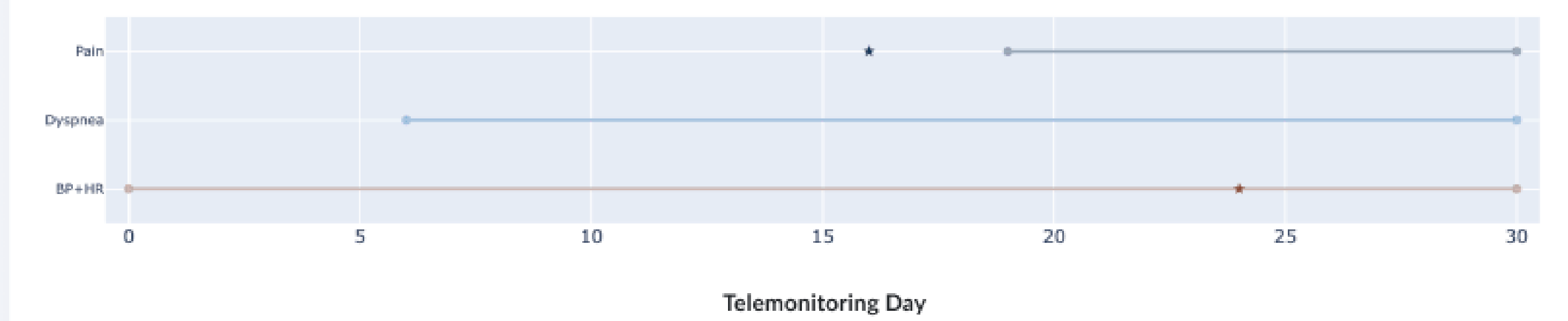
ICU Stay
2 days

Digital Health Service Performance

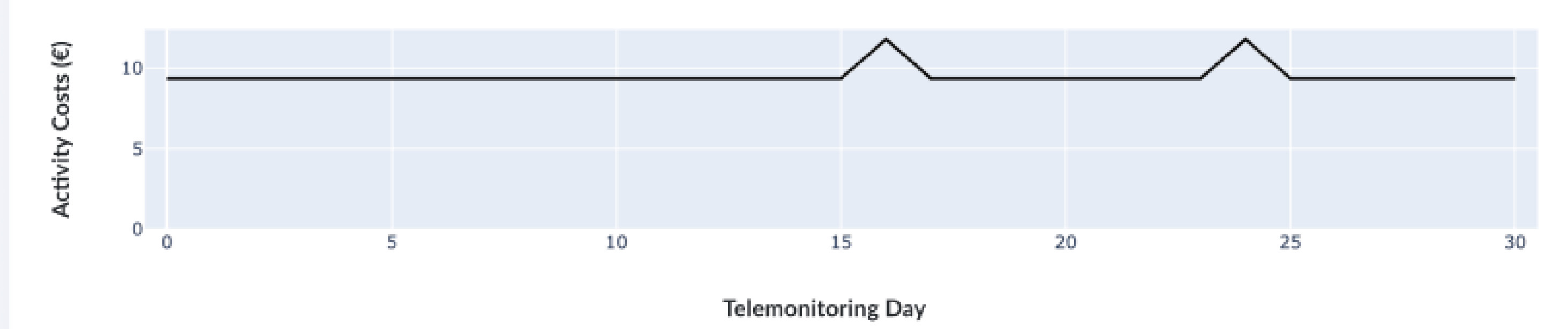
Outcomes Variation Analysis



Outcomes Stability Analysis



Resources/Costs Allocated



Service Total Cost
€ 297.45
(avg €316.79)

Total HR Time
6h46
(avg 7h26)

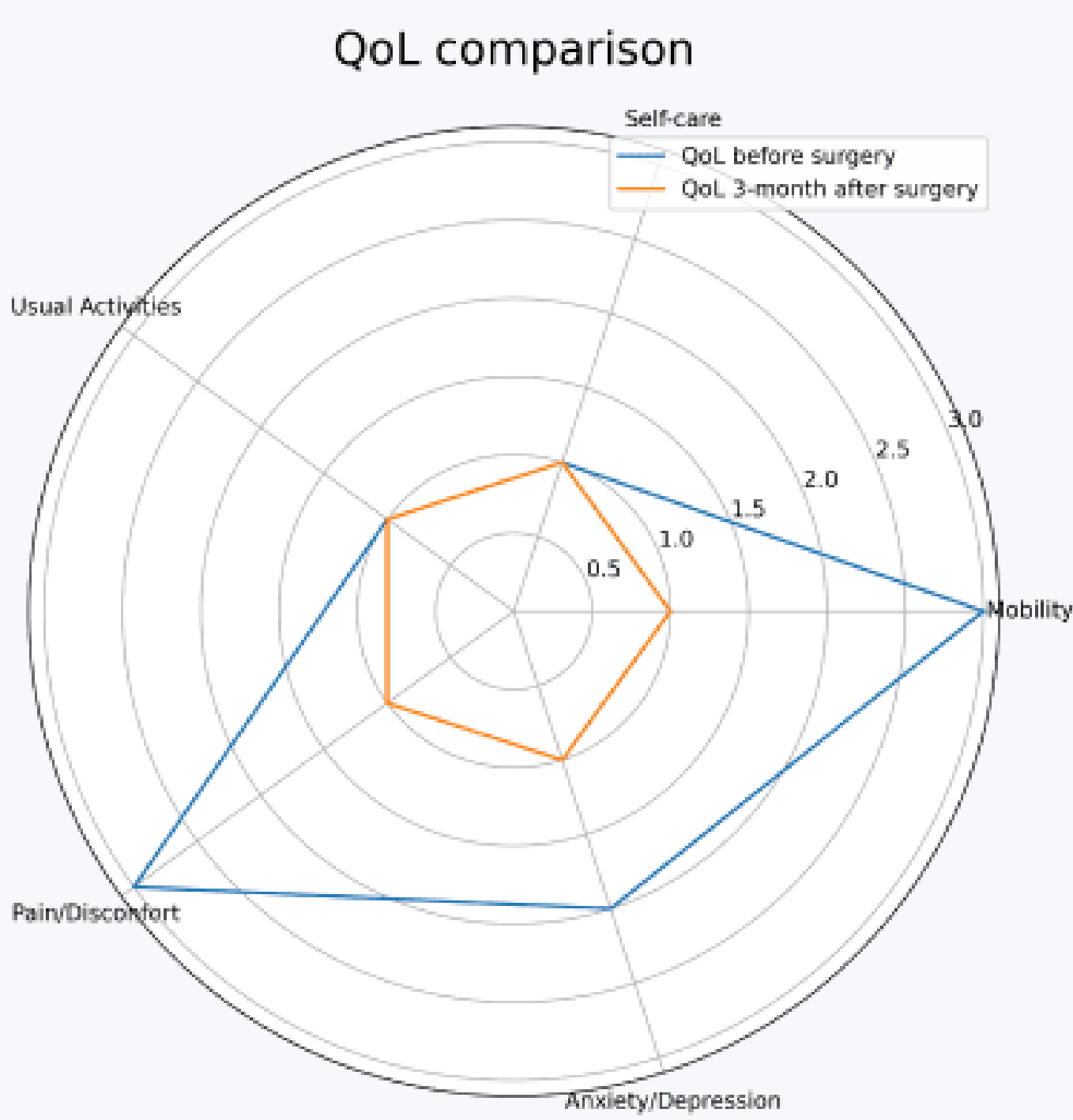
DEA Score
1.00

Patient Satisfaction & Engagement

NPS
10 (median 10)

Engagement
100% (avg 94%)

Patient Quality of Life Evolution



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