MYSPHERA
IoT & Location Systems for Care

Vall d'Hebron Hospital

Vall d'Hebron Barcelona Campus Hospitalari

Generalitat de Catalunya
Departament de Salut

Institut Català de la Salut

Implementation of Real Time Patient Tracking in the Optimization of Surgical Process

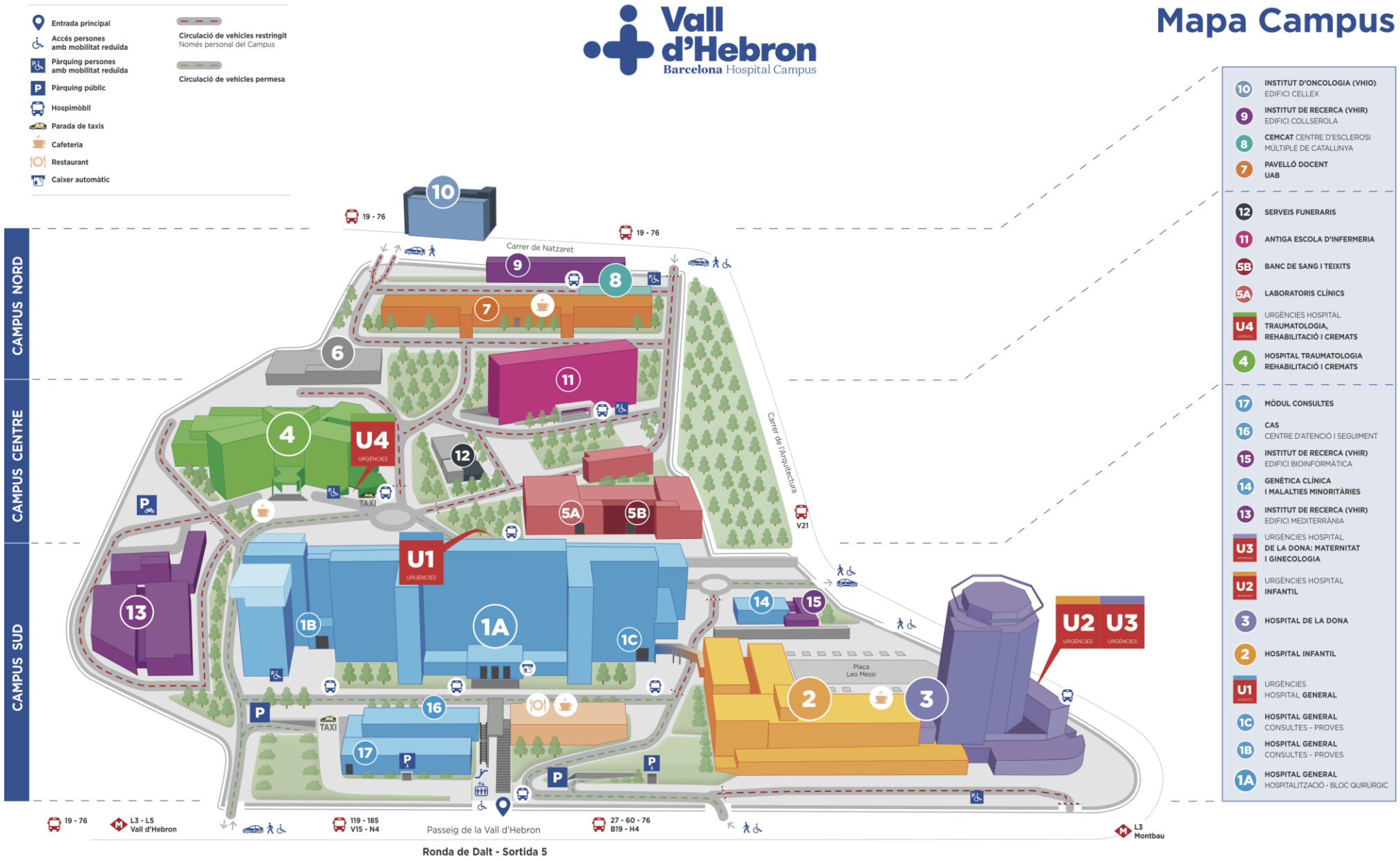
Juan A. Hueto-Madrid, MD
Vall d'Hebron University Hospital
Barcelona (Spain)

Manchester (UK), October 8th 2019

Vall d'Hebron
3,5m
Mòdul A
Mòdul B
Mòdul C

Mapa Campus

Vall d'Hebron
Barcelona Hospital Campus



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OSPEDALE SAN RAFFAELE

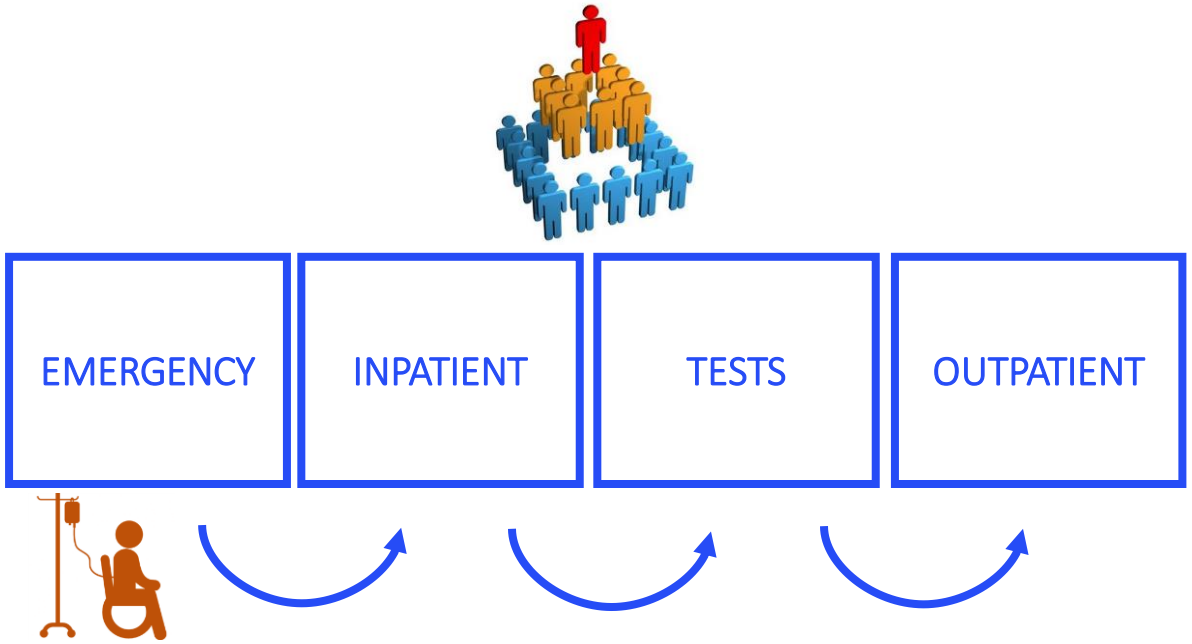
Vall d'Hebron
Barcelona Campus Hospitalari

Surgical process at Vall d'Hebrón Campus

- 4 Surgical Blocks:
- 51 Operating Rooms
- 38.112 Surgeries (2018)
- Solid Organ Transplants
- Robotic Surgeries: 412
- Surgical Waiting Lists: 12.000 patients

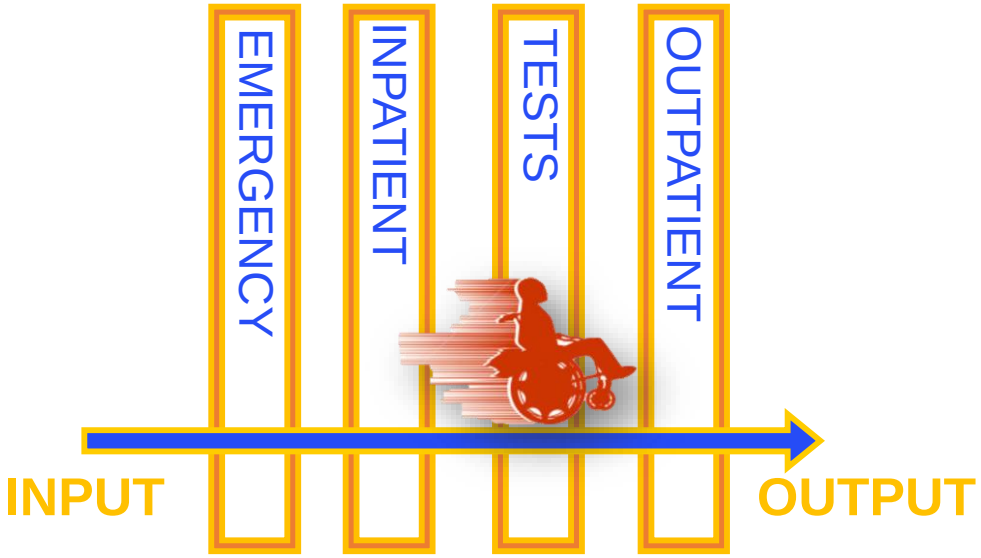
Traditional organization

- Hierarchical structure
- Fragmented vision
- Department oriented
- Lack of communication between units



Process oriented organization

- Oriented to patient workflows
- Integral vision
- Customer oriented
- Communication and cooperation between units



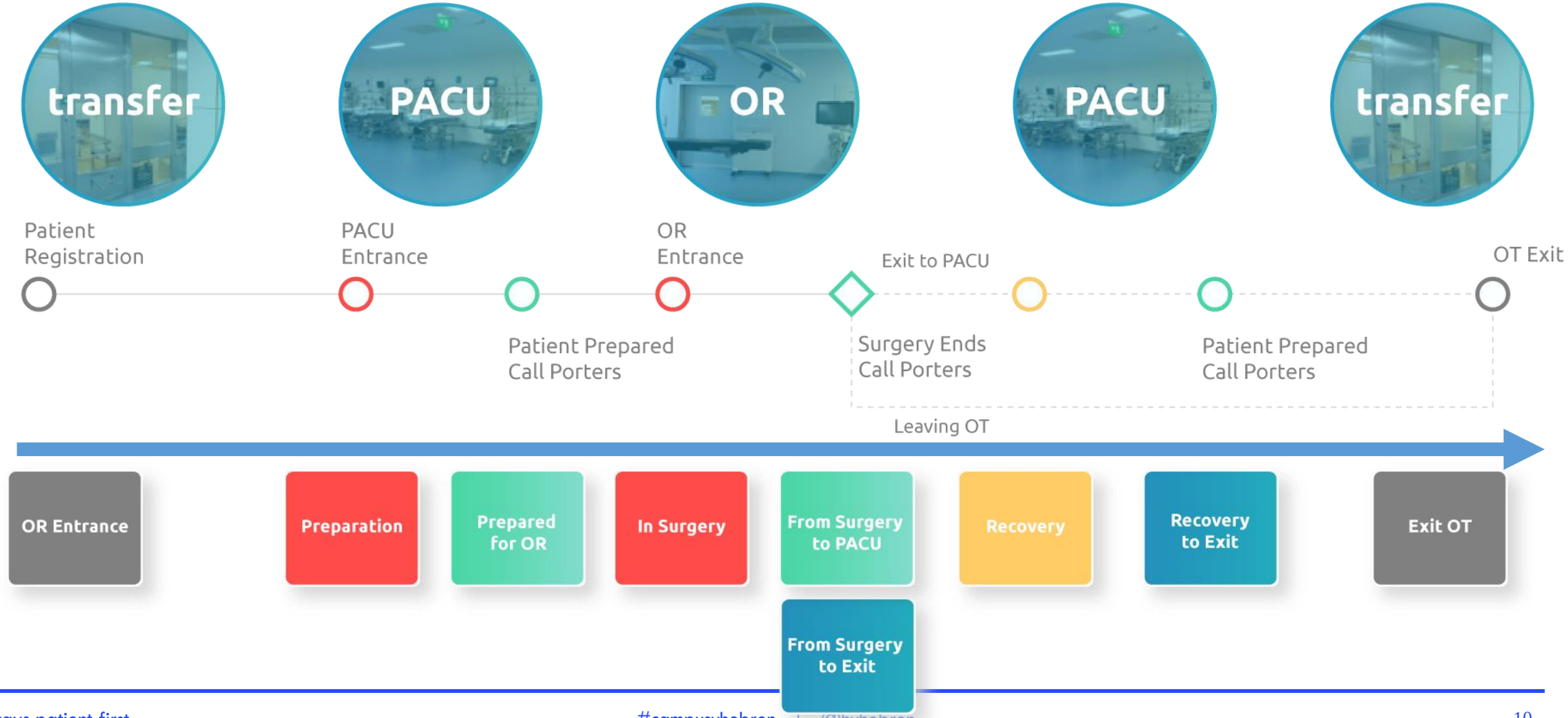
Our three strategic axes

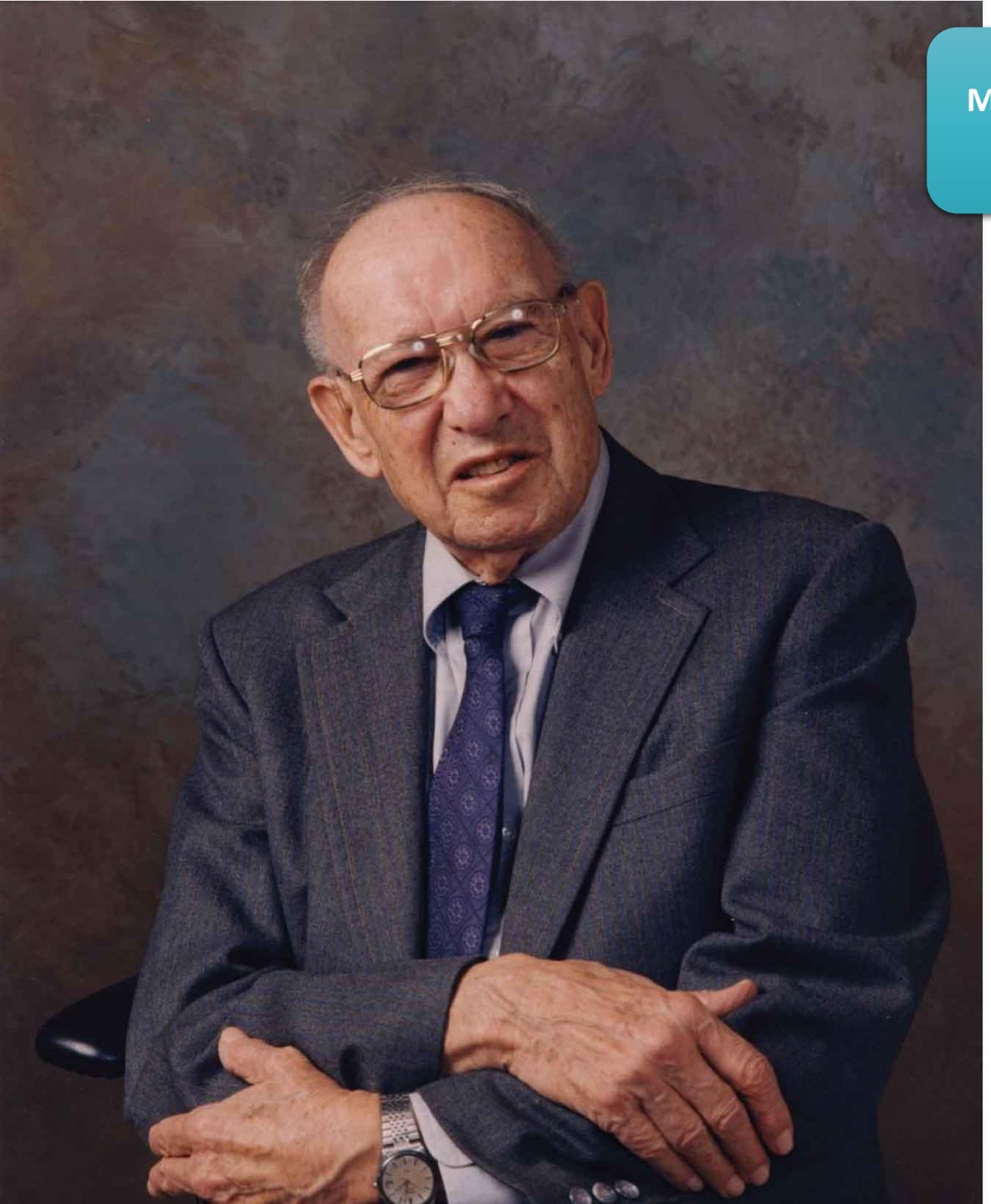
Goals

Always,
Patient First

Diagnostics/ Points of improvement

Lean management


transfer
PACU
OR
PACU
transfer
Patient Registration
PACU Entrance
OR Entrance
Exit to PACU
OT Exit
Patient Prepared Call Porters
Surgery Ends Call Porters
Patient Prepared Call Porters
Leaving OT
OR Entrance
Preparation
Prepared for OR
In Surgery
From Surgery to PACU
Recovery
Recovery to Exit
Exit OT
From Surgery to Exit



Measurement Indicators

“IF YOU CAN’T MEASURE IT YOU CAN’T MANAGE IT.”

— *PETER DRUCKER*

Quality of measurement

Accurate

Systematic

Reliable

Purpose

Transparent

Credible

Secure Identification

Instant Location

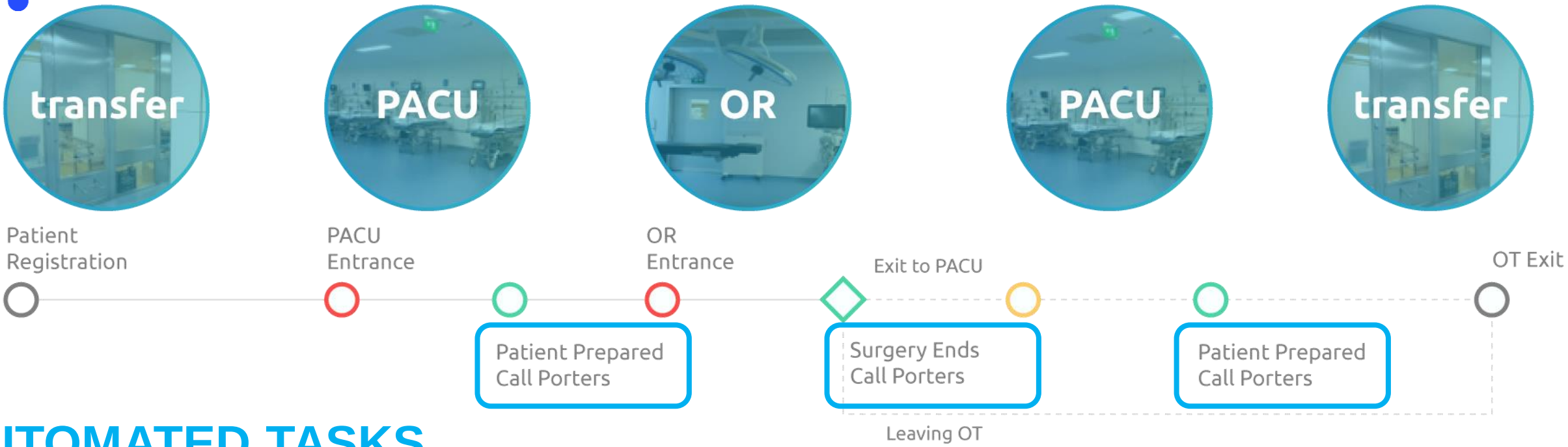
Real Time Dashboards

MYSPHERA

Patient Flow

Data Analytics

Implementation



AUTOMATED TASKS

MYSPHERA highlights

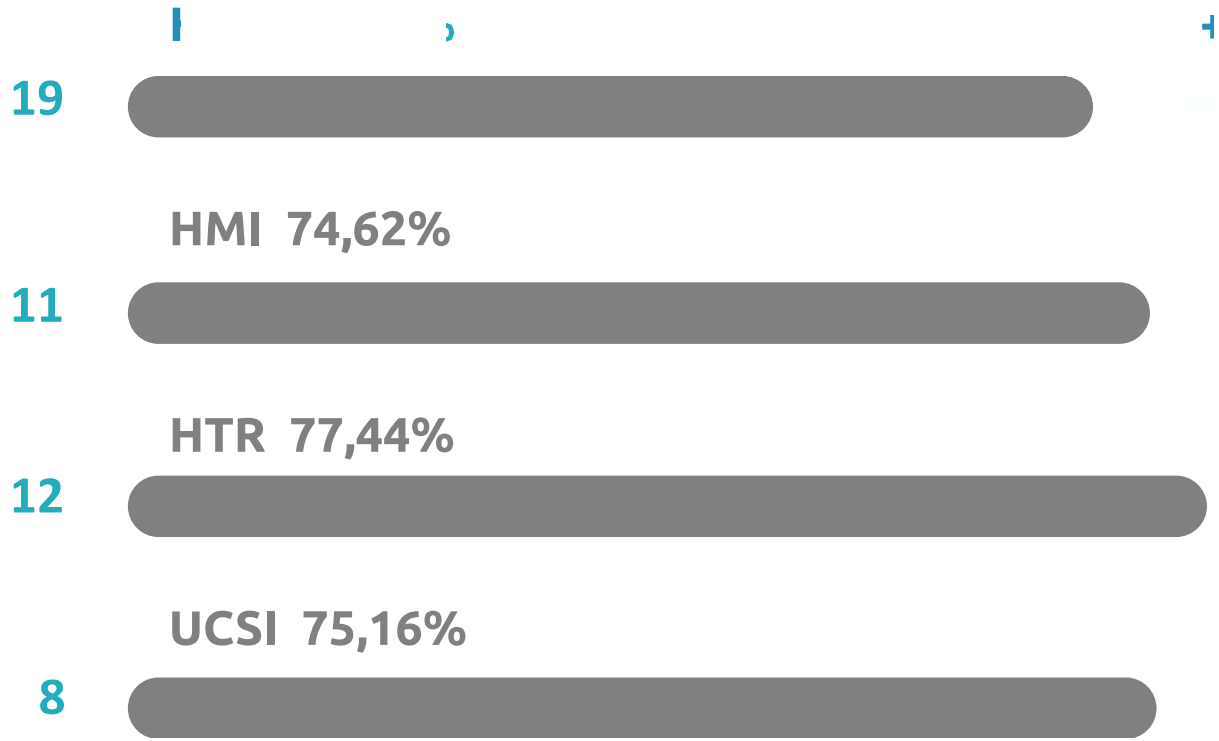
MYSPHERA

- Solid, proven and reliable optimization platform
- User friendly and non-invasive technology
- Ease of deployment without major interruptions in the surgical unit
- Lowest total cost of ownership in the industry
- Interoperability
- Open and scalable: possibility for further expansions

Productivity Improvement Methodology with Associated Measurements

Evaluation Outcomes

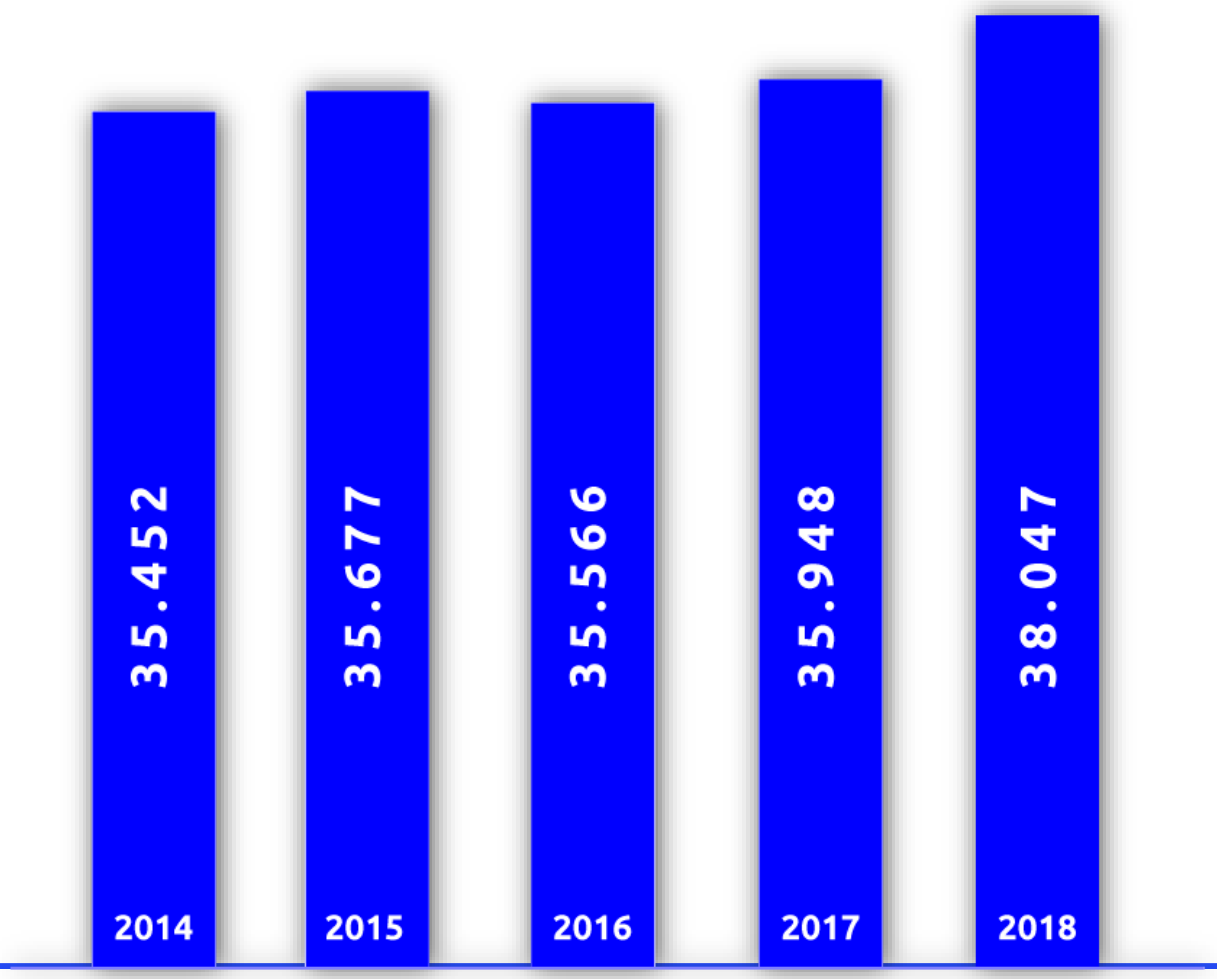
MYSPHERA is currently impacting 19 ORs.
Expansion in 50 ORs coming soon.



Surgical performance

Productivity Improvement Methodology with Associated Measurements

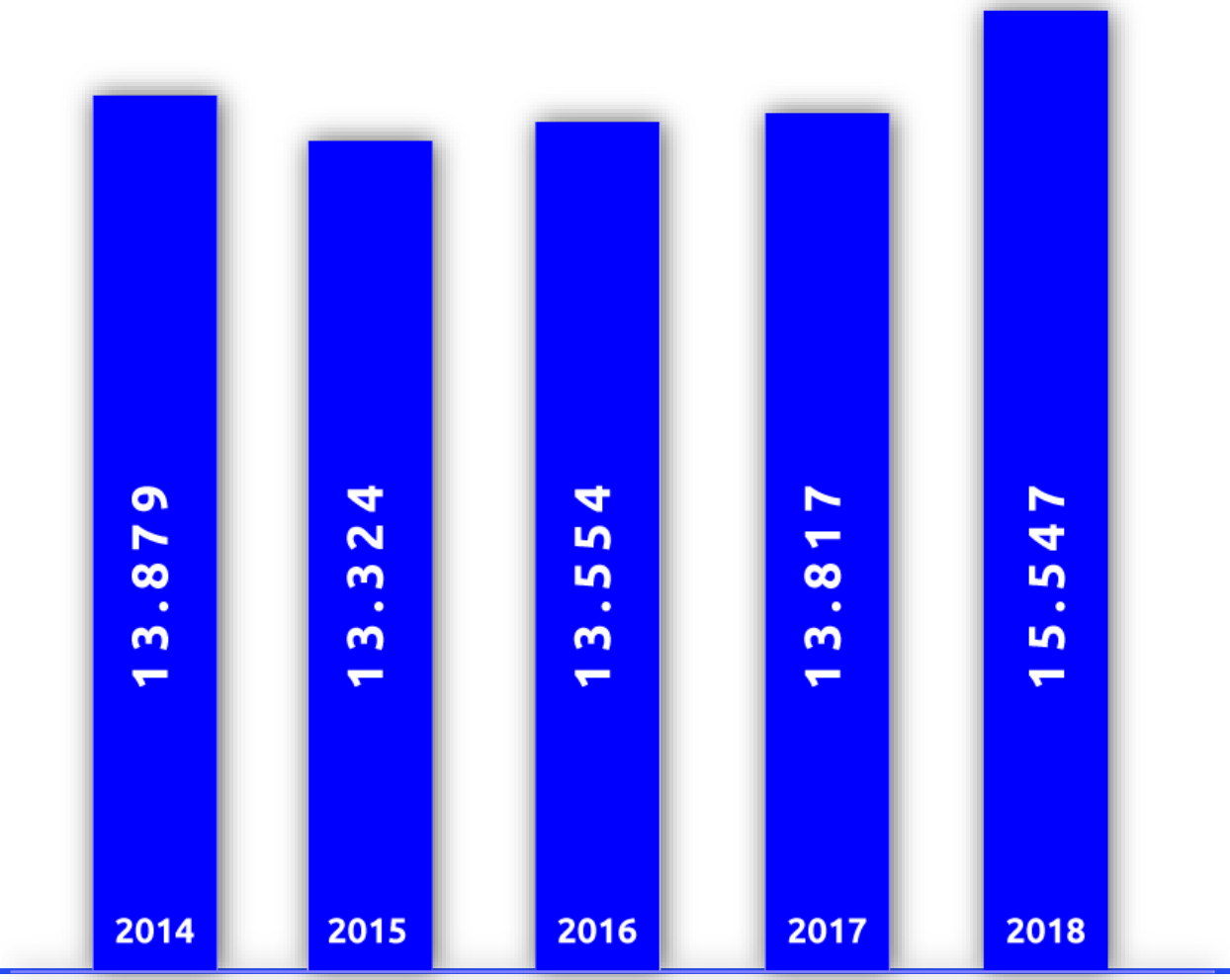
Hospital-Wide



surgeries

Improvements by Type of Surgery

Day Surgery Unit



surgeries

Improvements by Type of Surgery

Urgent surgeries hospital-wide

2017

1157

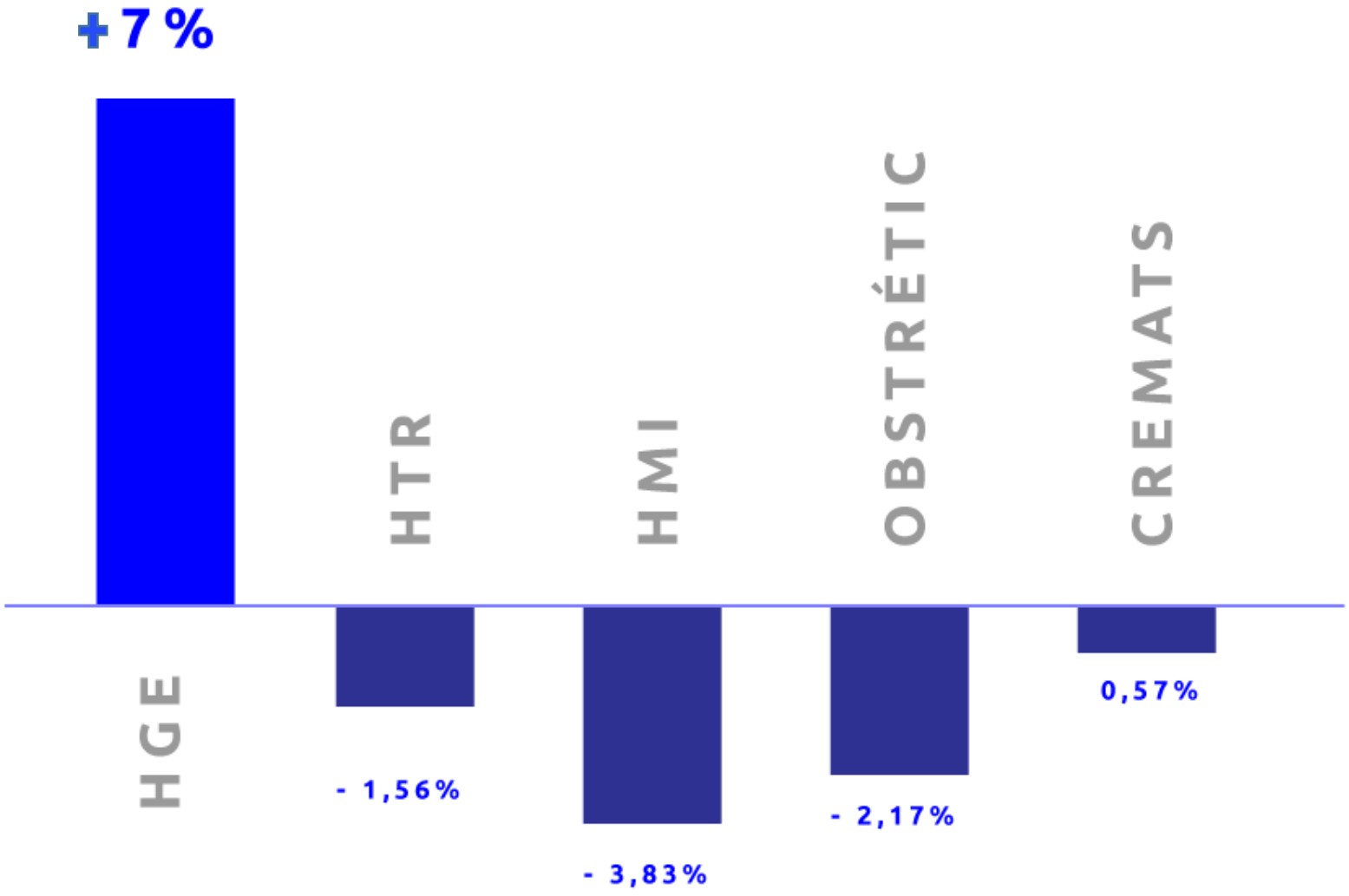
2019

1342

+16%

Improvements by Type of Surgery

Minor surgery



Our three Strategic Axes

Always,
Patient First

Thank You!