

## The Randers Regional Hospital journey

# IMPROVING OPERATION FLOW

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## BACKGROUND

Both patients and staff experienced unnecessary waiting time in relation to operational flow. This led to inefficient and unsatisfying utilisation of operational capacity.

## AIMS

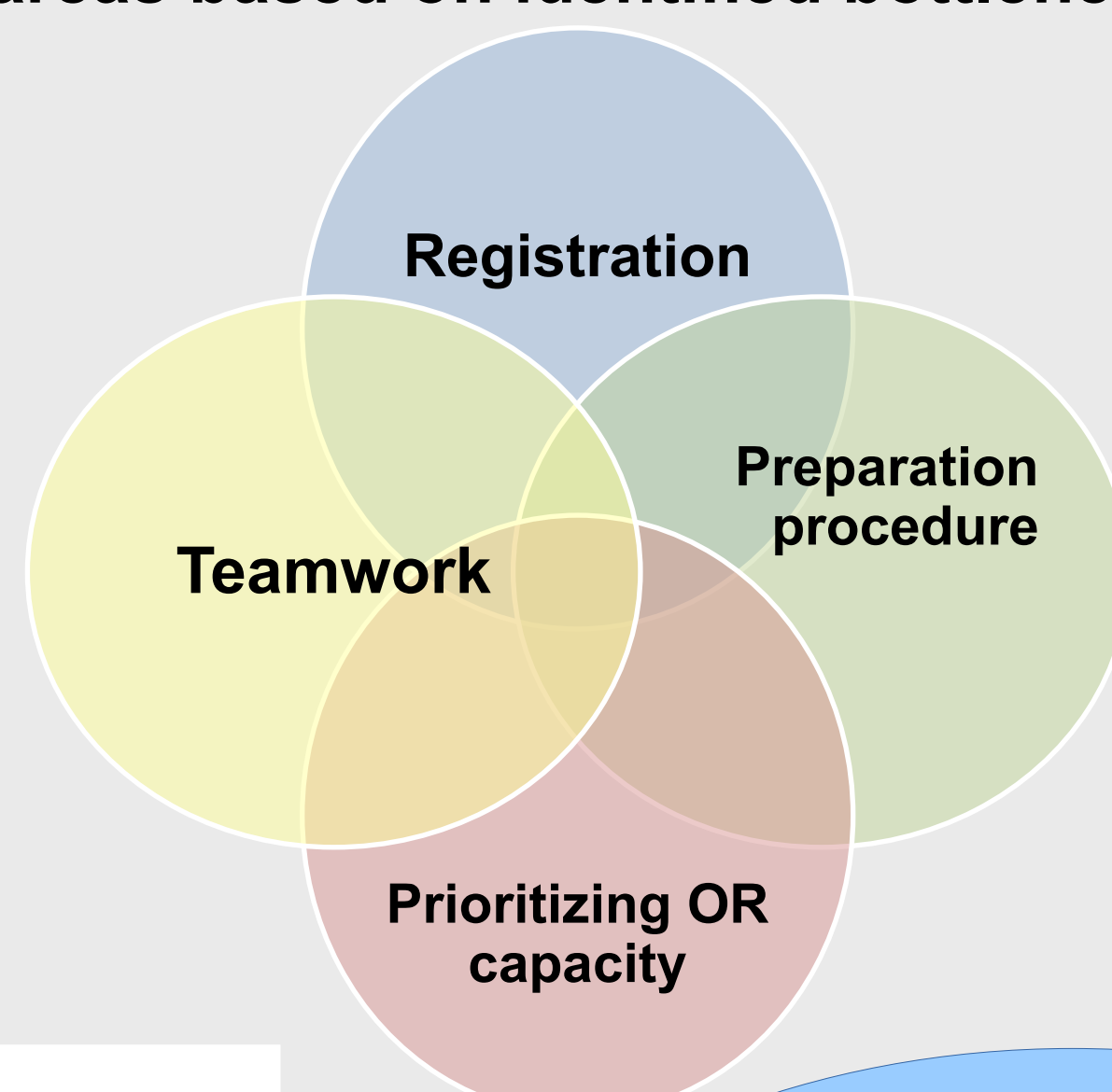
- reduce unnecessary waiting time for surgery
- increase patient safety
- increase staff satisfaction
- optimize resource utilisation

## OUR APPROACH

The Model for Improvement was used in an extensive bottom-up setting with managerial support. All surgical and anesthetic procedures were systematically registered in a four-week period. The question to be answered was:

**“What are we waiting for, when we stand still?”**

Focus areas based on identified bottlenecks:



Four focus areas were appointed based on the identified bottlenecks

1. Registration
2. Preparation procedure
3. Prioritizing OR capacity
4. Teamwork

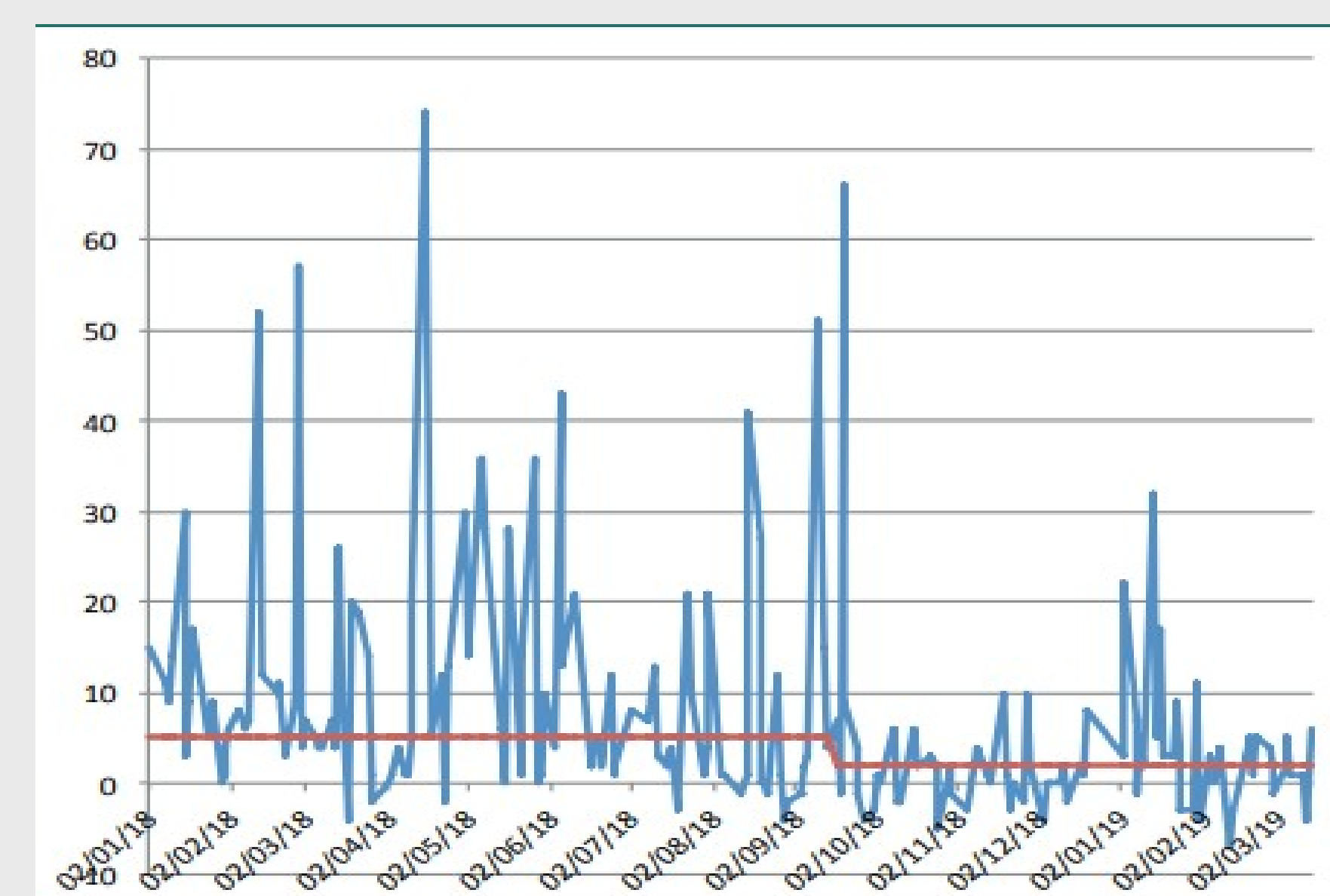
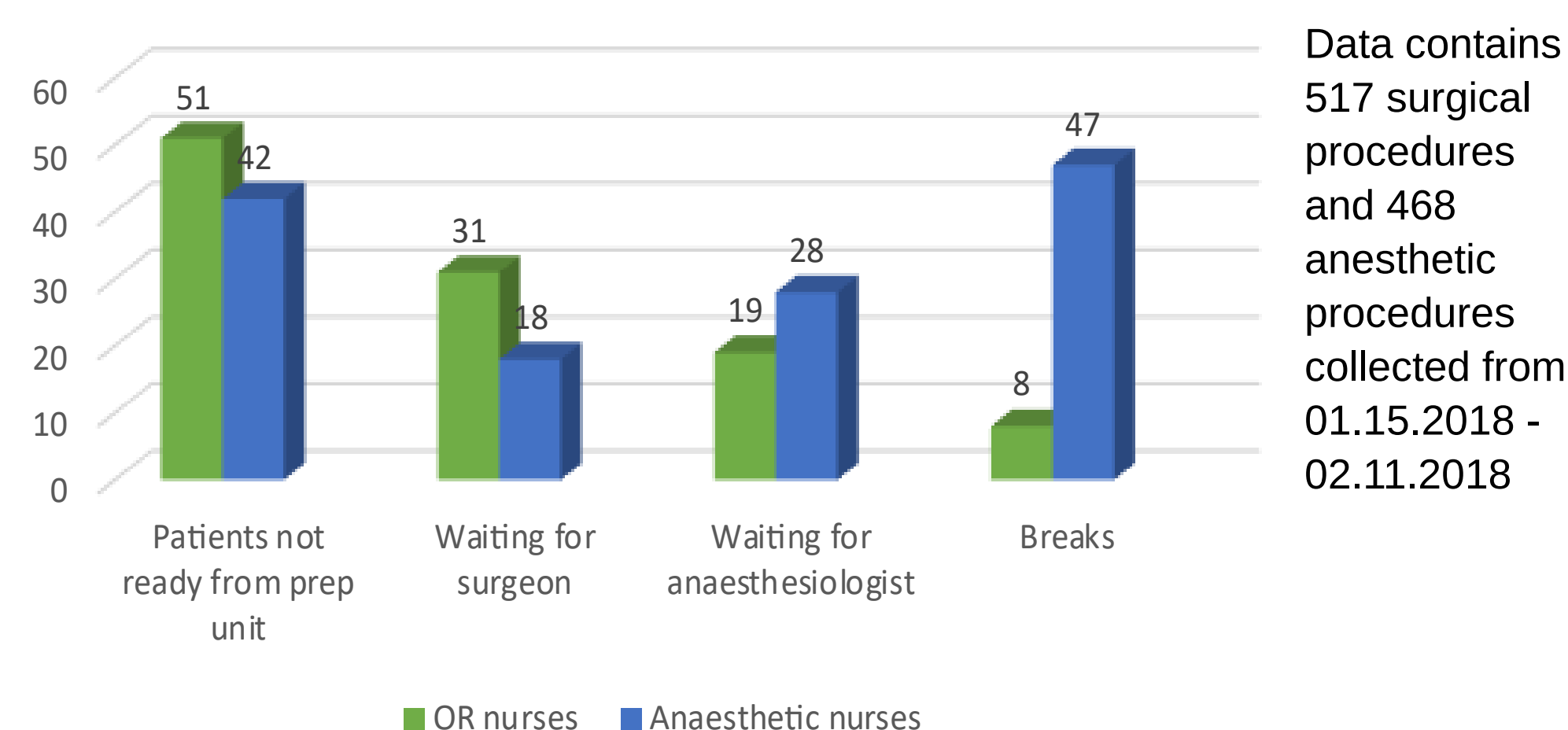
## RESULTS

The identified bottlenecks were reduced due to the implemented interventions.

We have achieved an increased timeliness in the operating flow, amongst others:

- Timely preparation of patients
- Better coordination of the OR-schedule and breaks
- Increased patients satisfaction
- Increased staff satisfaction though the employees express concern regarding simultaneous tasks

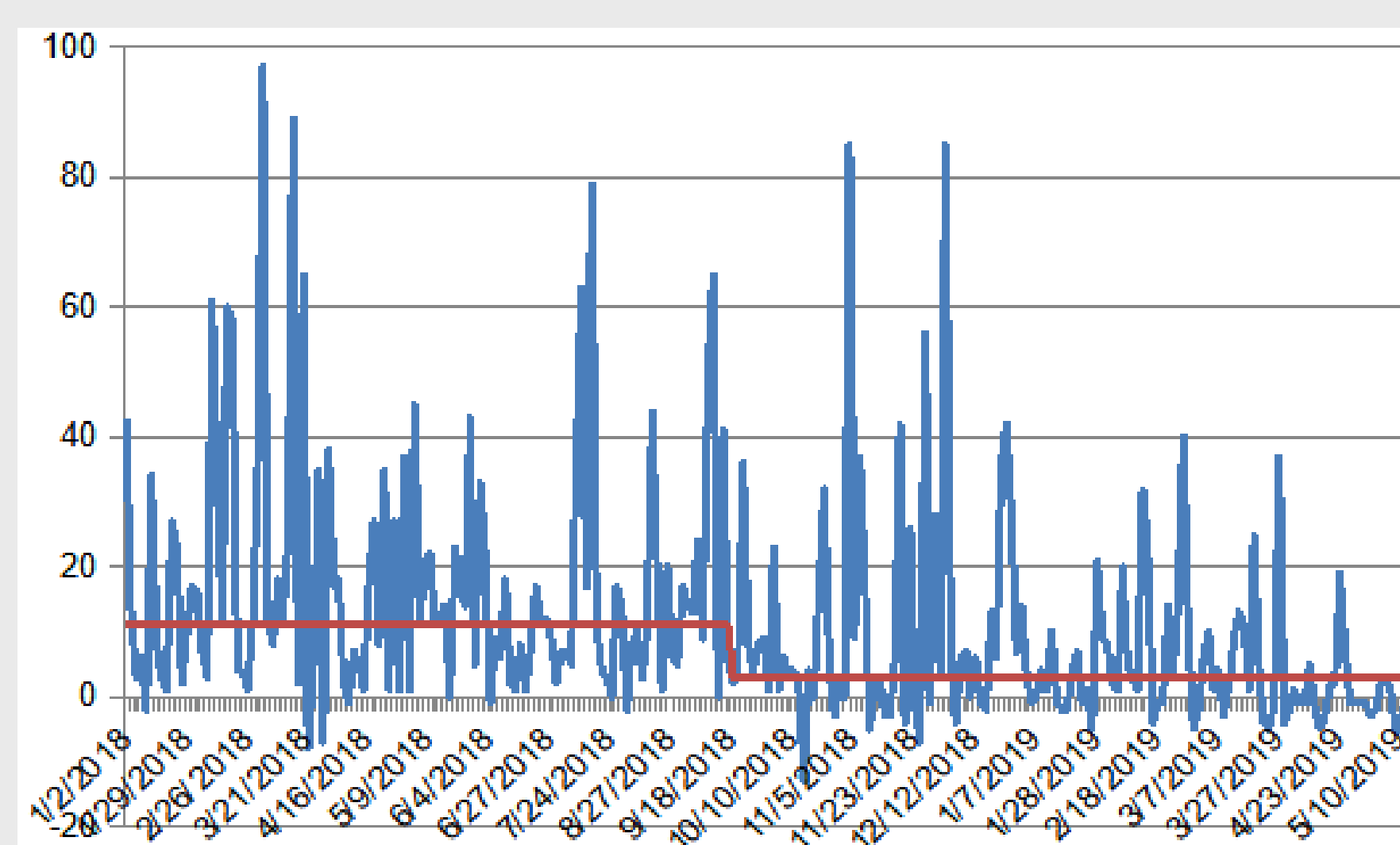
What or whom are we waiting for?



**Operating theatre for elective surgery.**

**Before interventions**  
Mean: 5 minutes  
Average: 10.3 minutes

**After interventions**  
Mean: 2 minutes  
Average: 3.3 minutes



**Operating theatre for acute surgery.**

**Before interventions**  
Mean: 11 minutes  
Average: 17.6 minutes

**After interventions**  
Mean: 4 minutes  
Average: 9.5 minutes

## INTERVENTIONS

The identified bottlenecks were addressed through following interventions:

- **OR huddles**  
To strengthen the daily coordination of all operating theatres the coordinating nurses and physicians met three times daily
- **All patients that can walk, must walk**  
To empower patients and to reduce a potential bottleneck (waiting time for service) all elective patients that can walk, must walk to the operating theatre.
- **Checklist for preparation of patients**  
To ensure that all patients are fully ready for surgery when arriving at the operating theatre a checklist was developed
- **Team huddles**  
Every morning all team members participate in a team huddle at each operating theatre to ensure better coordination of the OR-schedule and to increase team spirit
- **Early determination of the first acute patient**  
To ensure timely start of the acute operating theatres in the morning, the first acute patient is determined at the OR huddle at 21.00 pm the night before. Guidelines for surgical case grouping procedures were developed. Only higher ranking surgical procedures can change the priority

## RECOMMENDATIONS

- Involve all professional groups to ensure companionship - with physicians as an essential player
- Combine the bottom - up approach with managerial support
- Use Model for Improvement - and remember “study”
- Ensure interdisciplinary project management

Coming together is beginning, keeping together is progress, and  
working together is success.

Henry Ford

