

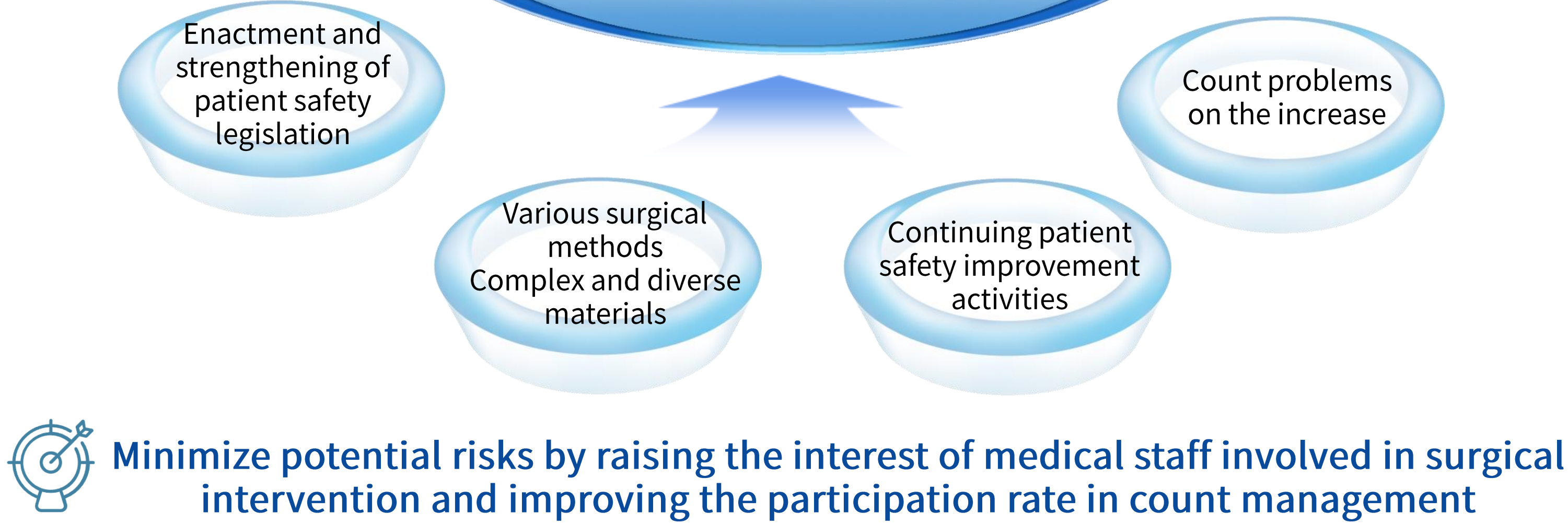
Surgical Safety Improvement Activities through Surgical Count Management

JY Kim, HS Lim, MH Song, SH Yoon

Operating room, National Health Insurance Service Ilsan Hospital, Goyang, Republic of Korea

INTRODUCTION

Need for the improvement of surgical count management



AIM

Indicator 1. Surgical count-related patient safety report rate ... Downward indicator

• Target: 0.89 % (average increase in last 3 years) ... preliminary result 1.63 %

Indicator 2. Periodic surgical instrument inspection rate ... Upward indicator

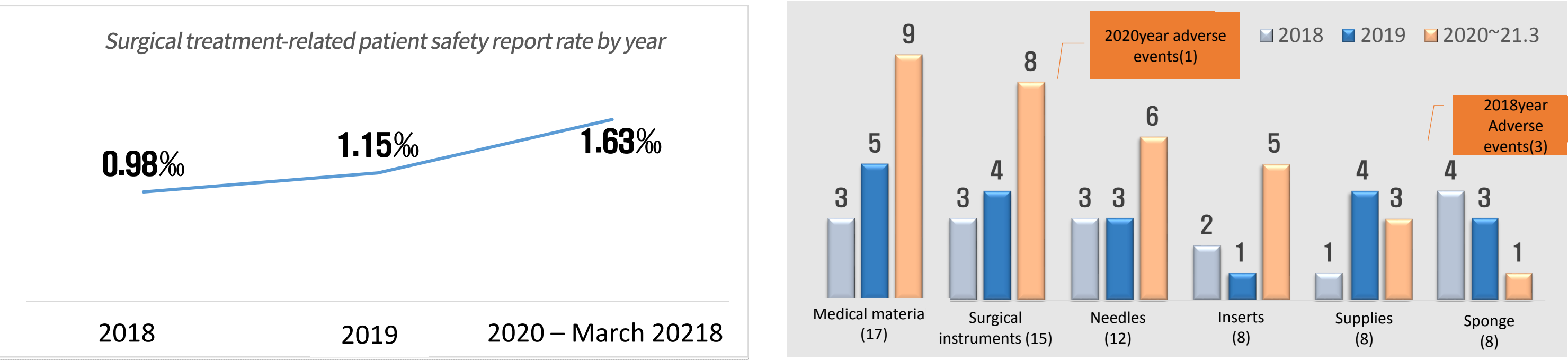
• Target: 45% (18.1%p increase) ... preliminary result 26.9%

METHODS

1. Preliminary Status

Indicator 1. Surgical count-related patient safety report rate ... 1.63%

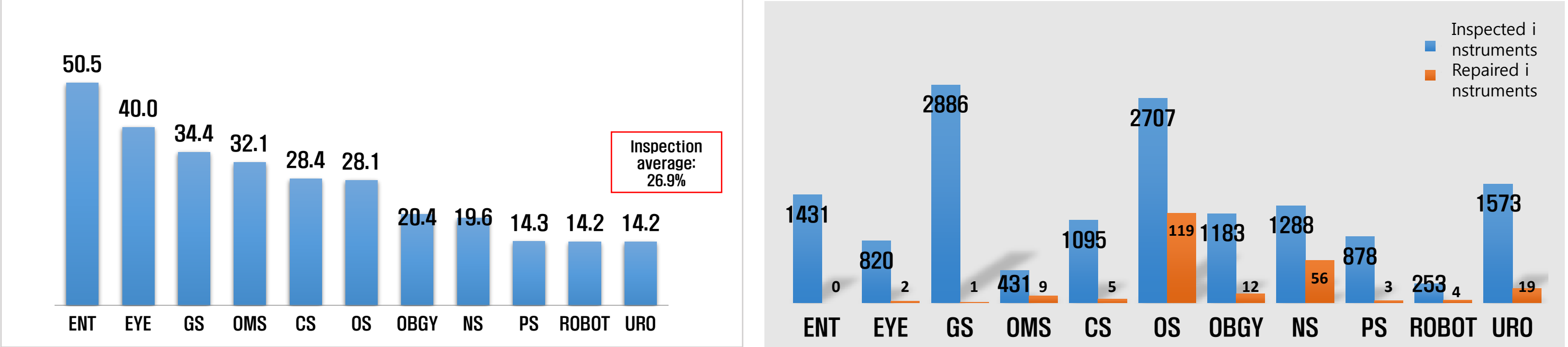
✓ Investigation Period: 2018 – March 2021 (preliminary investigation)
✓ Investigation Method: EMR 『Patient Safety Management』



"Identify causes" of safety reports + "countermeasures" upon problem analysis necessary

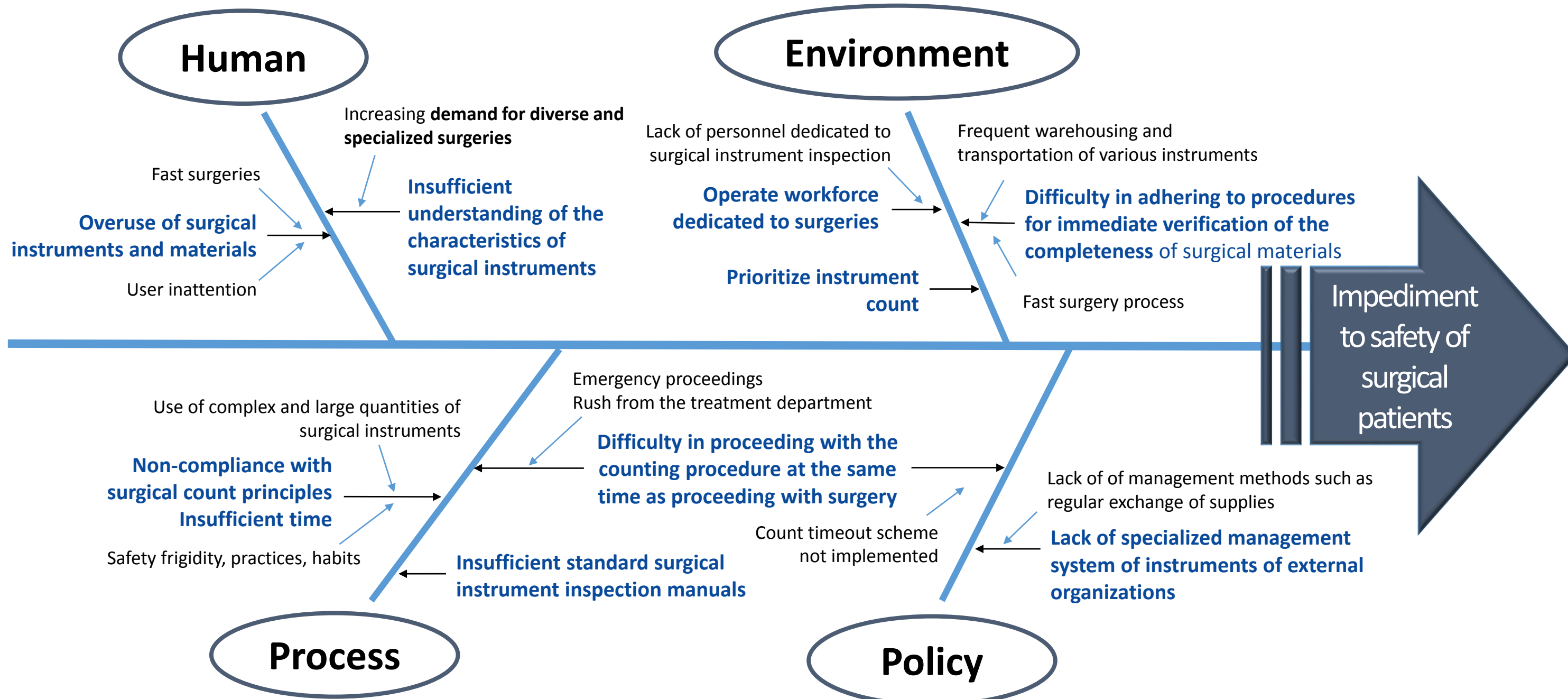
Indicator 2. Periodic surgical instrument inspection rate ... 26.9%

✓ Investigation Period: Sep. 2020 – March 2021 (preliminary investigation)
✓ Investigation Method: 『Investigation Method: Surgical Instrument Checklist by Treatment Department』



"Standardized forms" for instrument inspection + "workforce dedicated to the management of surgical instruments" necessary

2. Cause Analysis



1. Surgical Count Reinforcement Activities



Enhance Counting

- 1:1 Simulation training
- Itemized count training
- Fourth count enforcement



Confirm Completeness

- Training and announcements on checking methods by surgery and material
- Conversion of supplier products of split medical supplies → Commercialization of supplier products (24 types in total)



Change Counting Method

- Reflection of counting board in CPS history
- Count record modification on surgical nursing report
- Use counting tools

2. Improve and strengthen sterilization processes

Self-implementation of operating room equipment reprocessing

⇒ Centralization

Surgical instrument reprocessing request

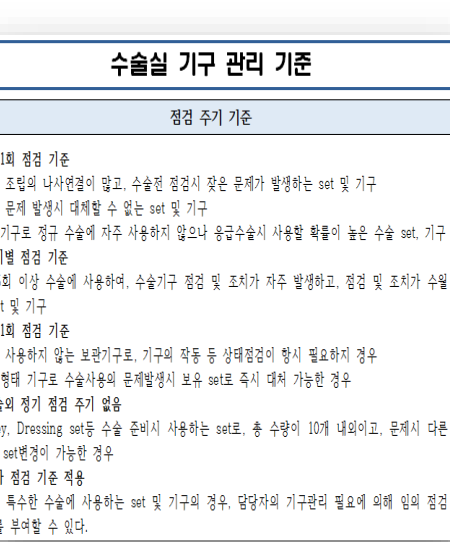
Move contamination-only DWs

Cleaning, packaging, and sterilization

Move sterilization-only DWs

* DW(dumb waiter): package moving hauler

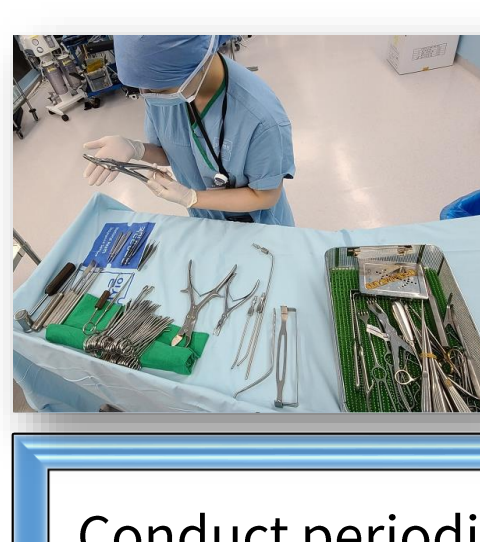
3. Surgical instruments pre-check activities



Develop a Standard Template for operating room equipment inspection



Fill out the operating room equipment checklist by Treatment department



Conduct periodic equipment inspections (monthly quarterly)

4. Improve medical staff's awareness of safety culture

『교포무 계수관리 질향상 활동』



5. Management of instruments rented from external agencies (agency delivers to the hospital [lending], hospital uses and returns)

Equipment Management

Inspect regularly used equipment

Supply Management

Exchange according to the number of use

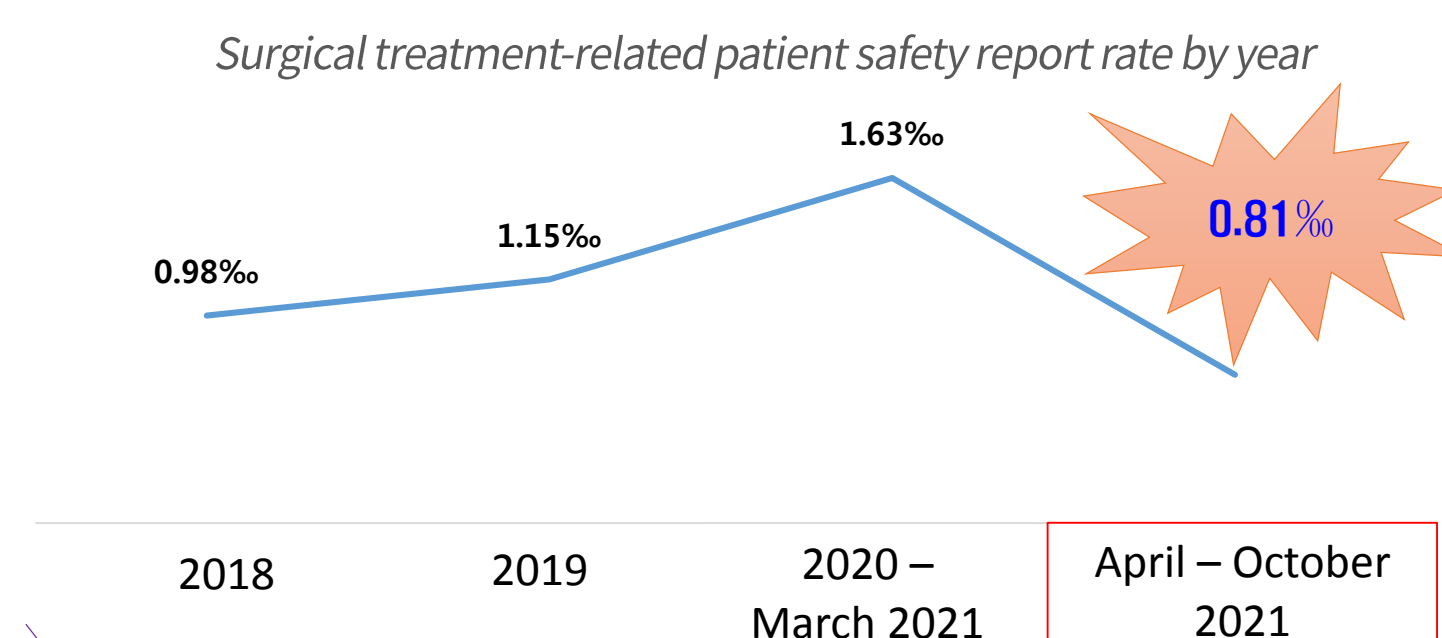
Inspection Plan

Expand the inspection plan

RESULTS

Indicator 1. Surgical count-related patient safety report rate

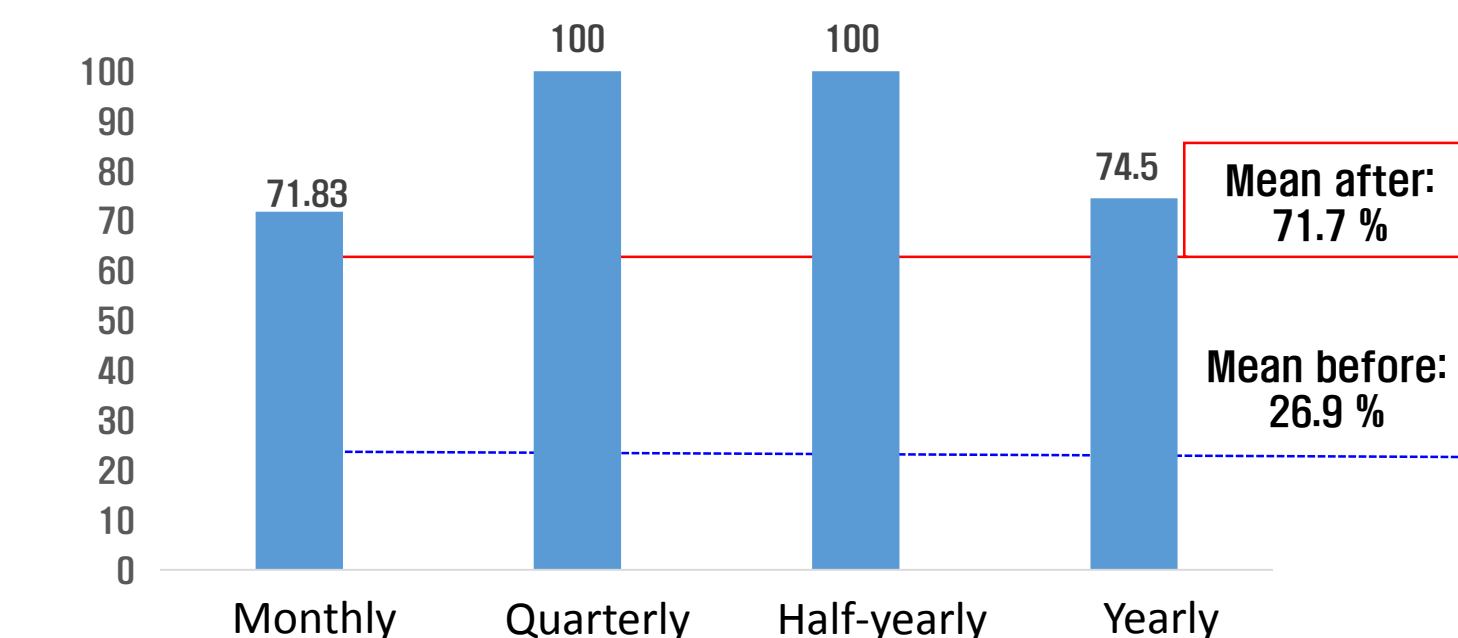
Target: below 0.89 %



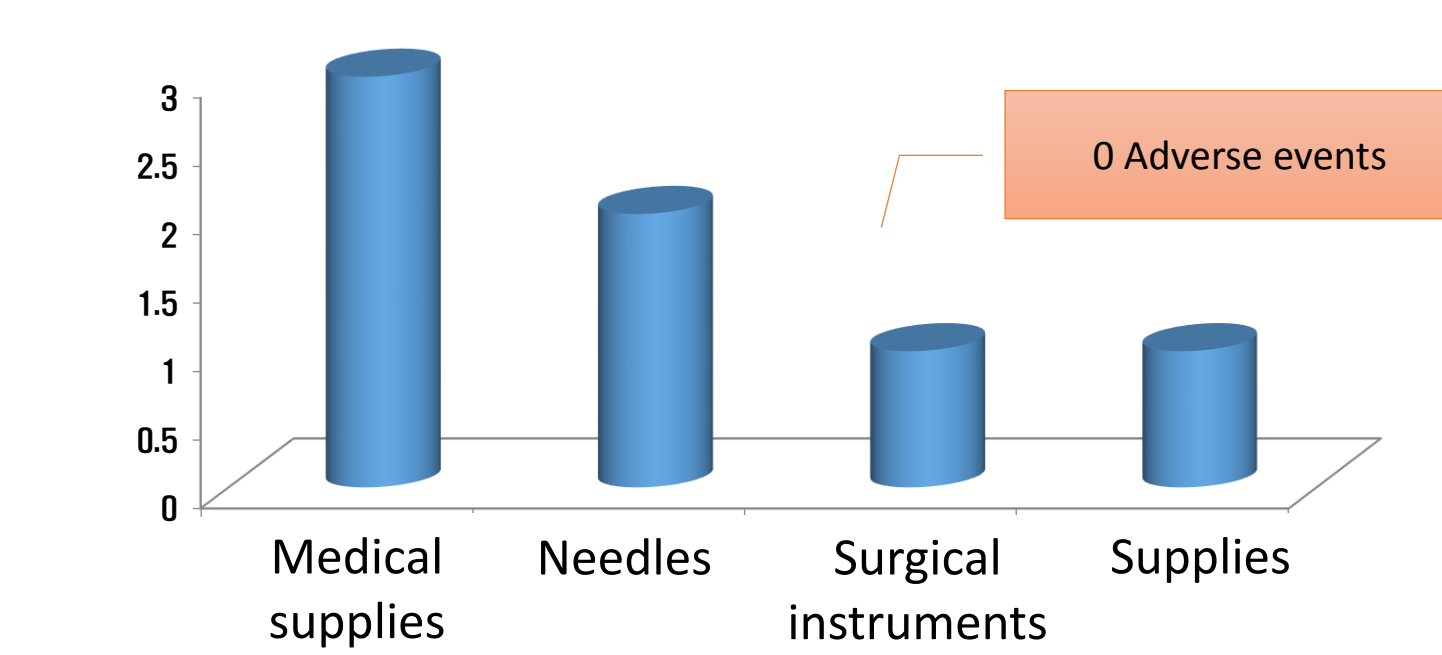
Continued follow-up monitoring after a year (0.7% target achievement)

Indicator 2. Periodic surgical instrument inspection rate

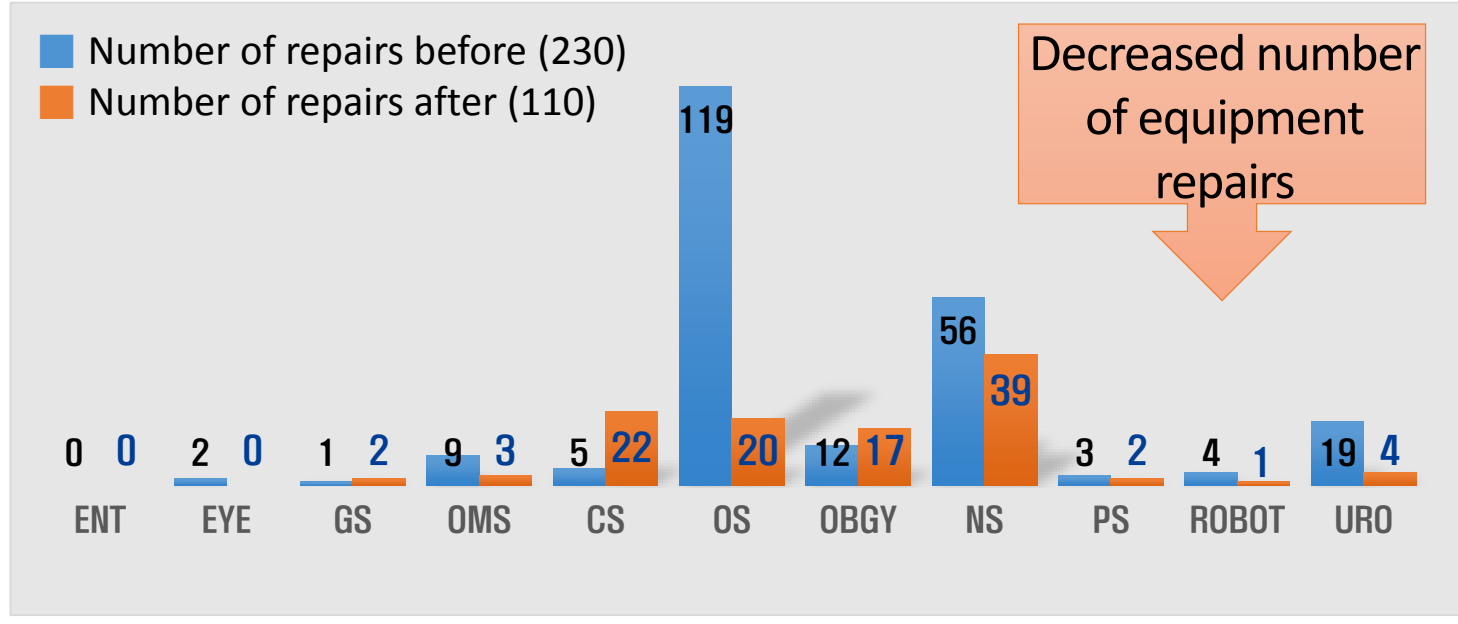
Target: above 45%



Continued follow-up monitoring after a year (82.4% target achievement)



『Achieved the targets for the second year in a row』



CONCLUSION

✓ Recognition of the surgical count process

• Need for a culture of safety awareness among healthcare professionals
• Implement a counting timeout system

✓ Establishing a count safety system

• Improve sterilization work process → Concentration on surgical nursing tasks
• Establish a process control system for managing rental equipment