

Efficiency of major treatment by applying nursing records and nursing prescription linkage system

MR. Kim, MY. Ma, YN. Kim and SY. Kim
National Health Insurance Service Ilsan Hospital, Goyang, Republic of Korea

INTRODUCTION

Smarter hospitals

Use of various devices
Use individual programs for each device



Increased patient severity

Increased direct nursing
Repetitive nursing procedures and recording tasks
Decreased work efficiency



Increased complex treatments

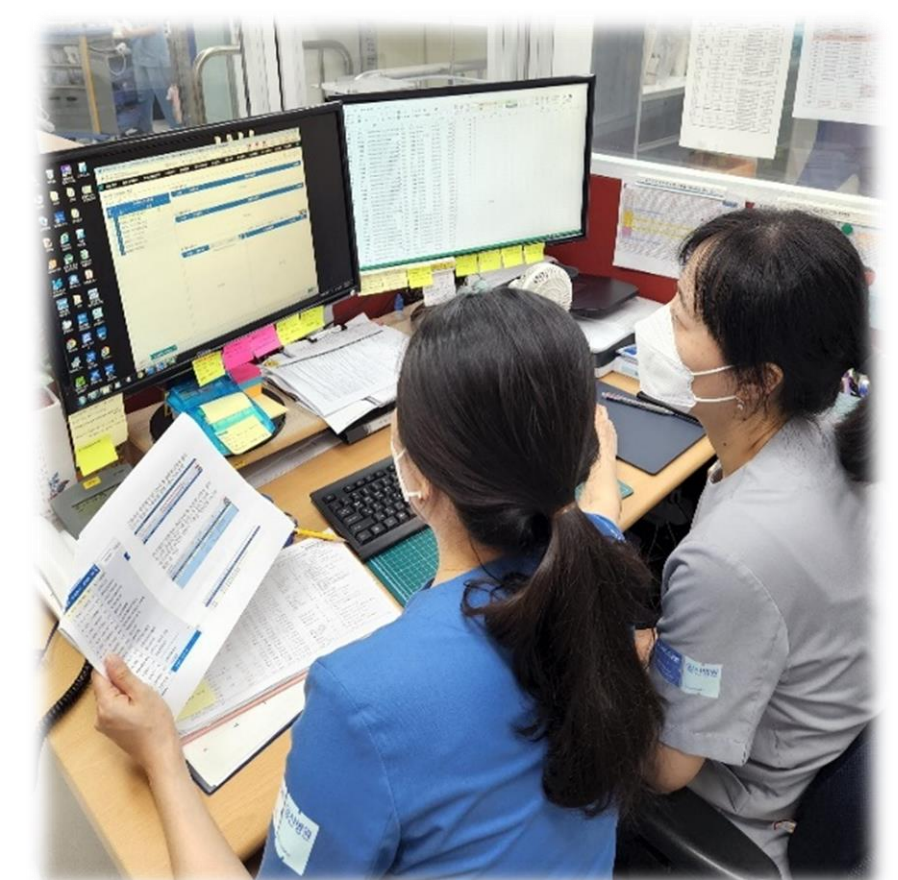
Various departments and medical materials
Increased work burden for nurses



Need for the improvement of nursing record and nursing prescription systems

4 One-click smart records training and promotion

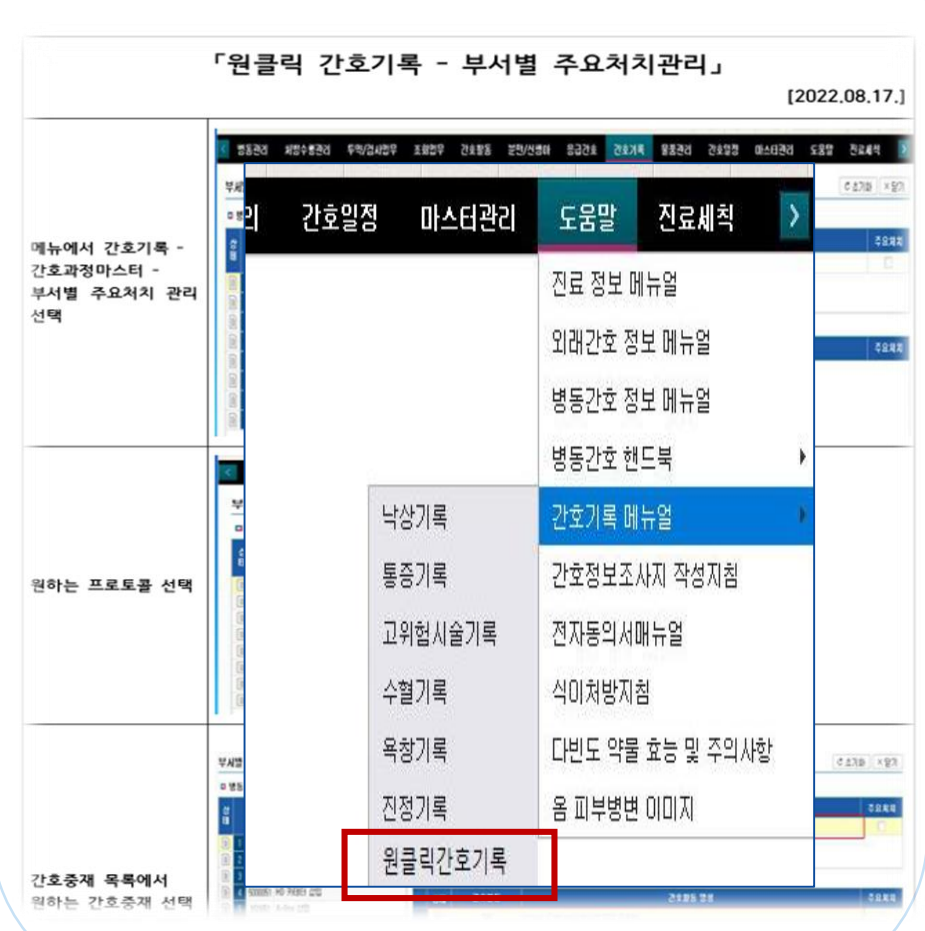
Department manager training



Department member training



Add a help function



AIM

- Indicator 1

Main treatment nursing records and nursing prescription time
50% decrease from the preliminary investigation
- Indicator 2

Nursing prescription omission rate of main treatment materials
50% decrease from the preliminary investigation
- Indicator 3

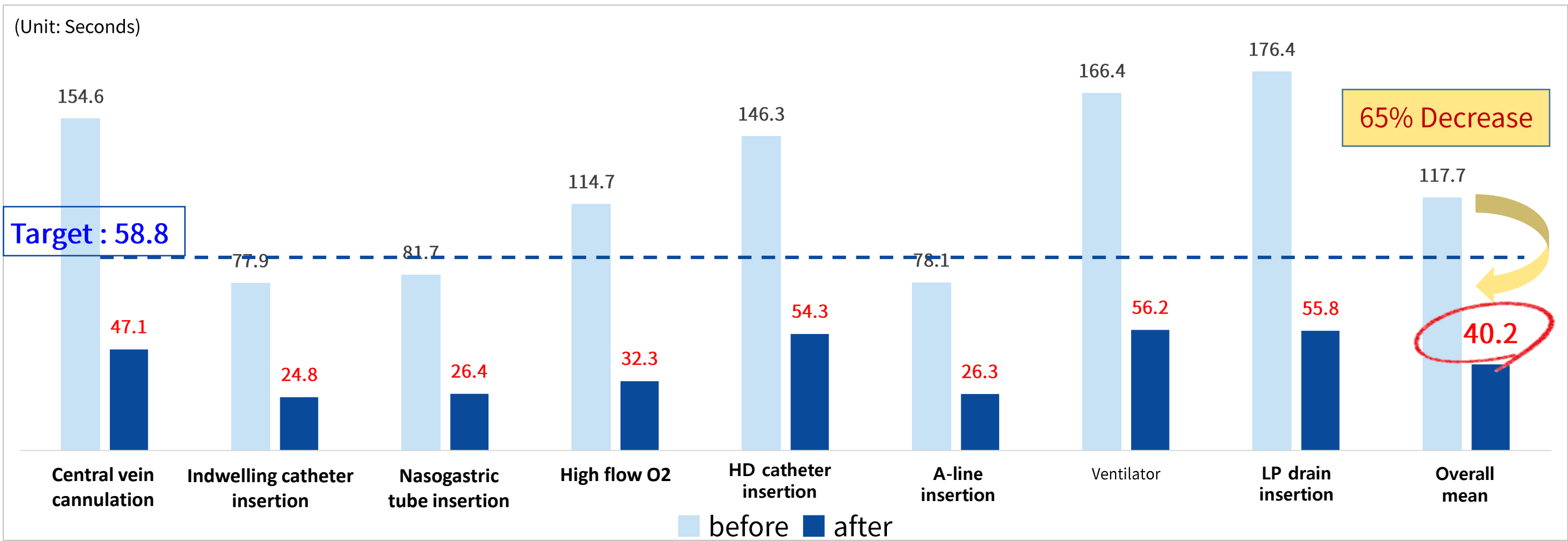
User satisfaction with the system
20% increase from the preliminary investigation

RESULTS

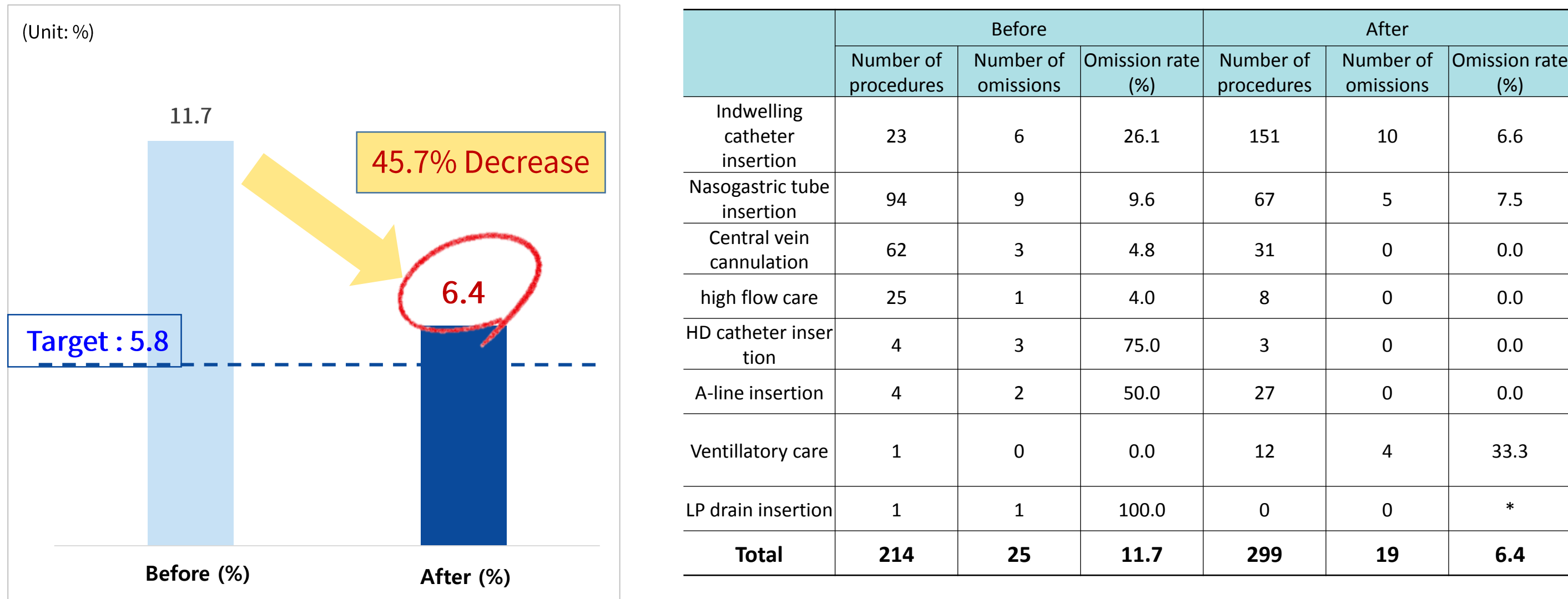
Investigation Period

Preliminary: Apr. 8-14, 2022; Follow-up: Sep. 26 – Oct. 3, 2022

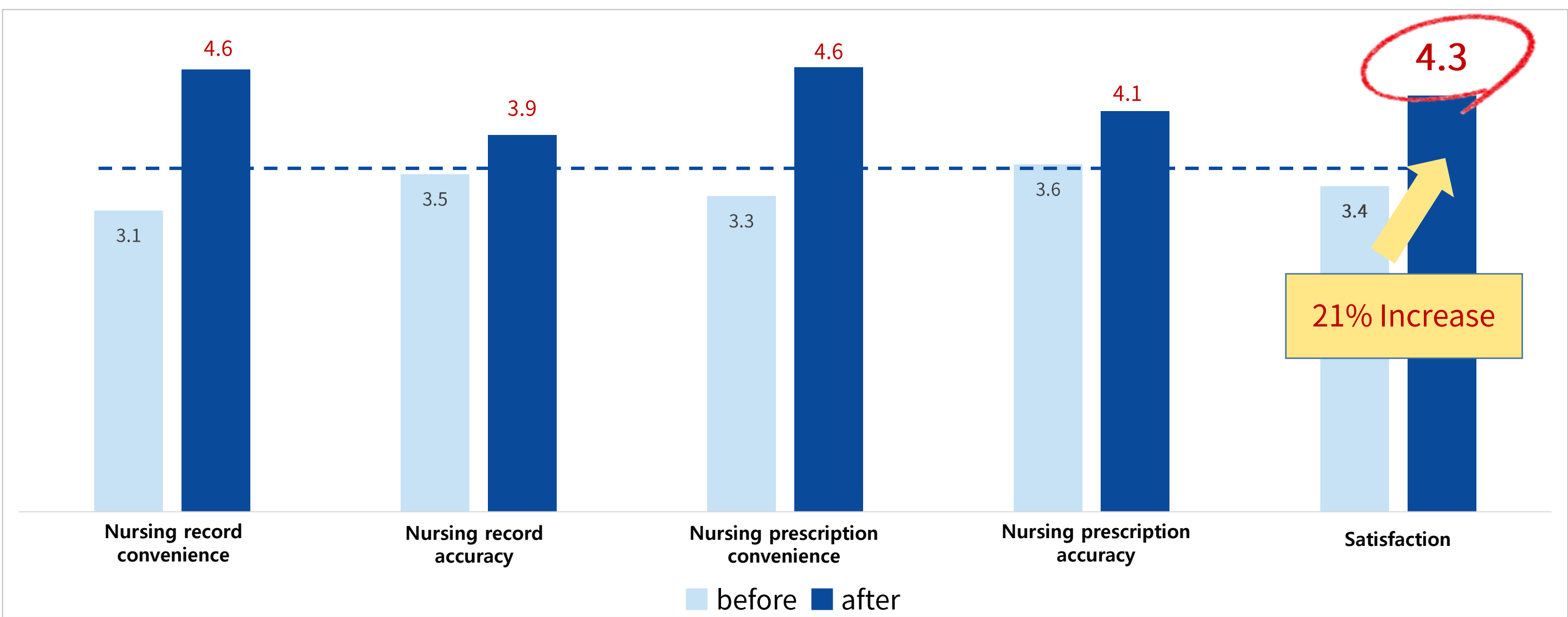
Indicator 1 Main treatment nursing records and nursing prescription time



Indicator 2 Nursing prescription omission rate of main treatment materials



Indicator 3 User satisfaction with the system



METHODS

Cause-effect diagram

Human: Increased proportion of new nurses, Inadequate nursing skills, Excessive workload, Misplacement of notes.

Process: Increase in patient severity, Increased number of treatments, Shortage of workforce, Error in recording post-treatment memos, Difficulty in the nursing recording process, Difficulty finding materials used during recording.

System: Missing departmental coded prescription update, No update of the nursing records-prescription linkage, Creating a new nursing record protocol every time the procedure is performed.

Environment: Delayed internet connection, Manual recording at the time of treatment, Increased errors due to the use of the search function during nursing prescription, Immediate recording difficult due to the aging of the department's laptops, Difficulties in immediate recording and prescriptions due to lack of computers in the department.

Result: Increased Nursing Workload

Improvement Activities

- Selection of 8 main treatment items and review of details
- Development of a one-click master screen
- Development of a nursing records-prescription linkage system

Main treatments

Central vein cannulation
Indwelling catheter insertion
Nasogastric tube insertion
High flow O2 care
HD catheter insertion
A-line insertion
Ventilatory care
L-P drain insertion

Master screen function

- Add and remove main treatment items
- Select nursing activities for main treatments
- Select medical materials for main treatments
- Enable the creation of lists of nursing prescriptions and records tailored to department characteristics

One-click nursing records and prescriptions

- Select the main treatment from the one-click nursing record screen
- Save the master-set records and prescription via one-click

CONCLUSION

- Improve work efficiency through expanded operation, as it is limited to 8 main treatment items
- Customized management that reflects an ever-changing healthcare system needed
- Develop a linked screen that enables one-click nursing records from the existing nursing record screen
- Establish an environment that enables focusing on patient care by developing a system that allows immediate recording next to the patient with a smart device such as a PDA