

Improving the management of anti-thrombotic drug administration in surgical patients

SH LEE, SK Kang, HS Kim, JY Seo, DH Shin, TE Ham, TH Lee, JU Byeon, SY Yun, SH Park
National Health Insurance Service Ilsan Hospital, Goyang-si, Republic of Korea

Introduction

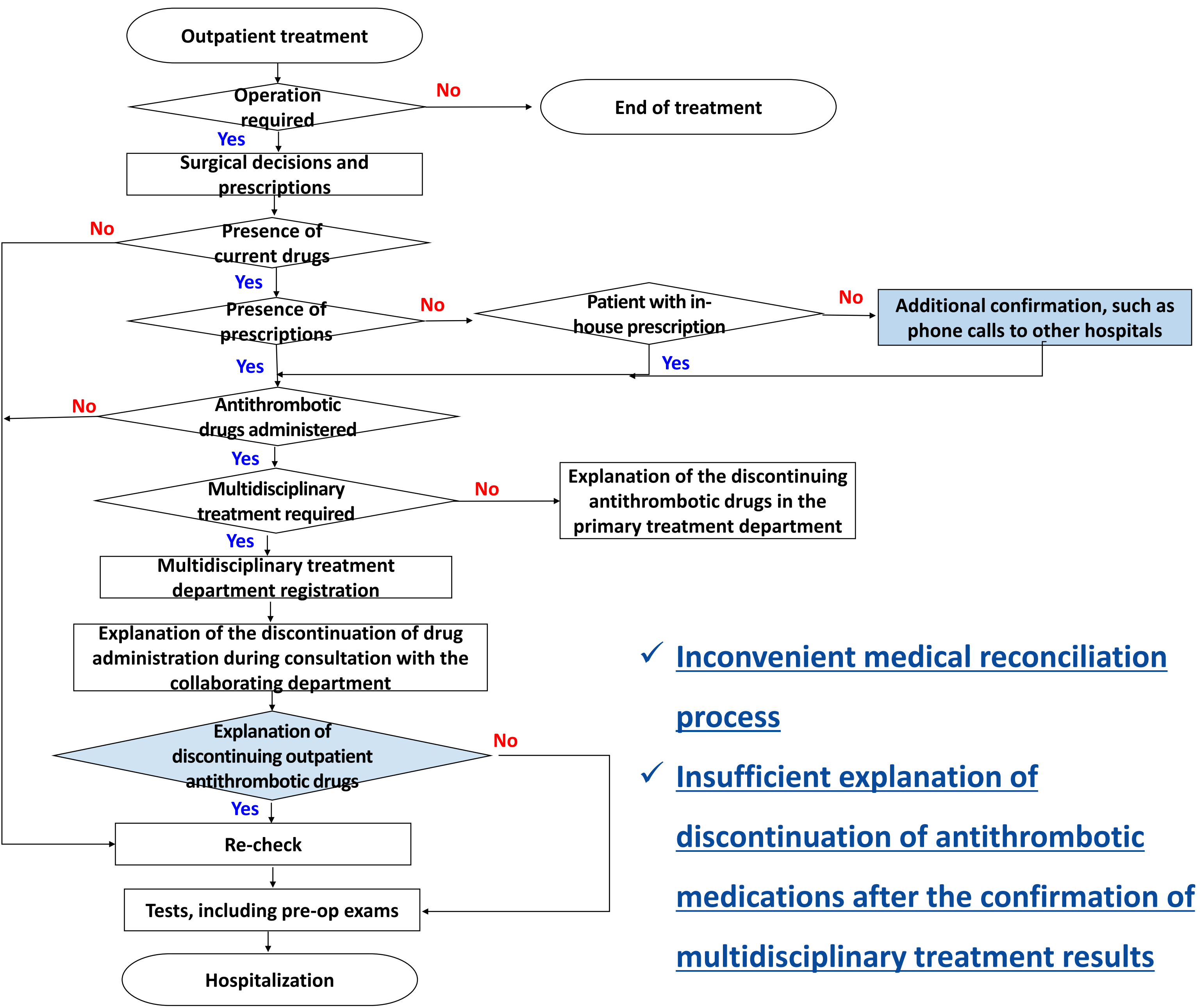
- Require through management according to the issuance of patient safety alerts of the Korea Patient Safety Reporting & Learning System’s “Antithrombotic medication management errors before and after surgery”
- Necessary to inspect the process and establish a system to countermeasure surgery delays and continuous patient complaints due to non-discontinuation of antithrombotic medication administration

Indicators and Goals

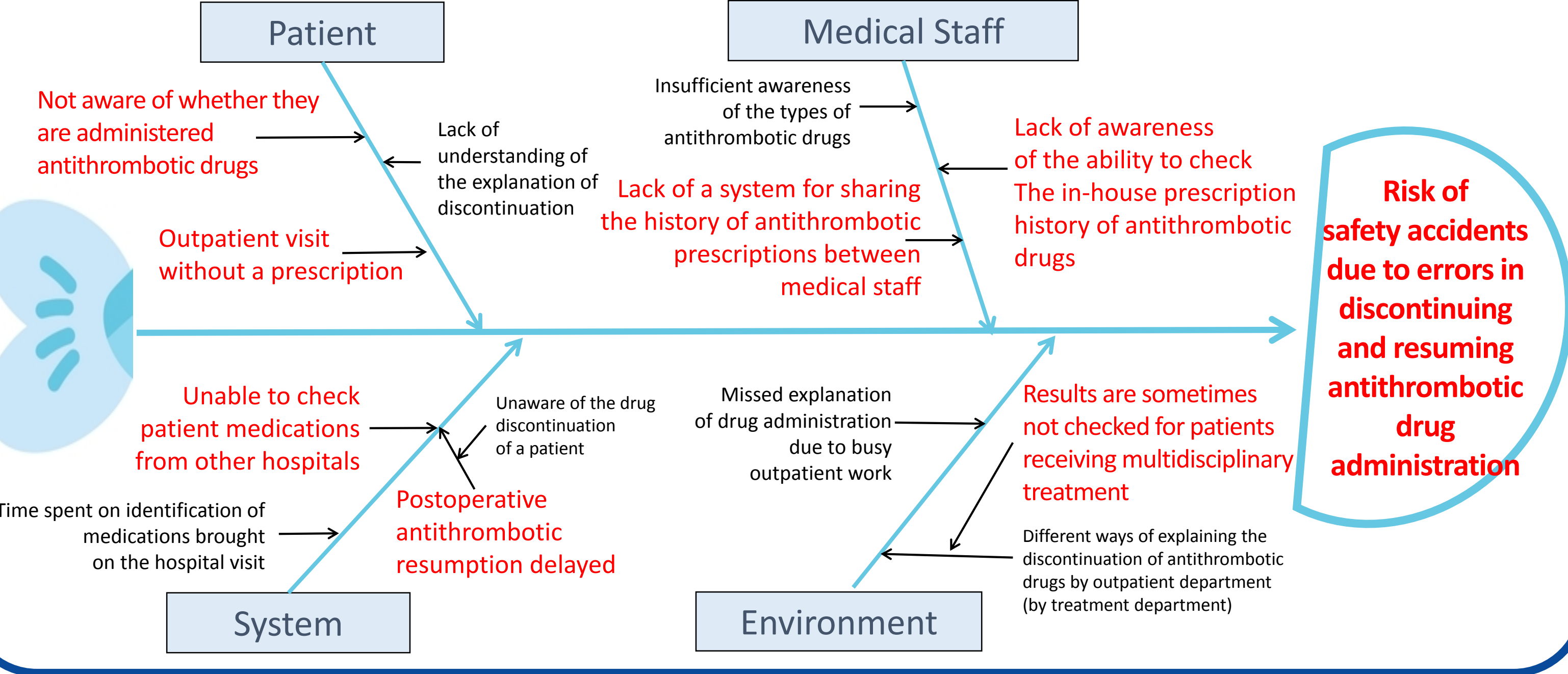
- Indicator 1**
Reduced surgery cancellation rate by 20% due to the middle stage of taking anti-thrombotic drugs
- Indicator 2**
Reduced time required to identify current drugs for outpatients scheduled for surgery by 20%
- Indicator 3**
Reduced average number of carry-on confirmations by 50%

Problem Analysis

Work Process Analysis

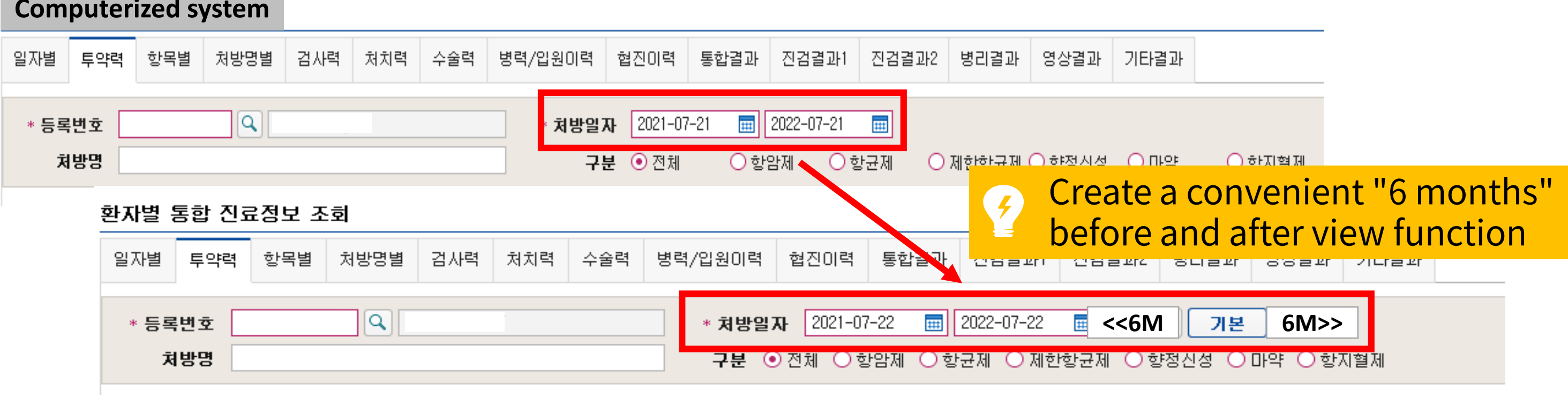


Cause & Effect Diagram



Improvement Activities

Improved procedures for checking the history of antithrombotic drug administration



→ (In-house prescription) Supplement medical history search function and provide training for physicians on its usage (July 22, 2022)



→ (Outpatient prescription) Introduce a one-stop inquiry system for history of antithrombotic drug administration and utilize it in outpatient department PCs (June 20, 2022)

Improve antithrombotic drug resumption process

수술비정원상 Save antithrombotic discontinuation status

성명	No	STA	집도	등록번호	성명	수술제 항혈전제 중단	나이	병실	집도의	전공의
1		OS				☒	M 17			
2		OS				☐	M 14			

Enter information when deciding to discontinue antithrombotic drug administration to share the information

→ Check discontinuation status on the "view scheduled surgeries" screen (July 22, 2022)

Provide alerts for consideration of postoperative antithrombotic drug resumption

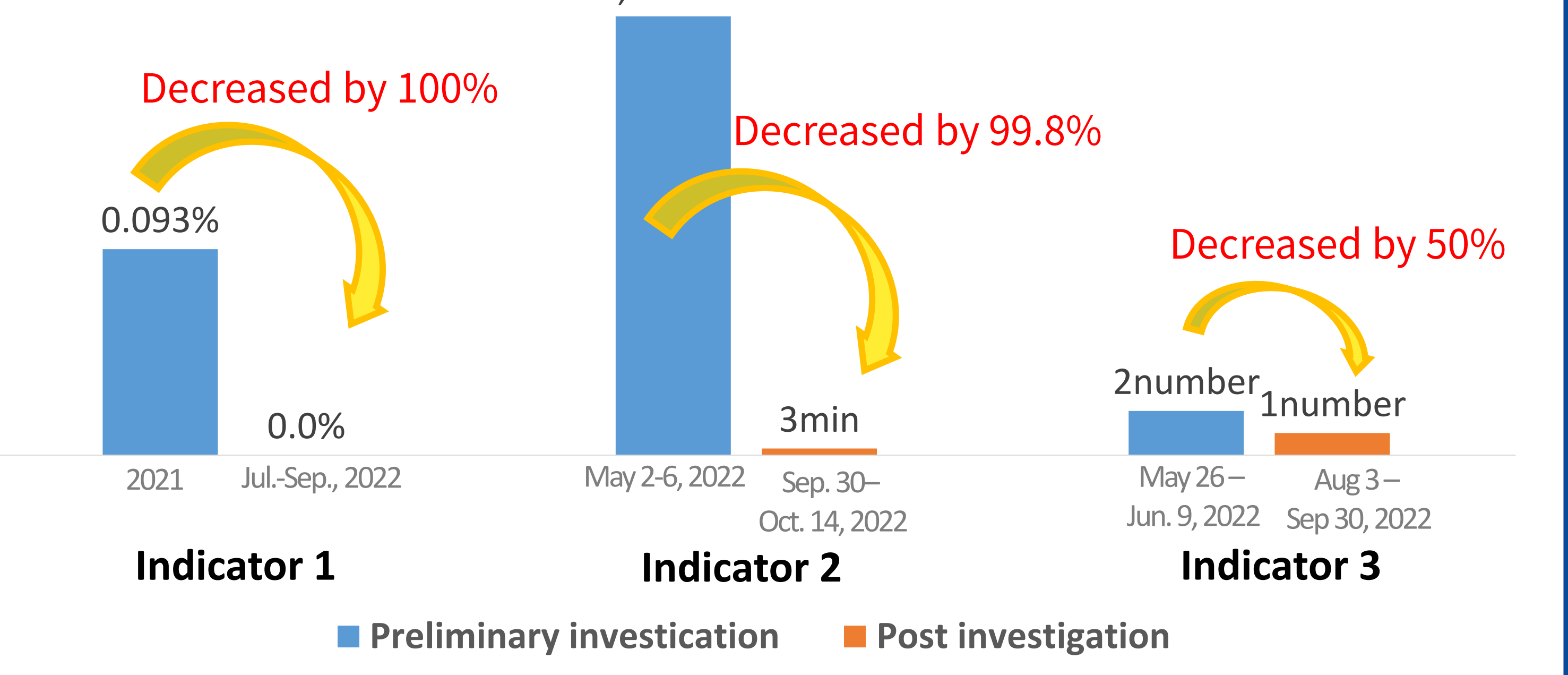
→ Auto-generate prescription messages up to 2 days after the surgery (July 22, 2022)

Inspect the process of checking outpatient antithrombotic drug administration

→ Improve the process to the outpatient surgical department checking the results of the preoperative collaborative treatment and explaining them to the patient

Results

Results of the Improvement Activities



Achieved all 3 targets

Conclusion

- Greatly reduced the workload and time to check current medications by implementing a one-stop system
- Enabled the resumption of antithrombotic medication administration at an appropriate time by establishing a resumption alert system to prevent interruptions on antithrombotic drug administration for longer than the necessary periods after surgeries
- Follow-up management and review are required to expand the pilot one-stop system to other treatment departments