# To reduce the number of opened unused surgical gloves in Major Operating Theatre, General Surgery OTs Ng Lay Har, I'vi Xue Juan, Geraldine Lie Management 2024 Major Operating Theatre, Major Operat

Ng Lay Har, Esther Lim Wan Shin, Yi Xue Juan, Yeo Xin Yi, Geraldine Lim Joo Tin Major Operating Theatre



## Background

Sterile surgical gloves are routinely worn during all invasive procedures to prevent two-way transmission of pathogens between the surgical team and the patient. This reduces the risk of surgical-site infections and prevent patients and staffs from exposing to blood-borne disease.

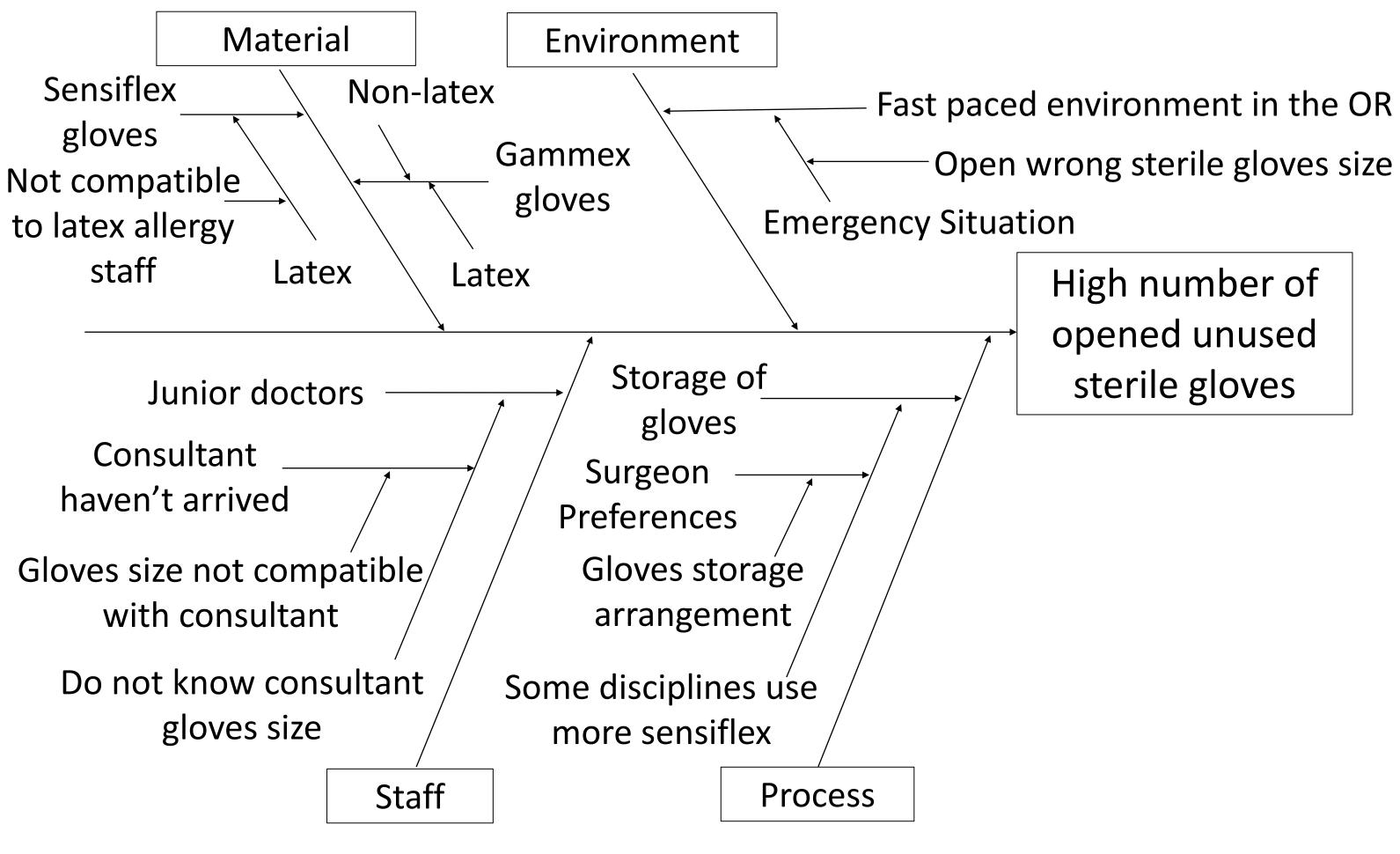
However, there is a high number of wastage on opened and unused sterile surgical gloves in Major Operating Theatre (MOT), General Surgery OTs. A total of 150 pairs of opened and unused sterile gloves were collected from October to December 2022.

# **Objectives**

To reduce the number of opened and unused gloves in General Surgery OTs from 13 to 8 pairs per week within 6 months.

# **Root Cause Analysis**

Cause-Effect Diagram



### The final root causes identified

- 1. Unaware of Consultant gloves size and preferences
- 2. Gloves storage arrangement

# Implementations



Brainstormed for ideas using SMART goals

Singapore General Hospital: Surgical Safety Checklist



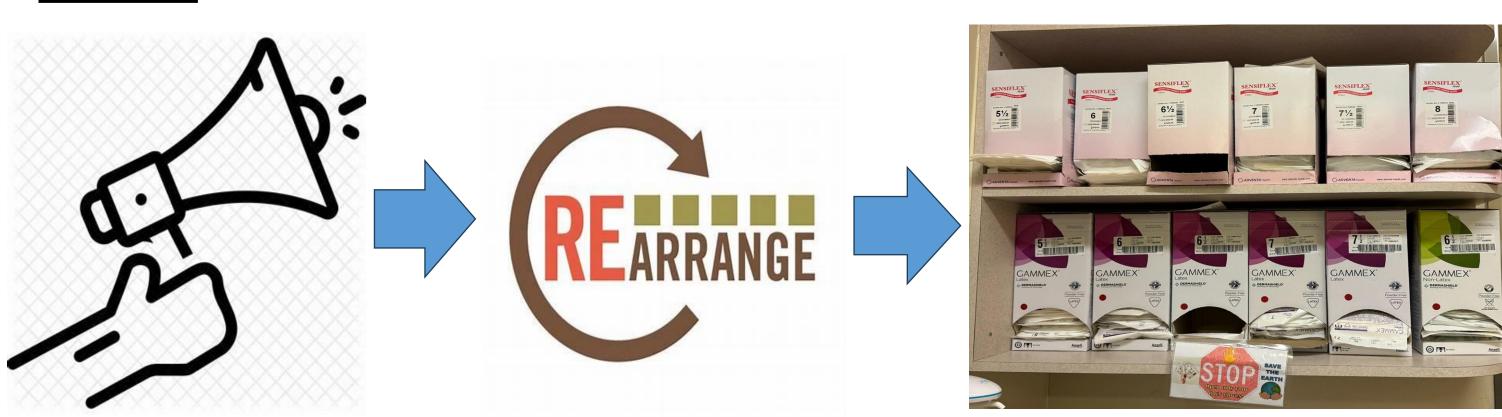
Remind surgeons after
Team Brief or PreInduction Sign In to open
only what they need



Signage placed in scrub room gloves compartment area as a reminder



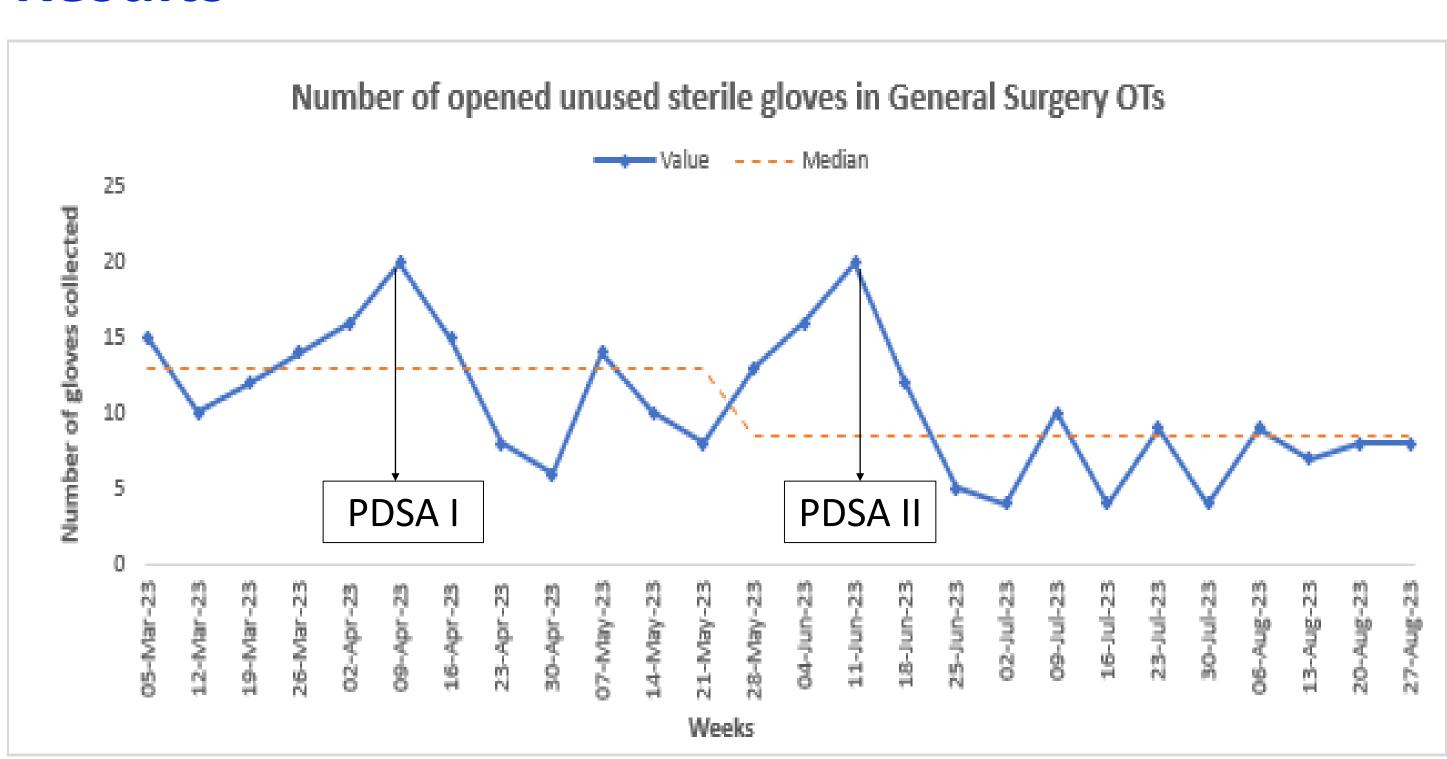
### **PDSA II**



Inform MMD colleagues to top up one box of gloves for each brand and size

Shelves are rearranged to fit only one box per size at designated area

### Results



We have met our target by reducing the number of opened and unused sterile gloves to 8 pairs per week.

### Tangible Benefits

Cost savings for consumables (Sterile Gloves):

- 20 pairs of gloves per month
- \$0.53 per pair of sterile gloves

Total cost savings of \$10.60 per month

• Total cost savings for per year = \$127.20

### **Intangible Benefits**

- Material Management Department (MMD) colleagues do not need to top up so frequently
- Better communication and good rapport among surgeons and nurses
- Operating Theatre Technician Associate (OTTA) do not need to collect opened and unused sterile gloves from individual theatre which lighten their workload

# **Sustainability Plans**

Team members continue to monitor and remind the surgeons to reduce sterile surgical gloves by opening only what they need at the end of team brief or Pre-induction sign in. Ensure that signage is placed in scrub room at glove compartment where it is visible for everyone to see.

### Conclusion

SAVE

THE

EARTH

This project helps us to reduce sterile gloves wastage in the Operating Theatre to protect our global environment. We have shared and implemented this initiatives to other disciplines in Major Operating Theatre. Going forward, we plan to explore ways to reduce waste of opened but unused sterile surgical gowns.