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## Enhance Patient Safety Through Disinfection of Linen Trolley

### INTRODUCTION

Clean linen trolley play a critical role in maintaining hygiene and preventing the spread of infections. It ensures the safety and well-being of patients and healthcare professionals.

Linen Supplies Unit (LSU) is experiencing challenges such as incomplete disinfection due to intricate surfaces and potential oversight in routine cleaning protocols require further attention to sustain cleaning compliance rate.



#### What is the aim of this project?

To achieve 93% glo germ compliance rate

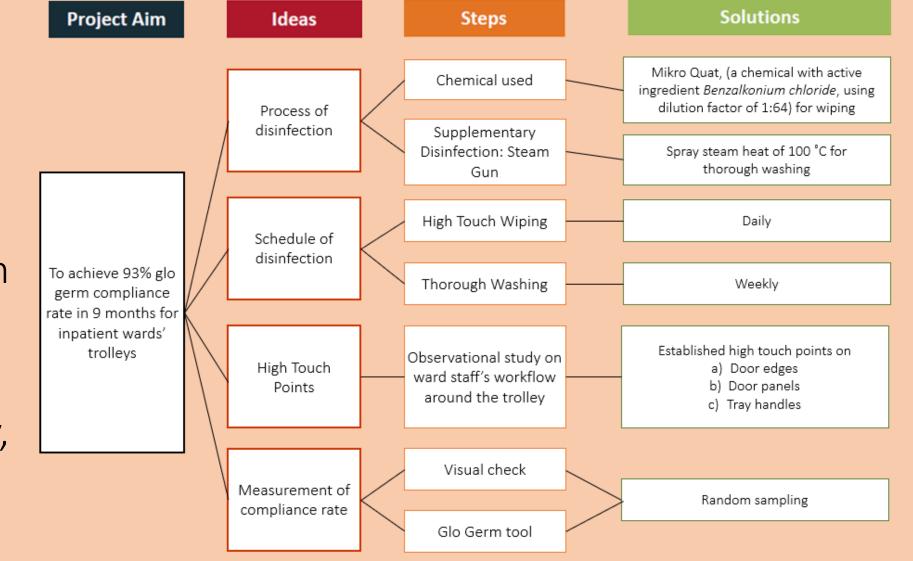
(to standardize with Inpatient cleaning - glo germ inspection target) in 9 months for inpatient wards' trolleys by establishing a systematic guidance in linen trolley disinfection process flow and schedule

## PROJECT ANALYSIS

Driver Diagram is used to develop ideas further to attain the aim of the study.

The frequency of daily wiping and weekly thorough cleaning are established to effectively disinfect trolleys surfaces when trolleys are returned from wards to LSU from Jan 2022.

High touch points of linen trolleys were identified through observational study on ward staff's workflow around the trolley, especially during routine bed making and patient shower time, where clean linen is retrieved from the trolley.



#### **METHODOLOGY**

# Cleaning of Linen Trolley: Daily High Touch Points Wiping with Quaternary cleaner

- 1) 3-tiers trolley with necessary tools is placed at place of use.
- 2) Put on PPE and perform wiping as per procedure.
- 3) Take a piece of clean cloth pre-soaked with Mikro Quat and wipe the high touch points in following sequence:
  - a) door edges

2.1 piece of clean cloth for 1 unit of trolley wiping.

- b) door panel & lock
- c) tray handles (for OCH linen trolleys only)



Tools were made available near place of use

**Visual management**: Standards showing the steps on high touch wiping are placed at place of use to empower LSU staff to perform task effectively.





## Cleaning of Linen Trolley: Weekly Thorough Cleaning with Steam Gun Sterilization



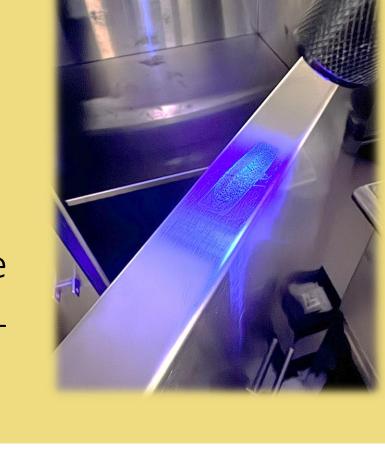
1) Check linen trolley to ensure all the linen are removed from the linen trolley.

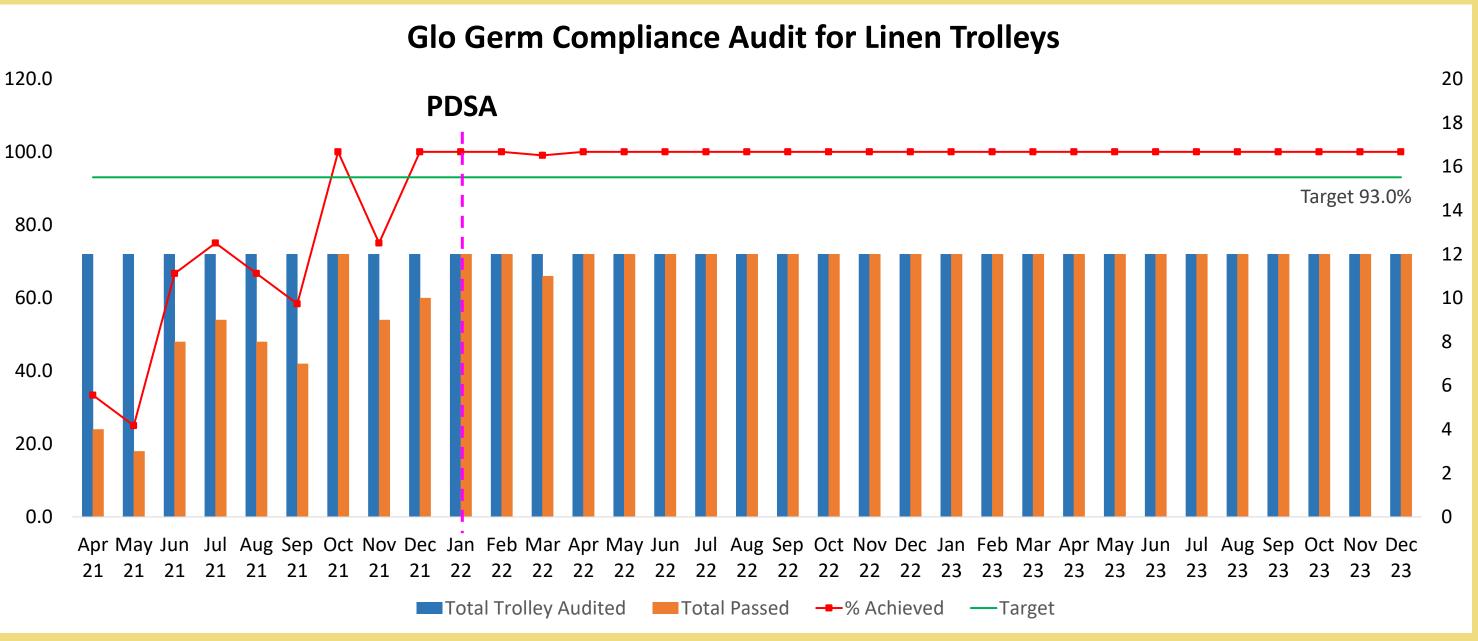
- 2) Put on PPE and handle steam gun as per procedure.
- 3) Spray hot steam to sanitize internal of trolley, follow by external of it and underneath of trolley.
- 4) Remove PPE then wipe dry internal and external surfaces of linen trolley with clean cloth.

## **RESULT**

Glo Germ is a visual tool to demonstrate effectiveness of surface cleaning. When expose to Glo Germ UV light, it casts a revealing glow to identify the miss-out surface.

From April 2021 to Dec 2023, glo germ was used to measure compliance rate. After we started PDSA in Jan 2022, the post-implementation median maintained at 100%.





#### Benefits of disinfecting linen trolley:

- Decreased risk of cross-contamination and infection transmission
- Enhanced patient safety and well-being.
- Increased confidence in infection control measures among healthcare staff.
- Compliance to infection prevention practices.

## CONCLUSION

Daily high touch point cleaning and use of stream gun sterilization, followed by a compliance audit with Glo Germ, is an effective method of ensuring our linen trolley go through a thorough disinfection program to protect our patients and staff from cross-contamination and infection transmission. LSU may also explore Ultraviolet-C (UVC) treatments to disinfect linen trolleys to reduce manhours used to wipe dry linen trolleys after steam gun cleaning.