Project Title

From Discard to Design: Syringe Driver Bag with a Purpose

Project Lead and Members

Project lead: Jennifer De Leon Andaya

Project members: Wu HM, Woon LT, MF Tan Carol

Organisation(s) Involved

KK Women's and Children Hospital

Healthcare Family Group(s) Involved in this Project

Healthcare Administration, Nursing

Applicable Specialty or Discipline

Infection control, environmental services

Project Period

Start date: March 2023

Completed date: September 2023

Aims

The aim is to introduce single-use syringe driver bags to eliminate sharing between patients and reduce the risk of infection transmission.

Background

Syringe driver is a portable device for delivering subcutaneous infusions or medications, especially to palliative patients. It is typically placed in a small bag for patient convenience and safety. However, these bags are often reusable, and there is no standard practice for cleaning them, posing an infection control concern due to

the risk of transmitting infections from one patient to another. In addition, mold formation were also seen due to inadequate drying of these bags.

Methods

A multidisciplinary team was formed to assess the current practices concerning the cleanliness of SD bags. The team comprised the Infection Control Nurse, Nurse Clinicians from Ward 43, and representatives from Environmental Services, Linen Services. The team engaged relevant staff across multiple departments to ensure a comprehensive evaluation of the options. To engaged Yellow Ribbon Industries, an external laundry company in upcycling condemned linen into single-use bags, the most sustainable and cost-effective among others. Specific measurements and drawing were given, and a sample was made for trial use and evaluation on patients. This option is sustainable and cost-effective solution not only addresses immediate concerns but also offers long-term benefits.

Results

With this implementation, patient were satisfied as the bag is light in weight, soft to touch, and most importantly it is for their own use. Ward nurses were also satisfied as these eliminate the time spend to perform washing and drying within the ward, reduces the risk of transmission of infection between patients and thus improve the safety of their high-risk group of patients. By upcycling these condemned linens, we helped to recycled these linen that were bound to be thrown away and reduced waste, contributing to sustainability effort.

Conclusion

This initiative significantly contributes to the hospital's commitment to achieving TARGET ZERO HARM by minimizing healthcare- associated infections (HAIs), supporting recycling efforts to reduce environmental footprints, and enhancing operational efficiency in the hospital.

Project Category

Care & Process Redesign

Value Based Care, Safe Care

Keywords

Upcycling, Infection control, Syringe Driver Bag

Name and Email of Project Contact Person(s)

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Background

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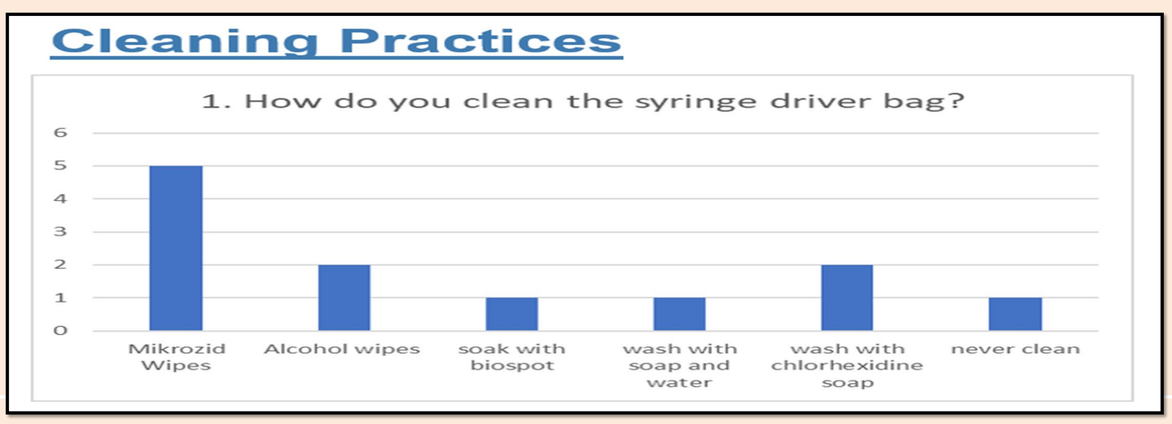

Figure 1 – Different Cleaning Practices of the Nurses

Figure 2 – Old Syringe Driver Bag (wash and hang to dry in utility room)

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Figure 3 – New Syringe Driver Bag

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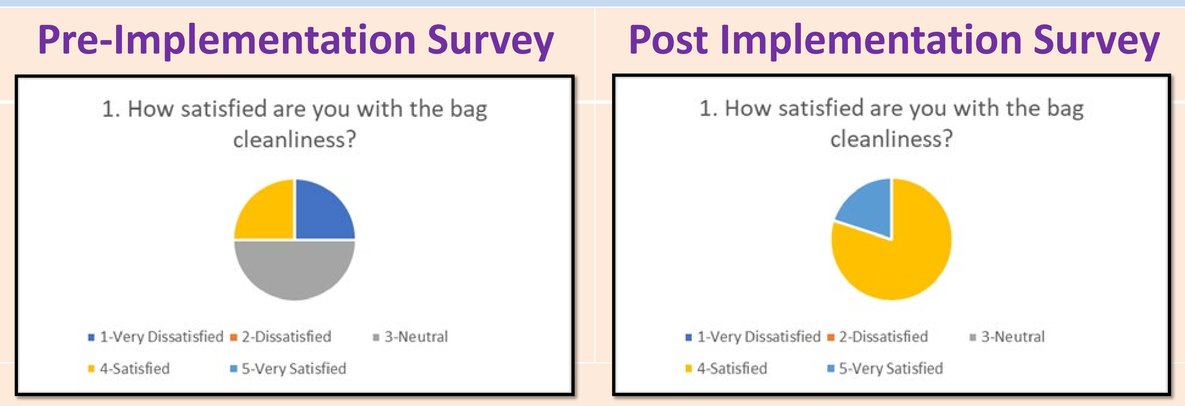

Figure 4 – Patient Satisfaction

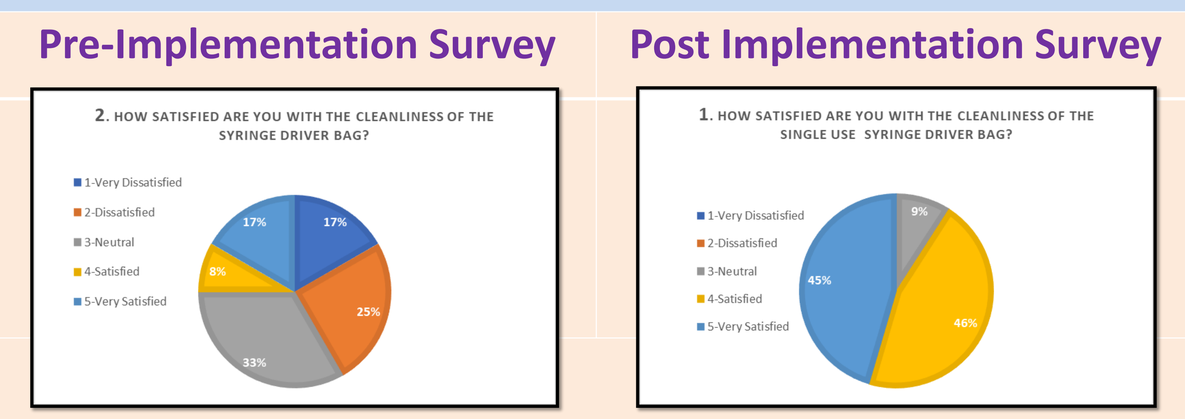

Figure 5 – Staff Satisfaction

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Acknowledgment

The team would like to thank Vijayan R, Baby Tan and team from Yellow Ribbon Industries Pte Ltd who helped to create these bags.

Ms Ang Li Duan, appreciate the opportunity to work with, you significantly contributed to the success of this project.