



Upcycling Hospital Linen that are No Longer Had its Useful Lifespan (Condemned) and Repurpose the Linen to Increase its Original Value to Improve Patient Care and Reduce Waste

Introduction

Lifespan of hospital linen is around 5 years or shorter if the linen is torn or worn out beyond repair. These linen were discarded. New linen were bought to replace the discarded linen.

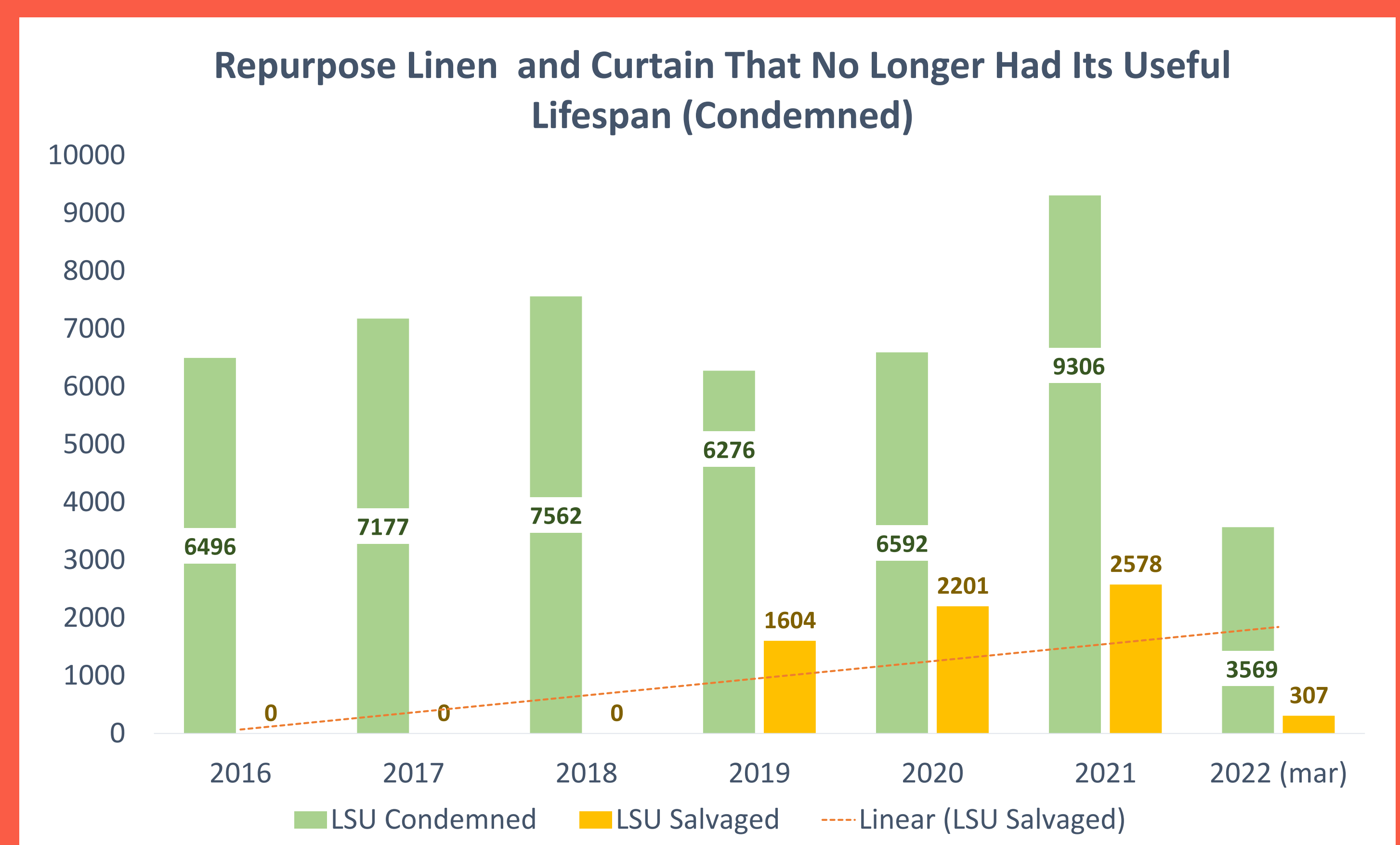
Linen Supplies Unit (LSU) noticed the large quantity of damaged linen being generated as waste, which is not friendly to the environment.

What is the aim of this study?



To decrease the disposal quantity of damaged linen by 15% within 2 years through upcycling them into items that are valuable and functional.

Result



With this implementation, we have achieved the following key objectives of reducing waste generated from damaged linen:

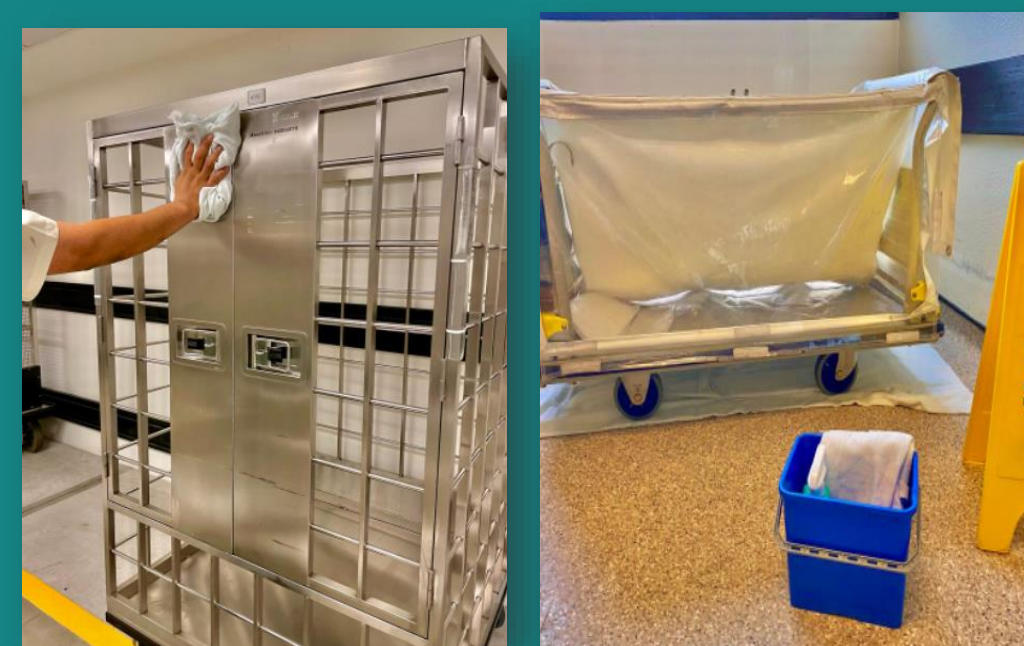
- Upcycling an average of 2,170 pieces of linen and 190 pieces of curtains per year, which is about 22% of total linen to be discarded per year within 2 years.
- The linen upcycling contributed an estimated saving of \$29,798 per year
- Positive feedbacks from users
- Greater awareness in upcycling items

Methodology

A practical instruction was applied to upcycle linen. The PDCA methodology was utilized for continuous quality improvement and enhance systematic guidance in repurposing linens.

LSU issue repurposed linen to SGH housekeeping team:

1. Every Tuesdays, LSU staff will receive damaged linen from launderer.
2. LSU staff will sort out linen that can still be reuse or repurpose.
3. Reusable linen to store for future use. Linen which can be repurposed will be converted to small cloth which are issued to housekeeping team for cleaning.



LSU upcycle old curtain as laundry bags:

- Mystique curtains were replaced by silver mist curtains
- Old curtains were transformed to laundry bags and currently use at Outram Community Hospital (OCH) to contain plastic linen bags that holds soiled linen prior sending to soiled linen holding room via pneumatic chute.



Conclusion

To explore into the green practice initiative, Linen Supplies Unit (LSU) is collaborating with the inpatient wards in re-issuing pyjamas to patients who do not have personal clothing upon discharge.

Utilize the reusable linen to replace disposal cloths. Concurrently, we are engaging with another vendor by providing samples of linen for their R&D project with NTU on sustainable textiles – textile recycling.