

Transformation of Sterile Supplies Unit

Goh Meh Meh, Chang Pin Sun, Chng Poh Choo, Ng Choon Luan, Heng Wei Cheng, Yeo Su Qian, Chua Xin Ni
chang.pin.sun@sgh.com.sg



Problem Statement



In Sterile Supplies Units, which operate in a labor-intensive environment, faced a significant challenge due to the shortage of manpower which was further exacerbated by increased patient loads. The rising demand of sterile supplies services necessitated SSUs to review its existing processes to address the challenges faced and sustain high quality care provided to patients.

Potential Solutions

Improve Efficiency by Eliminating Redundancy

- Explore converting high demand simple instruments to disposables
- Review users' norms and eliminate reprocessing of unnecessary items
- Handover distribution of disposable items to ALPS

Optimization of Manpower Deployment

- Review customers based on location proximity to SSUs and optimize logistical operations.
- Train and upskill staff to perform reprocessing of more complex instruments.

Streamline and Standardize Workflows

- Identify variation in reprocessing standards between both SSU@SGH and SSU @ SingHealth Tower (SSU@SH).
- Streamline and standardize workflows to allow better integration of both SSUs.

Project Aim

↓ ⌚ Improve Efficiency by Eliminating Redundancy

⚙️ Optimize Manpower Deployment

📋 Streamline and Standardize workflow

Lessons Learnt

Importance of Data-Driven Decision Making

- Gathering and analyzing data at various stages allowed a more accurate understanding of the process and areas that require improvement.
- The team was able to make informed decision for the ongoing quality improvement project.

Strong Leadership Support and Clear Communication

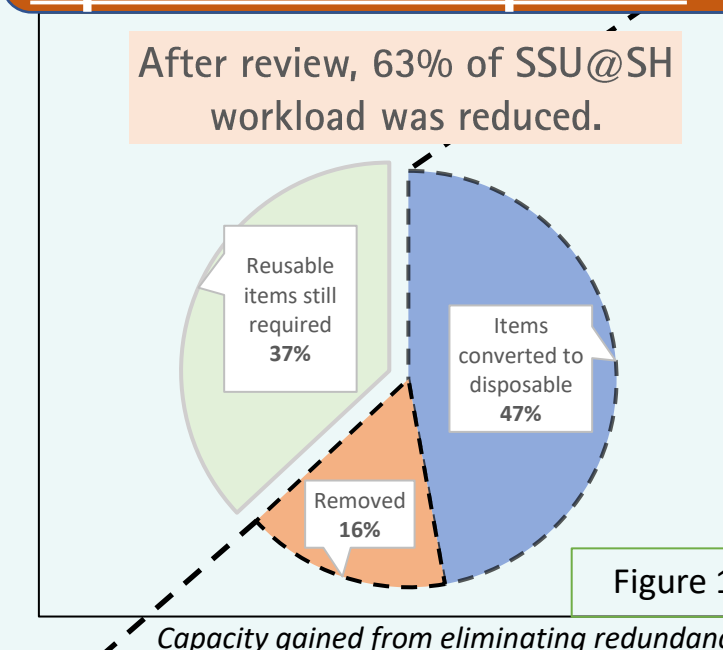
- Strong leadership support and clear communication were key to successful implementation.
- Staff felt empowered by management's support to carry out the interventions.
- Staff also felt involved and that their opinions were valued in improving the work processes.

Never Be Afraid!

- Interventions proposed might be uncommon with a low take up rate. However, the project was well received by end users.
- Thus, we learnt to never to be afraid to try something new.

Outcomes & Impacts

Improved Efficiency & Optimized Manpower



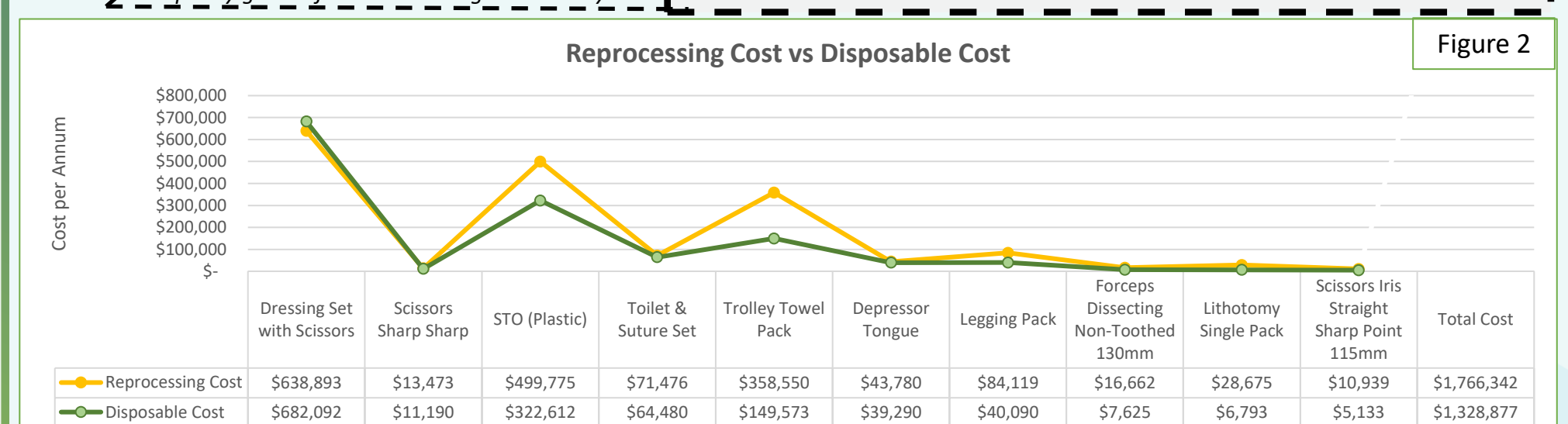
1. Focus on Higher Value Tasks

- Reprocess complex surgical instruments for NHCS OTs, Urology OTs and Burns OTs.
- Upskill and train staff to reprocess complex surgical instruments from simple procedural sets.
- Optimized manpower for daily logistics trips from 6 FTEs to 3 FTEs.

2. SingHealth Polyclinics

- The additional capacity allowed SSU the opportunity to provide sterilization services to SingHealth Polyclinics located outside of SGH campus.
- It was the 1st national initiative by a healthcare cluster to centralize reprocessing of instruments for its polyclinics which improve safety and standards for sterile items used in polyclinics.

Reprocessing Cost vs Disposable Cost



Generally, disposables cost were lower than reprocessing cost as seen in figure 2. Recycling of used disposable instruments (600 KG/month) also generated a spillover savings of \$12,460.76.

Streamlined and Standardization of SSU Workflows

Standardized Workflows	Benefits
<ul style="list-style-type: none"> • Streamline policies & procedures for both SSUs • Washer and Sterilizer program • All staff to be identified by name on T-DOC • 1 year duration for instrument refresh 	<ul style="list-style-type: none"> • Standardized practice & workflow for both SSUs • Cross deployment of staff during manpower shortage • Seamless deployment to either SSU in event of BCP activation

Total cost savings per annum from this project: \$391,662.72