

**Project Title**

Reducing the Use of Sterile Crepe Bandage for Post Operation Patient in Operating Theatre (OT) Services

**Project Lead and Members**

- Marhaini Hamid
- Jaslyn S T
- Kok P L
- Jeraymin Y I L
- Pek K L
- Ramatas V R
- Zhang D D
- NG C L
- Tan M L

**Organisation(s) Involved**

Singapore General Hospital

**Healthcare Family Group Involved in this Project**

Medical, Nursing

**Specialty or Discipline**

Surgery

**Project Period**

Oct 2019

**Aims**

To reduce the high usage of Sterile Crepe Bandages (4" & 6") in SGH Operating Theatres by an estimated quantity from 20,332 pieces to 10,166 pieces within 6 months

## **Background**

See poster appended / below

## **Methods**

See poster appended / below

## **Results**

See poster appended / below

## **Lessons Learnt**

See poster appended / below

## **Conclusion**

See poster appended / below

## **Additional Information**

Singapore Healthcare Management (SHM) Conference 2021 – Shortlisted Project  
(Supply Chain Management Category)

## **Project Category**

Care & Process Redesign, Quality Improvement, Workflow Redesign, Job  
Effectiveness, Value Based Care, Operational Management, Inventory Management,  
Training & Education, Learning Approach, Team Based Learning

## **Keywords**

Sterile Crepe Bandage, Operating Theatre, Post-Operative Wound Dressing

## **Name and Email of Project Contact Person(s)**

Name: Marhaini Hamid

Email: singaporehealthcaremanagement@singhealth.com.sg



# Reducing the Use of Sterile Crepe Bandage for Post Operation Patient in OT Services.

Singapore Healthcare Management 2021

Marhaini Hamid, Jaslyn S T, Kok P L, Jeraymin Y I L, Pek K L, Ramatas V R, Zhang D D, NG C L, Tan M L



Singapore General Hospital  
SingHealth

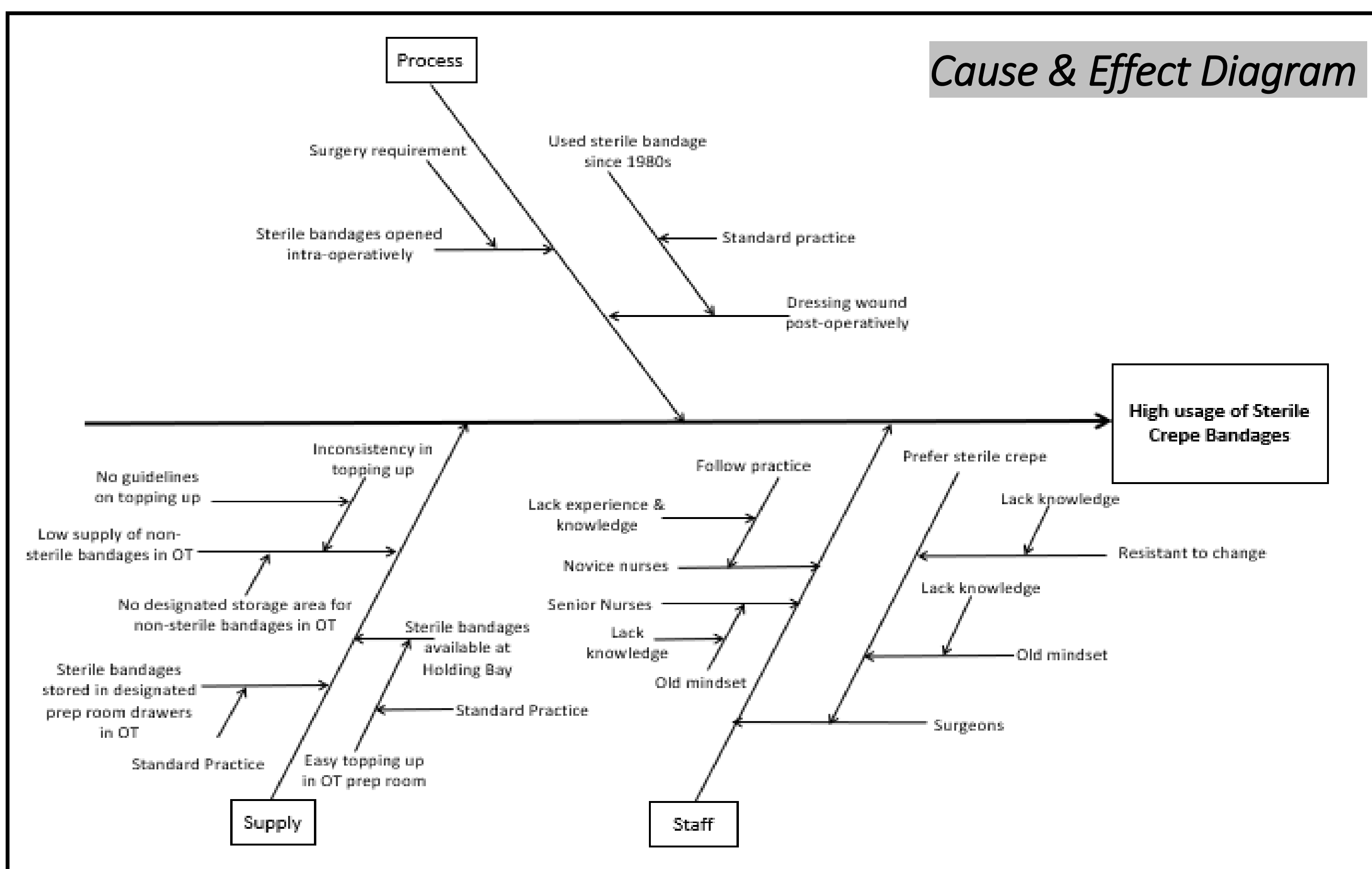
## Background

Crepe bandages are used vastly in multi-disciplinary surgeries such as Orthopaedic, Hand, Vascular and Plastic surgeries. They are also ideal for securing and protecting surgical wound dressings post-operatively. Since the 1980s, Operating Theatres nurses have been using sterile crepe bandages to support the wound dressings post-operatively. Due to overwhelming demands, the company which supplies sterile crepe bandages were unable to meet with delivery demands in a timely manner. With that, OT Nurses and Surgeons worked together to explore the possibilities of using non-sterile crepe bandages for patients post-operatively.

## Mission Statement

To reduce the high usage of Sterile Crepe Bandages (4" & 6") in SGH Operating Theatres by an estimated quantity from 20,332 pieces to 10,166 pieces within 6 months.

## Analysis of Problem



### The final root causes were:

1. Standard practice of using sterile bandage post-operatively.
2. Lack knowledge on the proper use of sterile bandage.
3. No designated storage area for non-sterile bandages in OT as only sterile bandages were stored.

## Interventions

### PDSA 1: Changed standard of practice

- Changed SOP and implemented the use of non-sterile bandage for post-operative wound bandaging.
- Incorporated the SOP for post operative wound dressing in department reference file.



This practice is unnecessary as the incisional wound is already covered and dressed with a sterile adhesive dressing, ensuring wound sterility is not compromised.

## Interventions

### PDSA 2: Conducted briefing & sharing sessions

Communicated the use of non-sterile crepe bandages during Surgical Department Meeting, Nurse Leader Meeting and Staff meeting.

- Conducted sharing sessions for nurses during individual disciplinary roll-calls.
- Conducted briefing for team doctors and nurses during daily Team-Briefs.
- Encouraged use of non-sterile crepe bandages with evidence from literature review.

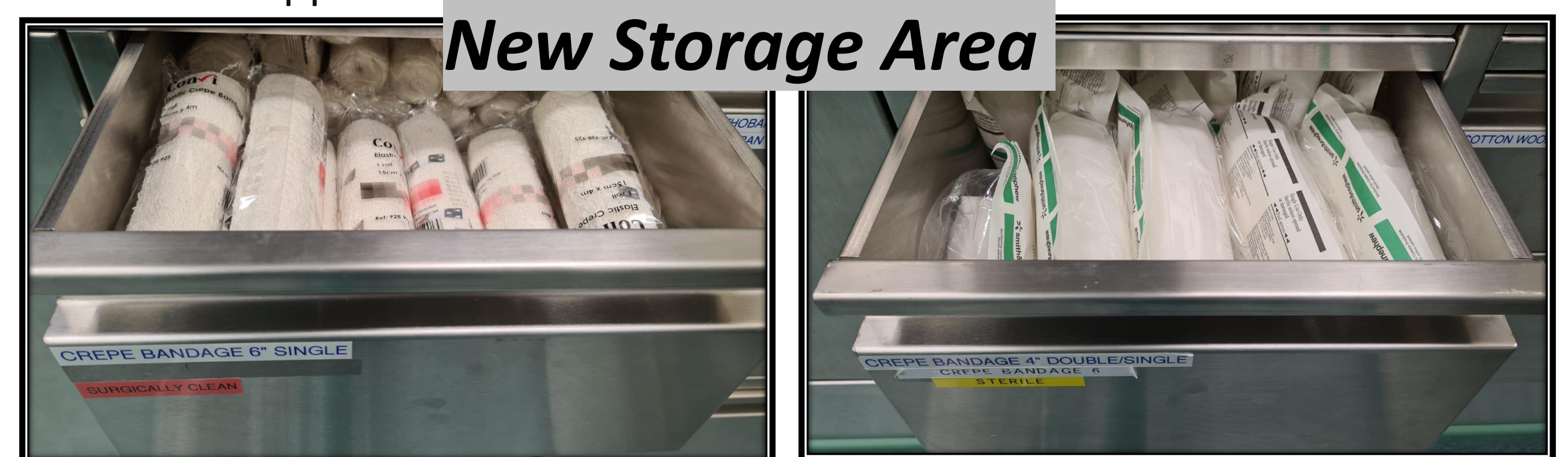


### PDSA 3: Created storage area & worked with MMD

- Removed sterile bandages from holding bay area.
- Created storage area to place non-sterile crepe bandages in OT preparation room.
- Provided projection to MMD to place order for non-sterile crepe bandages.
- Member from ALPS/MMD created an ordering format/system for individual theatre supplies.

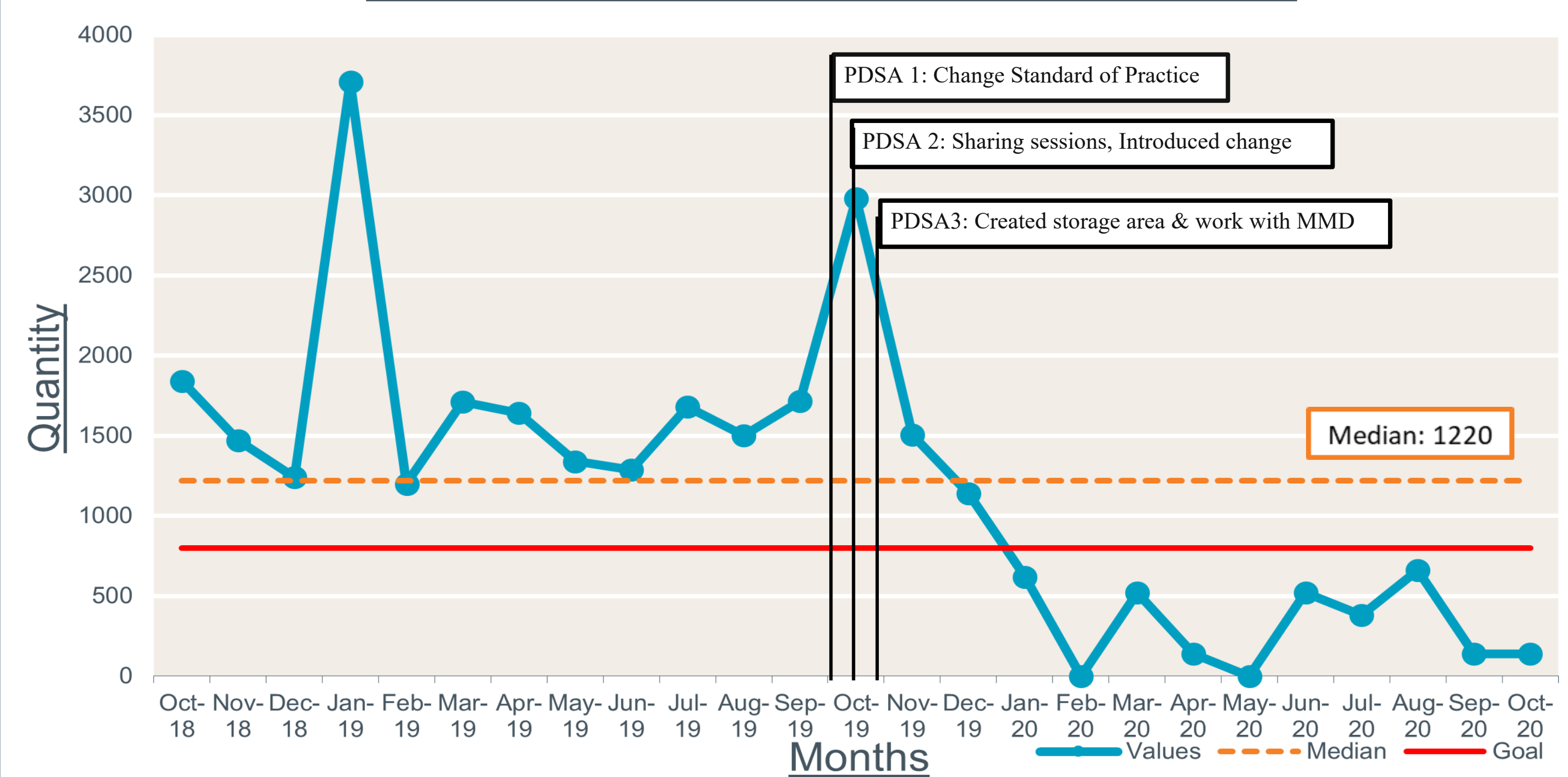
MMD Item Code	Item Description	No. Of Pcs per Ctn	Unit of Issue	Daily Requirement	3 days stock requirement per level	Required Stock Ordering Quantity
1160-03-001-A	Abdominal Swab Pack, Gauze, 22cmx42cm (Roll)	40	packet	80	240	160
1110-01-008-A	Bandage, Crepe, Sterile, (4inch), 100x50mm	200	pieces	10	30	30
1110-01-010-A	Bandage, Crepe, Sterile, (4inch), 150x50mm	200	pieces	15	45	50
1110-02-008-A	Bandage, Crepe, Sterile, (4inch), 50 x 4cm	300	pieces	10	30	30
1110-02-010-A	Bandage, Crepe, Sterile, (4inch), 75 x 4cm	180	pieces	15	45	45
1110-02-015-A	Bandage, Crepe, Sterile, (4inch), 100 x 4cm	120	pieces	20	60	60

### Ordering format to MMD



## Results

### Quantity of Sterile Crepe Bandage used in OT



We have met our target and successfully reduced usage of sterile crepe bandages from 20,332 pieces to 8744 pieces.

Total cost savings \$36,011.45 – \$16,206.20=

**\$19,805.25**

### Intangible Benefits

- Meet SGH organisational goal of "Green" as non-sterile bandage requires single packaging as compared to double packaging of plastic and paper for sterile bandage.

## Sustainability Plans

- Continue to use Non-Sterile crepe bandages to support wound dressing post-operatively.
- Monitor for staff compliance on using Non-Sterile crepe bandages.
- Work closely with MMD to always monitor and ensure availability and adequate supply of Non-Sterile crepe bandages.