

## **Project Title**

Reduce Unnecessary Expenditures in CSSD

## **Project Lead and Members**

Project lead: Bernardo V Halili

Project members: Hung Lea Ping, Kristin Chin Hsiao Han, Nisha Velutheri, Sharizan Binte

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## **Organisation(s) Involved**

Ng Teng Fong General Hospital

## **Aims**

Our aim is to reduce the cost of re-packaging and re-sterilization to 50% of the average cost from \$5,044.80 to \$2,522.40 per month.

## **Background**

See poster below

## **Methods**

See poster below

## **Results**

See poster below

## **Lessons Learnt**

Staff are encouraged to bring difficulties encountered in their work to minimise error that will lead to unnecessary expenditures. Staff are also encouraged to suggest how to make work more efficient and effective.

## **Conclusion**

See poster below

**Project Category**

Care & Process Redesign

**Keywords**

Ng Teng Fong General Hospital, Care & Process Redesign, Quality Improvement, Improvement Tools, Plan Do Check Act, Re-packing, Re-sterilization

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# REDUCE UNNECESSARY EXPENDITURES IN CSSD

- SAFETY
- PRODUCTIVITY
- PATIENT EXPERIENCE
- QUALITY
- VALUE

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## Define Problem/ Set Aim

### Problems

- Between 1 July 2017 to 30 November 2017, CSSD reprocessed a total of 147,137 Instruments from MOT, Wards and Clinics. Out of these, 1029 Instruments need to be re-packed & re-sterilized with a total cost of \$25,224 and average of \$5,044.80 per month.
- Re-packaging and re-sterilization of Instruments increase the cost of consumables and additional man-hours.

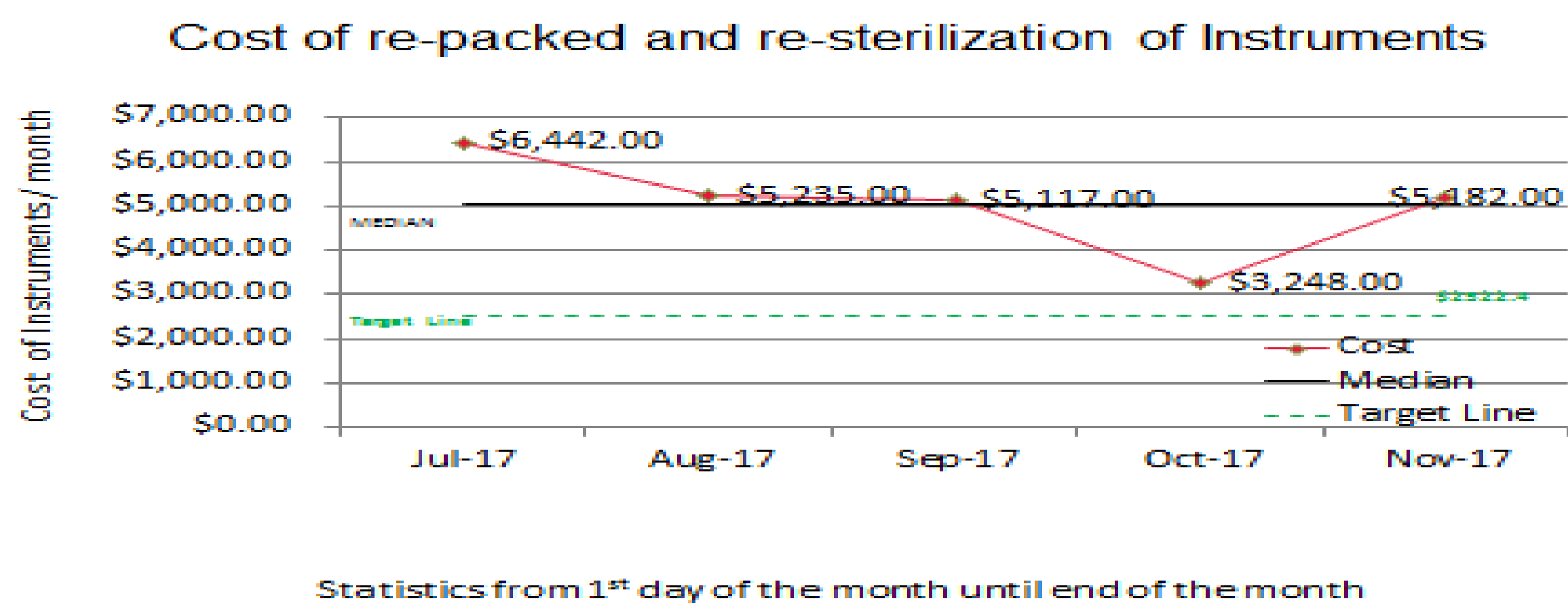
### Aim

Our aim is to reduce the cost of re-packaging and re-sterilization to 50% of the average cost to \$2,522.40 per month.

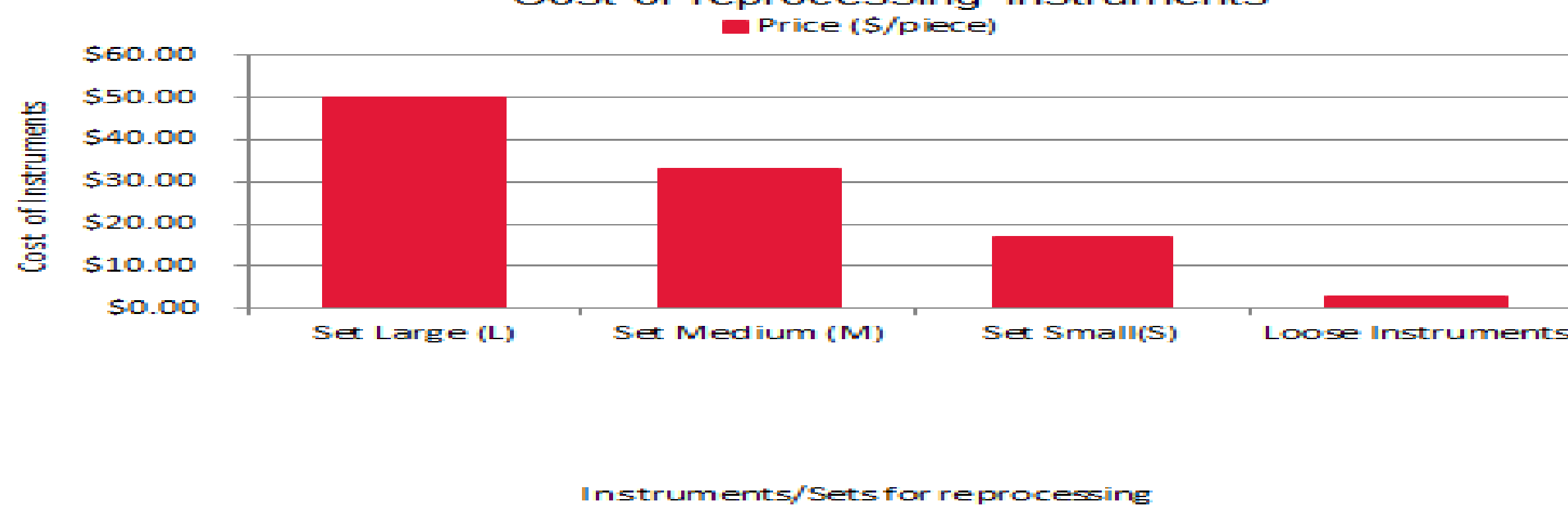
## Establish Measures

### Current performance

Run Charts:  
Outcome Measure 1:



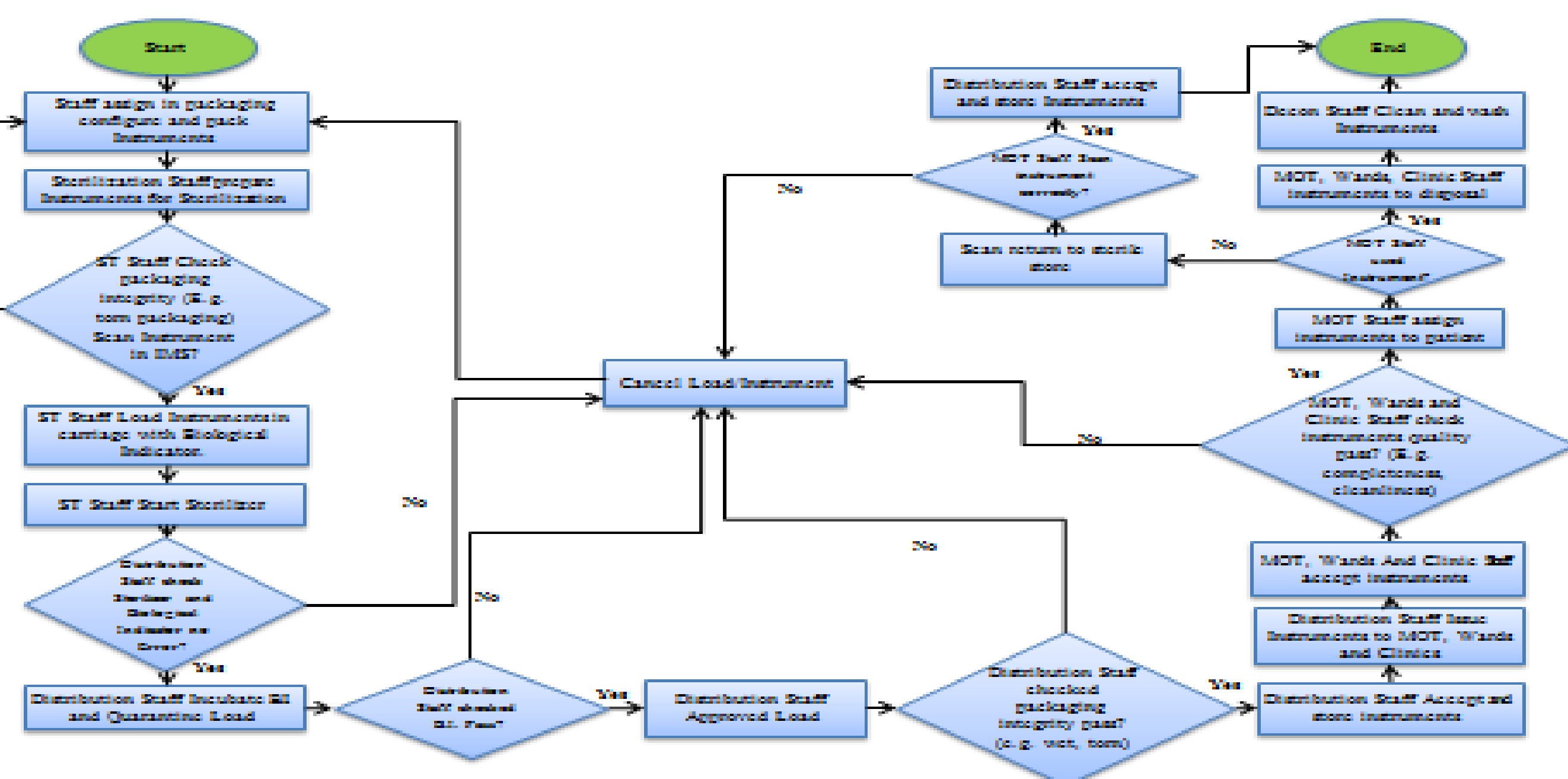
Run Charts:  
Process Measure 1:



## Analyse Problem

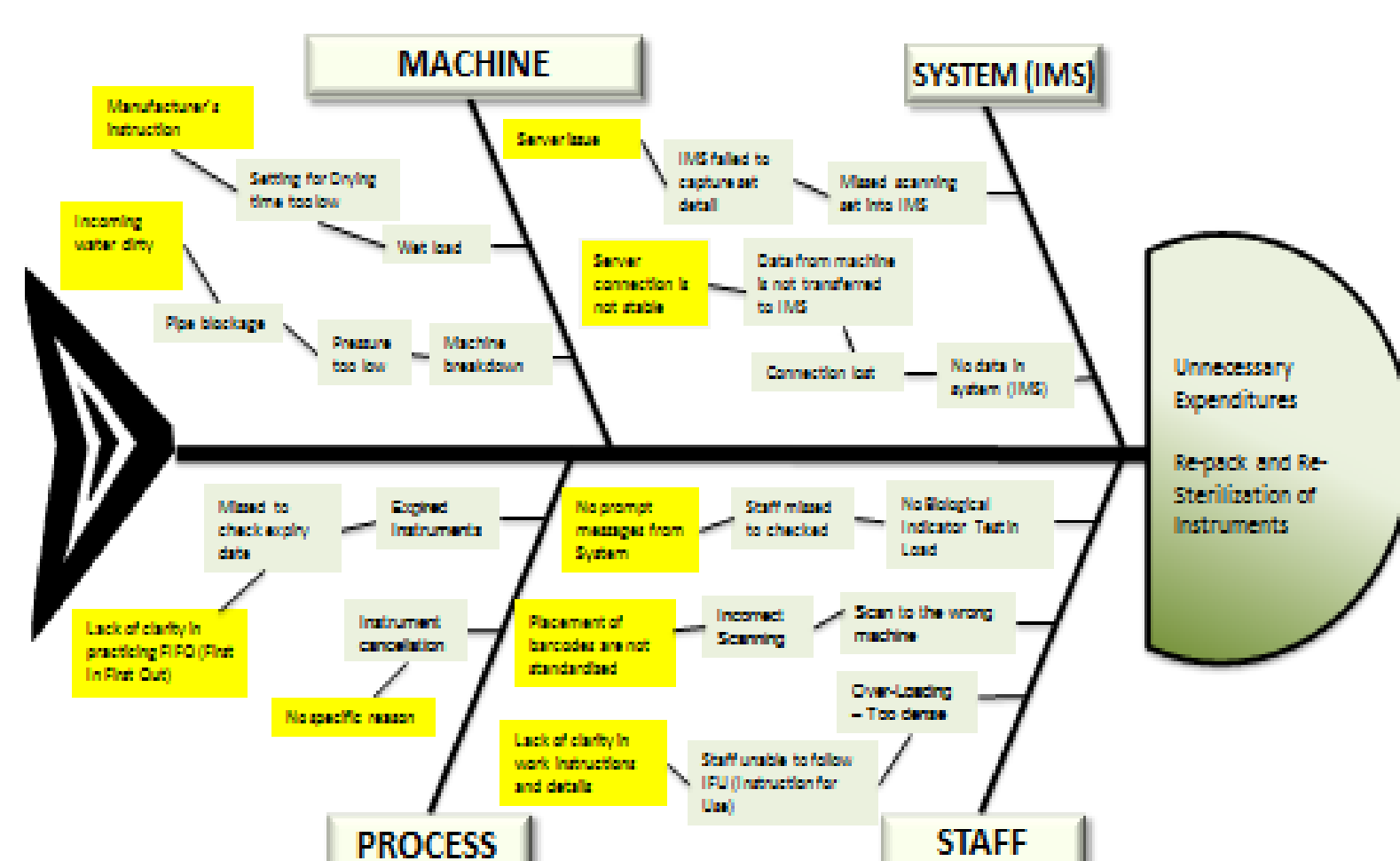
### Current process

Process Map

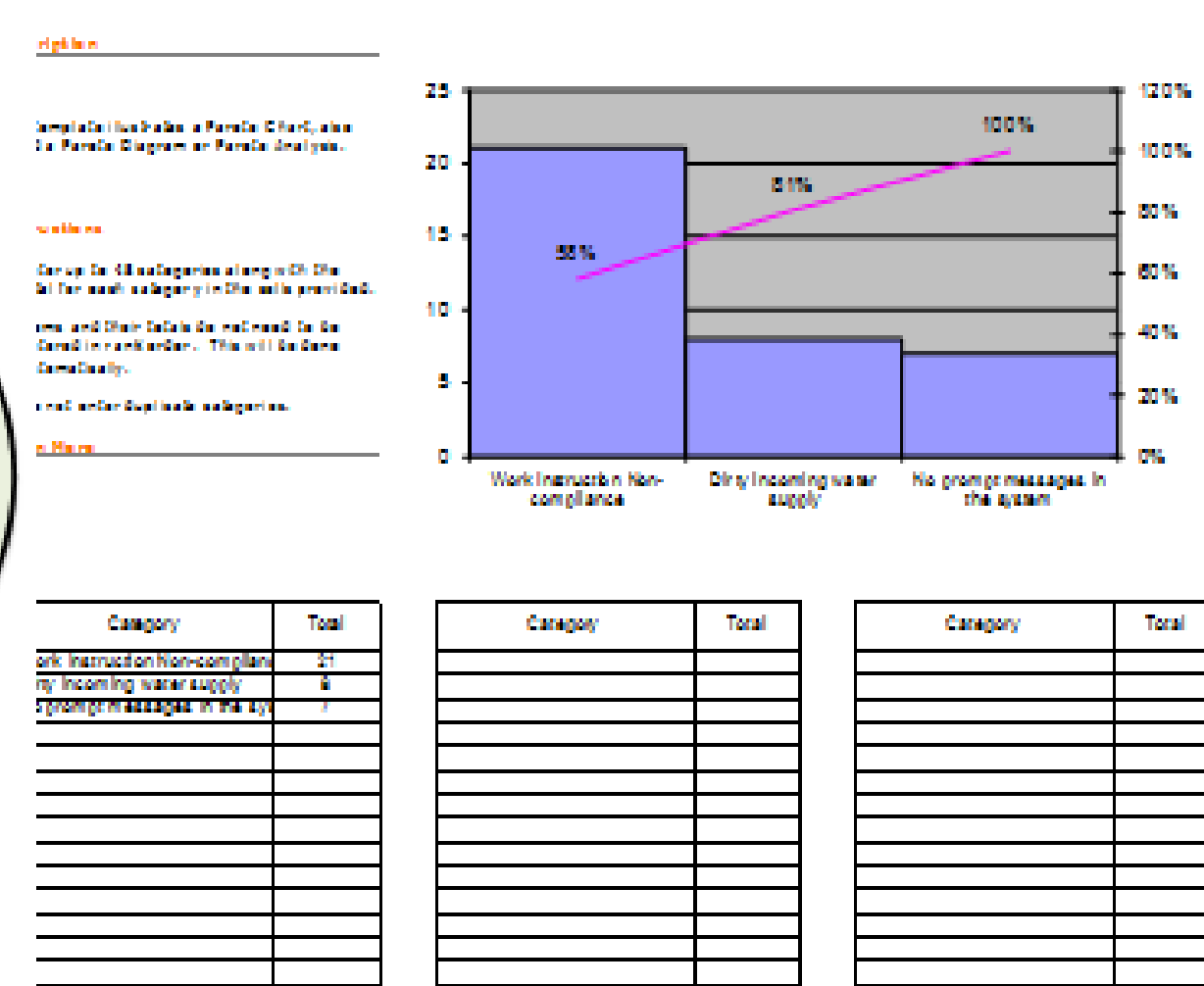


### Probable root causes

Fishbone Diagram



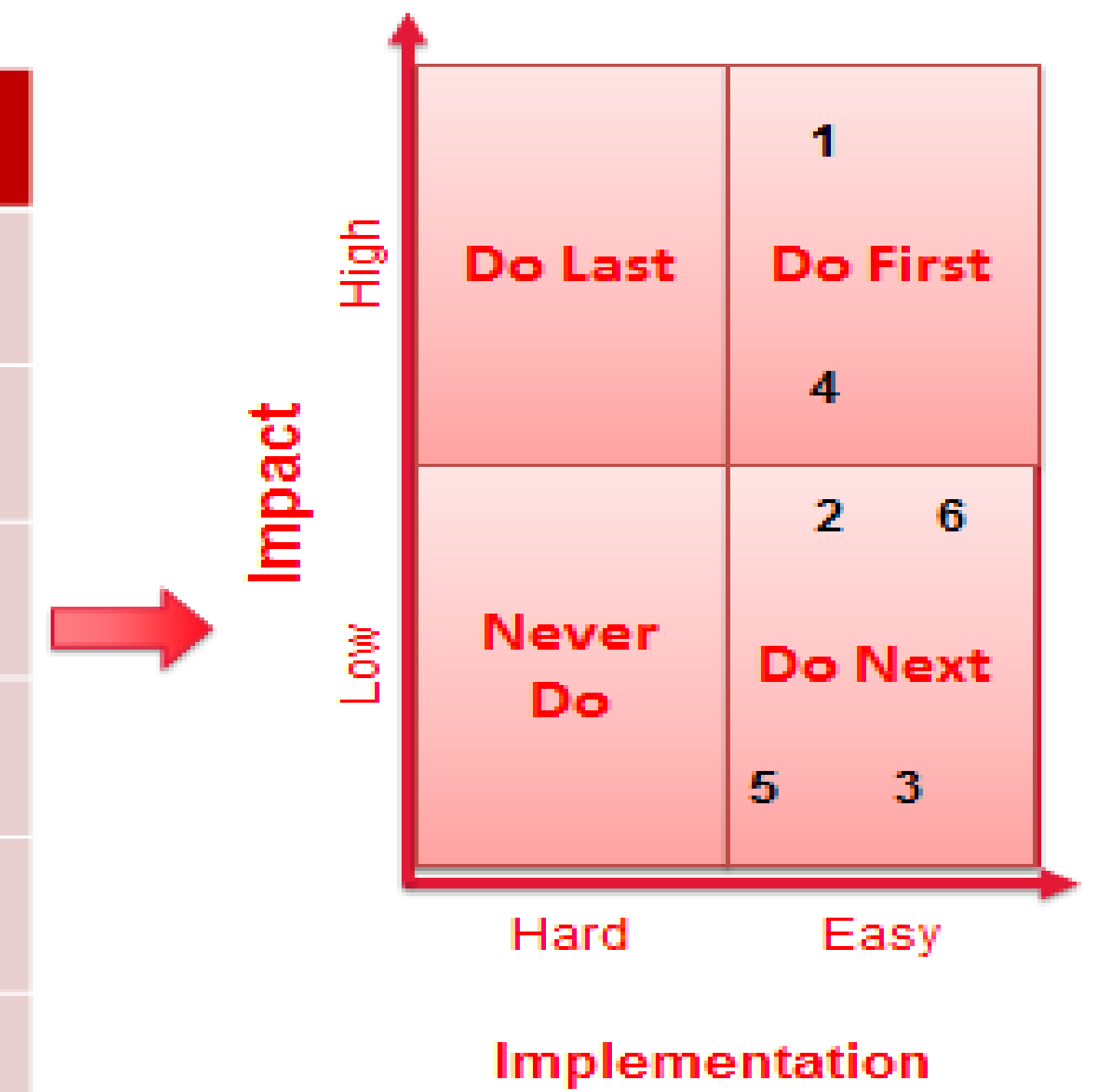
Root Causes Identified



## Select Changes

List of Probable Solutions

| Root Cause   | Potential Solutions             |
|--|---------------------------------|
| Root Cause A<br>Work Instruction<br>Non-compliance | 1 Enhance Training              |
|  | 2 Competency                    |
|  | 3 Revise work instructions      |
|  | 4 System prompt message         |
|  | 5 Pictorial guide               |
|  | 6 Standardized barcode location |



## Test & Implement Changes

### PDSA Planning Form

#### 1. Plan

To conduct enhance training to all Staff. To review, revise and standardized work instructions. To add pictures with instructions to take note and prompt messages in the system. To standardize barcode location and arrangement. To paste reminder poster in sterilizer to check before starting a load.

**PREDICTION:** There will be reduction of error in processing instruments because revised work instruction help to standardized work process. Pictures and prompt messages will determine to do necessary procedure prior to next step.

Ask staff assign in packaging and sterilization assignment whether prompt messages and picture format help minimize error. Check monthly data for number of cancelled sets and reason.

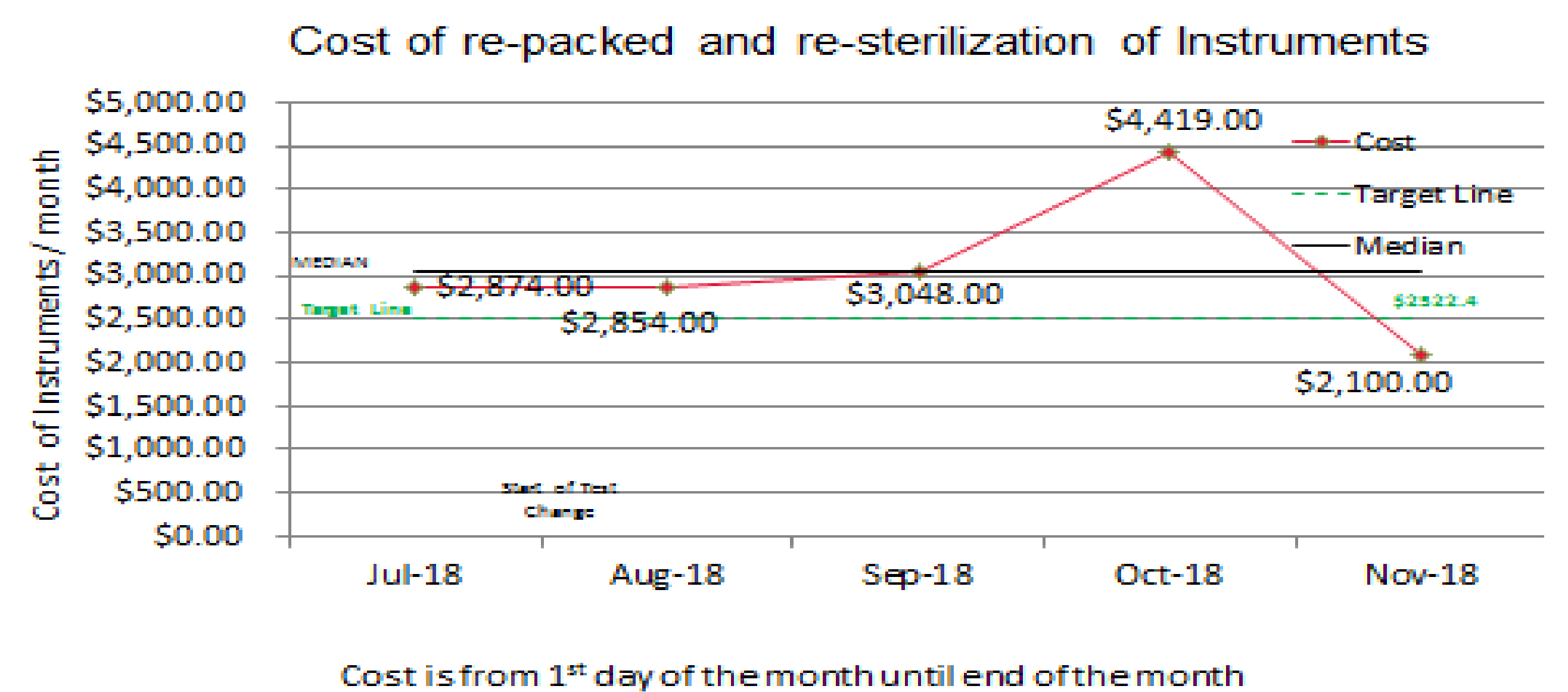
#### Preparation:

| Task to be completed               | Person Responsible | When?         | Where & How?          |
|------------------------------------|--------------------|---------------|-----------------------|
| Enhance Trainings                  | HOD                | By March 2018 | Engage Vendor         |
| Revised work instruction           | CSSD Staff and HOD | By March 2018 | Work Instruction File |
| Update picture and prompt messages | Admin Staff        | By March 2018 | IMS and Work Stations |
| Put up pictures and posters        | Quality Team       | By March 2018 | Work stations         |
| Collect data                       | Quality Team       | By July 2018  | IMS                   |

### PDSA Planning Form

#### 3. Study

Data shows a decrease of cost on re-packed and re-sterilization of instruments.



## Spread Change/ Learning Points

Through roll call monthly meeting and handover of shifts, staff are encourage to bring difficulties encountered in their work to help minimise error that will lead to unnecessary expenditures. Staff are also encourage to suggest on how to make work efficient and effective.

After changes and implementation data shows decrease of error rate and machine breakdown, CSSD team will continue to improve and explore quality initiative on how to reduce unnecessary expenditures in re-packing and re-sterilization of instruments