



**Singapore Healthcare  
Management 2019**

# Improving the Management of Non-Standard Dental Instruments in NDCS



**National Dental  
Centre Singapore**  
SingHealth

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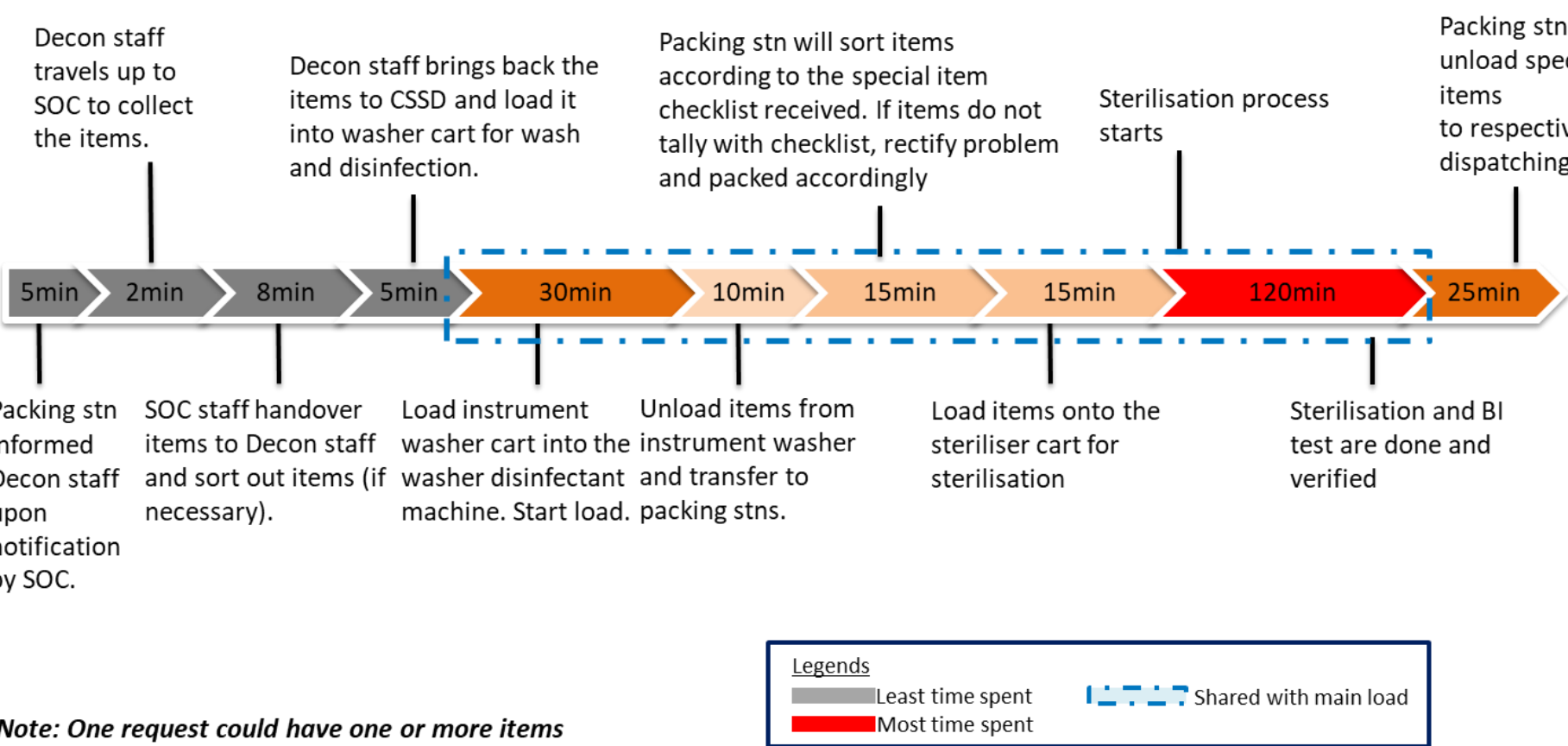
## Introduction

- During the CSSD Continuous Improvement engagement session on 8th Feb 2018, staff raised the issue of potential continuous improvement for sterilization of non-standard dental instruments.
- Following this, the HOD of CSSD, Senior Staff Nurse of CSSD and Manager, Dental Assisting met up to identify the root cause of the problems and brainstorm for potential areas for improvement.
- Time motion study was conducted for the entire process and the team brainstormed for potential areas for improvement.

### Current Situation - Time Study

- Additional time required to receive, process and dispatch **\*one request** of non-standard items = **45 min**

Example for SOC 2



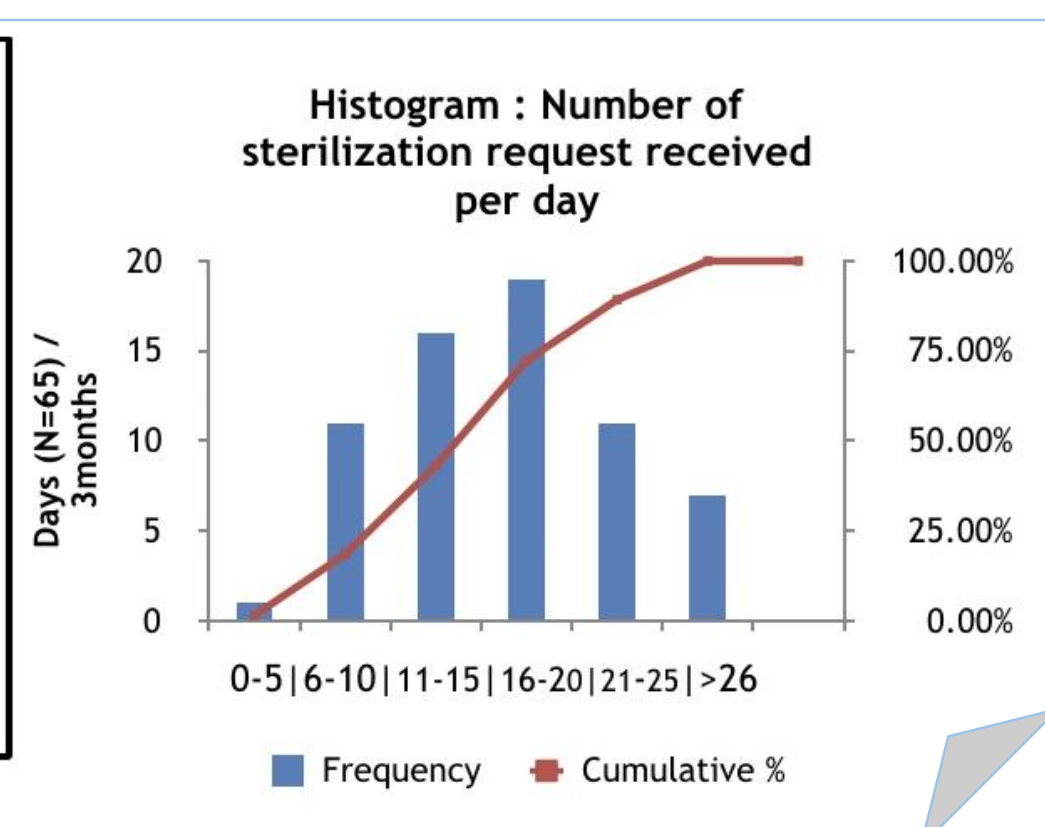
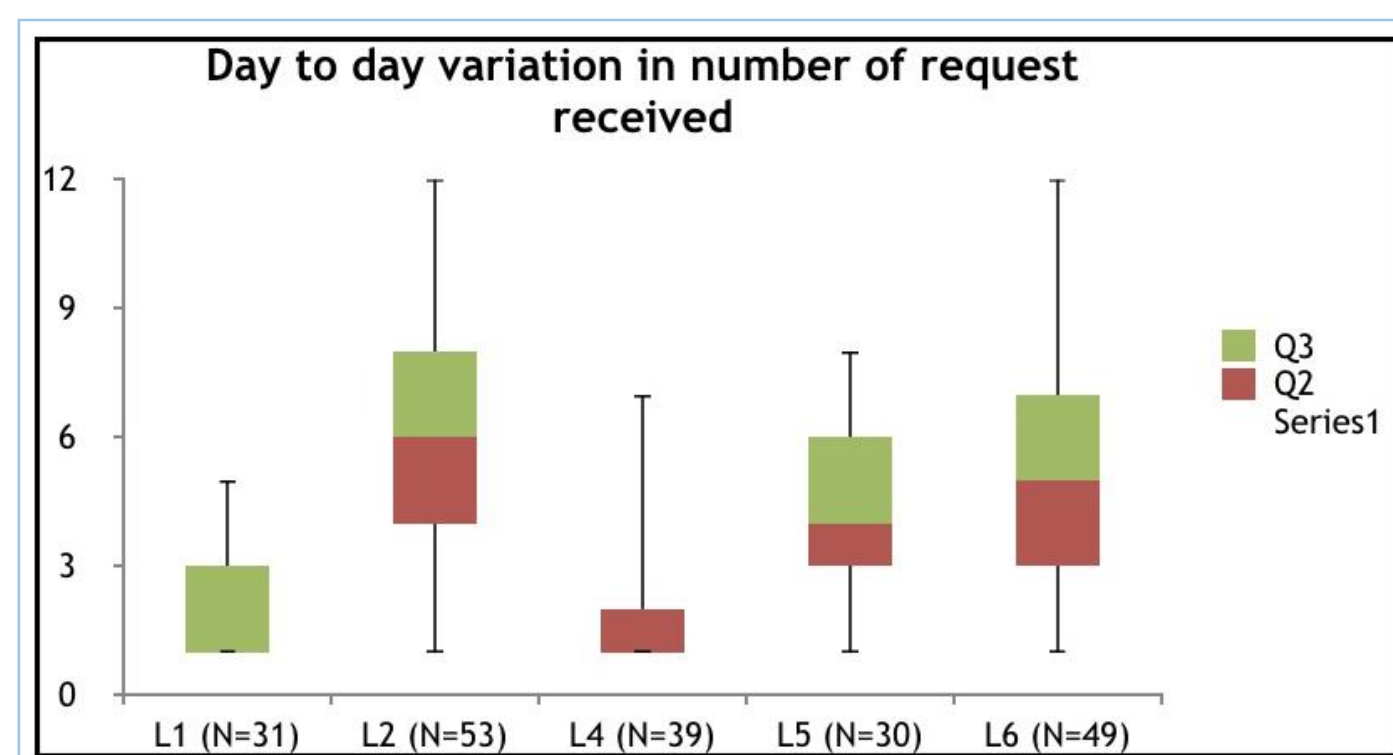
\*Note: One request could have one or more items

Level	Number of unique special instruments
1	36
2	95
4	57
5	71
6	53
<b>Total</b>	<b>312</b>

## Interventions

PDSA	Intervention	Date of Intervention	Learnings from PDSA
1	Communication between SOC staff and clinicians to shrink the approved non-standard items.	June 2018	Elaborate communication across departments is still required to align the understanding on the benefits of this intervention.
2	Health attendant to cease delivery to specific rooms, only deliver non-standard items to supply island.	June 2018	This intervention is effective in cutting down travel time.
3	SOC to consolidate sterilisation requests into 3 batches daily.	June 2018	This intervention is effective in limiting the frequency of sterilisation request from SOC.
4	Standardize the request forms to be commonly used across all levels.	June 2018	Low compliance as old forms are still being used, with the assumption that a newer version of the form will be implemented after culling of the non-standard items.
5	Use of stainless steel mesh and containers to replace plastic bags for transfer of special items.	June 2018	This intervention is effective to replace current use of plastic bag to transfer items and provide cost saving and environmental friendly benefit.
6	a. Approved policy CSS-PP-08 [Request for Non-Standard Instrument Purchase]. b. Dissemination to HOD and HOU via email	July 2018 Aug 2018	Intervention is effective in controlling the purchase of new non-standard dental instruments
7	Briefing to specific departments by CSSD Head.	Oct 2018	With the new procurement process being implemented, the approved instrument list should be regularly reviewed.

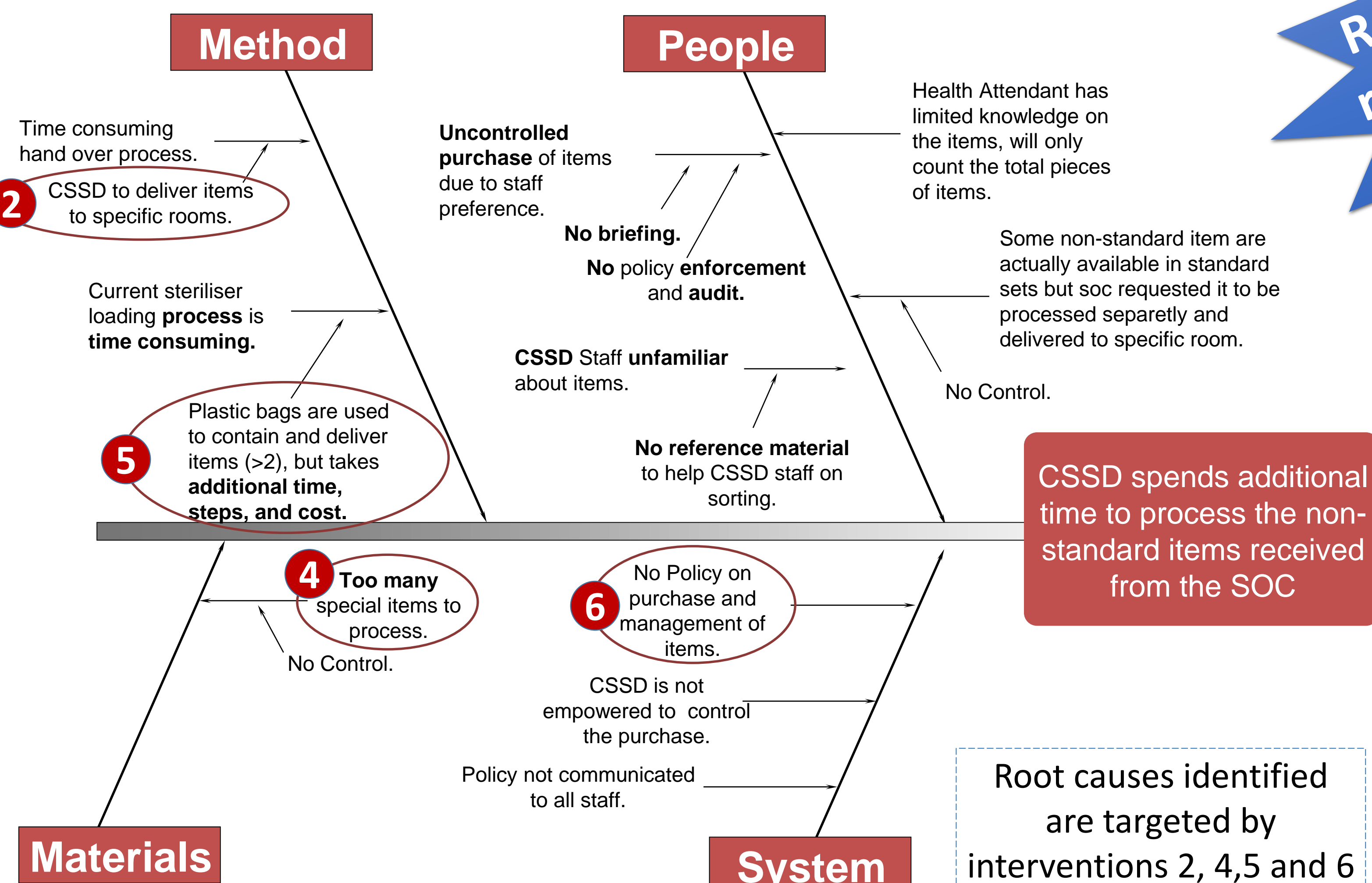
On average, CSSD received 13 sterilization requests per day



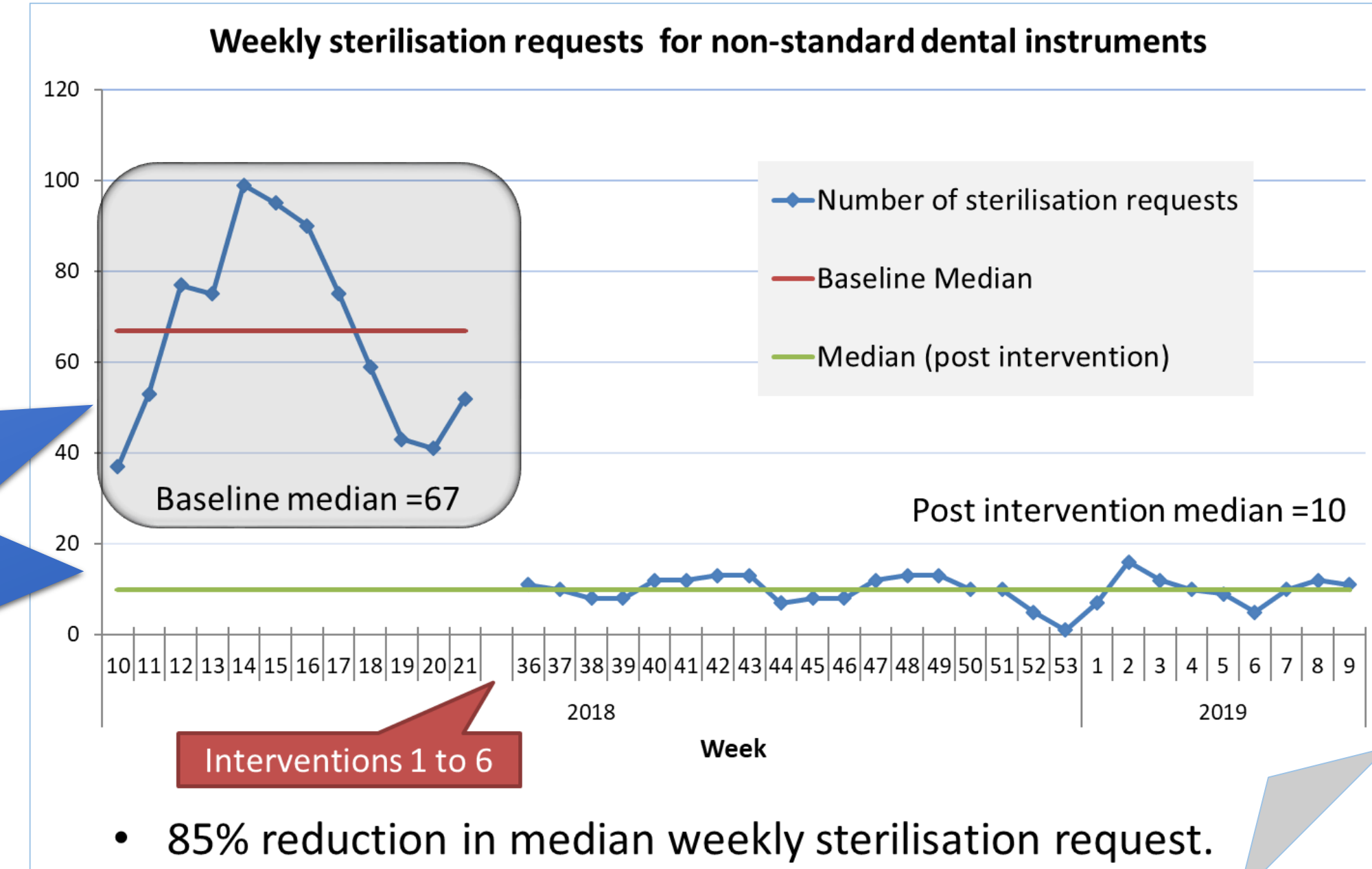
## Objectives

- To streamline purchase of non-standard items.
- To standardize the list of approved non-standard items.
- To streamline process and decrease unnecessary time spent for processing non-standard items at CSSD.
- To cut down time spent on hand-over processes of non-standard items.

## Methodology



## Results



Results achieved	Before	After	Goal	Achievement
Types of special items in circulation	312	30	50%	90% reduction
Median weekly sterilisation requests	67	10	50%	85% reduction
Time spent on hand-over process	8 mins	5 mins	-	37% reduction
<b>Productivity gains</b>	<b>486 minutes per week</b>			

## Conclusion

- Policy CSS-PP-08 [Request for Non-Standard Instrument Purchase] is in place to govern the purchase of non-standard instruments.
- Periodic review of the approved non-standard instrument list to maintain the approved non-standard instrument list.
- Interventions had been spread to entire NDCS and is institutionalised.