

Project Title

To Achieve 100% Compliance in the Daily Status Check of Instruments Sets and Loose Instruments in General Surgery Operating Theatres

Project Lead and Members

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Organisation(s) Involved

Singapore General Hospital

Healthcare Family Group Involved in this Project

Nursing

Project Period

Start date: Oct 2019

Completed date: Feb 2021

Aims

- To improve compliance from 78% to 100% in daily instrument status check for General Surgery discipline operating theatres within 6 months
- To enhance patient safety and mitigate risks related to instruments/instrument sets undergoing sterilization processes and deemed to be safe for patient use perioperatively

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 (Risk Management Category)

Project Category

Care & Process Redesign, Quality Improvement, Workflow Redesign, Value Based Care, Safe Care, Risk Management, Adverse Outcome Reduction, Technology

Keywords

Instrument Status Check, Cable Connection, Scanners, Integrated Health Information System

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Introduction

Instrument Status Check is a crucial step to verify if the instrument sets or loose instruments have gone through sterilisation process and deemed to be safe for patient use during surgery.

This is done using a Tdoc program uploaded onto designated laptops in all Operating Rooms (ORs). Additionally, visual checking is also done to ensure packaging integrity is maintained, free of holes, tear or wetness.

Background

Since the implementation of Instrument Status Check, there was only 78% compliance rate of operating theatre (OT) nurses performing Instrument Status Check.

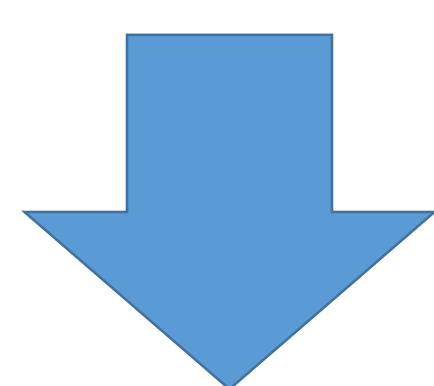
Objectives

- To improve compliance from 78% to 100% in daily Instrument Status Check for General Surgery discipline OTs within 6 months
- To enhance patient safety and mitigate risks related to instruments/ instrument sets undergoing sterilisation processes and deemed to be safe for patient use perioperatively

Methodology

A cause and effect diagram was used to determine root causes. Final root causes were:

- Knowledge deficit
- OT nurses overlook and did not scan
- Wrong cable connection
- End of life (for scanner)



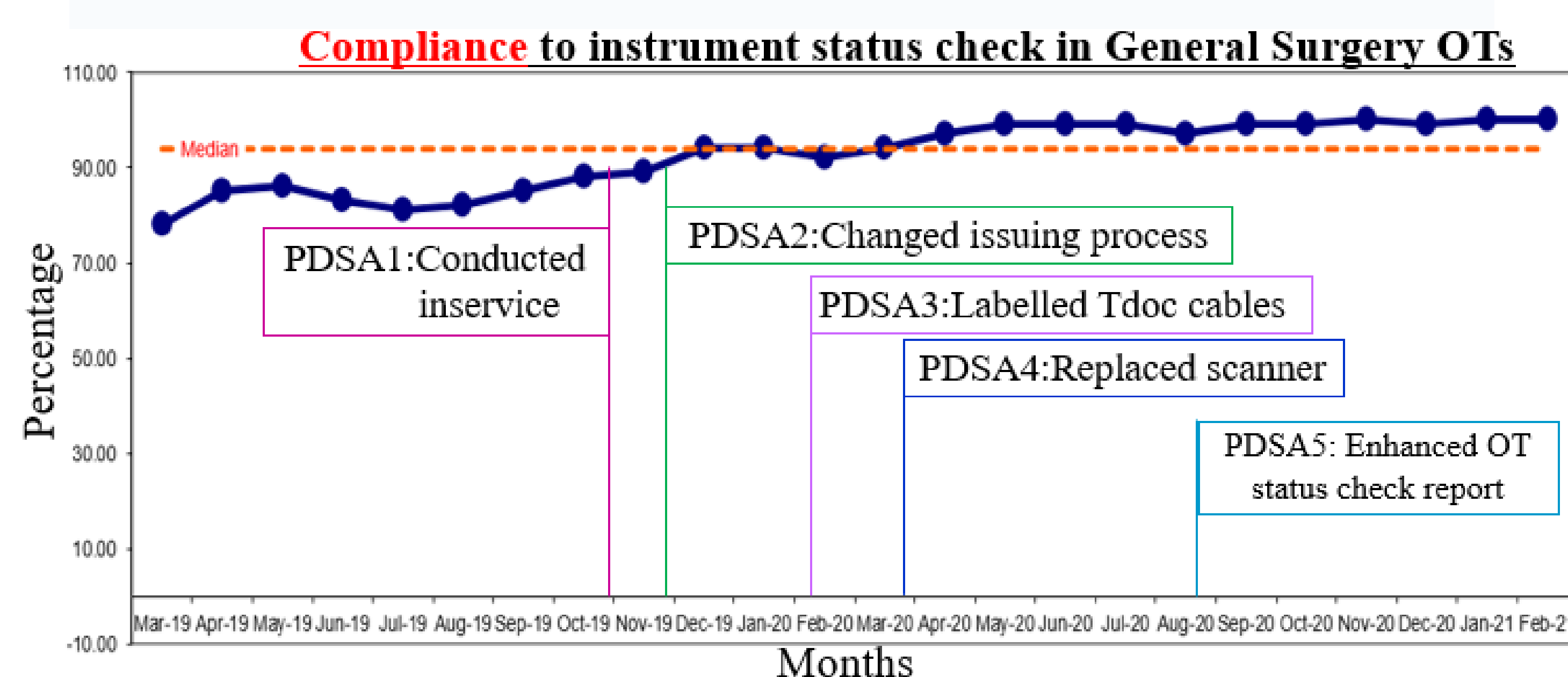
Brainstormed for solutions and the following were implemented

- PDSA 1: Conducted in-services to improve and enhance knowledge
- PDSA 2: Changed process of issuing shortfall instrument sets
- PDSA 3: Labelled Tdoc cables on laptops in all ORs
- PDSA 4: Replaced scanners



Results

Percentage of compliance to Instrument Status Check improved to 97% in April 2020



Based on feedback, team worked with Integrated Health Information System (IHIS) to review the Instrument Status Check report and implemented

- PDSA 5: Enhanced OT Instrument Status Check report

Dispatch, Status Check and Patient Registration Compliance For OTs (Based on Dispatch Date)
Units Dispatched Date From: 2021-05-03 Until: 2021-05-04

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Final results in January and February 2021, Compliance to Instrument Status Check in General Surgery OTs increased to 99.68%

Conclusion

- We will continue to collect feedback and have implemented above initiatives to all other surgical disciplines.
- The enhanced link to Instrument Status Check report is on all computers for easy access.
- This work process has been incorporated into the orientation of new nurses, who will be closely supervised by the Champions/ Senior nurses when they start working in the clinical area.
- This project promotes good working relationship and cooperation between OT nurses and SSU staffs, there is better understanding of each department function, which helps improve camaraderie, great teamwork and boost morale for all staffs.