

# Improving the process of handling loss of ophthalmic instruments



Singapore National Eye Centre

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Yeo Liew Soo<sup>1</sup>, Low Poh Leng, Wendy Hui Yue May & Saraswathi Sandhanam

### Background

Ophthalmic surgeries are often performed in ambulatory setting and the turn over for the most common surgery is approximately 20 minutes Ophthalmic micro instruments are small, delicate and

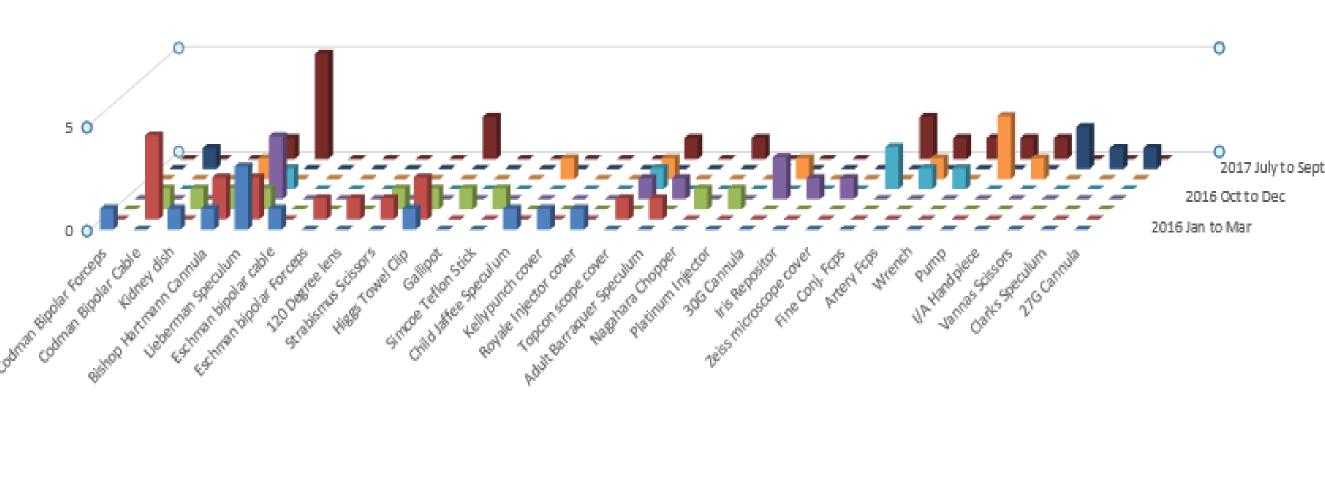
#### Intervention

PDCA 1 involved a consistent weekly reminder for 3 consecutively months (July to Sept 16). The reminders included group, individual reminders using pictorial guide to guide various points of checks. Pictorial guide was updated to guide TSSU staff to improve hand over consistency

costly. Most of these instruments are small and found to be accidentally thrown along with drape post surgery. Most common missing instruments were eye speculum, towel clips and bipolar cables as these items were the last items to be removed from surgical site. The cases were observed most frequently towards the end of am or pm sessions.

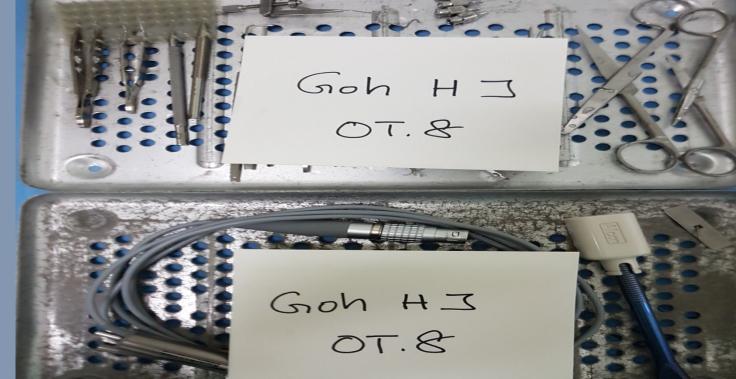






2016 April to June 2016 July to Sept 2016 Oct to Dec 2017 Jan to Mar 2017 April to June 2017 July to Sept 2017 Oct to Dec

PDCA 2 targeted on intervention to improve tracking process for each OT especially after schedule hours. Data on cost of discarded instruments were shared with individuals to create awareness and accountability. Count card for staff to enter their OT and name of scrub nurse to facilitate data collection after hours







#### Methodology

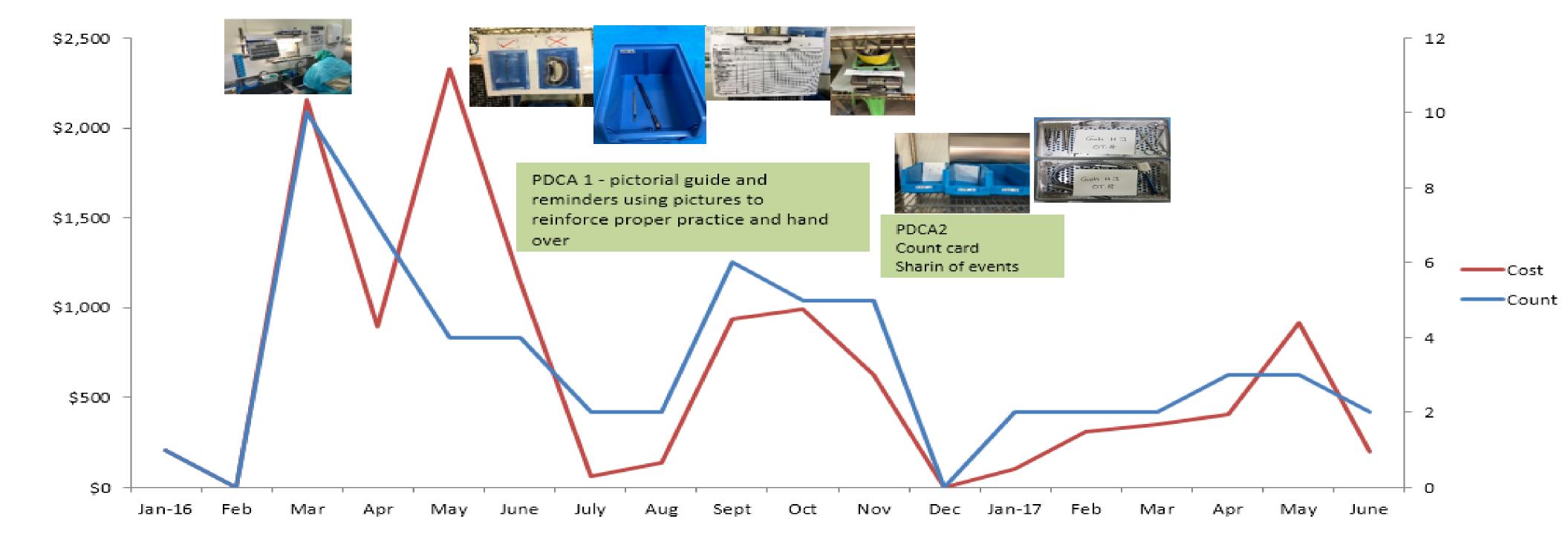
A quality improvement methodology using PDCA cycle was adopted to understand the significance of the problem, factors contributing to instrument loss and testing of potential intervention

Data showed Our baseline from Jan to June 16 showed a total of 26 instruments saved from being discarded, which could amount to a potential replacement cost of \$6700 if not found

Root cause analysis showed majority of staff missed the checks from high turn around and occurred more frequently at end of pm list

#### Results

The reminders and targeted intervention reduced the total incidences down to 20, equivalents to \$2750 in cost, within 6 (July to Dec 2016) months. The data remained consistent following next 6 months (Jan to June 2017) with further reduction to 14 incidents and corresponding cost of \$2280. Lesson learnt from the project was used to enhance orientation and training program for all new staff



#### Run chart on the number and cost of missing ophthalmic instrument

#### **Conclusion:**

Guidance to ensure consistency of checks and handover at various points can help to ensure proper practice of instrument count and reduce potential of loss after surgery

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