

Project Title

Improving Accountability and Safety in the Management of Podiatry Instruments at
Tan Tock Seng Hospital

Organisation(s) Involved

Tan Tock Seng Hospital

Project Category

Process Improvement, Safety

Keywords

Process Improvement, Safety, Safe Care, Process Redesign, Quality Improvement, System Level Improvement, Tan Tock Seng Hospital, Allied Health, Podiatry, Operations, Infection Control, Cost Effectiveness, Cost Saving, Root Cause Analysis, Specialized Podiatry Instrument, Instrument Management, Sterile Instruments, Work Instruction, Equipment Storage, Clear Communication, Staff Accountability, Collective Responsibility, Central Sterile Supply Department.

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Tan Tock Seng
HOSPITAL

Improving Accountability and Safety in the Management of Podiatry Instruments at Tan Tock Seng Hospital

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Adding years of healthy life

Introduction and Problem

The Podiatry Service at Tan Tock Seng Hospital's (TTSH) Foot Care & Limb Design Centre provides treatment for lower limb conditions such as diabetic foot ulcers and ingrowing toenails. Such treatments by Podiatrists require specialised Podiatry instruments, which are sterilised by the TTSH Central Sterile Supplies Department (CSSD). However, a loss of 822 instruments, worth approximately SGD\$11,647, was recorded over a two year period between January 2013 to January 2015. There was no existing process in place to control and identify these losses. Findings from an internal Infection Control audit in 2014 also identified that used instruments were not stored and managed in a safe manner, with inadequate controls to prevent cross infection to staff.

Timeline

Root cause analysis by representatives from key stakeholders (Podiatry, Operations, CSSD and Infection Control). Findings and initial plans shared with Podiatry team.

Continuing discussion with Podiatry team to gather feedback and refine proposed interventions. Drafting of Work Instructions for Instrument Management.

Finalised interventions with Podiatry team. Purchased plastic boxes for storage and transport of instruments.

Trial of plastic boxes and bundling of instruments into sets. Purchased trolley for transportation of plastic boxes.

Work Instructions finalised. Rollout of new system.

April 2016

May 2016

June 2016

July 2016

August 2016

Interventions

Before



Seven unique instruments to track, with clean instruments left in each treatment room (accessible to public) at the end of the day with no secure storage.

After



Four commonly used instruments (highlighted on the left) are bundled into one set, and clean instruments are stored in a locker located within the staff-only area.

Before



Used instruments were placed in a modified sharps box at the side of the treatment trolley, where the used instruments would be left overnight before being collated by the Podiatry Assistant the next day.

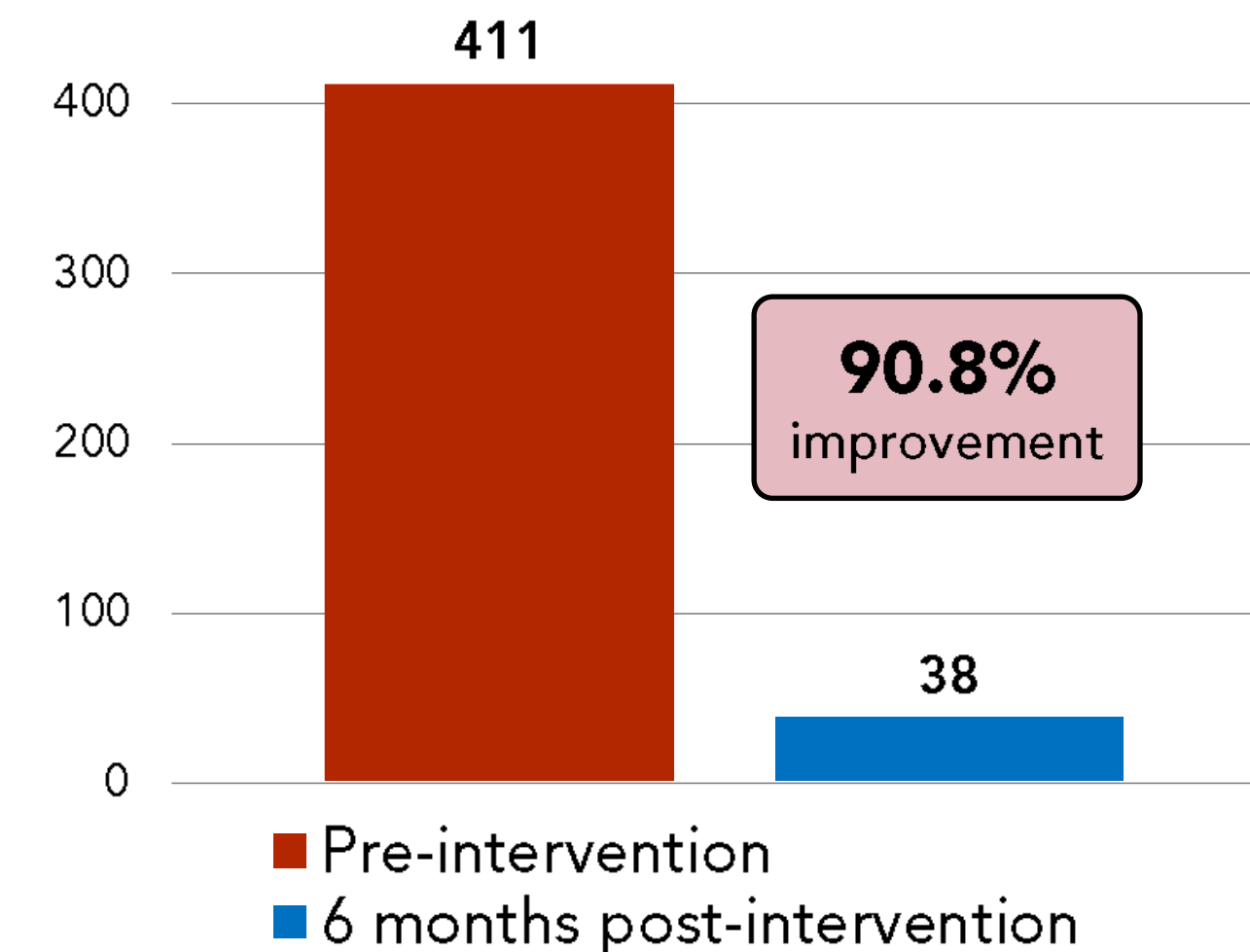
After



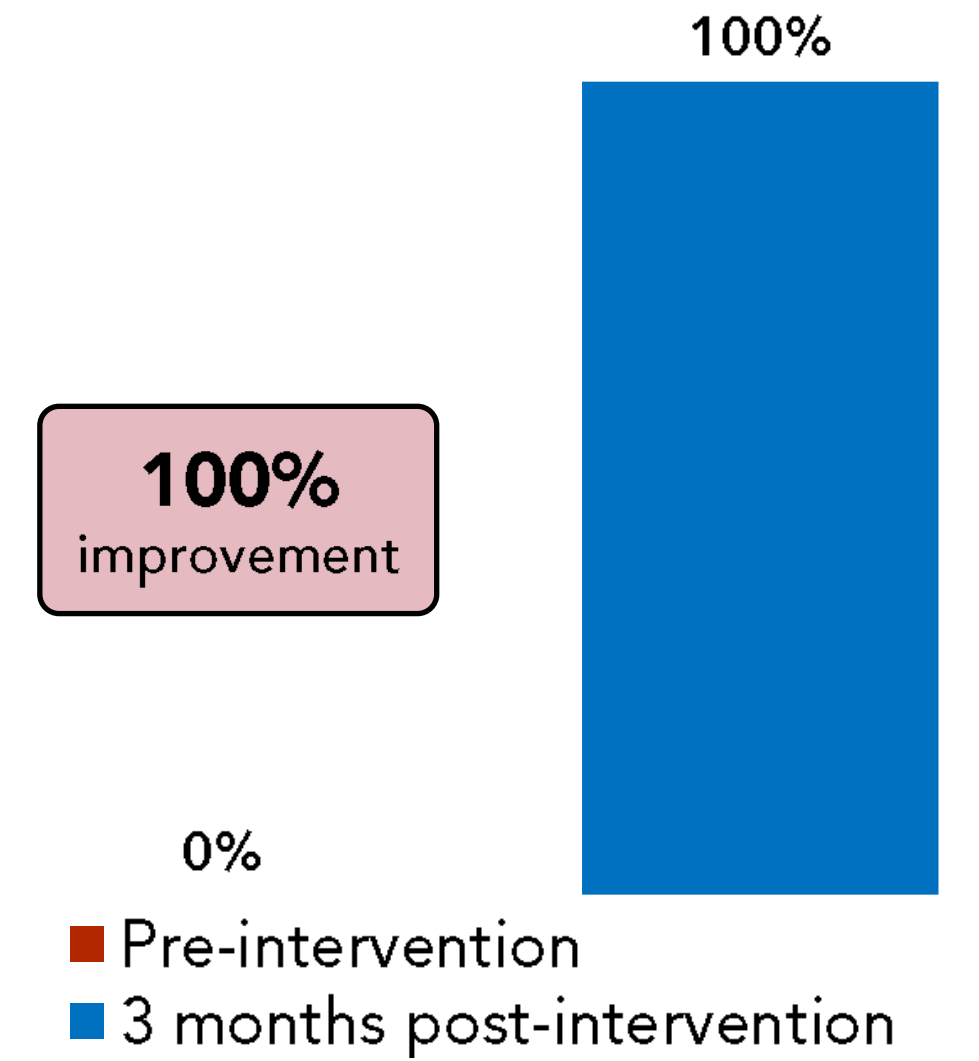
A plastic box (purchased off the shelf) is now used to contain used instruments. After each set of used instruments are placed into the box, they are disinfected with an enzymatic foam before the whole box is sent to CSSD in a trolley, where the instruments are then sterilised and the boxes are surgically washed.

Results

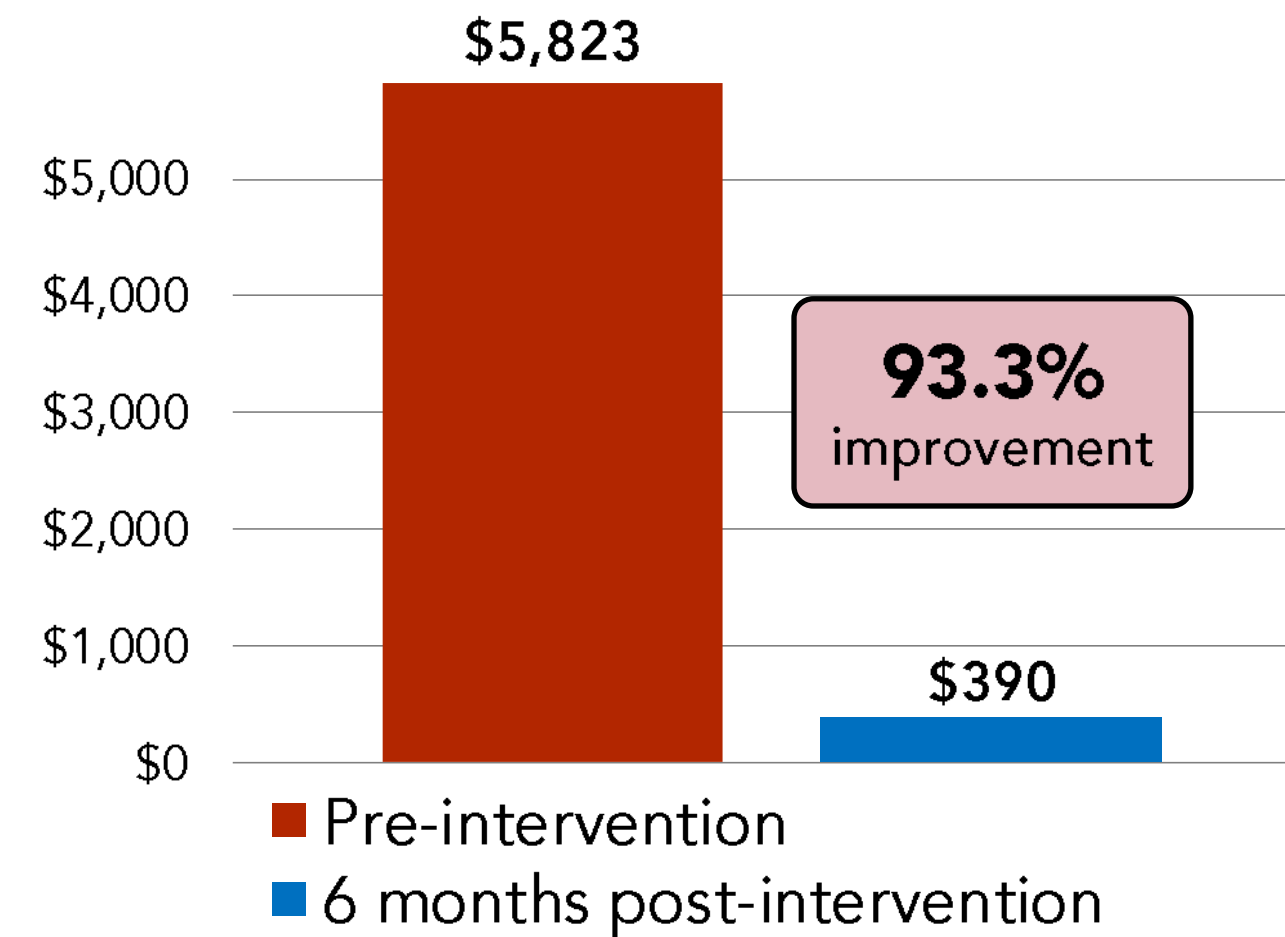
Quantity of Lost Instruments (Annualised)



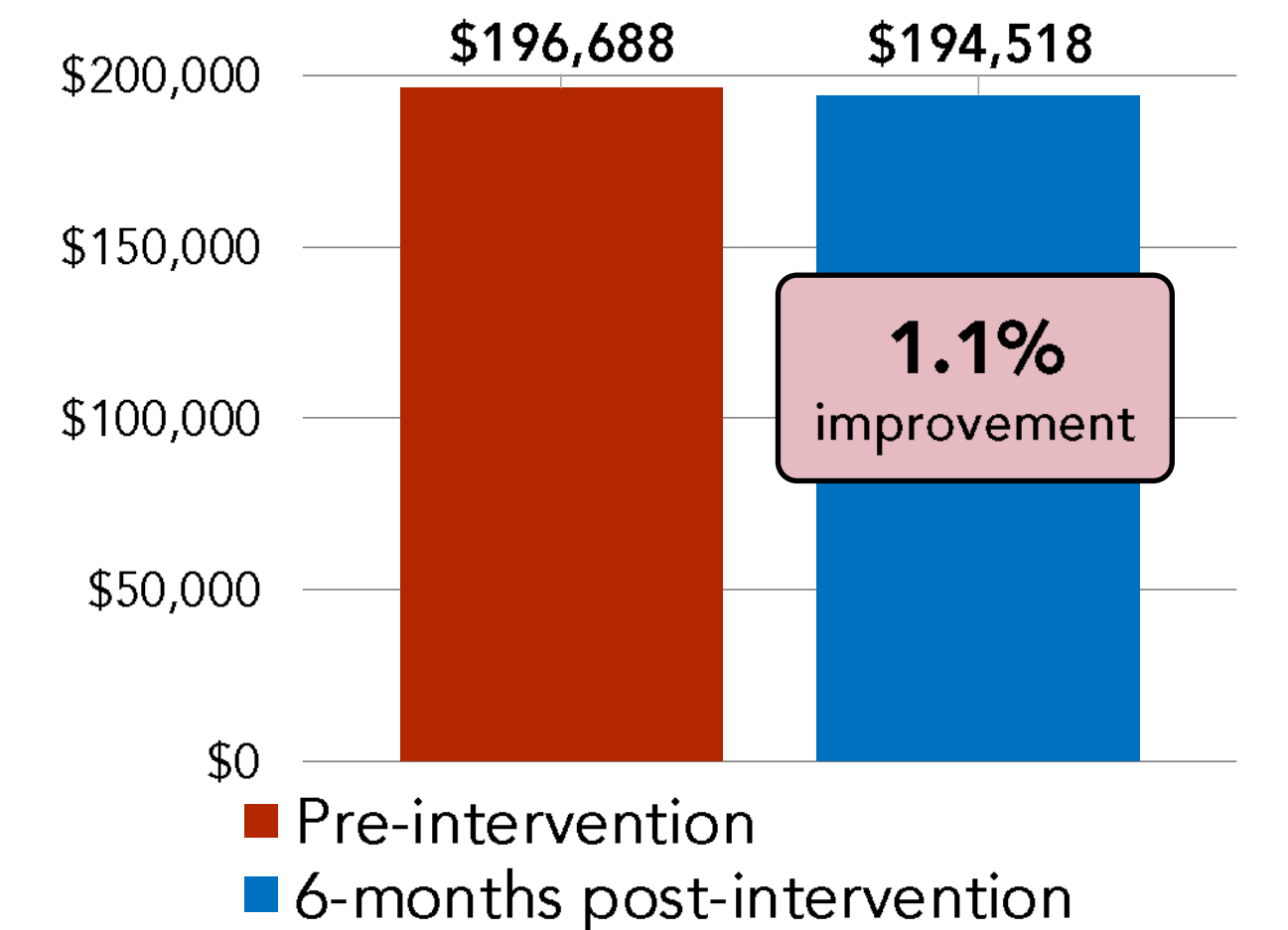
Staff Satisfaction



Cost of Lost Instruments (Annualised) (SGD)



Actual Cost of CSSD Services (Annualised)



Estimated cost savings: SGD\$7,603 per annum

Challenges and Lessons Learnt

One challenge faced during this project was ensuring that all staff were familiar with, and able to adhere to the new workflow. This was mitigated through clear communication and periodic reminders to the team. When embarking on any improvement project, all key stakeholders should be consulted first so as to reduce the need for re-work. Accountability is also crucial in the success of any team based initiative, as each team member has a collective responsibility in sustaining the implementation.

Conclusion

The supply and management of sterile instruments is an important process for any clinical service. Having an effective workflow will allow clinical care to be provided seamlessly, without having to worry about not having sufficient instruments, and help to save costs by improving accountability and safety.

Acknowledgements

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