



“NUH” (Source: National University Hospital)

# “Ouch! I Fell Down!” Reduce Hospital Workplace Injury\*

Chen Man Ling Monica<sup>1</sup>, Liu Mei Kay<sup>2</sup> and Dr Sandhya Mujumdar<sup>3</sup>

<sup>1</sup> Senior Manager (Medical Affairs- Clinical Governance); <sup>2</sup> Safety Officer (Office of Ops Risk Governance); <sup>3</sup> Deputy Director (Medical Affairs- Clinical Governance) & Senior Specialist (Quality & Accreditation)

## Introduction

National University Hospital (NUH) in Singapore is a tertiary teaching hospital with 1,239 beds providing comprehensive range of services, and over 8,500 staff of diverse cultures.

NUH’s incident reports showed a 30% increase of workplace injuries in the past 3 years since 2015 while there was no significant increase in staff numbers.

The man-day lost due to these injuries has also increased by 50%, from 323 days to 622 days within the same period. Therefore, it is important for NUH to look into the areas that have high risk for such incident and to reduce the workplace injuries and associated man-days lost in NUH.

## Objective

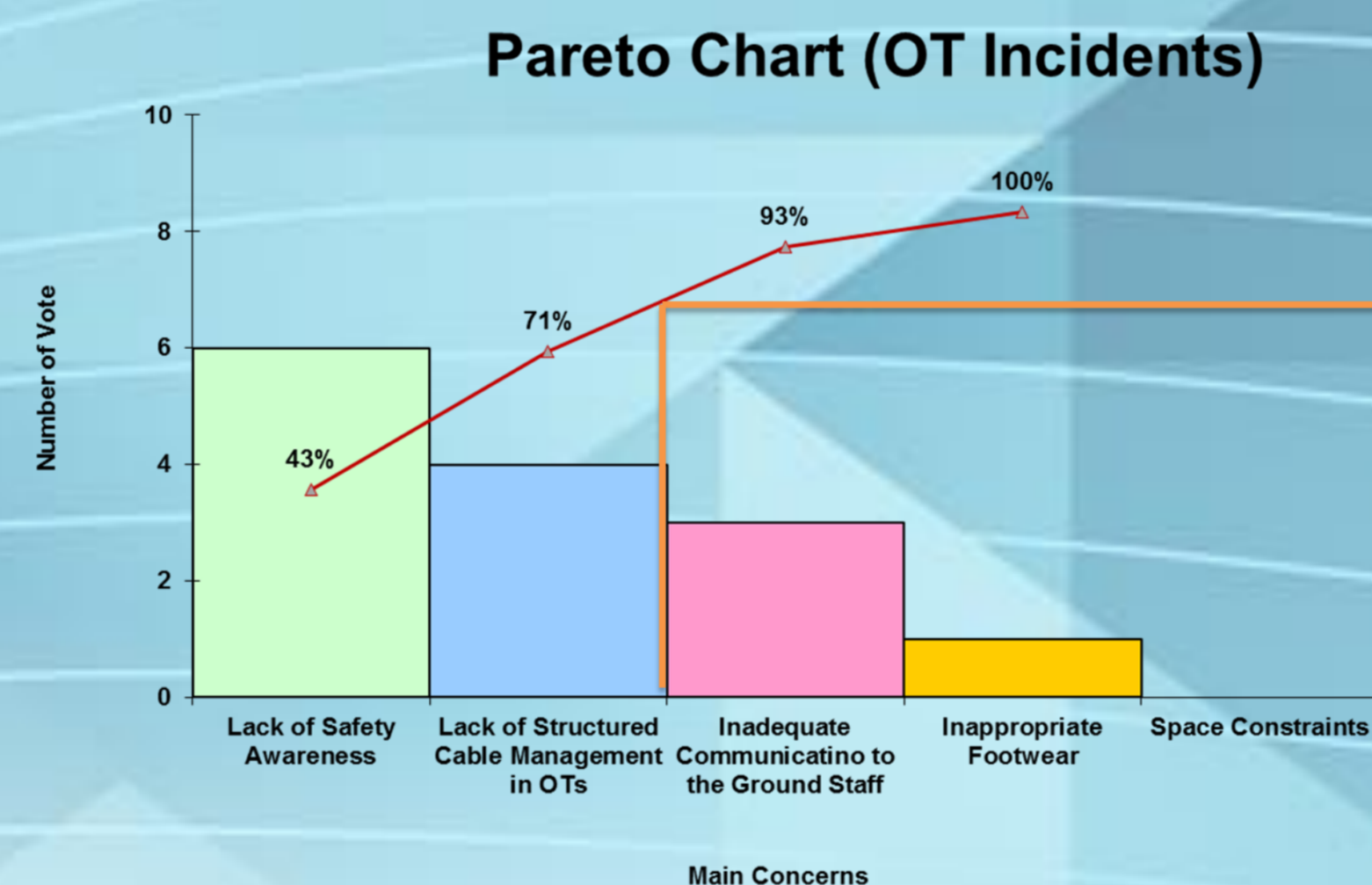
To reduce NUH Operating Theaters (OTs) incidents of Slip, Trip and Fall (STF) by 50 %\*\* within 6 months.

\*\*To improve NUH Operating Theaters (OTs) incidents of Slip, Trip and Fall (STF) by increasing the “Incident-Free” days from an average of 48 days to 96 days within 6 months.

## Materials and Methods

The data from Web-based reporting system was reviewed and analysed. Since 2015, NUH Workplace Injuries has increased about 30%. Slips, trip and falls (STF), remained at the Top 1 incident type which reflect similar result to a study of eight healthcare institutions in Singapore in 2014\*\*\*.

High man-day lost due to STF Data was analysed further and Operating Theatre (OT)/Day Surgery were identified to be one of the high risk location for STF incident. With the use of the Clinical Practice Improvement Practice (CPIP) methodology and tools including staff activities map, Affinity Diagram, Cause and Effect Diagram, and Pareto Chart. The following Root Causes were identified and prioritized: 1) Lack of Safety Awareness, 2) Inadequate Communication to the Ground on Incident learning points, and 3) Lack of Cable Management (for Equipments and Devices).

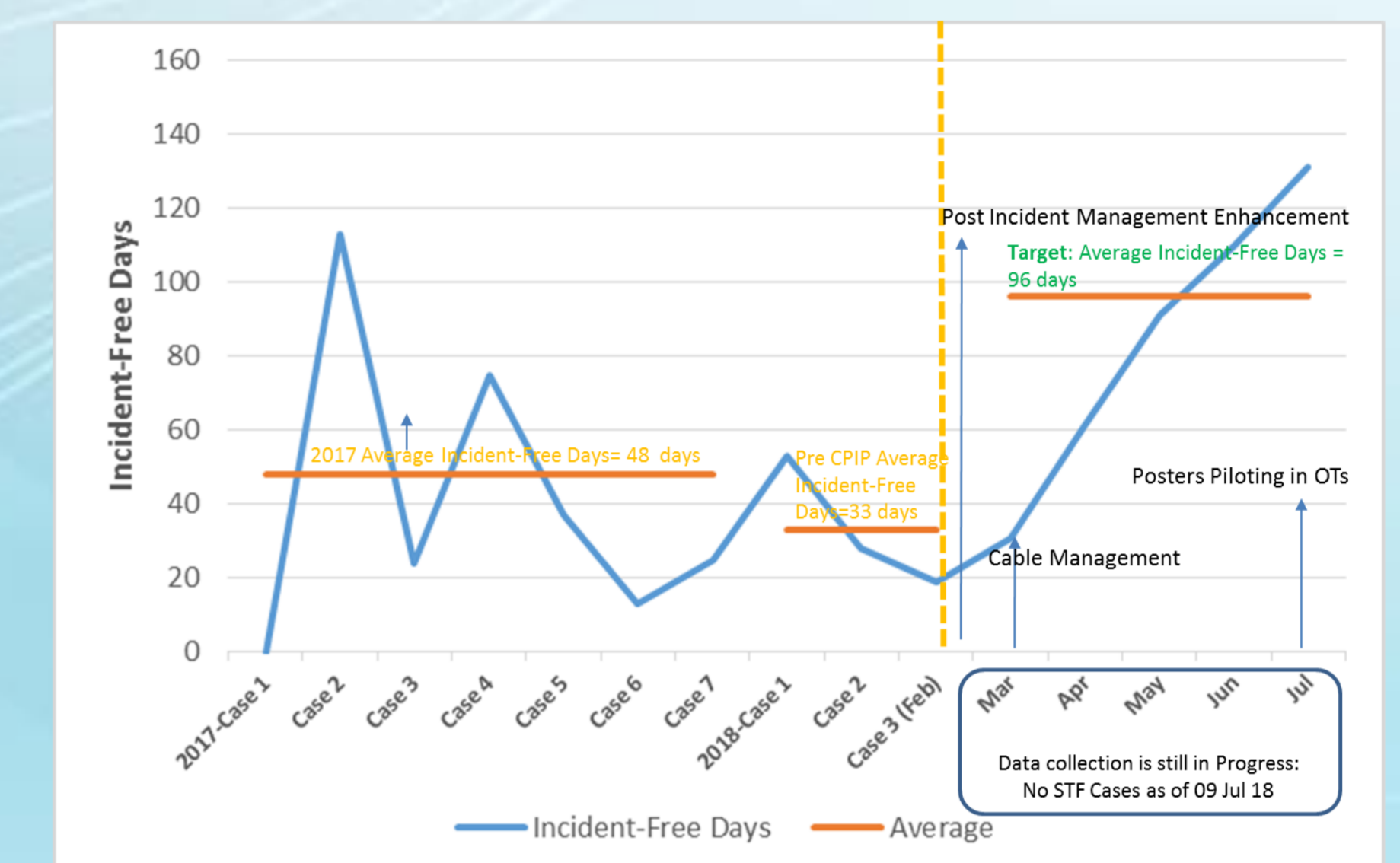


PDSA cycles were implemented and evaluated to increase safety awareness, Access to Information on Staff’s Slip, Trip and Fall’s Prevention using Posters and Cable Management in OTs.

## Results

The “Incident-Free” days improved from an average of 48 days to 152 days within 6 months from February to July 2018. This is a 200% improvement, exceeding the original target of 50% reduction. Cost saving from the STF medical expenses/claimed amount and man-day lost was SGD 57,381 in 6 months.

STF Incident-Free Days 2017-2018



## Sustaining and Spreading

With the encouraging result, strategies for sustaining and spreading are completed, which include site visits and close monitoring on STF incidents, internal audits, etc. Root Cause Analyses for all STF incidents in NUH were done. Full Scale roll out is planned via Safety roadshows/events and other related measures.

In addition, the interventions addressing the “Insufficient communication to the ground staff on Risk Assessment/Incident sharing” will also be implemented hospital-wide.

## Conclusion

Increasing Safety awareness by sharing incidents, site visits & displaying posters at strategic areas, together with implementing Cable Management in OT helped to prevent trip and fall incidents effectively.