Project Title

Fall-less

Project Lead and Members

Seah Pei Fen, Audi Fehdurani Bin Mat Sayuti, Chong Heng Choong, Eleanor Chew Shuxian, Joyslyn Lai Jie Xin, Lily Chang Yu-Tzu, Nurul Aini Binte Bari, Vimal Palanichamy, Joy Tan Meiling

Organisation(s) Involved

Singapore General Hospital

Healthcare Family Group(s) Involved in this Project

Allied Health

Applicable Specialty or Discipline

Physiotherapy

Aims

To reduce the number of preventable fall incidents during inpatient physiotherapy sessions from median of 0.103 per 1000 inpatient attendances to 0 per 1000 inpatient attendances in SGH within 15 months.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Additional Information

Singapore Healthcare Management (SHM) Conference 2021 Risk Management Category 3rd Prize

Project Category *(refer file attached for more info)*

Training & Education

Keywords

Preventable fall risks, preventable fall incidents related to physiotherapy sessions

Name and Email of Project Contact Person(s)

Name: Seah Pei Fen

Email: singaporehealthcaremanagement@singhealth.com.sg

Fall-less

Seah Pei Fen, Audi Fehdurani Bin Mat Sayuti, Chong Heng Choong, Eleanor Chew Shuxian, Joyslyn Lai Jie Xin, Lily Chang Yu-Tzu, Nurul Aini Binte Bari, Vimal Palanichamy, Joy Tan Meiling
Department of Physiotherapy, Singapore General Hospital

Introduction & Background

Falls are a serious threat to patient safety. They may result in associated injuries which require increased diagnostic and therapeutic procedures and the need for institutionalisation, rehabilitation, and home care. The need for further treatment and longer hospital stays will in turn lead to increased patient care costs and healthcare professional workload. Apart from patient safety, fall incidents can also affect staff safety. Physiotherapists and therapy assistants may sustain injuries while attempting to catch falling patients.

From annual review, the number of fall incidents occurred during physiotherapy sessions has been observed to be on an upward trend and majority of them were preventable. To mitigate this safety risk, we embarked on an improvement project to reduce the number of preventable fall incidents during inpatient physiotherapy sessions.

Mission Statement

To reduce the number of preventable fall incidents during inpatient physiotherapy sessions from median of 0.103 per 1000 inpatient attendances to 0 per 1000 inpatient attendances in SGH within 15 months.

Methodology

1) Analysis of problem

Cause-and-effect diagram (Fig 1), multi-voting and pareto chart (Fig 2) were used to identify the main root causes of preventable fall incidents during inpatient physiotherapy sessions
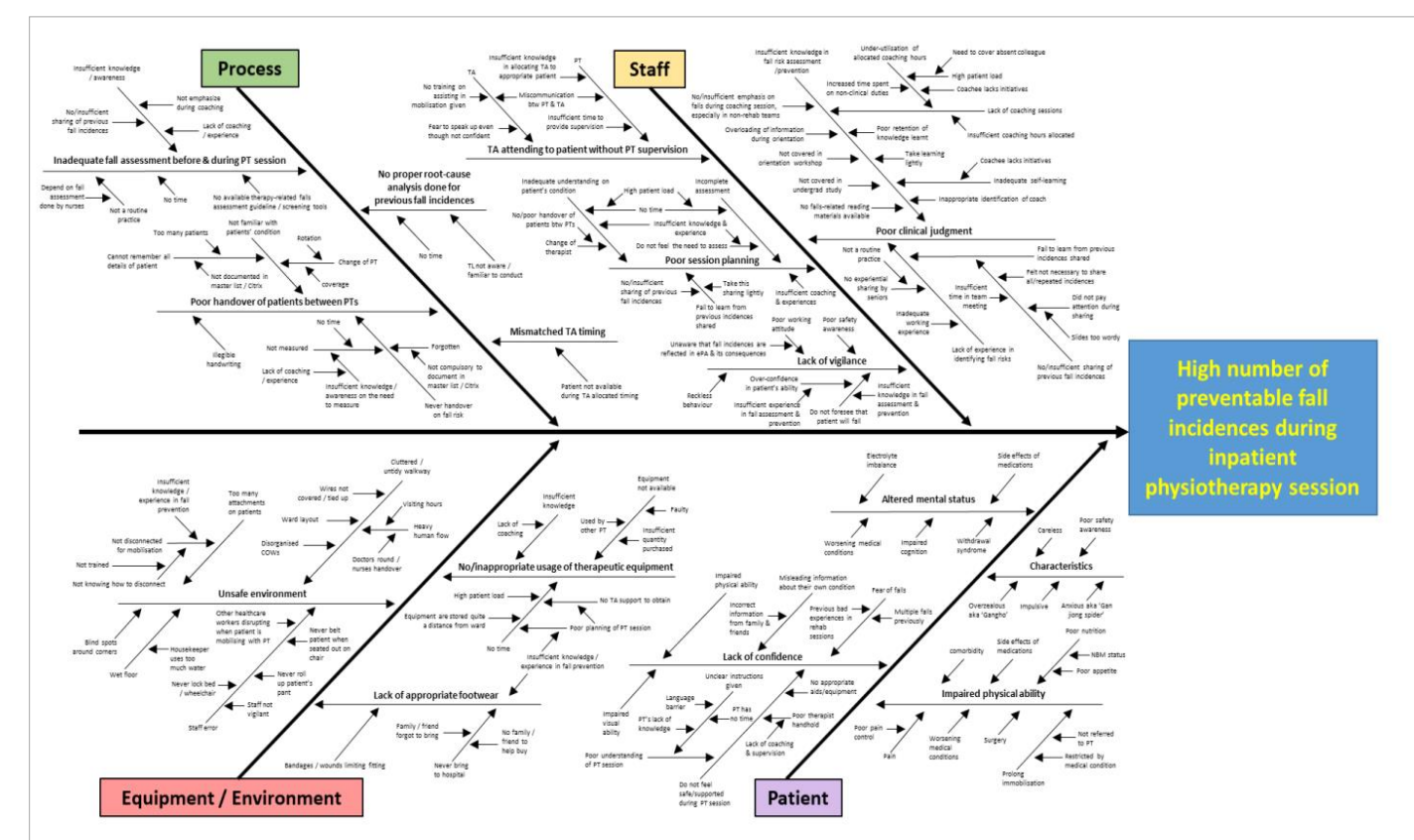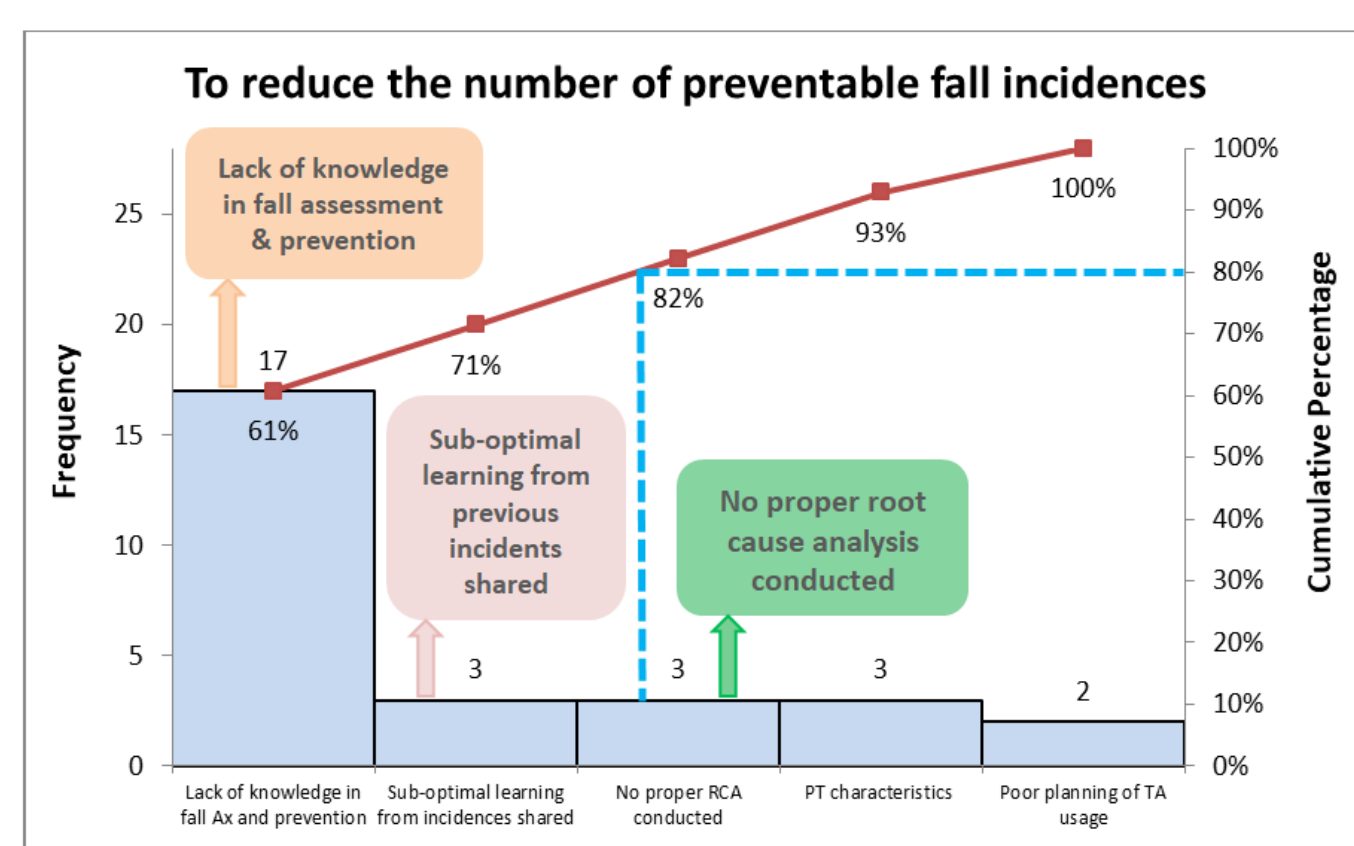

Fig 1: Cause-and-effect diagram

Fig 2: Pareto Chart

Three final root causes were identified:
1. Lack of knowledge in fall assessment and prevention
2. Sub-optimal learning from previous incidents shared
3. No proper root cause analysis conducted
(PT characteristics was not identified as a final root cause to be addressed as it was mostly uncontrollable)

2) Implementation of interventions

The driver-diagram and prioritisation matrix (Fig 3) were used to shortlist interventions (PDSA 1 to 4) for the identified root causes. The 4 PDSAs were implemented in phases over a period of 15 months.


Fig 3: Prioritisation Matrix

Be ready with your F.A.C.T.S.

F: full **F**alls assessment
A: walking **A**ids and/or gait belt
C: **C**hair/Wheelchair
T: **T**herapy assistant
S: assess for **S**uitability

Results

The project achieved its target in reducing preventable falls (Pre: 19 falls to Post: 8 falls) during physiotherapy session from a median of 0.103 to 0. Cost savings was $10,007.12. The shift is detected from May to December 2020 in the run chart as shown.

Pre: 19 cases

Post: 8 cases
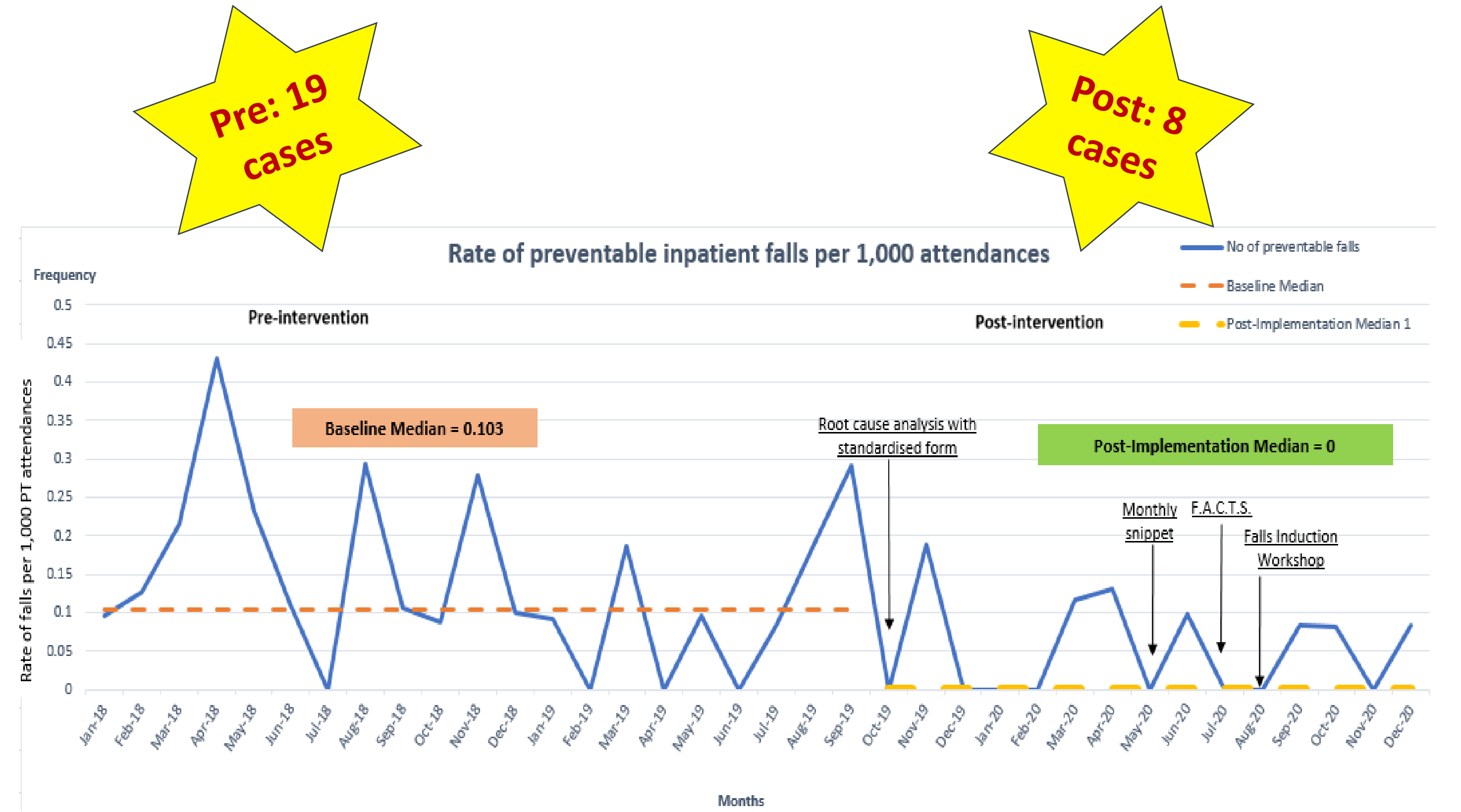
Prevented 11 fall incidents in 15 months = **$10,007.12**

Achieve organisation aims and priorities of "Best Outcome, Best Experience" and Target Zero Harm.

Increase therapist's self-confidence and morale

Better patient's experience and outcome

Less caregiver stress and burden

Conclusion

Preventable falls during inpatient physiotherapy sessions can be reduced with an increase in fall assessment and prevention knowledge, favourable learning from previous incidents and proper root cause analysis conducted.

Sustainability Plans

Conduct annual orientation on incident investigation workflow & form

Conduct fall induction workshop for every rotation

Fall risk factor assessment and F.A.C.T.S. are incorporated in clinical audit form

Continual reviewing & refining of fall prevention guide and induction workshop