

# National Quality Improvement Conference

## Enhancing Patient Safety: Education & AI-Driven Strategies for Fall Prevention

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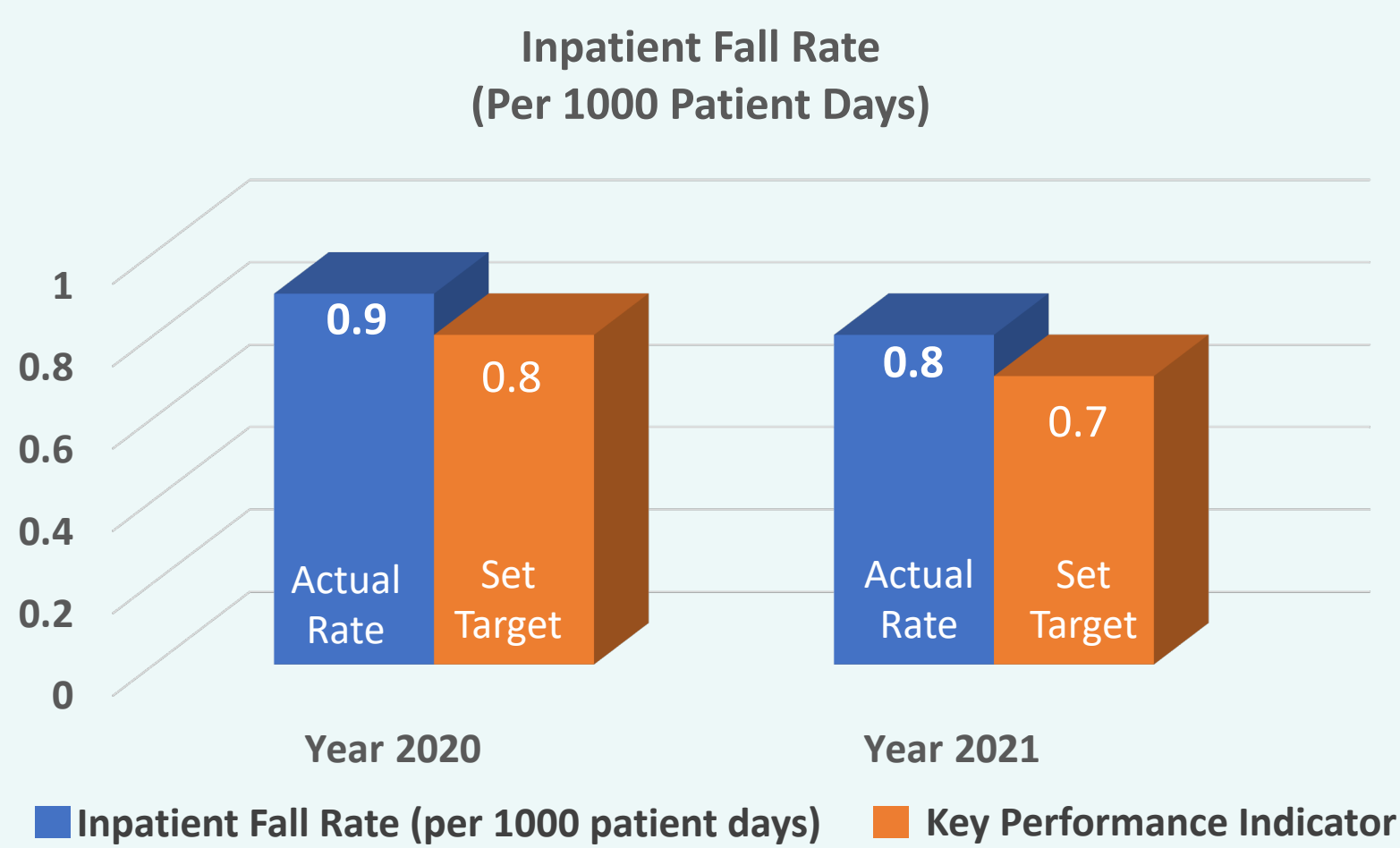
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### Problem Statement

A private hospital with 333 single-bedded rooms had an incident of high fall rates, above the key performance indicator set target of 0.8 and 0.7 per 1000 patient days in 2020 and 2021 respectively.



### Potential Solutions

PDSA CYCLE 1

#### Preliminary Fall Risk Screening & Patient Education (From April 2022)

The Front Office (FO) staff were trained to identify high fall risk patients using a preliminary fall risk screening checklist, and provide basic fall prevention education

Preliminary Fall Risk Screening	
<input type="checkbox"/>	Age 75 years of age
<input type="checkbox"/>	History of fall in last 3 months
<input type="checkbox"/>	Planned for operation/invasive diagnostic test
<input type="checkbox"/>	Confused/Demented/Forgetful
<input type="checkbox"/>	Unsteady gait
<input type="checkbox"/>	Has walking sticks/walker/whichever
<input type="checkbox"/>	Visual/hearing impairment

The FO staff performed the fall risk screenings for inpatients upon their first entry into the hospital

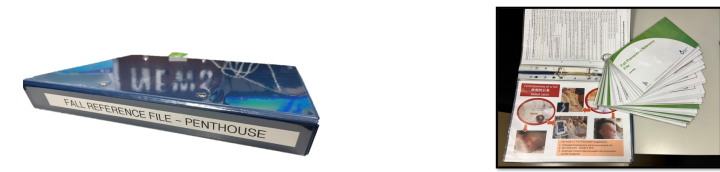
The FO staff provided basic fall prevention education according to the fall risk level, i.e. low or high

PDSA CYCLE 3 & 4

#### Newly Hired Healthcare Staff (From May 2022)

1-hour fall prevention training was provided for newly hired healthcare staff on their first day.

A fall prevention reference file was used to brief them on their departments' fall prevention measures.



#### Staff Education Existing Healthcare Staff (From April 2022)

Fall prevention rah-rah(s) were conducted from April to July 2022 to raise awareness and encourage participation in patient fall prevention measures



Regular fall prevention newsletters were distributed to encourage the healthcare staff to think more critically about patient fall



PDSA CYCLE 2

#### Refresher on Use of an AI-Enabled Technology Platform (From July 2022)

Refresher training on the use of the platform was conducted from July to August 2022.



PDSA CYCLE 5

### Project Aim

To reduce inpatient falls rate from a rate of 0.8 to 0.4 patient falls per 1000 patient days (50% reduction) from 1 March to 31 December 2022.



### Lessons Learnt



The project successfully reduced the incident of fall particularly those that are related to patients moving out of bed and ambulating without assistance. Even so, it is critical to pay attention to all causes of fall as each individual instance missed can cause injury or harm to patient.

To ensure the initiatives' sustainability, ongoing data collection is crucial to evaluate the effectiveness of this approach. This data will also guide future improvements in fall prevention measures.

### Outcomes & Impacts

There was a **21% decrease** in the inpatient fall rate, 0.8 to 0.6 inpatient falls per 100 patient days by December 2022.

