

## **Project Title**

Falls Prevention Project in Econ Sunnyville Nursing Home (Yio Chu Kang)

## **Project Lead and Members**

Lee Yoke Chuan, Liang Biling, Liu Jian Ping, Mhar Rosari Quitalias

## **Organisation(s) Involved**

Econ Healthcare

## **Healthcare Family Group(s) Involved in this Project**

Nursing, Allied Health

## **Applicable Specialty or Discipline**

Rehabilitation

## **Project Period**

Start date: Jan 2022

Completed date: Dec 2022

## **Aims**

- To reduce rate of falls for 50% in Econ YCK by 2022
- Implement the fall prevention programme in all wards of Econ YCK by 2022

## **Background**

See poster attached

## **Methods**

See poster attached

## **Results**

See poster attached

## **Lessons Learnt**

See poster attached

## **Conclusion**

See poster attached

## **Additional Information**

Accorded the Clinical Quality Improvement award – Team Award (Gold) at AIC's  
Community Care Excellence Award (CCEA) 2023

## **Project Category**

Care Continuum

Intermediate and Long-Term Care & Community Care, Nursing Home

## **Keywords**

Falls Prevention, Elderly, Staff Training

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## Falls Prevention Project in Econ Sunnyville Nursing Home (Yio Chu Kang) Econ Healthcare

Lee Yoke Chuan<sup>1</sup>, Liang Biling<sup>2</sup>, Liu Jian Ping<sup>3</sup>, Mhar Rosari Quitalias<sup>4</sup>

### Introduction/Background

Falls are common amongst elderly in local nursing homes according to a local study (Yap, et al., 2003). There were 17 residents' falls in Econ Sunnyville Nursing Home, Yio Chu Kang (Econ YCK) in 2020, and the falls led to injury and some other adverse impacts. Thus, it is important to have a structured falls prevention work process and work group in place.

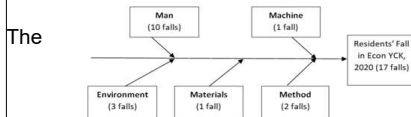
### Goal/Objective

A falls prevention committee consisting of a multidisciplinary team with healthcare professionals from Nursing and Rehab departments had been formed in 2021, with the goals of reducing number of falls among the residents in Econ YCK. With guidance from AIC, the falls prevention project was started with the aim to:

- 1) Reduce rate of falls for 50% in Econ YCK by 2022.
- 2) Implement the fall prevention program in all wards of Econ YCK by 2022.

### Problem Analysis

Root cause analysis (RCA) was conducted by the falls prevention committee to identify causes of residents' falls via investigation of all submitted falls incident reports in 2020 using 5 Whys, with their contributing factors as shown below:



The committee decided to focus on creating a fall care bundle for all residents, review work processes, as well as increasing staff knowledge on falls prevention targeting the contributing factors.

### Implementation Plan

#### Staff Training

Six topics related to falls prevention and patient safety were developed for all nursing staff, which include:

- High risk medication and its impact on falls
- Understanding of 3Ds and orthostatic hypotension
- How to conduct CLC for head injury sustained after a fall
- How to use FRAT
- Safe manual handling (with practical)
- Fall risk factors identification & prevention

#### Falls Care Bundle

A falls care bundle was created with the elements targeting the root causes of falls below:

- Nursing assessment (FRAT, orthostatic hypotension, medication, vision and environment)
- Rehab assessment (gait & balance, walking aid, ADL status, footwear and assistive devices)
- Resident/ Next-of-kin education
- Management of at-risk residents
- Post falls management

#### Work Processes Review

- Work process of enhancing safety during residents showering (one staff to one resident) was reinforced.
- Pictorial mobility status was indicated on residents' headboard to provide visible reminder to all staff.
- The needs of applying restrainer according to was reviewed for restrainer as the last resort of falls prevention.
- Individualised falls prevention measures were implemented

- Safe use and management of equipment, daily equipment checks, and regular maintenance of all equipment used for resident's care such as mobile commode and wheelchair with safety features were reinforced to staff
- Econ Facilities Mobile App was created by IT department to reduce waiting time in repairing faulty equipment reported.
- Designated linen trolley area which is within staff's easy reach when showering residents was allocated.

### Sample of Econ YCK Fall Care Bundle

**Fall Care Bundle**  
STANDARD FOR ALL RESIDENTS

RESIDENT STORY LABEL

Conduct FRAT on: \_\_\_\_\_

Tick ✓ where applicable

- On admission
- 1 month
- On the 6th
- On change in condition, i.e. post discharge from hospital
- Start new medication which may cause fall
- Others: \_\_\_\_\_

**1. Nursing Assessment**

(1) FRAT:  Low risk  at Risk (Subsant/High Risk)

(2) Orthostatic Hypotension (DBP difference >10 mmHg from lying to sitting/standing, DBP difference >10 mmHg from lying to sitting/standing):  No, no order to MEDICINE  Yes

(3) Any medication which can cause fall:  Yes, no order to MEDICINE & MEDICINE  No

(4) Break with them (if resident can see):  Glasses  State chair  Bedside table  Dotted movement (to refer to MEDICINE if a resident is having vision impairment)

**2. Risk Assessment**

(1) Risk of falling and (or refer to FRAT assessment): \_\_\_\_\_

(2) Use of walking aid (to refer to FRAT assessment): \_\_\_\_\_

**By exceptional Therapist:** \_\_\_\_\_

(3) MRB score: \_\_\_\_\_

(4) Staff assistance required during:  Transfer  Showering  Incontinence  To and from toilet  Other: \_\_\_\_\_

**3. Clothing, Footwear, Devices and Equipment**

(1) Available devices, such as shower chair and commodes, are checked and maintained regularly:  Yes  No

(2) Appropriately sized clothing is provided:  Yes  No

(3) Appropriate footwear is provided:  Yes  No

Remarks: \_\_\_\_\_

**4. Assessment:**

(1) Resident and staff are oriented to environment and advised to seek for assistance when needed

(2) Safe physical environments is ensured including:

- 1. Clear floor/walkway
- 2. Adequate lighting
- 3. Dry floor (no spills are demonstrated and cautionary signs are up)
- 4. Personal belongings and frequently used items are within reach
- 5. Call bell is within reach

**Jasmine Ward** Hi, I am \_\_\_\_\_  
My Bed No. is \_\_\_\_\_  
I can speak: \_\_\_\_\_  
Drug Allergy:  YES  NO  
Food Allergy:  YES  NO

**Diet** Enteral Feeding/Schedule

Full Diet  Feed / Supplement \_\_\_\_\_  
Soft Diet  Date of Commence \_\_\_\_\_  
Chopped Diet  (Check Amount of Water Intake) \_\_\_\_\_  
Minced Diet  \_\_\_\_\_  
Blended Diet  \_\_\_\_\_  
Thickened Fluids  \_\_\_\_\_  
Fluid Restrictions  \_\_\_\_\_

**Mobility Status**

Assessment:  Independent  Needs supervision  Requires assistance  Bed

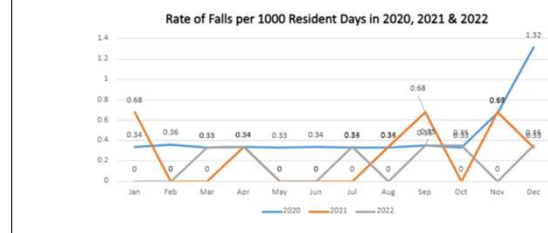
Fall Precautions:  I need frequent turning:

Special Notes (Please specify): \_\_\_\_\_

Fall Risk:

### Benefits/Results

The fall prevention program has been implemented in all wards as at end of 2022. The rate of preventable falls among all residents in YCK was studied for the year 2020, 2021 and 2022 as shown below. The average falls rate decreased from 0.45 in 2020 to 0.25 in 2021. It further decreased to 0.17 in 2022, which is about 62% reduction.



### Sustainability & Reflections

- Falls prevention program targeted at improving staff's knowledge, implementing structured falls care bundle, maintaining equipment, well as improving resident care work processes seemed effective in reducing the falls rate in Econ YCK.
- All new nursing staff will be trained on the six topics related to falls prevention and patient safety as part of their orientation and training. Refresher training should also be provided to existing staff. Future study should include staff, resident and/or family's satisfaction.