

National Quality Improvement Conference

Footwear is Important to Reduce Adverse Events (FIRAE)

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Problem Statement



Poor features of current supply of footwear to inpatient wards

12 fall incidents was related to footwear during May 2020-2021



Heel counter stiffness	X
Fixation	X
Heel height	✓
Sole rigidity	✓
Sole flexion point	X
Tread pattern	X
Total features	2 / 6



Patient in ward without proper footwear/ no footwear at all

Picture 1: Podiatrist analysis of the current inpatient footwear

Footwear is a **modifiable factor** & provision of timely and adequate footwear **education** can reduce fall incidents!

Potential Solutions

Phase 1

- Problem identification
- Background data collection through HITS and surveys
- Root cause analysis
- Brainstorming ideas

Phase 2

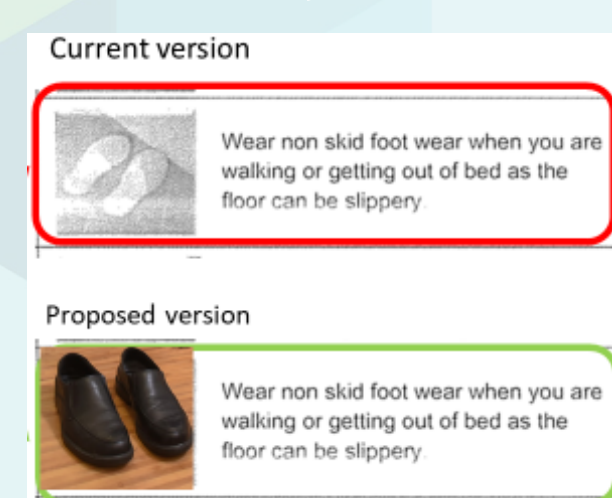
- Update Patient Family Education (PFE) and fall contract
- Source for high quality and cost-effective footwear for inpatient wards
- Educational poster
- E-learning

Phase 3 (ongoing)

- Continue sourcing for better footwear
- Evaluation of collective effect of solutions developed in phase 2



Picture 2: Educational poster on proper footwear



Picture 3: E-learning slide on footwear analysis

Advantages	Disadvantages	Fall Risk
<ul style="list-style-type: none"> • Ease of wear (slip in) • Soft and comfortable to skin • Very low costs (\$1-5) 	<ul style="list-style-type: none"> • Slippery • Lack of midfoot support • Lack of safety ankle strap • Lack of heel support • Gets wet easily 	HIGH

Picture 4: Updating the PFE and fall contract

Project Aim

1. To reduce fall incidents in inpatient wards related to lack of proper footwear by 50%.

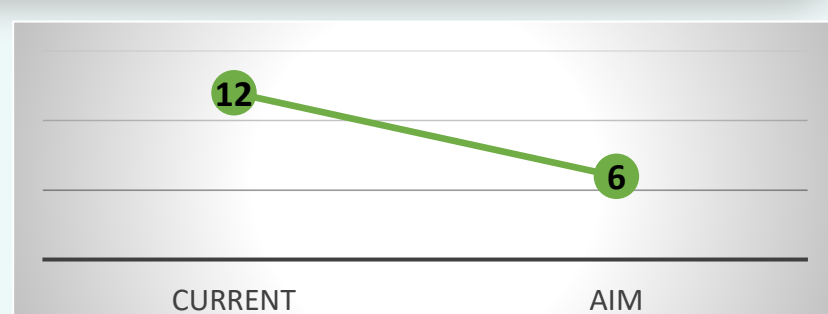


Figure 1: Fall incidents related to footwear

2. To increase number of staff who are confident in performing footwear education by 40%.

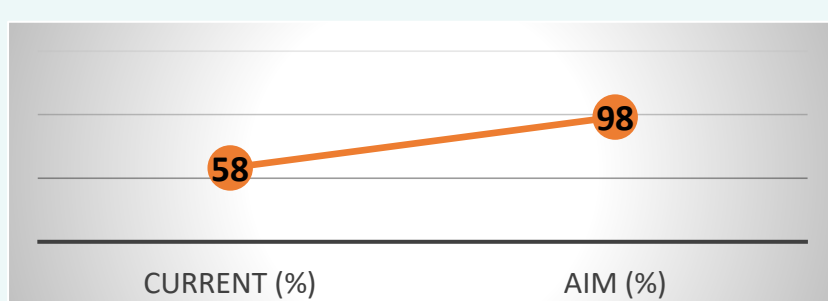


Figure 2: staff confidence in providing footwear education

Lessons Learnt

Multidisciplinary collaboration

- Coordinating with various stakeholders to facilitate progress
- Establishing consensus and allocating roles and responsibilities
- Obtaining support from hospital falls workgroup
- Maintaining the passion during covid-19 pandemic

Limited types of footwear from vendor

- Improve on existing type of footwear as a transition
- Limited vendors due to cost restrictions and limited supply
- Increase the demand of inpatient footwear to attract more vendors

Compliance and sustainability

- Identify champions to monitor the progress and provide continuous reinforcement
- Collecting feedback for continuous improvement
- Incorporate into standard operating procedures (SOP)

Outcomes & Impacts

- The educational poster was temporarily rolled out in trial ward as brochure to be given out to patients during admission.
- 61% of nurses reported feeling confident in providing proper footwear education after introduction of the brochure.
- 25 patients were surveyed in trial ward post introducing educational brochure. Non-compliance in proper footwear education by staff has been identified which requires further reinforcement on the ground.

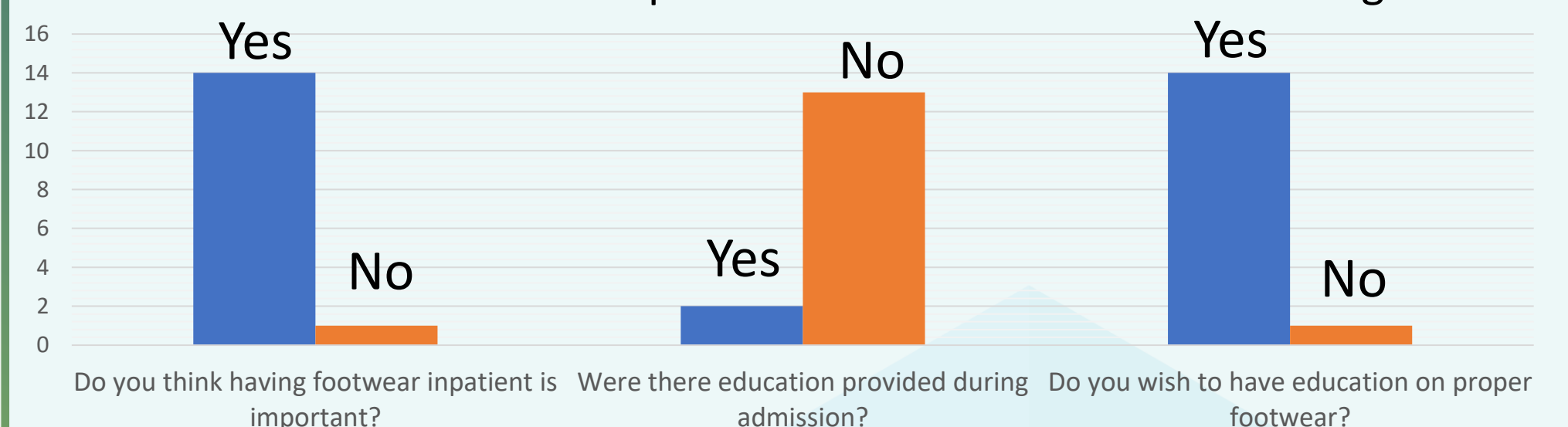


Figure 3: Patients' perspective on footwear in inpatient wards

FIRAE is an ongoing quality improvement project with the goal of creating a more significant impact on:

Quality of care	Patient safety	Cost saving	Transferability
<ul style="list-style-type: none"> • standardised practice across KTPH and YCH 	<ul style="list-style-type: none"> • Reduce fall incidents and adverse events relating to footwear in the hospital 	<ul style="list-style-type: none"> • reduce cost in investigation and treatment processes with adverse events 	<ul style="list-style-type: none"> • Patients will continue to adopt proper footwear when out of the hospital