

Reducing Geriatric Chair Related Falls: Anti-Slip Mat

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Background

Geriatric chairs are commonly used to sit patients out of the bed. In 2014, there were 33 Geriatric chair related falls, of which one was a Serious Reportable Event (SRE) when the patient sustained a fracture after sliding from the Geriatric chair. These falls occur when patients climb out of the chair or slide down through the gap between the chair and locked in table. Upon examining the safety of the Geriatric chair, an Anti-Slip Mat (Fig. 1a-1c) was created to address the safety lapses.

Aim

To evaluate the effectiveness of the Anti-Slip Mat in prevention of Geriatric Chair related falls.

Methodology

Data Collection

- Retrospective review highlighted **33** Geriatric-Chair related falls in the year 2014 (Fig 2). **2.75** Geriatric-Chair related fall per month
- 1 Geriatric-Chair related fall was a SRE

Study the problem

- Large gap between locked in table and seat, the current material of seat is slippery
- Seat belt and locked in table can also be easily removed

Solution

- Anti-Slip Mat
 - Stingray-like body with a padded groin area
- Velcro straps the the base of the mat and an adjustable belt

Data Analysis

- Incidence of Geriatric Chair related fall was measured over one year.
- There were no incidence of Geriatric Chair related falls in the piloted ward in 2015

Fig 1a: Anti-Slip Mat



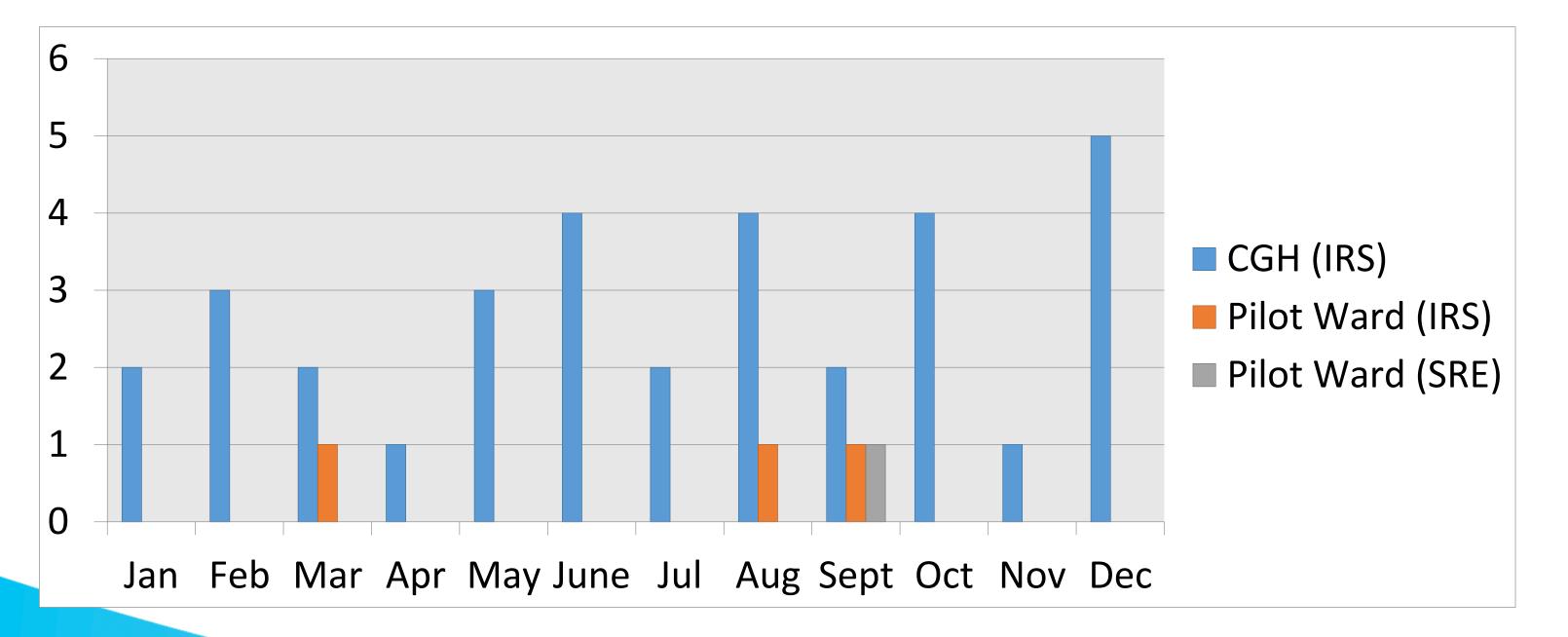
Fig 1b: Front view of Anti-Slip Mat on a Geriatric Chair



Fig 1c: Side view of Anti-Slip Mat on a Geriatric Chair



Fig 2: Geriatric Chair related fall rates in 2014



Results

In 2015, there were **zero** incidences of Geriatric chair related falls from the piloted ward (Fig 3). The Anti-Slip Mat was then rolled out to all inpatient wards from November 2015.

From November 2015 till April 2016, there were 10 Geriatric chair related falls (average **1.67** per month) in the entire hospital, which equates to **39%** in reduction of fall since the implementation of the Anti-Slip Mat from the initial **2.75** falls per month (Fig 4).

Fig 3: Geriatric Chair related fall rates in the piloted ward, before and after implementation of Anti-Slip Mat

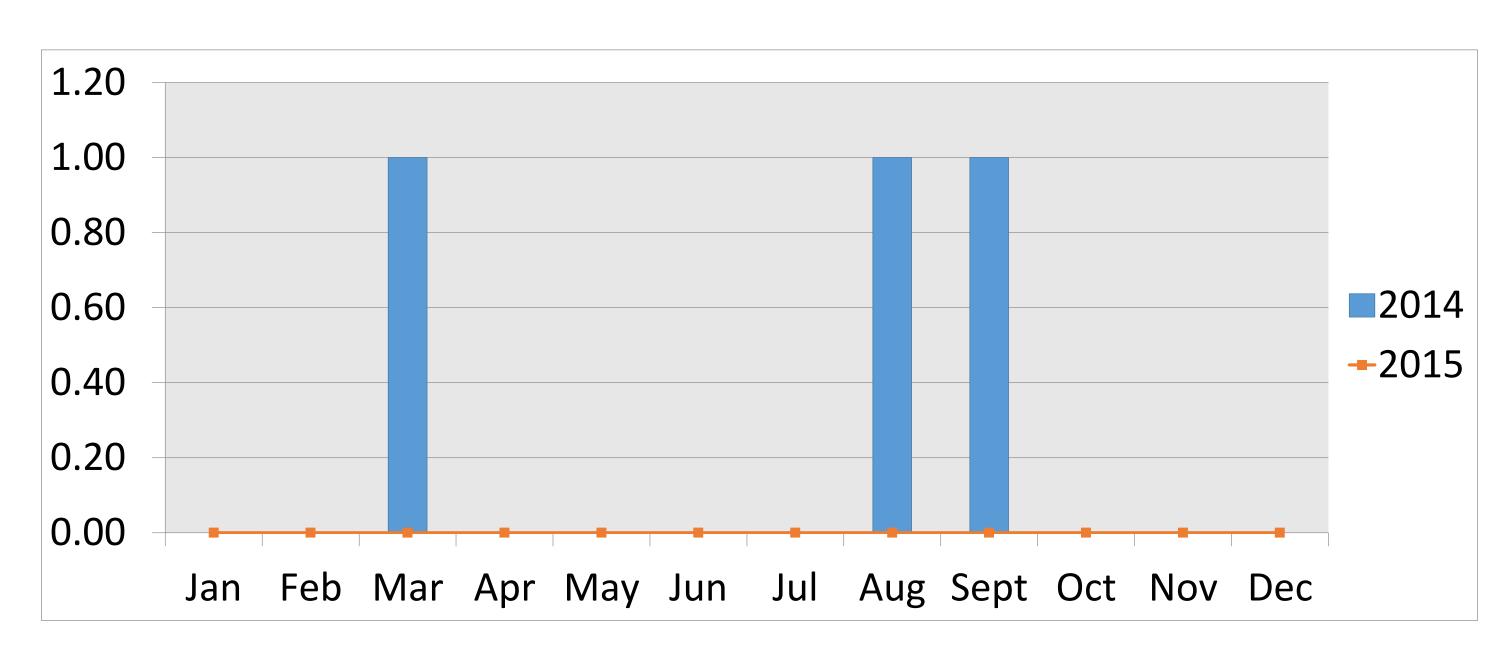
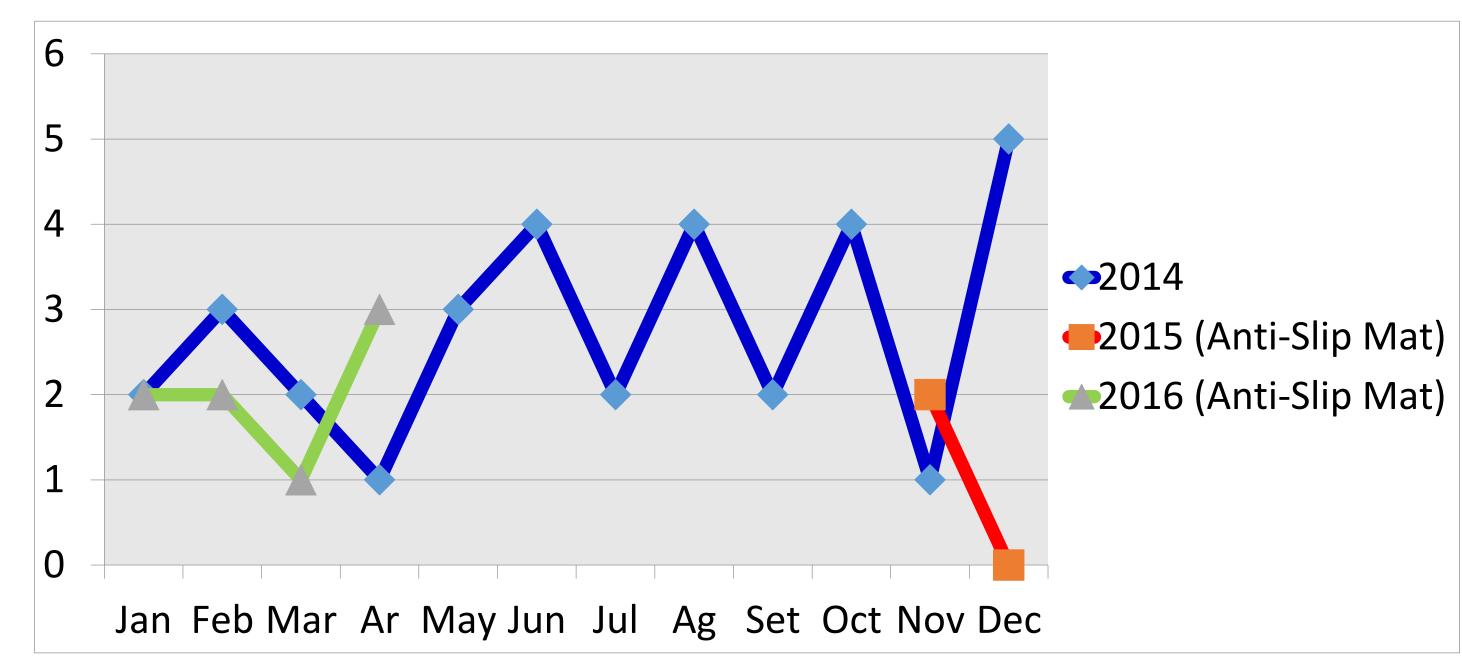


Fig 4: Geriatric Chair related fall rates in CGH, before and after implementation of Anti-Slip Mat



When examined, the 10 Geriatric-Chair related falls took place when the Anti-Slip Mat was not used. Therefore, a focus group discussion was conducted with representatives from all wards to address queries and understand the barriers to using the Anti-Slip Mat. Reinforcement was done to encourage nurses to use the Anti-Slip Mat and frequent rounds were also made to ensure that the Mat is used by patients who need it.

Conclusion

The Anti-Slip Mat has proven to be effective in preventing Geriatric-Chair related falls.

Continued reinforcement to the ground staff is needed to prevent future falls.



