



REDUCING FALL RATE IN MEDICAL SURGICAL UNIT USING 4AT DELIRIUM SCREENING TOOL

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Background

The last fiscal year, hospital falls on a medical-surgical (med-surg) unit at a teaching hospital accounted for 69 (i.e. 15%) of the total hospital falls. Again, this fiscal year, this unit is recording falls and staffs are ready to combat this issue and aiming minimal to no fall.

Aim of the Project

This quality improvement (QI) initiative aimed to promote safety interventions and decrease fall rate using the 4AT (Arousal, Attention, Abbreviated Mental Test-4, Acute change) delirium screening tool on admission and each shift for patients 65 years and older.

Outcome goal:

- Screening with the 4 AT tool, Identification of delirious or at risk for delirium i.e., score ≥ 3 (positive)

Process goal:

- All positively screened patients will have a fall precaution order and different strategies will be applied.

Data Collection Method and Analysis

- **Setting:** 35-bed med-surg adult inpatient unit.
- **Target population:** All adult patients ≥ 65 years old admitted to the unit from September to December 2023.

Implementation:

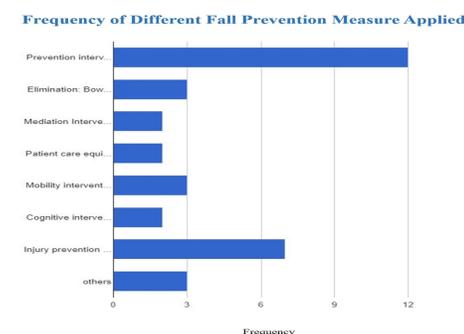
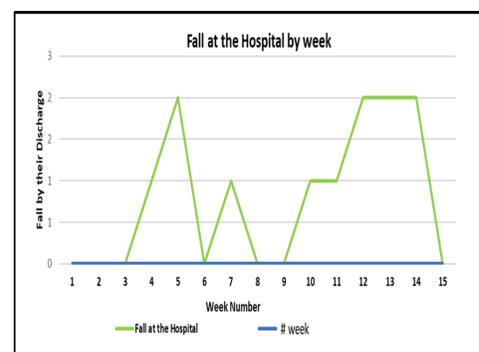
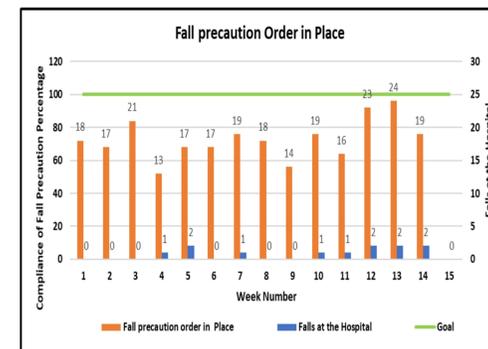
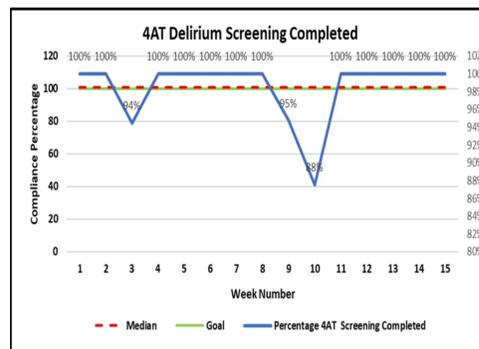
- ❖ A multi-dimensional framework PARIS model.
- ❖ Online modules, emails, staff meetings, tip-sheets, huddles, and power points for education and sending reminders.
- ❖ Nurses completed the 4AT screening questionnaires on admission and every 12 hour-shifts.

- ❖ Completion of 4AT tool resulted in a certain screening score. For score ≥ 3 , fall precaution order will be placed in EMR.

Data Collection and analysis:

- ❖ PL audited the charts weekly and collected data related to 4AT tool such as an automated score, fall precaution order, fall event if there is any, and strategies applied.
- ❖ Data was directly entered into Redcap system for analysis.
- ❖ Thereafter, data was compared weekly for clinical significance The implementation took place in Fall 2023, over a 15-weeks.

Outcomes Measures or Results



- ❖ 262 (N) patients were included in this QI project.
- ❖ 99% (n=260) of those patients had 4AT questionnaires completed and the score (0-10) was documented.
- ❖ 24.8% (n=65) scored ≥ 3 (positive).
- ❖ 100% had fall precaution order placed and different strategies applied to them.
- ❖ 12 patients (4.5%) experienced fall events of varying degrees within this period.

Discussion

The fall rate was significantly reduced (30 to 12 falls in Sep-Dec 2022 and 2023 respectively) during this QI initiative. Thus, the outcomes align with current evidence that support screening patients with 4AT for delirium and taking prevention measures for a score of ≥ 3 .

Limitations:

- Short implementation timeline (15 weeks)
- Inability to establish a system to alert provider directly based on automated 4AT score
- High turnover

Conclusion

- ❖ Early identification of delirious or at risk for delirium patients.
- ❖ Initiation of fall precautions.
- ❖ 99% compliance and 100% fall precaution orders.
- ❖ Thus, there was a decrease in fall rate in this unit since implementation of this evidence-based initiative.

Implications for Practice: Highly supports that the screening of all elderly patients with 4 AT tool for recognition of delirious or at-risk for delirium patients and initiating fall precautions for score ≥ 3 to decrease the fall rate in med-surg unit. In addition, this project is replicable.

Sustainability: Screening eligible patients with 4AT tool is standard nursing practice in other hospitals and this QI project was successful. Hence, random chart audit for compliance and fall events by the unit champions should be done for sustainability.

Audit Tool



References

