

Introduction

Patient falls has been identified as a problem on G11E leukemia in-patient unit. There has been inconsistencies in initiating and maintaining the fall prevention interventions for the high fall risk patients. This necessitated standardization of fall prevention interventions for all high fall risk patients across the G11E unit by using the Kamishibai Card (K-Card) process.

“A fall is a sudden, unintentional descent, with or without injury to the patient, that results in the patient coming to rest on the floor, on or against some surface, on another person or on an object” (Press Ganey, 2016). Patient falls contribute to increased cost of healthcare and can add financial burden to the hospital. The estimated medical costs associated with falls was approximately \$50.0 billion in 2015 across the United States (Florence, Bergen, Atherly, Burns, Stevens, & Drake, 2018).

The National Database of Nursing Quality Indicators (NDNQI) identified patient falls as a nursing quality indicator (NDNQI, 2019).

Background

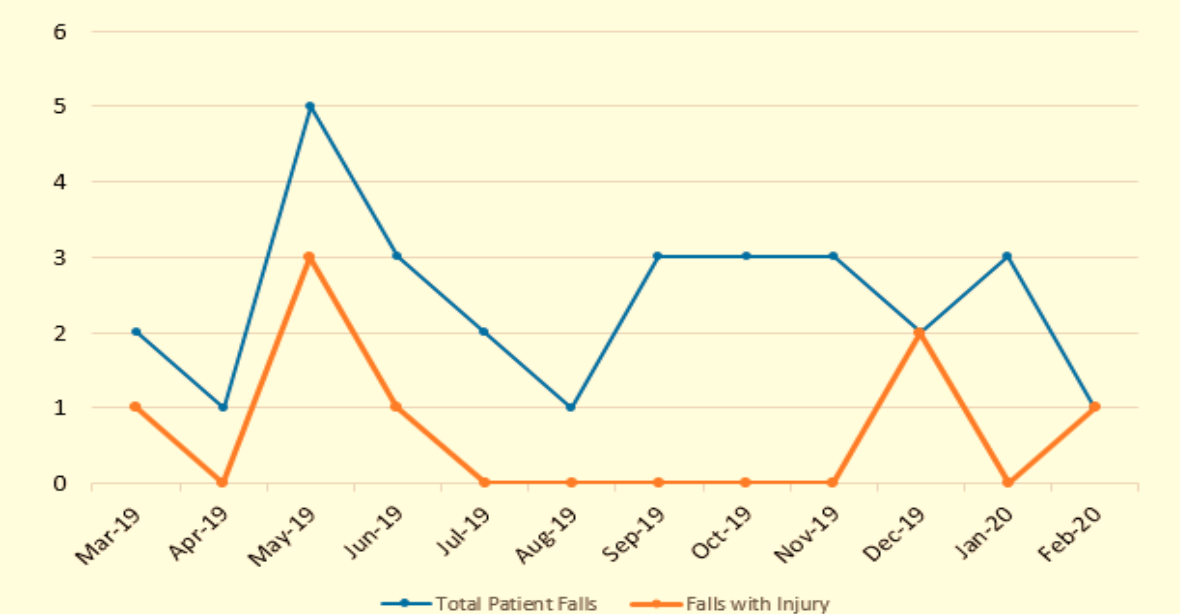
G11E is a 24bed unit, where care is provided for patients with different types of leukemia diagnosis in various spectrum of their disease progression. Patients admitted to G11E received multiple anti-neoplastic treatments and supporting treatments. The severity of the disease, co-morbidities, and the cancer treatment side effects and toxicities increased their fall risk (Toomy & Friedman, 2014).

The number of falls with injury on G11E were 8 in FY 2019. The unit leadership observed inconsistencies in placing fall prevention interventions for high fall risk patients on G11E.

Pre-intervention Data

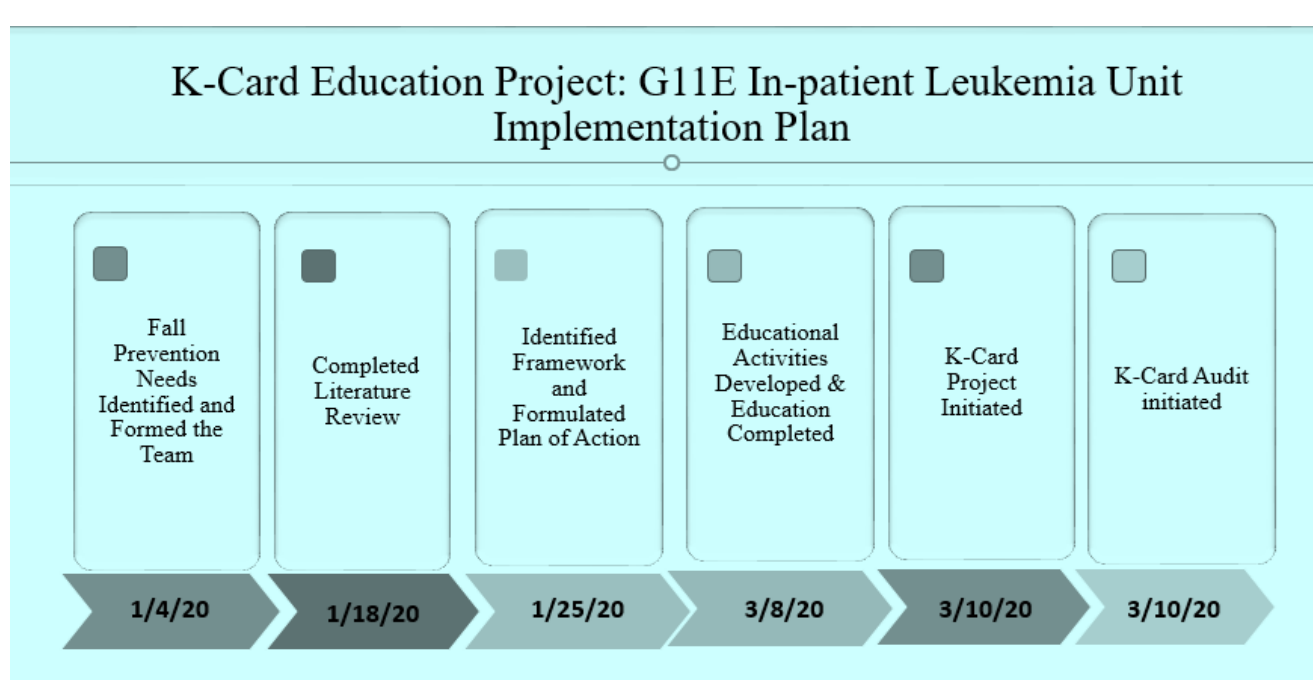
Pre-intervention data was collected from January 2019 through December 2019 by the unit fall champions by using the institutional fall champion Qualtrics audit tool, and the opportunities for improvement were identified. Non-compliance of basic fall prevention interventions were identified.

G11E Total Patient Falls 2019-2020



Method

The Kamishibai Card (K-Card) process was used to standardize the fall prevention intervention strategies for all high risk patients on G11E. The K-Card is a process used for problem solving by using visual boards or cards. This process allows identification of barriers in a real time, which will enable removal of barriers or redesigning them (Frith, et al., 2020).



Results

Successful implementation of K-Card process involved commitment, teamwork, communication and collaboration from the nursing team members. The fall champion team of G11E educated all non-licensed and licensed nursing staff on K-Card process.

The non-compliant interventions were identified in real time and the missed interventions were activated and placed in real time. Some of the missed interventions identified included gait belt not present, refusal/ absence of bed alarms/ chair alarms, yellow arm band not present, and inaccurate door sign for the high risk fall patients.

At three months of K-Card implementation project, education was provided on use of chair alarms and escalation process of refusal of interventions.

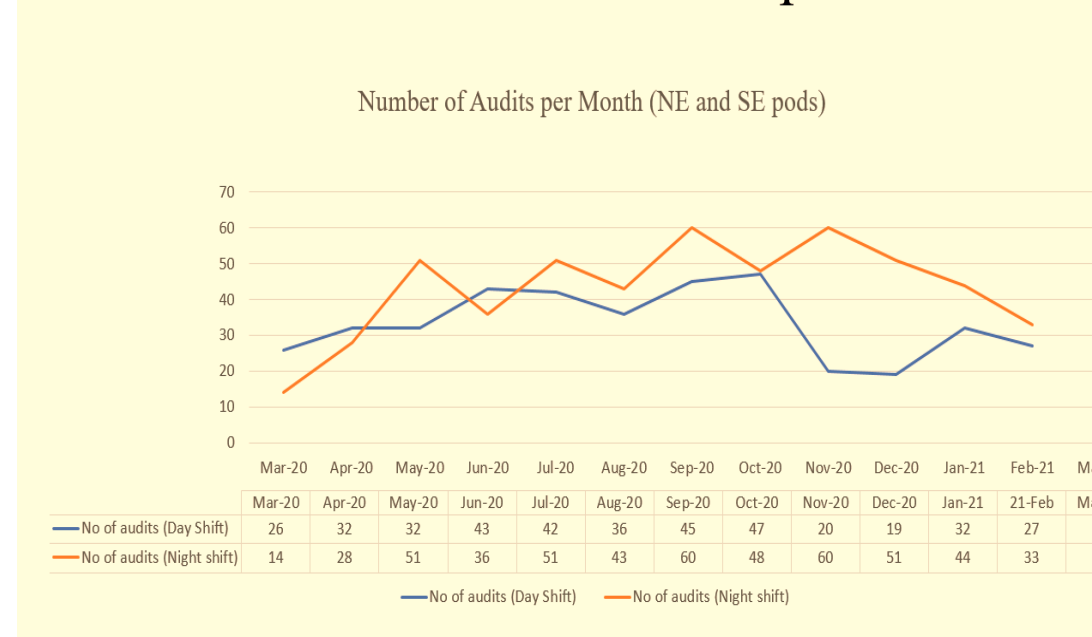
Post-intervention Data

G11E Total Falls till March 2021

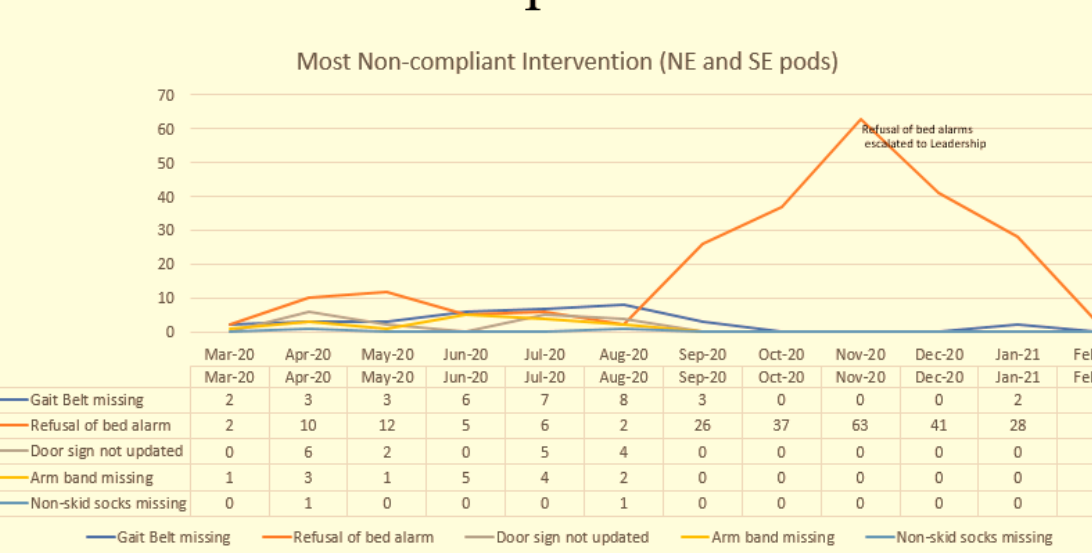


	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Total # Patient Falls	3	0	2	0	0	1	2	0	0	0	2	2	1
Total # Falls with Injury	1	0	1	0	0	0	2	0	0	0	0	2	0

Number of K-Card Audits per Month



Non-compliant Interventions from K-Card Audits per Month



References

- Florence CS., Bergen G., Atherly A., Burns ER, Stevens JA, Drake C. (2018) Medical Costs of Fatal and Nonfatal Falls in Older Adults. *Journal of the American Geriatrics Society*. Retrieved from [DOI:10.1111/jgs.15304](https://doi.org/10.1111/jgs.15304)
- Frith, J., et al. (2020). Impact of Kamishibai card process on compliance with the central venous line maintenance bundle. *Journal of Nursing Care Quality*. Retrieved from <https://journals.lww.com/jncjournal/toc/2020/01000>
- National Database of Nursing Quality Indicators. (2019). NDNQI nursing-sensitive indicators. <https://nursingandndnqi.weebly.com/ndnqi-indicators.html>
- Press Ganey (2016). Guidelines for data collection and submission on patient falls indicator (Inpatient and Ambulatory Areas). 2016 Press Ganey Associates, Inc. : Author
- Toomey, A., & Friedman, L. (2014). Mortality in cancer patients after a fall-related injury: The impact of cancer spread and type. *Injury*, 45(11), 1710–1716.

Limitation

The K-Card audit took place during each hand off by the patient care technicians. If the patient was taken care by the float PCT from another unit, a quick in-service was given, however it did not seem beneficial. In between hand off, when the interdisciplinary personnel cared for the patient, the fall prevention interventions were not maintained in place.

Conclusion

K-Card provided a design for real time follow up among the nursing team members to ensure that the fall prevention strategies were in place. This improved the communication and team work among the licensed and unlicensed providers in the nursing unit. K-Cards may help in reducing and preventing falls in in-patient units by auditing the compliance with each hand off and providing opportunity for real time compliance.

K-Card audit reports may be used to identify barriers in implementing fall prevention strategies, and develop new fall prevention strategies.