

Assessing the Implementation of Dashboards to Increase Adherence and Reduce Inpatient Falls

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Background

- Patient falls are one of the largest preventable adverse events among hospitalized patients.
- In FY 22, 11.6% (N=189) of falls recorded at project site were classified as repeat falls. In FY 22, total number of falls at project site in Medical / Surgical unit was 106 and 28 of the falls resulted in injury.
- In 2022 (August to November), rate of fall at project site in Medical/Surgical unit was 11.3 fall/1000 patient days.
- The national benchmark indicate a rate of fall 3.44 fall /1000 patient days on medical/surgical units.

Project Purpose and Goals

- Project aims to assess and evaluate the effectiveness of implementing dashboards to increase adherence rates with evidence-based fall prevention strategies and reduce the rate of falls in the Medical/Surgical unit.

Goals

- **Process Goal:** To increase the adherence rate to evidence-based fall prevention above 80% in all the audit criteria.
- **Outcome Goal:** To reduce the rate of falls by 8%.

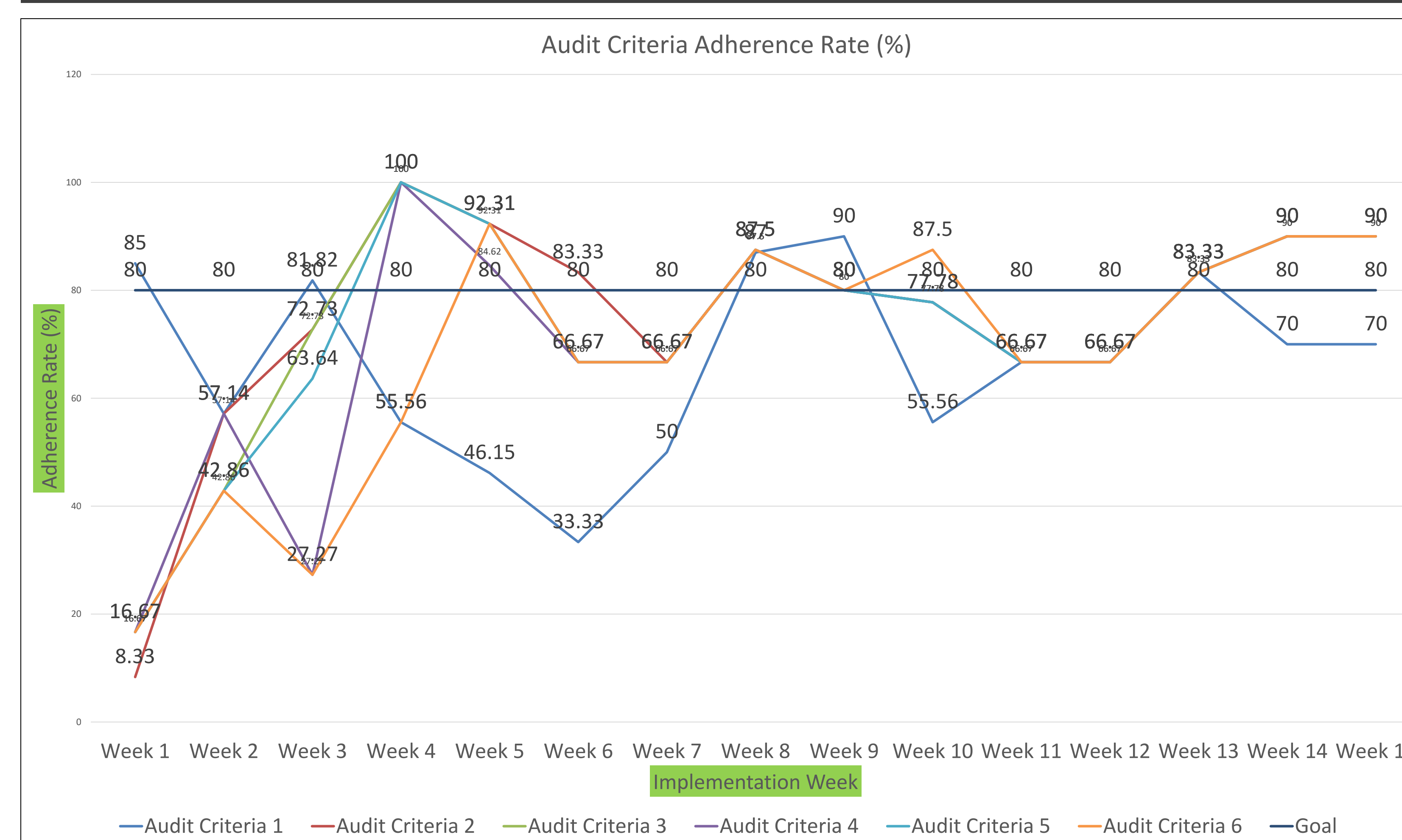
Method

- **Setting:** Academic hospital setting, 21-bed Medical/Surgical in-patient.
- **Population:** Adults patients, hospitalized in Medical/Surgical unit.
- **Intervention:** Dashboards presentation to increase adherence rate with evidence-based fall prevention strategies. The audit criteria have two categories:
 1. Admission, Transfer, and shift documentation.
 2. Care plan initiation and documentation.
- **Implementation Strategies:**
 - ✓ Weekly clinical audits.
 - ✓ Weekly dashboard presentation of audit results.
 - ✓ Biweekly shift change huddles with staff nurses.
- **Measure:**
 - ✓ Clinical audit performed through Electronic medical record (EMR) chart review weekly.
 - ✓ Data collection, dashboard presentation, and tracking performed through REDCap.

Results

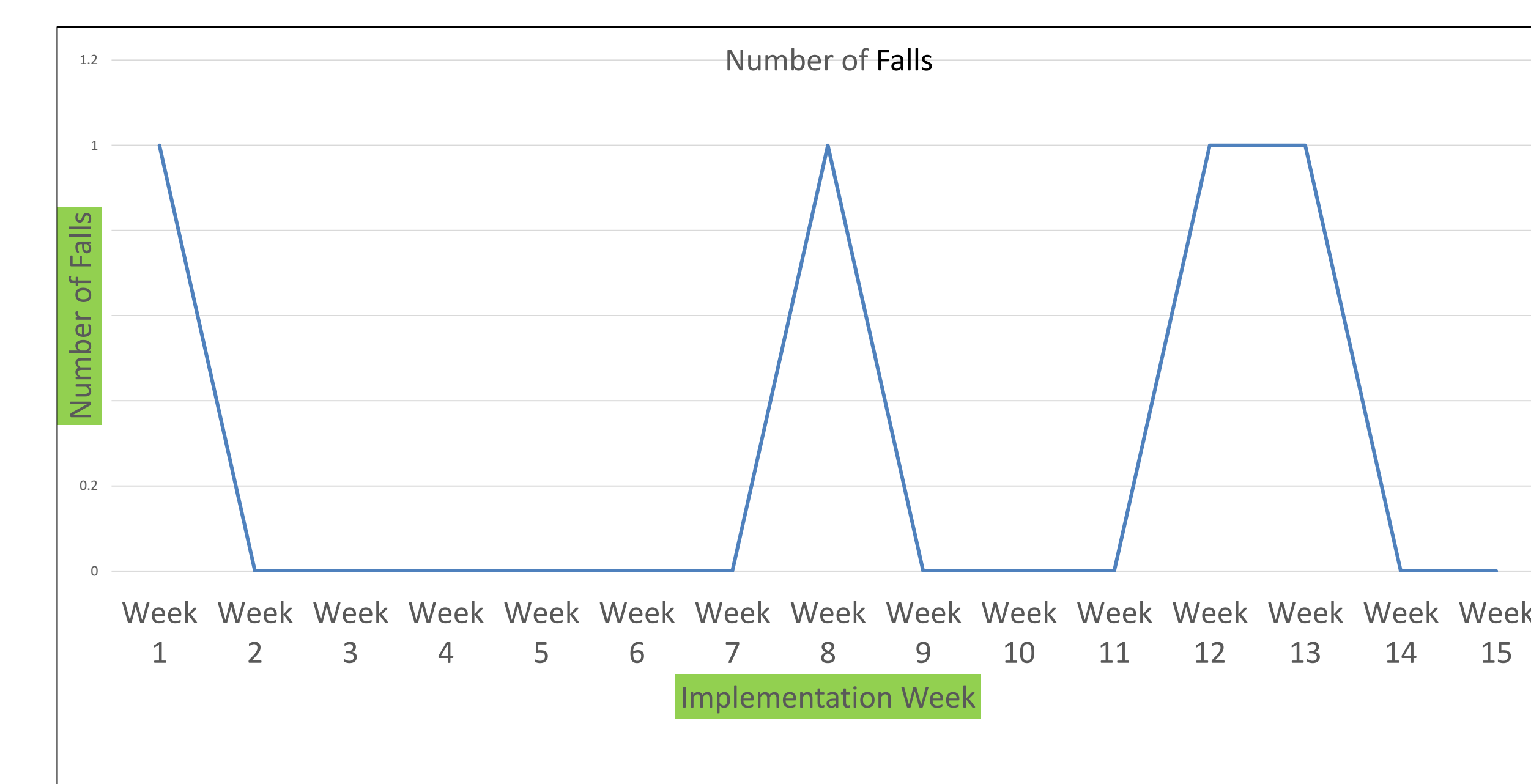
- Total of **129 patients** scored greater than 45 on Morse Fall score and clinical audits were performed on those patients.
- The lowest adherence rate was 8.3% in audit criteria 2 (care plan initiation) on week 1. And the highest adherence rate was 100% in Audit criteria 3, 4, and 5 on week 4.
- The adherence rate for audit **criteria 1** showed a declined **from 85% (week 1) to 33.3% (week 6)**. This implies the implementation of this project did not improve the adherence rate for audit criteria 1.
- The similarity in adherence rate between audit criteria 2, 3, 4, 5, and 6 can be explained with the fact all these audit criteria are found under care plan. These audit criteria shift upward slop starting from week 1, meeting an all time high on week 4.
- Audit criteria 1 which was highest on week 1 goes on a downward shift on week 6. This can explained with the lack of dashboard presentation when the adherence rate was above 80%.
- In week 15, the adherence rate for audit **criteria 2, 3, 4, 5, and 6** was **above 80%** (Process goal). However, the adherence rate for audit **criteria 1** was **70%** (below process goal).
- The total number of falls recorded was **4** (rate of fall **2.89 fall/1000** patient days) during the 15-week of implementation.

Figures



- **Audit Criteria 1:** 'A fall risk assessment is carried out within 24 hours of admission'
- **Audit Criteria 2:** 'Fall prevention and management care plan initiated'
- **Audit Criteria 3:** 'Patient participated in the fall risk assessment process'
- **Audit Criteria 4:** 'At-risk patients and their families/caregivers receive oral and written information about fall prevention'
- **Audit Criteria 5:** 'Patients are engaged in goal setting and treatment planning'
- **Audit Criteria 6:** 'Targeted interventions are implemented according to risk factors'

Figures



Discussion

- Although there was an increase in adherence rate in most of the audit criteria, the process goal of 80% or above was not met in audit criteria 1.
- On week 13, all the audit criteria were above 80% (process goal), yet one fall was recorded that week. However, week 2 to week 3 and week 6 to week 7, the adherence rate for all the audit criteria was below 80% (process goal), yet there was no recorded fall during that time period.
- The outcome goal of reduction with rate of fall by 8% was met; however, the fall occurrence and the increase in adherence rate does not match.
- Limitations to project includes low census of patients in the unit and inability to present the dashboard to all the nursing staff in the unit.

Conclusion

- Due to lack of association between the adherence rate and number of fall, it is difficult to concluded the effect of increased adherence rate with the number of falls.
- Clinical audit process increases awareness and accountability in evidence-based fall prevention strategies within the nursing staff.
- To lessen the time spent on clinical audit and to sustain this project, establish a dedicated fall prevention team or a more focused selection of audit criteria is recommended.

References

Scan QR code for references



Acknowledgement

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