Multidisciplinary Evaluation of Fall Risk in the Rehabilitation Population: An Evidence-based Assessment

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Background

Falls are a significant problem in the acute inpatient rehabilitation setting with a national average rate of 6/1000 patient days. In fiscal year 2013, we found we had a   significant increase with incidence of falls in our patient who were up ad liberty. A multidisciplinary review to identify fall risk may decrease the incidence of   falls and identify patients who can be cleared up ad liberty (UAL) safely.

PICOT Question

In acute rehabilitation patients (Patient/problem), how does a multidisciplinary review for clearing patients up ad liberty (Intervention), compared to an unstructured process (Comparison), affect fall rate prevalence (Outcome) within the inpatient rehabilitation stay (Time)?

Review of the Literature

- Key words used in the literature search included: fall risk, rehabilitation, and multidisciplinary
- Databases accessed for the literature search included: Cochrane Systematic Reviews, PubMed and CINAHL

Synthesis of Evidence

- Five articles were included in the final review: one case-control/cohort study (level IV) and four descriptive studies (level VI)
- The body of evidence supports using the Functional Independence Measure (FIM) to determine risk of falls
- FIM has been shown to be a statistically significant tool in determining fall risk especially in regards to cognitive and mobility subsets

Outcome Synthesis Table

*References	1	2	3	4	5
Functional Independence Measure better predictor of fall than Morse	↑	↑	↑	↑	↑

↑ =positive   ↓ =negative   ↔ =no difference

Decision to Change Practice

- All of the appraised literature supports using FIM assessments as a factor in determining fall risk
- Through the evaluation of FIM scores and multidisciplinary assessment of the patient the determination of when it is safe to clear a patient UAL can safely be determined

Implementation

- Physical therapists identify patients who perform well in regards to balance and safety with ambulation/transfers, thereby initiating a review by the entire team
- The entire team (Physical Therapy, Occupational Therapy, Speech Therapy, Registered Nurse and Physician) assess patient risk of falling based on mobility/cognition/safety as well as medical concerns
  1. If there is not agreement with clearing a patient to be UAL, then the patient will continue to need supervision with ambulation; no change to activity order
  2. If there is agreement with clearing a patient UAL, the physician will change the activity order denoting that the patient is UAL

*References:
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2. Gilewski, M.J., Roberts, P., Hirata, J., & Riggs, R. (2007). Discriminating High Fall Risk on an Inpatient Rehabilitation Unit. Rehabilitation Nursing, 32(6), 234-240.
3. Kwan, F., Kaplan, S., Hudson-McKinney, M., Redman-Bentley, D., and Rosario, E.R. (2012). Comparison of Fallers and Nonfallers at an Inpatient Rehabilitation Facility: A Retrospective Review. Rehabilitation Nursing, 37(1), 30-36.
4. Rosario, E.R., Kaplan, S.E., Khonsari, S., & Patterson, D. (2014). Predicting and Assessing Fall Risk in an Acute Inpatient Rehabilitation Facility. Rehabilitation Nursing, 39 (2), 86-93.
5. Salamon, L.A., Victory, M., & Bobay, K. (2012). Identification of Patients at Risk for Falls in an Inpatient Rehabilitation Program. Rehabilitation Nursing, 37 (6), 292-297.
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Data

UAL Falls

# of Falls

	FY 12	FY 13	FY 14	FY 15 (July-September)
	4	5	13	1
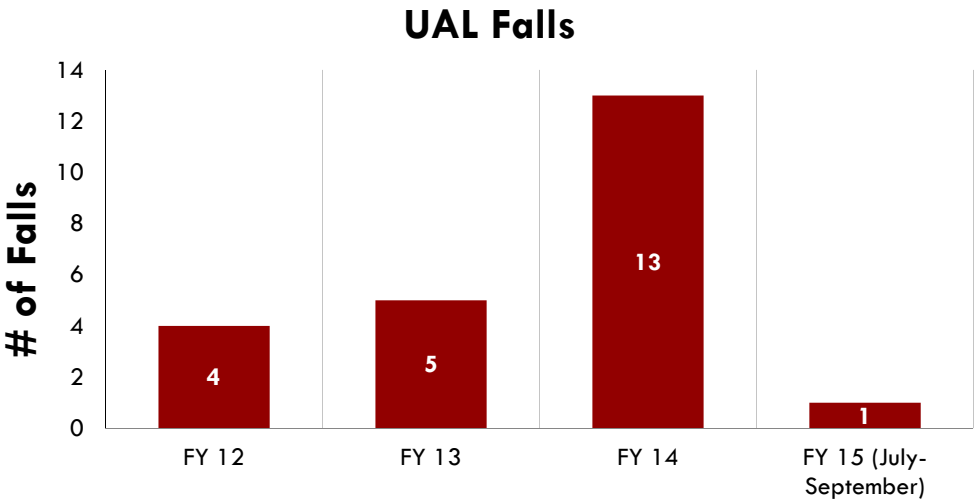
Opportunities for Improvement

Based on audits of UAL process:
- Standardized UAL orders when restrictions are needed (i.e. UAL in room only, with walker, except showers, etc.)
- Activity orders changed in timely manner
- Ensuring communication with entire team has occurred prior to order entry
- Shower assessment done by therapy prior to UAL clearance
- Environmental sweeps completed on a routine basis, to clear fall obstacles

Conclusion

Use of an evidenced based process to determine risk of patient fall is a critical component of fall prevention management, in the rehabilitation setting. It is imperative to decrease burden of care by promoting independence with dressing, bathing, toileting, transfers and ambulation. This impacts Functional Independence Measure (FIM) gain while ensuring that the patient is safe to perform these tasks independently.