Title:
Evaluation of the Efficacy of Repeat Falls Risk Assessments Using the Morse Falls Scale

Mary Beth Harrington, PhD
Geriatric Research, Educationand Clinical Center, VA Boston HealthCare System, Boston, MA, USA

Session Title:
Preventing Falls Using Evidence-Based Practice
Slot:
O 06: Sunday, 30 July 2017: 1:15 PM-2:00 PM
Scheduled Time:
1:15 PM

Keywords:
Falls, Hospitalized adults and Risk assessment

References:
Baek, S., Piao, J., Jin, Y., & Lee, S. (2014). Validity of the Morse Fall Scale implemented in an electronic medical record system. *Journal of Clinical Nursing*, *23*(17/18), 2434-2441.

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Chapman, J., Bachand, D., Hyrkas, K. (2011) Testing the sensitivity, specificity and feasibility of four falls risk assessment tools in the clinical setting. *Journal of Nursing Management,* 19: 133-142.

Garcez Sardo, P. M., Oliveira Simões, C. S., Marques Alvarelhão, J. J., Fernandes Lindo Simões, J. F., & de Oliveira Pinheiro de Melo, E. M. (2016). Fall risk assessment: retrospective analysis of Morse Fall Scale scores in Portuguese hospitalized adult patients. *Applied Nursing Research*, *31*34-40. doi:10.1016/j.apnr.2015.11.013

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Healey, F., & Haines, T. P. (2013). A pragmatic study of the predictive values of the Morse falls score. *Age & Ageing*, *42*(4), 462-468.

Nassar, N., Helou, N., & Madi, C. (2014). Predicting falls using two instruments (the Hendrich Fall Risk Model and the Morse Fall Scale) in an acute care setting in Lebanon. *Journal of Clinical Nursing*, *23*(11/12), 1620-1629.

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Sung, Y. H., Cho, M. S., Kwon, I. G., Jung, Y. Y., Song, M. R., Kim, K., & Won, S. (2014). Evaluation of falls by inpatients in an acute care hospital in Korea using the Morse Fall Scale. *International Journal of Nursing Practice*, *20*(5), 510-517. doi:10.1111/ijn.12192

The Joint Commission (2015, September 28) Sentinel event alert #55. Preventing falls and fall-related injuries in health care facilities.

Abstract Summary:
Falls are a potentially preventable, nurse-sensitive outcome. The first step in preventing falls is identifying risk, for which the Morse Fall Scale is widely used. Generally, institutional policies require repeated measurements. This session will discuss the changes in scores and the utility of repeating assessments.
Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Characterize the variability of Morse Fall scores during the hospitalization of adult patients	Frequency of significant changes in Morse Fall scores Causes of inaccurate scoring
Develop an algorithm to improve the efficiency of fall risk assessment in hospitalized adults	Indications for re-scoring Indications for maintain a score as "fixed"

Abstract Text:

Purpose: Patient falls have been identified as a potentially preventable, nurse sensitive outcome. Routine assessment of fall risk is required by the Joint Commission (2015). The rate of falls in the United States is approximately 3.5 falls per 1,000 patient days, with 1 injurious fall per 1,000 patient days. They are the most commonly reported adverse events in hospitals, constituting approximately 40% reports. Patient falls delay recovery, cause psychological harm and can decrease independence and mobility due to either physical harm or fear of falling again. As of October, 2008, Medicare no longer provides reimbursement for care required due to inpatient falls. The first step in fall prevention is identification of individuals at risk. The MSF has been studied extensively and has demonstrated good sensitivity and negative predictive value. The majority of the studies of, or utilizing, the MFS have used a measurement at a single point in time. However, repeated observations are required in most institutions. Most facilities, including the VA Boston HealthCare System require repeated measurements during the patient's hospitalization, ranging between every 48 hours to as often as every shift. However, there is little evidence to support the frequency at which the assessment should be done. The research question for this study is; What is the efficacy of repeated MFS measurements in hospitalized patients?

Methods: Patients who sustained a fall between October 1, 2014 and September 31, 2015 were identified from the institutional incident report database. The electronic health records of 50 of those patients were randomly selected to be reviewed retrospectively. Data collected included patient age, gender, the date and time of all Morse Fall scores, including the total score and the score for each individual item, time and date of any falls, and dates of any transfers between units. Any score which was a change, either increasing or decreasing, was compared to documentation in the progress notes. In the event of a discrepancy, the progress note data was identified as valid and a corrected score was calculated. For example, if the MFS indicated no IV, but the progress note documented an IV dressing or change, the appropriate points were added to the score and error was flagged. All raw data, including both documented and corrected scores, when applicable, were entered into an Excel spreadsheet. All data was rechecked for accuracy, then de-identified. The spread sheet was password protected and stored behind the VA firewall. Scores were dichotomized into those below 45 and those above 45, the high risk cutoff at our institution. Each patient's scores were reviewed for any significant change, defined as a raw score change sufficient to move that patient into the other group.

Results: After correcting for calculation errors, 70% of patients had no change in their MFS, having scored in the high risk group on admission and remaining there throughout their hospital stay. Four scores (8%) changed to high risk due to a fall. Two scores (4%) increased due to a change in mental status. Six patients (12%) had changes in their scores due to changes in the nursing assessment of gait, or the presence of an IV. Generally, these changes resulted in a temporary decrease, briefly bringing them out of the high risk group. For 50 patients, there were 890 MSF assessment, estimated to represent

75 hours of nursing time. There was a discrepancy in 361 (41%) of the assessments. 5.4% of the discrepancies were due to errors in addition. Other errors included omitting history of falls, comorbidities, presence of an IV, ambulatory aids, and mental status issues, such as confusion. Gait assessment fluctuations were commonly due to assigning 0 points for bedrest during the night shift.

Conclusion: There is little change in the corrected MFS score of adult patients during their hospitalization. Frequent repetition of the MSF assessment consumes nursing time, a valuable and limited resource. Performance of the MSF assessment during the night shift is particularly problematic . Our data suggests that assessment on admission, transfer, after a fall or any change in mental status would be a more efficient approach to identifying patients at risk and that, once a patient is identified as at high risk, they should remain there and not require any further MFS assessments.