Validation of Fall Risk Assessment Specific to the Inpatient Rehabilitation Facility Setting

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Purpose & Objective

• Purpose: To evaluate and compare the Morse Fall Scale (MFS) and Casa Colina Fall Risk Assessment Scale (CCFRAS) for identification of patients at risk for falling in an acute inpatient rehabilitation facility.

• Objective: To perform a retrospective validation study of the CCFRAS, specifically for use in the inpatient rehabilitation facility (IRF) setting.

Design & Methods

• Design: Retrospective validation study

• Method: The study was approved under expedited review by the local Institutional Review Board. Data was collected on all patients admitted to Cottage Rehabilitation Hospital (CRH) from March 2012 - August 2013. Patients were excluded from the study if they had a length of stay less than three days or age less than 18. The area under the receiver operative characteristic curve (AUC) and the diagnostic odds-ratio were used to examine the differences between the MFS and CCFRAS. AUC between fall scales was compared using the DeLong Test.

Findings & Conclusion

• Findings: There were 931 patients included in the study with 62 (6.7%) patient falls. The average age of the population was 68.8 with 503 males (51.2%). The AUC was 0.595 and 0.713 for the MFS and CCFRAS, respectively (P= 0.006). The diagnostic odds-ratio of the MFS was 2.0 and 3.6 for the CCFRAS using the recommended cutoffs of 45 for the MFS and 80 for the CCFRAS.

• Conclusion: The CCFRAS appears to be a better tool in detecting fallers versus non-fallers specific to the IRF setting.

Clinical Relevance

• Clinical Relevance: The assessment and identification of patients at high risk for falling is important in order to implement specific precautions and care for these patients to reduce their risk of falling. The CCFRAS is more clinically relevant in identifying patients at high risk for falling in the IRF setting compared to other fall risk assessments.

Implementation of this scale may lead to a reduction in fall rate, and injuries from falls, as it more appropriately identifies patients at high risk for falling.