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## Accuracy Analysis of Revised Fall Risk Assessment Scale for Adults: A Secondary Data Analysis

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### Abstract

**Objective:** Since 2009, our hospital has used the STRATIFY risk assessment tool for fall assessment. This study aimed to evaluate the accuracy of the revised 2017 Fall Risk Assessment Scale.

**Methods:** The hospital records were analyzed to extract information regarding adult inpatients who underwent fall risk assessment and adverse events from March to December 2017. Data were analyzed using receiver operating characteristics analysis, Youden index, and logistic regression analysis.

**Results:** The area under curve (AUC) value of the revised Fall Risk Assessment Scale was 0.81, and the cutoff point was 1. The sensitivity (86.64% vs. 83.87%) and specificity (60.91% vs. 68.35%) were nonsignificantly different at cutoff points 1 and 2.

**Conclusions:** The AUC value of the revised Fall Risk Assessment Scale was 0.81, indicating that the scale has excellent discriminating power. In addition, the study demonstrated that poor vision, which affects life functions, serves as a protective factor among patients with high fall risks. Furthermore, caregiver factors are crucial local high-risk factors. These results could be used for adjusting the Fall Risk Assessment Scale in future.

**Keywords:** fall, Fall Risk Assessment Scale, accuracy