

# **Summary of Research Project: Inter-rater reliability of the Functional Acute Care Score**

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## Summary of Project

The procedures for data collection (please refer to the attached Research Project Notification: Rationale and Protocol) were successfully followed between the dates of 10/30/99 and 2/10/99. During this data collection time, 30 fully completed data points were taken. In brief, the am and pm assistance level measures were taken for ambulation, transfers, and stairs. Within each of these, the assistive device used was also scored. Finally, the distance covered was measured for ambulation (on level surfaces), and stairs. Two separate physical therapists (randomized pairing from a pool of three PTs) measured in either the am or the pm.

## Summary of Results

Dr Keith Kuhlemeier utilized a statistical computer model to measure Regression of testing between physical therapists. Please also refer to the statistical data sheets attached. Firstly, the therapists rarely tested the patients on stairs because the patients were not functionally safe or appropriate at the time the FACS scores were done. In order to collect data effectively, scoring was usually done on the first or second day the patient was seen, rather than waiting for the day of discharge. It is typical that patients are instructed in and evaluated on the stairs just prior to discharge to home; they are rarely seen twice by a PT on the day of discharge. Therefore, in this study, inter-rater reliability can not be established for stairs (with or without an assistive device) using the FACS tool.

On the other hand, transfers scoring was done with almost every patient. The coefficient Beta value is fair for transfers assistance level (0 – 7 on score sheet), being 0.619. However, the Beta value for transfers assistive device (cane, crutch, walker, none...) shows poor correlation, being – 0.201.

Locomotion scoring was also done with almost every patient, and its correlation was fairly good. Locomotion level of assistance was a Beta of 0.730. Locomotion distance correlation Beta was 0.826.

### Implications

Studying inter-tester reliability is challenging with this tool. It may not be appropriate to test patients twice consecutively because of fatigue factors. Furthermore, two testers can not give simultaneous scores on one performance because the tester is to feel the amount of assistance needed by the patient (not just by observation). This initial study shows fairly good inter-tester correlation for ambulation, but not good for transfers. In addition, the stairs testing was inconclusive because of a lack of data.

Further studies may be warranted for the stairs component of the test. In addition, more testing with all of the FACS will need to be done with other inpatient populations.