Functional Independence Measure

Contains 18 items composed of:

13 motor tasks

5 cognitive tasks (considered basic activities of daily living)

Tasks are rated on a 7 point ordinal scale that ranges from total assistance (or complete dependence) to complete independence

Scores range from 18 (lowest) to 126 (highest) indicating level of function

Scores are generally rated at admission and discharge

Dimensions assessed include:

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Eating
Grooming
Bathing
Upper body dressing
Lower body dressing
Toileting
Bladder management
Bowel management
Bed to chair transfer
Toilet transfer
Shower transfer
Locomotion (ambulatory or wheelchair level)
Stairs
Cognitive comprehension
Expression
Social interaction
Problem solving
Memory
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FIM Scoring Criteria: (refer to the users manual for more information)

FIM Scoring Criteria:

No Helper Required

Score

Description

7

Complete Independence

6

Modified Independence (patient requires use of a device, but no physical assistance)

Helper (Modified Dependence)

Score

Description

5

Supervision or Setup

4

Minimal Contact Assistance (patient can perform 75% or more of task)

3

Moderate Assistance (patient can perform 50% to 74% of task)

Helper (Complete Dependence)

Score

Description

2

Maximal Assistance (patient can perform 25% to 49% of taks)

1

Total assistance (patient can perform less than 25% of the task or requires more than one person to assist)

0

Activity does not occur

The impact of age on rehabilitation outcome after traumatic brain injury (TBI) as measured by changes in the Functional Independence Measure (FIM) has been addressed in several seemingly conflicting reports. Differences may be explained by different study populations and different ways of analyzing data.

To investigate the role of data analysis in the interpretation of the age effect on rehabilitation outcome after TBI by comparing classical analyses of the total FIM score with a new item-wise analysis that unfolds the comprehensive amount of information contained in the FIM measurement otherwise concealed by the total score.

We analyzed admission and discharge FIM data from 411 consecutive TBI patients admitted to inpatient rehabilitation during 1998-2011 by both methods.

The classical analysis indicated similar rehabilitation outcome in the 18 to 39, 40 to 64, and 65+ years age groups, which could be explained by selection of strong elderly patients and/or

methodological problems with classical data analyses, whereas the item-wise analysis demonstrated profound age effect on most FIM items throughout the age interval covered.

The item-wise analysis meets requirements of proper data analysis, avoids concealing diversity in rehabilitation outcome behind the total FIM score, and provides a flexible, informative, and clinically relevant data analysis [1)].

Although the FIM decreased by half in hemodialysis patients, rehabilitation improved their FIM (particularly the motor items). The FIM was a novel predictive marker of 3-year mortality in these patients, and an increased FIM after rehabilitation resulted in better prognosis. Moreover, the effectiveness of rehabilitation may depend on maintaining cognitive functions [2)].

1)
Pedersen AR, Severinsen K, Nielsen JF. The Effect of Age on Rehabilitation Outcome After Traumatic Brain Injury Assessed by the Functional Independence Measure (FIM). Neurorehabil Neural Repair. 2014 Aug 4. pii: 1545968314545171. [Epub ahead of print] PubMed PMID: 25096275.
2)
Endo M Pt, Nakamura Y Md PhD, Murakami T Pt, Tsukahara H Pt, Watanabe Y Ot, Matsuoka Y Md, Ohsawa I Md PhD, Gotoh H Md PhD, Inagaki T Graduated Student, Oguchi E PhD Prof. Rehabilitation improves prognosis and activities of daily living in hemodialysis patients with low activities of daily living. Phys Ther Res. 2017 Feb 25;20(1):9-15. doi: 10.1298/ptr.E9898. eCollection 2017. PubMed PMID: 28781932; PubMed Central PMCID: PMC5527692.