

Outcome Measure	Functional Independence Measure (FIM)
Sensitivity to Change	Unknown
Population	Adult
Domain	Global Outcome Social Role Participation and Social Competence?
Type of Measure	Clinician-rated
ICF-Code/s	b1, d5, d7
Description	<p>The Functional Independence Measure (FIM) scale assesses physical and cognitive disability. This scale focuses on the burden of care – that is, the level of disability indicating the burden of caring for them.</p> <p>Items are scored on the level of assistance required for an individual to perform activities of daily living. The scale includes 18 items, of which 13 items are physical domains based on the Barthel Index and 5 items are cognition items. Each item is scored from 1 to 7 based on level of independence, where 1 represents total dependence and 7 indicates complete independence. The scale can be administered by a physician, nurse, therapist or layperson. Possible scores range from 18 to 126, with higher scores indicating more independence. Alternatively, 13 physical items could be scored separately from 5 cognitive items.</p> <p>It takes 1 hour to train a rater to use the FIM scale, and 30 minutes to score the scale for each patient.</p> <p>Dimensions assessed include: 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 and Memory.</p>
Properties	<p>See http://www.rehabmeasures.org/lists/rehabmeasures/disppform.aspx?id=889 for more details.</p> <p><i>Internal consistency</i>: Excellent with Cronbach's alpha around 0.95 (Hobart et al., 2001)</p> <p><i>Inter-rater reliability</i> (ICC): Excellent for total FIM scores with ICC around .95 (Ottenbacher et al., 1996)</p> <p><i>Test-retest reliability</i> (ICC): Excellent in different populations, scores for total FIM range between .85 (TBI) and .98 (Elderly).</p> <p>Test-retest ICC = .98 (Hobart et al., 2001)</p> <p><i>Convergent/divergent validity</i> – Correlates highly with similar measures, e.g. :</p> <ul style="list-style-type: none"> (1) Expanded Disability Status Scale, $r = -.91$ (Brosseuq & Wolfson, 1994). (2) Office of Population Censuses and Surveys Disability Scales (OPCS), $r = .82$ (Hobart et al., 2001) <p>Lower correlations with dissimilar constructs:</p> <ul style="list-style-type: none"> (1) London Handicap Scale, $r = .32$ (Hobart et al., 2001)

Advantages	Derived from extensive research with large sample sizes across a range of conditions. Well established psychometrics. Useful for documenting level of function (especially physical) of research samples. Well understood by clinicians.
Disadvantages	Cognitive items somewhat limited for TBI research (problem solving, memory only); cognitive scale less responsive to change than motor scale. Ceiling effects for TBI because heavily weighted for physical functioning. Requires training to ensure reliability.
Additional Information	The FIM (Cognition and Motor subscales) are Core measure of the Cognitive Activity Limitations and Physical Function Domains (both are not CRE Domains) in Wilde et al (2010)
Reviewers	Jenny Fleming

References

- Brosseau, L., & Wolfson, C. (1994). The inter-rater reliability and construct validity of the Functional Independence Measure for multiple sclerosis subjects. *Clinical Rehabilitation*, 8(2), 107-115.
- Hall, K. M., Mann, N., High, W. M. , Wright, J. , Kreutzer, J. S., & Wood, D. (1996). Functional measures after traumatic brain injury: Celing effects of FIM, FIM + FAM, DRS, and CIQ. *Journal of Head Trauma Rehabilitation*, 11(5), 27-39
- Hobart, J. C., Lamping, D. L., Freeman, J. A., Langdon, D. W., McLellan, D. L., Greenwood, R. J., & Thompson, A. J. (2001). Evidence-based measurement Which disability scale for neurologic rehabilitation?. *Neurology*, 57(4), 639-644.
- Ottenbacher, K. J., Hsu, Y., Granger, C. V., & Fiedler, R. C. (1996). The reliability of the functional independence measure: a quantitative review. *Archives of physical medicine and rehabilitation*, 77(12), 1226-1232.
- Tate, R. L. (2010) *A compendium of tests, scales, and questionnaires: The practitioners guide to measuring outcomes after acquired brain impairment*. Psychology Press.