Short Form 36 (SF-36)

Assessment Overview

Assessment Area

ICF Domain: Quality of Life

You Will Need

Length: 36 items

Scoring:

- Raw score is transformed to 0-100 scoring system (Algorithm available in the manual, which must be purchased)
- Score is norm-based; the mean score for the general population is 50 with a standard deviation of 10
- Higher score indicates better health status
- The SF-36 can also be scored using two norm-based summary scores, a physical and a mental component score (PCS & MCS).

Summary

The Medical Outcomes Study Short Form 36 (SF-36) is a generic health status measure that was introduced in 1992, and has been translated into various languages. The SF-36 assesses health-related quality of life using 8 domains, regarding either physical or mental functioning, both of which can also be summarized into a composite score: the physical (PCS) and mental (MCS) component summary.

The SF-36 is self-administered with scoring done by the clinician/ researcher.

Availability

Available for free here.

Languages: 50+ languages

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI For a sample of patients with osteoarthritis: Worsening: Physical functioning = 5.3 Bodily pain = 7.2 PCS = 2.0 Improving: Physical functioning = 3.3 Bodily pain = 7.8 PCS = 2.0

(Angst et al. 2001; n=122; 2201 males; mean age: 65 years)

Statistical Error

Minimal Detectable Change:

Physical functioning=21.4 Role physical=14.7 Bodily pain=7.4 General health=7.9 Vitality=4.6 Social functioning=5.9 Role emotional=4.1 Mental health=7.4

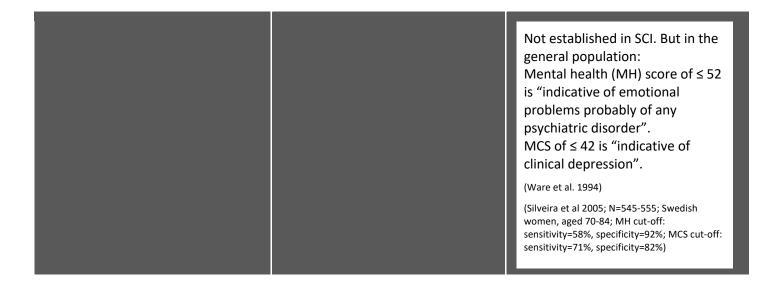
(Lin et al. 2007; n=187; 151 males; 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury: 7.4 years)

Typical Values

Mean (SD) Scores:

Physical functioning: 61.2(39.8) Role physical: 62.7(44.4) Bodily pain: 67.5(20.6) General health: 52.5(20.3) Vitality: 57.0(17.3) Social functioning: 71.8(22.2) Role emotional: 71.8(40.9) Mental health: 63.5(15.5)

(Lin et al. 2007; n=187; 151 males; 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury: 7.4 years) **Threshold Values:**



Measurement Properties

Validity – Low to Moderate

Moderate correlation with Life Satisfaction **Questionnaire 9 (LISAT-9):** ρ = 0.531

Low correlation with Functional Independence Measure (FIM):

 $\rho = 0.094$

(van Leeuwen et al. 2012; n=145; 104 males; 27 incomplete paraplegia, 65 complete paraplegia, 16 incomplete tetraplegia, 37 complete tetraplegia; 5 years post-discharge from inpatient rehabilitation)

Low to Moderate correlation with Beck Depression Inventory (BDI):

r = 0.229-0.329

(Ataoglu et al. 2013; n=140; 104 males; mean age: 36.2 years; 79 ASIA A, 61 ASIA B-E; mean time since injury: 25.2 months)

Moderate correlation between the Caregiver Burden Inventory in SCI (CBI-SCI) and all SF-36 subscales (p < 0.001):

SF-36 Subscale—Vitality: r = -045 SF-36 Subscale—Physical functioning: r = -0.35 SF-36 Subscale—Bodily pain: r = -0.48 SF-36 Subscale—General health: r = -0.50 SF-36 Subscale—Physical role functioning: r = -0.49 SF-36 Subscale—Emotional role functioning: r = -0.45 SF-36 Subscale—Social role functioning: r = -0.58 SF-36 Subscale—Mental health: r = -0.52

(Conti et al. 2019; n=176; 30 males; mean (SD) age: 56.2 (14.6) years)

Number of studies reporting validity data: 17

Reliability – Moderate to High

Moderate to High Inter-rater Reliability: ICC = 0.52-0.98

Moderate to High Intra-rater Reliability: ICC = 0.71-0.99

Moderate to High Internal Consistency: α = 0.72-0.98

(Lin et al. 2007; n=187; 151 males; 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury: 7.4 years)

Number of studies reporting reliability data: 5

Responsiveness

Floor/Ceiling Effect:

Percentage of patients at lowest score:

Items 3a-3j: 29% Items 3g, 3h, 3i: >90%

(Lee et al. 2009; n=305, 83% male; mean age: 44 years; SCI patients with neuropathic bladder, 55% tetraplegia; mean time since injury: 14 years)

2 subscales >20%

Percentage of patients at highest score: 3 subscales >20%

(Lin et al. 2007; n=187; 151 males; 48 incomplete tetraplegia, 28 complete tetraplegia, 73 incomplete paraplegia, 38 complete paraplegia; mean time since injury: 7.4 years)

Effect Size:

Physical Functioning Domain:	0.36
Physical Composite Score:	0.58
Mental Composite Score:	0.71

(Lee et al. 2009; n=305, 83% male; mean age: 44 years; SCI patients with neuropathic bladder, 55% tetraplegia; mean time since injury: 14 years)

Number of studies reporting responsiveness data: 7