

10 FUNCTIONAL RATING INDEX (FRI)

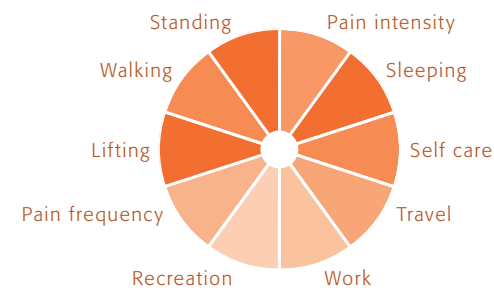
Source: **Feise RJ, Michael Menke J** (2001) Functional rating index: a new valid and reliable instrument to measure the magnitude of clinical change in spinal conditions. *Spine*; 26(1):78–86.

Type: Patient-reported outcome
Scale: 10 subscales (10 items)

Each subscale contains five statements.

Each statement describes a greater degree of disability.

Each subscale scored on a 0 to 4 point scale.



Interpretation:

Total score is normalized to 100.

Maximum score: 100
Minimum score: 0

The higher the score, the greater the disability.

OUTCOMES VALIDATED AGAINST

	Patient population tested in	Validity	Reliability	Responsiveness
[1]	<ul style="list-style-type: none"> Disability rating index SF-12 physical component score SF-12 mental component score 	+	+	+
[2]	<ul style="list-style-type: none"> Modified Oswestry low back pain disability questionnaire 	+	-	+
[3]	<ul style="list-style-type: none"> 18-item Roland-Morris disability questionnaire Improvement with time Change in work status 	+	+	+
[4]	<ul style="list-style-type: none"> Roland-Morris disability questionnaire Numeric rating scale 	+	+	NOT TESTED

10 FUNCTIONAL RATING INDEX (FRI)

Validated translation: Turkish

VALIDATION STUDIES

- Feise RJ, Michael Menke J** (2001) Functional rating index: a new valid and reliable instrument to measure the magnitude of clinical change in spinal conditions. *Spine*; 26(1):78–86.
- Childs MJ, Piva SR** (2005) Psychometric properties of the functional rating index in patients with low back pain. *Eur Spine J*; 14(10):1008–1012.
- Chansirinukor W, Maher CG, Latimer J, et al** (2005) Comparison of the functional rating index and the 18-item Roland-Morris Disability Questionnaire: responsiveness and reliability. *Spine*; 30(1):141–145.
- Bayar B, Bayar K, Yakut E, et al** (2004) Reliability and validity of the Functional Rating Index in older people with low back pain: preliminary report. *Aging Clin Exp Res*; 16(1):49–52.

METHODOLOGICAL EVALUATION

	NO SCORE	0 POINTS	1 POINT	POINTS	
Validity	Content validity	NOT TESTED	NOT VALID	VALID	1
	Construct validity	NOT TESTED	NOT VALID	VALID	1
	Criterion validity	NOT TESTED	NOT VALID	VALID	1
Reliability	Internal consistency	NOT TESTED	NOT CONSISTENT	CONSISTENT	1
	Reproducibility	NOT TESTED	NOT REPRODUCIBLE	REPRODUCIBLE	1
	Responsiveness	NOT TESTED	NOT RESPONSIVE	RESPONSIVE	1
SUBTOTAL				6	

CLINICAL UTILITY

	0 POINTS	1 POINT	2 POINTS	POINTS
Patient friendliness	LIMITED	MODERATE	STRONG	2
Clinician friendliness	LIMITED	MODERATE	STRONG	2
SUBTOTAL				4
TOTAL				10

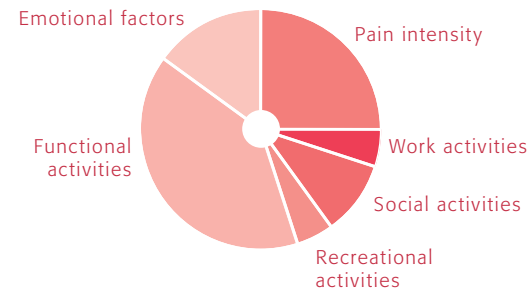
7 NECK PAIN AND DISABILITY SCALE (NPAD)

Adapted from the Million visual analog scale.

Source: **Wheeler AH, Goolkasian P, Baird AC, Darden BV 2nd** (1999) Development of the Neck Pain and Disability Scale. Item analysis, face, and criterion-related validity. *Spine*; 24(13):1290–1294.

Type: Patient-reported outcome
Scale: 6 categories (20 items)

Each item placed on a 10 cm visual analogue scale with each item scored 0 to 5.



Interpretation:
Total score is the sum of all items.

Maximum score: 100
Minimum score: 0

The higher the score, the greater the disability.

OUTCOMES VALIDATED AGAINST

	Patient population tested in	Validity	Reliability	Responsiveness
[1]	Patients with neck pain (N = 100) (44 years; 39% male) [1]	+	+	NOT TESTED
[2]	French speaking patients with neck pain (N = 101) (49 years; 32% male) [2]	+	+	NOT TESTED
[3]	Patients with neck pain (N = 33) (43 years; 36% male) [3]	NOT TESTED	+	+
[4]	Patients with neck pain (N = 50) (44 years; 24% male) [3]	+	+	+
[5]	Turkish speaking patients with chronic neck pain (N = 61) (age NR; 11% male) [4]	+	+	NOT TESTED

[4] • Visual analog scale (VAS)
• Pain disability index
• Hospital anxiety and depression scale (HADS)

7 NECK PAIN AND DISABILITY SCALE (NPAD)

Validated translations: French, Turkish

VALIDATION STUDIES

- Wheeler AH, Goolkasian P, Baird AC, et al** (1999) Development of the Neck Pain and Disability Scale. Item analysis, face, and criterion-related validity. *Spine*; 24(13):1290–1294.
- Wlodyka-Demaille S, Poiraudeau S, Catanzariti JF, et al** (2002) French translation and validation of 3 functional disability scales for neck pain. *Arch Phys Med Rehabil*; 83(3):376–382.
- Goolkasian P, Wheeler AH, Gretz SS** (2002) The neck pain and disability scale: test-retest reliability and construct validity. *Clin J Pain*; 18(4):245–250.
- Bicer A, Yazici A, Camdeviren H, et al** (2004) Assessment of pain and disability in patients with chronic neck pain: reliability and construct validity of the Turkish version of the neck pain and disability scale. *Disabil Rehabil*; 26(16):959–962.

METHODOLOGICAL EVALUATION

	NO SCORE	0 POINTS	1 POINT	POINTS	
Validity	Content validity	NOT TESTED	NOT VALID	VALID	-
	Construct validity	NOT TESTED	NOT VALID	VALID	1
	Criterion validity	NOT TESTED	NOT VALID	VALID	-
Reliability	Internal consistency	NOT TESTED	NOT CONSISTENT	CONSISTENT	1
	Reproducibility	NOT TESTED	NOT REPRODUCIBLE	REPRODUCIBLE	1
	Responsiveness	NOT TESTED	NOT RESPONSIVE	RESPONSIVE	1
SUBTOTAL				4	

CLINICAL UTILITY

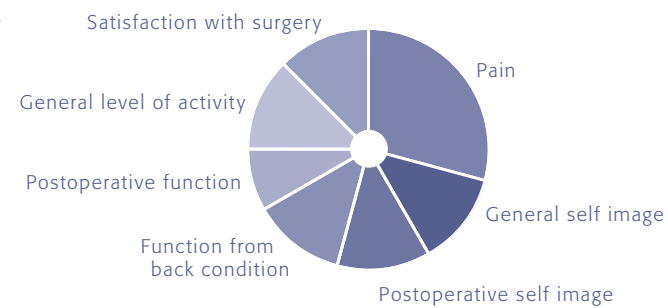
	0 POINTS	1 POINT	2 POINTS	POINTS
Patient friendliness	LIMITED	MODERATE	STRONG	1
Clinician friendliness	LIMITED	MODERATE	STRONG	2
SUBTOTAL				3
TOTAL				7

13 SCOLIOSIS RESEARCH SOCIETY INSTRUMENT (SRS-24)

Source: **Haheer TR, Gorup JM, Shin TM, et al (1999)** Results of the Scoliosis Research Society instrument for evaluation of surgical outcome in adolescent idiopathic scoliosis. A multicenter study of 244 patients. *Spine*; 24(14):1435–1440.

Type: Patient-reported outcome
Scale: 7 domains (24 items)

Each item scored on a 1 to 5 point scale.



Interpretation:
Items within a domain are summed to obtain an overall domain score.

Domain scores are normalized to 100 and expressed as a percentage.

Maximum score: 100
Minimum score: 0

The lower the score, the greater the disability.

OUTCOMES VALIDATED AGAINST

[1] • Normal high school students

Patient population tested in	Validity	Reliability	Responsiveness
Postoperative patients with adolescent idiopathic scoliosis (N = 244) (age NR; sex NR) [1]	+	+	NOT TESTED
Postoperative patients with adolescent idiopathic scoliosis (N = 121) (23 years at follow-up; 18% male) [2]	NOT TESTED	-	NOT TESTED
Japanese speaking nonsurgical patients with adolescent idiopathic scoliosis (N = 141) (14 years; 13% male) [3]	NOT TESTED	-	NOT TESTED

13 SCOLIOSIS RESEARCH SOCIETY INSTRUMENT (SRS-24)

Translation (not validated): Japanese

VALIDATION STUDIES

- Haheer TR, Gorup JM, Shin TM, et al (1999)** Results of the Scoliosis Research Society instrument for evaluation of surgical outcome in adolescent idiopathic scoliosis. A multicenter study of 244 patients. *Spine*; 24(14):1435–1440.
- White SF, Asher MA, Lai SM, et al (1999)** Patients' perceptions of overall function, pain, and appearance after primary posterior instrumentation and fusion for idiopathic scoliosis. *Spine*; 24(16):1693–1699.
- Watanabe K, Hasegawa K, Hirano T, et al (2005)** Use of the scoliosis research society outcomes instrument to evaluate patient outcome in untreated idiopathic scoliosis patients in Japan: part I: comparison with nonscoliosis group; preliminary/limited review in a Japanese population. *Spine*; 30(10):1197–1201.

METHODOLOGICAL EVALUATION

	NO SCORE	0 POINTS	1 POINT	POINTS	
Validity	Content validity	NOT TESTED	NOT VALID	VALID	1
	Construct validity	NOT TESTED	NOT VALID	VALID	1
	Criterion validity	NOT TESTED	NOT VALID	VALID	-
Reliability	Internal consistency	NOT TESTED	NOT CONSISTENT	CONSISTENT	0
	Reproducibility	NOT TESTED	NOT REPRODUCIBLE	REPRODUCIBLE	1
	Responsiveness	NOT TESTED	NOT RESPONSIVE	RESPONSIVE	-
SUBTOTAL				3	

CLINICAL UTILITY

	0 POINTS	1 POINT	2 POINTS	POINTS
Patient friendliness	LIMITED	MODERATE	STRONG	1
Clinician friendliness	LIMITED	MODERATE	STRONG	2
SUBTOTAL				3
TOTAL				6