

Self-Reported Neurological Disability in Multiple Sclerosis

Overview: Patients with multiple sclerosis can assess their level of impairment using a self-reporting questionnaire giving 8 functional scores. The results correlate well with the Expanded Disability Status Score (EDSS).

Components:

- (1) 25 questions reported as 7 subscores
- (2) level of current walking ability

Present Level of Functionality

What is your present level of intensity for each problem listed below?

- (1) weakness of right arm
- (2) weakness of left arm
- (3) weakness of right leg
- (4) weakness of left leg
- (5) leg stiffness or deficit at walk
- (6) tremor
- (7) clumsiness of arms
- (8) loss of balance
- (9) double vision
- (10) difficulty in speaking and/or swallowing
- (11) uncontrolled urinary urgency
- (12) difficulty in urination incomplete micturition or bladder emptying
- (13) constipation
- (14) loss of control of bladder
- (15) loss of control of bowel
- (16) difficulty in feeling a contact
- (17) difficulty in feeling heat
- (18) difficulty in feeling pain
- (19) pain or burning sensation in any part of the body
- (20) bizarre feeling (pins and needles constriction) in any part of the body

(21) difficulty with memory

(22) difficulty with calculation

(23) difficulty with reasoning or thinking

(24) level of vision in the right eye

(25) level of vision in the left eye

Scoring Questions 1-23	Points
none	0
mild; no interference with activity	1
moderate; interferes with activity	2
severe	3

Scoring Questions 24 and 25	Points
reading possible; $\geq 7/10$	0
recognition possible; $6/10$ to $4/10$	1
distinction of forms; $3/10$ to $2/10$	2
loss of vision; $\leq 1/10$	3

Pyramidal score = SUM(points for questions 1 to 5)

Cerebellar score = SUM(points for questions 6 to 8)

Brainstem score = SUM(points for questions 9 and 10)

Bladder and bowel score = SUM(points for questions 11 to 15)

Sensorial score = SUM(points for questions 16 to 20)

Mental score = SUM(points for questions 21 to 23)

Visual score = SUM(points for questions 24 and 25)

Walking Difficulty Score

Present Walking Ability	Score
you are able to walk without difficulties	0
you are able to walk without help or rest over a limited distance	1
you are able to walk without help over about 500 meters	2
you are able to walk without help over about 300 meters	3
you are able to walk without help over about 200 meters	4
you are able to walk without help over about 100 meters	5
you are able to walk alone with one cane over more than 100 meters	6
you are able to walk between about 20 to 100 meters with two canes (or crutches)	7
you can take a few steps with help but you need a wheelchair to move around	8
you are essentially restricted to wheelchair and you need aid in transfer	9
you are restricted to a bed a part of the day and when moving with wheelchair you need aid	10
you are restricted to bed most of the day	11

References:

Verdier-Taillefer MH Roullet E et al. Validation of self-reported neurological disability in multiple sclerosis. Int J Epidemiology. 1994; 23: 148-154.