

Bristol Rheumatoid Arthritis Fatigue scales (BRAFs): Scoring

BRAF-Numerical Rating Scales V2 revised: Three NRS give 3 separate answers from 0-10 where high is worse

BRAF Multidimensional Questionnaire (BRAF-MDQ): 20 items are combined to create 5 scores, high is worse:

Total fatigue score	0-70	Items 1-20 summed
Physical (severity) subscale	0-22	Items 1-4 summed
Living with fatigue subscale	0-21	Items 5-11 summed
Cognitive fatigue subscale	0-15	Items 12-16 summed
Emotional fatigue subscale	0-12	Items 17-20 summed

Subscale	Question		Range	Score
Physical	1	NRS fatigue	0-10	
	2	How many days?	0-7	
	3	How long on average has each episode of fatigue lasted?	0-2	
	4	Have you lacked physical energy because of fatigue?	0-3	
	Physical severity total		0-22	
Living	5	Has fatigue made it difficult to bath or shower?	0-3	
	6	Has fatigue made it difficult to dress yourself?	0-3	
	7	Has fatigue made it difficult to do your work or other daily activities?	0-3	
	8	Have you avoided making plans because of fatigue?	0-3	
	9	Has fatigue affected your social life?	0-3	
	10	Have you cancelled plans because of fatigue?	0-3	
	11	Have you refused invitations because of fatigue?	0-3	
	Living with fatigue total		0-21	
Cognition	12	Have you lacked mental energy because of fatigue?	0-3	
	13	Have you forgotten things because of fatigue?	0-3	
	14	Has fatigue made it difficult to think clearly?	0-3	
	15	Has fatigue made it difficult to concentrate?	0-3	
	16	Have you made mistakes because of fatigue?	0-3	
	Cognitive fatigue total		0-15	
Emotion	17	Have you felt you have less control because of fatigue?	0-3	
	18	Have you felt embarrassed because of fatigue?	0-3	
	19	Has being fatigued upset you?	0-3	
	20	Have you felt down or depressed because of fatigue?	0-3	
	Emotional fatigue total		0-12	
	BRAF-MDQ total score		0-70	

Missing BRAF-MDQ data

- Questions 1 and 2 must be completed to be valid
- Only 1 question may be missing from each dimension (maximum of 3 in the overall BRAF-MDQ).
- Replace the missing question score with the average score for that dimension
- For the **Physical Fatigue** dimension, a weighted average score is used to account for the varying score ranges in the 4 items. First, sum the 3 completed items, then divide by the total max possible score for those 3 questions, then multiply by the maximum score possible for all 4 questions (ie 22).

Eg: Q1 is 10/10, Q2 is 6/7, Q3 is missing, Q4 is 2/3, summed to give 18
 Divide by total max possible for those 3 questions (10+7+3 = 20) thus 18/20 = 0.9 weighted average
 Multiply by the max possible score for all 4 questions (22) ie 0.9 x 22 = 19.8
 Physical score would therefore be imputed as 19.8