Modified Friedreich Ataxia Rating Scale (mFARS) – Data Collection Worksheet

Subject ID: _____ **Test Date:** _____

Time test started: ☐ Before 12pm ☐ 12pm - 4pm ☐ After 4pm

How was the assessment completed? ☐ In person ☐ Virtual (Audio & Video)

A. BULBAR

Ask the patient to "cough as hard as you can, three times". Accept the strongest attempt.

A3. Cough score:

_____ . _____

0.0 = Normal
0.5
1.0 = Depressed
1.5
2.0 = Totally or nearly absent

Ask the patient to read or repeat the sentences. A "The President lives in the White House."
B "The traffic is heavy today."

A4. Speech score:

_____ . _____

0.0 = Normal
0.5
1.0 = Mild (all or most words understandable
1.5
2.0 = Moderate (most words not understandable)
2.5
3.0 = Severe (no or almost no useful speech)

Sub-Total BULBAR: [Calculated – Score=A3 + A4, Range 0-5]

B. UPPER LIMB COORDINATION

B1. Finger-to-Finger Test

B1a. Right score:

_____ . _____

B1b. Left score:

_____ . _____

0.0 = Normal (0 – 0.5 cm)
0.5
1.0 = Mild oscillations of finger (0.5- 2 cm)
1.5
2.0 = Moderate oscillations of finger (2-6 cm)
2.5
3.0 = Severe oscillations of finger (greater than 6.0 cm) and/or elbows require contact with body or surface, unable to perform task

B2. Nose-Finger Test

B2a. Right score:

_____

B2b. Left score:

_____

0 = None
1 = Mild (less than 2 cm. amplitude)
2 = Moderate (2-6 cm. amplitude or persisting through movement)
3 = Severe (greater than 6 cm. and persisting through movement)
4 = Too poorly coordinated to perform task

B3. Dysmetria Test

B3a. Right score:

_____

B3b. Left score:

_____

0 = None (no misses)
1 = Mild (1 – 2 misses)
2 = Moderate (misses 3-5 times)
3 = Severe (misses 6-8 times)
4 = Too poorly coordinated to perform task

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B4. Rapid Alternating Movements of Hands

B4a. Right score:

_____ . _____ time in seconds: _____

0.0 = Normal

0.5

1.0 = Mild (slightly irregular or slowed) wrist and elbow remain in relatively fixed position away from torso

B4b. Left score:

_____ . _____ time in seconds: _____

1.5

2.0 = Moderate (irregular and slowed) or participant compensates by bracing elbow on their trunk or there is noted elbow excursion during maneuver

2.5

3.0 = Too poorly coordinated to perform task.

B5. Finger Taps (index finger tip-to-thumb crease)

B5a. Right

_____ time in seconds: _____

0 = Normal.

1 = Mild (misses 1-3 times)

2 = Moderate (misses 4-9 times)

B5b. Left

_____ time in seconds: _____

3 = Severe (misses 10-15 times)

4 = Cannot perform the task and/or unable to maintain start position

Sub-Total Upper Limb Coordination: **[Calculated – Score=B1a+B1b+B2a+B2b+B3a+B3b+B4a+B4b+B5a+B5b, Range 0-36]**

C. LOWER LIMB COORDINATION

C1. Heel Along Shin Slide

C1a. Right score:

_____

0 = Normal (stay on shin).

1 = Mild (abnormally slow, tremulous but contact maintained)

2 = Moderate (goes off shin a total of 3 or fewer times during 3 cycles)

C1b. Left score:

_____

3 = Severe (goes off shin 4 or more times during 3 cycles)

4 = Too poorly coordinated to perform task.

C2. Heel-to-Shin Tap

C2a. Right score:

_____

0 = Normal (stays on target)

1 = Mild (misses shin 2 or less times)

2 = Moderate (misses shin 3-5 times)

C2b. Left score:

_____

3 = Severe (misses shin greater than 5 times)

4 = Too poorly coordinated to perform task or cannot assume start position due to contractures or other impairments.

Sub-Total Lower Limb Coordination: **[Calculated – Score=C1a+C1b+C2a+C2b, Range 0-16]**

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E. UPRIGHT STABILITY

Ea. Is the subject barefoot?	☐ Barefoot (preferred)	☐ Footwear	
Eb. Indicate if AFOs [plastic brace] are used:	☐ Yes	☐ No	
Ec. Test performed on carpet?	☐ Yes	☐ No	

E1. Sitting Posture score:	0 = Normal
	1 = Mild oscillations of head/trunk without touching chair back or side
_____	2 = Moderate oscillations of head/trunk; needs contact with chair back or side for stability
	3 = Severe oscillations of head/trunk; needs contact with chair back or side for stability
	4 = Requires moderate to maximal support of one to two people, or cannot assume start position.

E2a. Stance feet apart, eyes open

If the participant cannot perform the first stance test (feet apart eyes open) without assistance (holding examiner or table or walker) then a score of 4 is given for all 3 trials of this test, and none of the other stance tests are attempted with max score of 4 applied for all trials of all tests (2b, 3a, 3b, and 5). Tandem stance should still be attempted.

E2a1. Trial one score:	0 = 1 minute or longer
_____	1 = Less than 1 minute, greater than 45 seconds
E2a2. Trial two score:	2 = Less than 45 seconds, greater than 30 seconds
_____	3 = Less than 30 seconds, greater than 15 seconds
E2a3. Trial three score:	4 = Less than 15 sec. or needs hands held by assistant/device or cannot assume start position.
_____	

E2a. Average	**[Calculated – E2a1+E2a2+E2a3/3, Range 0-4]**

E2b. Stance feet apart, eyes closed

E2b1. Trial one score:	0 = 1 minute or longer
_____	1 = Less than 1 minute, greater than 45 seconds
E2b2 Trial two score:	2 = Less than 45 seconds, greater than 30 seconds
_____	3 = Less than 30 seconds, greater than 15 seconds
E2b3. Trial three score:	4 = Less than 15 sec. or needs hands held by assistant/device
_____	

E2b. Average:	**[Calculated E2b1+E2b2+E2b3/3, Range 0-4]**

E3a. Stance feet together, eyes open

If the participant cannot assume the relevant position for 3a (feet together eyes open) without assistance (holding examiner or table or walker) then a score of 4 is given for all 3 trials of this test and 3b). Tandem stance should still be attempted.

E3a1. Trial one score:	0 = 1 minute or longer
_____	1 = Less than 1 minute, greater than 45 seconds
E3a2. Trial two score:	2 = Less than 45 seconds, greater than 30 seconds
	3 = Less than 30 seconds, greater than 15 seconds
E3a3. Trial three score:	4 = Less than 15 sec. or needs hands held by assistant/device
_____	

E3a. Average	**[Calculated - E3a1+E3a2+E3a3/3, Range 0-4]**

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E3b. Stance feet together, eyes closed

E3b1. Trial one score:	0 = 1 minute or longer
	1 = Less than 1 minute, greater than 45 seconds
E3b2. Trial two score:	2 = Less than 45 seconds, greater than 30 seconds
	3 = Less than 30 seconds, greater than 15 seconds
E3b3. Trial three score:	4 = Less than 15 sec. or needs hands held by assistant/device
E3b. Average:	**[Calculated E3b1+E3b2+E3b3/3, Range 0-4]**

Which foot was in front during the tandem stance?   ☐   Right   ☐   Left

E4. Tandem Stance

E41. Trial one score:	0 = 1 minute or longer
	1 = Less than 1 minute, greater than 45 seconds
E42. Trial one score:	2 = Less than 45 seconds, greater than 30 seconds
	3 = Less than 30 seconds, greater than 15 seconds
E43. Trial one score:	4 = Less than 15 sec. or needs hands held by assistant/device
E4. Average	**[Calculated E41+E42+E43/3, Range 0-4]**

E5. Stance on Dominant Foot

E51. Trial one score:	0 = 1 minute or longer
	1 = Less than 1 minute, greater than 45 seconds
E52. Trial two score:	2 = Less than 45 seconds, greater than 30 seconds
	3 = Less than 30 seconds, greater than 15 seconds
E53. Trial three score:	4 = Less than 15 sec. or needs hands held by assistant/device
E5. Average	**[Calculated E51+E52+E53/3, Range 0-4]**

6 Tandem Walk

6. Tandem walk score:	0 = Normal (able to tandem walk 8 or greater sequential steps)
	1 = Able to tandem walk greater than 4 sequential steps, but less than 8
	2 = Can tandem walk, but fewer than 4 steps before losing balance.
	3 = Too poorly coordinated to attempt task.

7 Gait

7. Gait score:	0 = Normal
	1 = Mild ataxia/veering/difficulty in turning; no cane/other support needed to be safe
	2 = Walks with definite ataxia; may need intermittent support/examiner needs to walk with participant for safety
	3 = Moderate ataxia / veering / difficulty turning; walking requires cane/holding onto examiner with one hand for safety
	4 = Severe ataxia/veering; walker or both hands of examiner needed
	5 = Cannot walk even with assistance (wheelchair bound)
Sub-Total Upright Stability:	**[Calculated – Score= E1+E2a+E2b+E3a+E3b+E4+E5+E6+E7, Range 0-36]**
Total mFARS score:	**[Calculated – Score = Sub-totals A. Bulbar + B. Upper limb + C. Lower limb + E. Upright stability, Range 0-93]**