

Participant ID: _____ Visit: _____ Date: _____
 Evaluator: _____

FUGL-MEYER ASSESSMENT OF UPPER EXTREMITY FUNCTION FORM						
Arm Tested R / L						
JOINT MOTION & PAIN						
JOINT	MOVEMENT	ROM SCORE		PAIN SCORE		SCORING CRITERIA
		Age related values 20-54 yr ¹	60-84 yr ²			
Shoulder	Flexion	165° ±5°	165° ±10°			ROM Scoring 0-Only a few degrees of motion 1-Decreased passive range of motion (<i>less than age related value</i>) 2-Normal passive range of motion Total Scores: ROM = 0-24
	Abduction to 90°					
	External Rotation	100° ±8°	81° ±15°			
	Internal Rotation	67° ±4°	63° ±15°			
Elbow	Flexion	141° ±5°	144° ±10°			Pain Scoring 0-Marked pain at end of range or pain through range 1-Some pain 2-No pain Total Scores: Pain = 0-24
	Extension	0° ±3°	-4° ±4°			
Wrist	Flexion	75° ±7°	64° ±10°			
	Extension	74° ±7°	63° ±8°			
Fingers	Flexion					
	Extension					
Forearm	Pronation	75° ±5°	71° ±11°			
	Supination	81° ±4°	74° ±11°			
Total Scores:						
SENSATION						
TYPE OF SENSATION	AREA	SCORE		SCORING CRITERIA		
I. Light Touch	Upper Arm			0-Anesthesia		
	Palm of Hand			1-Hyperesthesia / dysesthesia		
				2-Normal		
				Total = 0-4		
II. Proprioception	Shoulder			0-No Sensation		
	Elbow			1-75% of answers are correct, but considerable difference in sensation to unaffected side		
	Wrist			2- All answers are correct, little or no difference		
	Thumb					
	14. Total Score:			Total = 0-8		

¹ Boone DC, Azen SP, Lin C, et al.: Reliability of goniometric measurements. Phys Ther 1978;58:1355-1390.

² Walker JM, Sue D, Miles-Elkousy N, et al.: Active mobility of the extremities in older subjects. Phys Ther 1984;64:919-923.

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MOTOR FUNCTION (in sitting)			
TEST	ITEM	SCORE	SCORING CRITERIA
I. Reflexes	Biceps		0-No reflex activity can be elicited
	Triceps		2-Reflex activity can be elicited
II. Flexor Synergy	Elevation		0-Cannot be performed at all
	Shoulder retraction		1-Performed partly
	Abduction (at least 90 ⁰)		2-Performed faultlessly
	External rotation		
	Elbow flexion		
	Forearm supination		
III. Extensor Synergy	Shoulder add./int. rot.		0-Cannot be performed at all
	Elbow extension		1-Performed partly
	Forearm pronation		2-Performed faultlessly
IV. Movement combining synergies	Hand to lumbar spine		0-No specific action performed 1-Hand must pass anterior superior iliac spine 2-Performed faultlessly
	Shoulder flexion to 90 ⁰ , elbow at 0 ⁰		0-Arm is immediately abducted, or elbow flexes at start of motion 1-Abduction or elbow flexion occurs in later phase of motion 2-Performed faultlessly
	Pronation/supination of forearm with elbow at 90 ⁰ & shoulder at 0 ⁰		0-Correct position of shoulder and elbow cannot be attained, and/or pronation or supination cannot be performed at all 1-Active pronation or supination can be performed even within a limited range of motion, and at the same time the shoulder and elbow are correctly positioned 2-Complete pronation and supination with correct positions at elbow and shoulder
V. Movement out of synergy	Shoulder abduction to 90 ⁰ , elbow at 0 ⁰ , and forearm pronated		0-Initial elbow flexion occurs, or any deviation from pronated forearm occurs 1-Motion can be performed partly, or, if during motion, elbow is flexed, or forearm cannot be kept in pronation 2-Performed faultlessly
	Shoulder flexion 90-180 ⁰ , elbow at 0 ⁰ , and forearm in mid-position		0-Initial flexion of elbow or shoulder abduction occurs 1-Elbow flexion or shoulder abduction occurs during shoulder flexion 2- Performed faultlessly

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MOTOR FUNCTION (continued)			
TEST	ITEM	SCORE	SCORING CRITERIA
V. Movement out of synergy	Pronation/supination of forearm, elbow at 0° and shoulder between 30-90° of flexion		0-Supination and pronation cannot be performed at all, or elbow and shoulder positions cannot be attained 1-Elbow and shoulder properly positioned and pronation and supination performed in a limited range 2-Performed faultlessly
VI. Normal reflex activity (This stage is only included if the patient attains a score of 6 in stage V)	Biceps and/or finger flexors and triceps		0-At least 2 of the 3 phasic reflexes are markedly hyperactive 1-One reflex is markedly hyperactive, or at least 2 reflexes are lively 2-No more than one reflex is lively and none are hyperactive
VII. Wrist	Stability, elbow at 90°, shoulder at 0°		0-Patient cannot dorsiflex wrist to required 15° 1-Dorsiflexion is accomplished, but no resistance is taken 2-Position can be maintained with some (slight) resistance
	Flexion/extension, elbow at 90°, shoulder at 0°		0-Volitional movement does not occur 1-Patient cannot actively move the wrist joint throughout the total range of motion 2-Faultless, smooth movement
	Stability, elbow at 0°, shoulder at 30°		0-Patient cannot dorsiflex wrist to required 15° 1-Dorsiflexion is accomplished, but no resistance is taken 2-Position can be maintained with some (slight) resistance
	Flexion/extension, elbow at 0°, shoulder at 30°		0-Volitional movement does not occur 1-Patient cannot actively move the wrist joint throughout the total range of motion 2-Faultless, smooth movement
	Circumduction		0-Cannot be performed 1-Jerky motion or incomplete circumduction 2-Complete motion with smoothness
VIII. Hand	Finger mass flexion		0-No flexion occurs 1-Some flexion, but not full motion 2-Complete active flexion (compared with unaffected hand)

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MOTOR FUNCTION (continued)			
TEST	ITEM	SCORE	SCORING CRITERIA
VIII. Hand (cont)	Finger mass extension		0-No extension occurs 1-Patient can release an active mass flexion grasp 2-Full active extension
	Grasp I - MCP joints extended and proximal & distal IP joints are flexed; grasp is tested against resistance		0-Required position cannot be acquired 1-Grasp is weak 2-Grasp can be maintained against relatively great resistance
	Grasp II - Patient is instructed to adduct thumb, with a scrap of paper interposed, all other joints at 0°		0-Function cannot be performed 1-Scrap of paper interposed between the thumb and index finger can be kept in place, but not against a slight tug 2-Paper is held firmly against a tug
	Grasp III - Patient opposes thumb pad against the pad of index finger, with a pencil interposed		0-Function cannot be performed 1-Pencil interposed between the thumb and index finger can be kept in place, but not against a slight tug 2-Pencil is held firmly against a tug
	Grasp IV - The patient should grasp a can by opposing the volar surfaces of the 1st and 2nd digits		0-Function cannot be performed 1-A can interposed between the thumb and index finger can be kept in place, but not against a slight tug 2-Can is held firmly against a tug
	Grasp V - The patient grasps a tennis ball with a spherical grip or is instructed to place his/her fingers in a position with abduction position of the thumb and abduction flexion of the 2nd, 3rd, 4th & 5th fingers		0-Function cannot be performed 1-A tennis ball can be kept in place with a spherical grasp but not against a slight tug 2-Tennis ball is held firmly against a tug
IX.Coordination/ Speed- Finger to nose (5 repetitions in rapid succession while patient is blind-folded)	Tremor		0-Marked tremor 1-Slight tremor 2-No tremor
	Dysmetria		0-Pronounced or unsystematic dysmetria 1-Slight or systematic dysmetria 2- No dysmetria
	Speed		0-Activity is more than 6 seconds longer than unaffected hand 1-(2-5) seconds longer than unaffected hand 2-Less than 2 seconds difference Total Maximum Score = 66
	Total Motor Score:		