Capabilities of Upper Extremity (CUE) Instrument

Overview: The Capabilities of Upper Extremity (CUE) Instrument can be used to evaluate impairment of the upper extremity especially in patients with spinal cord injuries. It can be used for initial patient evaluation and to monitor a patient over time. The authors are from the Jefferson Medical College and University of Pennsylvania in Philadelphia.

NOTE: The instrument as distributed to patients is given in the Appendix (pages 1520-1521). This is the concise form.

Measures of Left Upper Extremity
Reaching and Lifting:
(1) reach forward
(2) reach up
(3) reach down
Pulling and Pushing:
(4) pull light object towards self
(5) pull heavy object (10 pounds) towards self
(6) push light object from self
(7) push heavy object (10 pounds) away from self
Wrist Actions:
(8) curl wrist upward (extend)
(9) turn hand palm-down (pronate)
Hand and Finger Actions:
(10) power grasp (for example about a hammer)
(11) pinch grasp
(12) key grasp
(13) wide power grasp (for example opening the lid of a jar)
(14) manipulate a small object
(15) press with index finger (for example ringing a doorbell)
Measures of Right Upper Extremity
Reaching and Lifting:
(1) reach forward

- (2) reach up
- (3) reach down

Pulling and Pushing:

- (4) pull light object towards self
- (5) pull heavy object (10 pounds) towards self
- (6) push light object from self
- (7) push heavy object (10 pounds) away from self

Wrist Actions:

- (8) curl wrist upward (extend)
- (9) turn hand palm-down (pronate)

Hand and Finger Actions:

- (10) power grasp (for example about a hammer)
- (11) pinch grasp
- (12) key grasp
- (13) wide power grasp (for example opening the lid of a jar)
- (14) manipulate a small object
- (15) press with index finger (for example ringing a doorbell)

Measures of Both Upper Extremities

- (1) lift a 5 pound weight over the head
- (2) push down to life self off chair (push-up and weight shift)

Capability	Points
not at all limited	7
a little limited	6
some limitation	5
moderately limited	4
very limited	3
extremely limited	2

totally limited; cannot do at all	1
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total score = SUM(points for all 32 questions)

subscore for left upper extremity = SUM(points for 15 left side questions)

subscore for right upper extremity = SUM(points for 15 left side questions)

Interpretation:

• minimum total score: 32

maximum total score: 224

• The higher the score the better the upper extremity function.

percent of normal function = ((total score) - 32) / 192 * 100%

Performance:

- The instrument was found to have good homogeneity reliability and validity.
- Sensitivity to change in function needs to be determined.

References:

Marino RJ Shea JA Stineman MG. The Capabilities of Upper Extremity Instrument: Reliability and validity of a measure of functional limitation in tetraplegia. Arch Phys Med Rehabil. 1998; 79: 1512-1521 (Table 1 page 1513)