The Chedoke Arm and Hand Activity Inventory

Administration Guidelines

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General Instructions for Administering the CAHAI

The purpose of this measure is **to evaluate the functional ability of the hemiplegic arm and hand to perform tasks** that have been identified as important by stroke survivors. It is NOT designed to measure the client's ability to complete the task using only their unaffected hand, but rather to encourage bilateral function.

Explain to your clients that some tasks are difficult and they should not get frustrated if unable to complete all the tasks. Encourage them to give their best effort using BOTH arms and hands. *The client may attempt each task twice*.

When attempting each task, always consider safety, especially for Stage I upper limb.

Standard starting position

Posture: seated in chair without armrests or in wheelchair with armrests removed, encourage erect posture, feet flat on the floor
Height of table: at the level of the last costal rib
Distance from table: client's elbow comes to the table edge
Hands: resting on the table

Variations from the standard starting position will be indicated at the top of the task page.

To ensure the client's understanding:

Every effort should be made to ensure the client understands the task.

- each task should be demonstrated once, twice if needed
- the client may be cued to use both hands twice
- the client may be reminded not to rest elbows on the table twice

Scoring

Score the performance of the affected upper limb using the 7 point Activity scale (*fig. 1.0).* Observe the performance of the affected upper limb and:

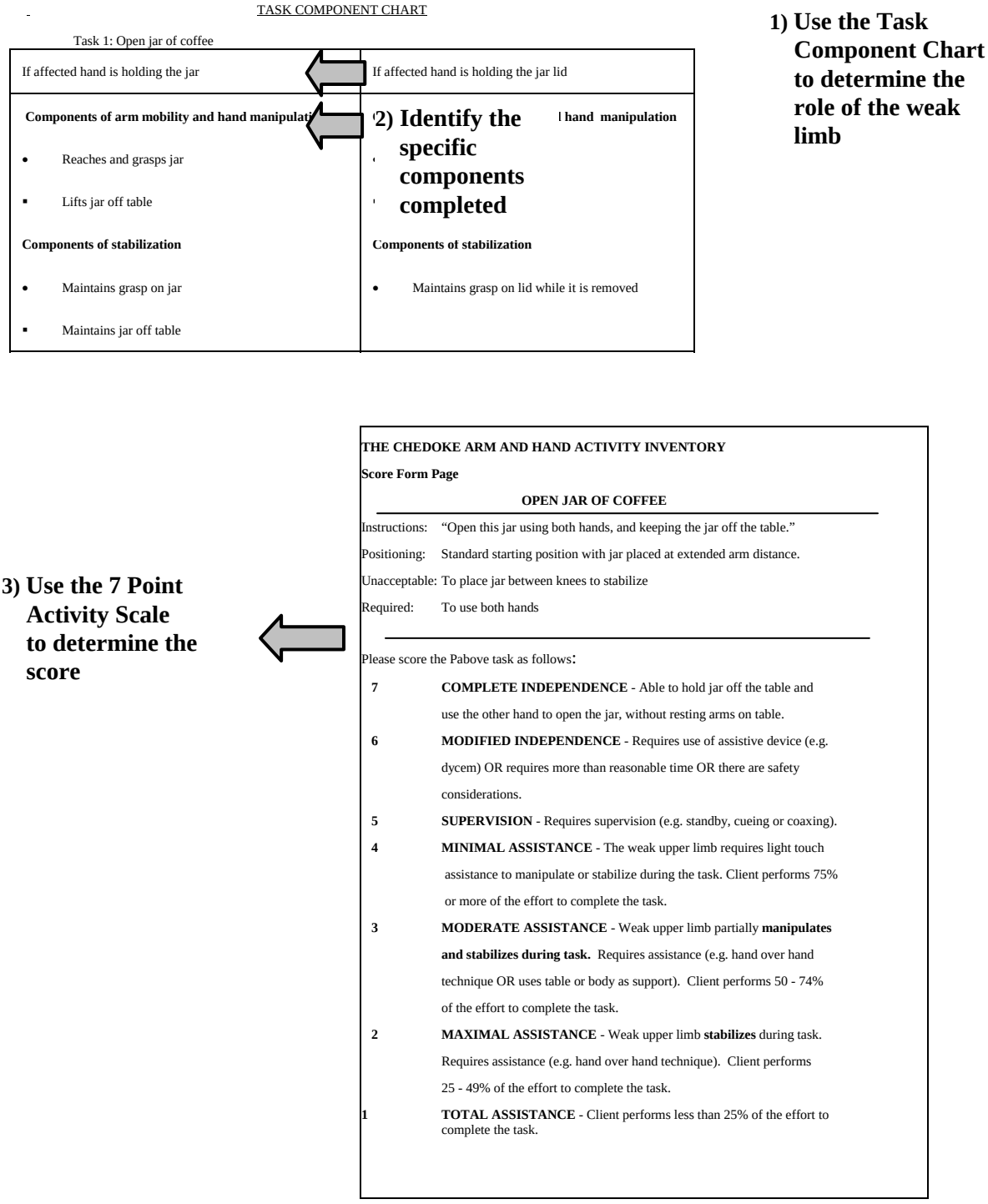
1) Use the Task Component Chart to determine what part of the task the affected limb performed. e.g. affected hand turning the lid or affected hand stabilizing the jar

2) Identify the specific components of manipulation and stabilization the affected limb completed

3) Use the 7 point Activity Scale to determine the score.

If different performances are observed then assign the lower score. Record which part of the task the affected hand performed in order for retesting to be consistent.

Figure 1.0



TASK COMPONENT CHART

Task 1: Open jar of coffee

If affected hand is holding the jar	If affected hand is holding the jar lid
Components of arm mobility and hand manipulati	**l hand manipulation**
• Reaches and grasps jar	
▪ Lifts jar off table	
Components of stabilization	**Components of stabilization**
• Maintains grasp on jar	• Maintains grasp on lid while it is removed
▪ Maintains jar off table	

1) Use the Task Component Chart to determine the role of the weak limb

2) Identify the specific components completed

3) Use the 7 Point Activity Scale to determine the score

THE CHEDOKE ARM AND HAND ACTIVITY INVENTORY

Score Form Page

OPEN JAR OF COFFEE

Instructions: "Open this jar using both hands, and keeping the jar off the table."

Positioning: Standard starting position with jar placed at extended arm distance.

Unacceptable: To place jar between knees to stabilize

Required: To use both hands

Please score the Pabove task as follows:

7 **COMPLETE INDEPENDENCE** - Able to hold jar off the table and use the other hand to open the jar, without resting arms on table.

6 **MODIFIED INDEPENDENCE** - Requires use of assistive device (e.g. dycem) OR requires more than reasonable time OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing).

4 **MINIMAL ASSISTANCE** - The weak upper limb requires light touch assistance to manipulate or stabilize during the task. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. hand over hand technique OR uses table or body as support). Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. hand over hand technique). Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

THE CHEDOKE ARM AND HAND ACTIVITY INVENTORY

The Chedoke Arm and Hand Activity Inventory is designed to compliment the Chedoke-McMaster Stroke Assessment. The scoring key is similar to that used in the Functional Independence Measure (Adult FIM^{SM}).
SCORE EACH ITEM IN THE BOXES PROVIDED; THEN SUM THE SCORES AT THE END OF THE COLUMN.

DESCRIPTION OF THE LEVELS OF FUNCTION FOR THE ACTIVITY SCALE

7 **COMPLETE INDEPENDENCE** - All of the tasks are performed safely, without modification, assistive devices or aids, and within reasonable time.

6 **MODIFIED INDEPENDENCE** - Activity requires any one or more of the following: an assistive device, more than reasonable time, or there are safety (risk) considerations.

5 **SUPERVISION** - The client requires no more help than standby, cueing or coaxing, without physical contact. A helper sets up needed items or applies orthoses.

4 **MINIMAL ASSISTANCE** - With physical contact the client requires no more than touching, and client expends 75% or more of the effort.

3 **MODERATE ASSISTANCE** - Weak limb **manipulates and stabilizes** during the task. The client requires more help than touching, or expends

2 **MAXIMAL ASSISTANCE** - Weak limb stabilizes during task. The client expends less than 50% of the effort, but at least 25%.

1 **TOTAL ASSISTANCE** - The client expends less than 25% of the effort.

Score 6 if more than reasonable time is required. (e.g. more than 3 times the normal time is required)

Score 6 if assistive devices (e.g. built up handles, dycem, cock-up/ dynamic splints) are used

Score 6 if there are safety concerns in doing upper limb tasks (e.g. impulsivity, balance, poor motor control)

Score 5 if you need to cue throughout the clients' second attempt of the task

Score 4 if client touches table very briefly

Score 3 if client continually uses table for support

Score 1 if client uses only one arm/hand

Score 1 if two people are required to assist in completing task

Score 1 if you feel it is unsafe to try the task.

Administration time (approximately 30 minutes)

Questions: Please contact Susan Barreca at sbarreca@cogeco.ca or Lisa Masters at mastersl@hhsc.ca

Equipment required:

CAHAI-7 Version (Items 1-7) requires all items in Equipment List A
Equipment List A

- height adjustable table
- chair/wheelchair without armrests
- dycem
- 200g jar of coffee
- push-button telephone
- 12”/30cm ruler
- 8.5” x 11” paper
- pencil
- 2.3L plastic pitcher with lid
- 250 ml plastic cup
- wash cloth
- wash basin (24.5 cm. in diameter, height 8 cm.)
- Pull-on vest with 5 buttons (one side male & one side female)
- bath towel (65cm X 100cm)

CAHAI-8 Version (Items 1-8) requires all items in Equipment List A and B
Equipment List B

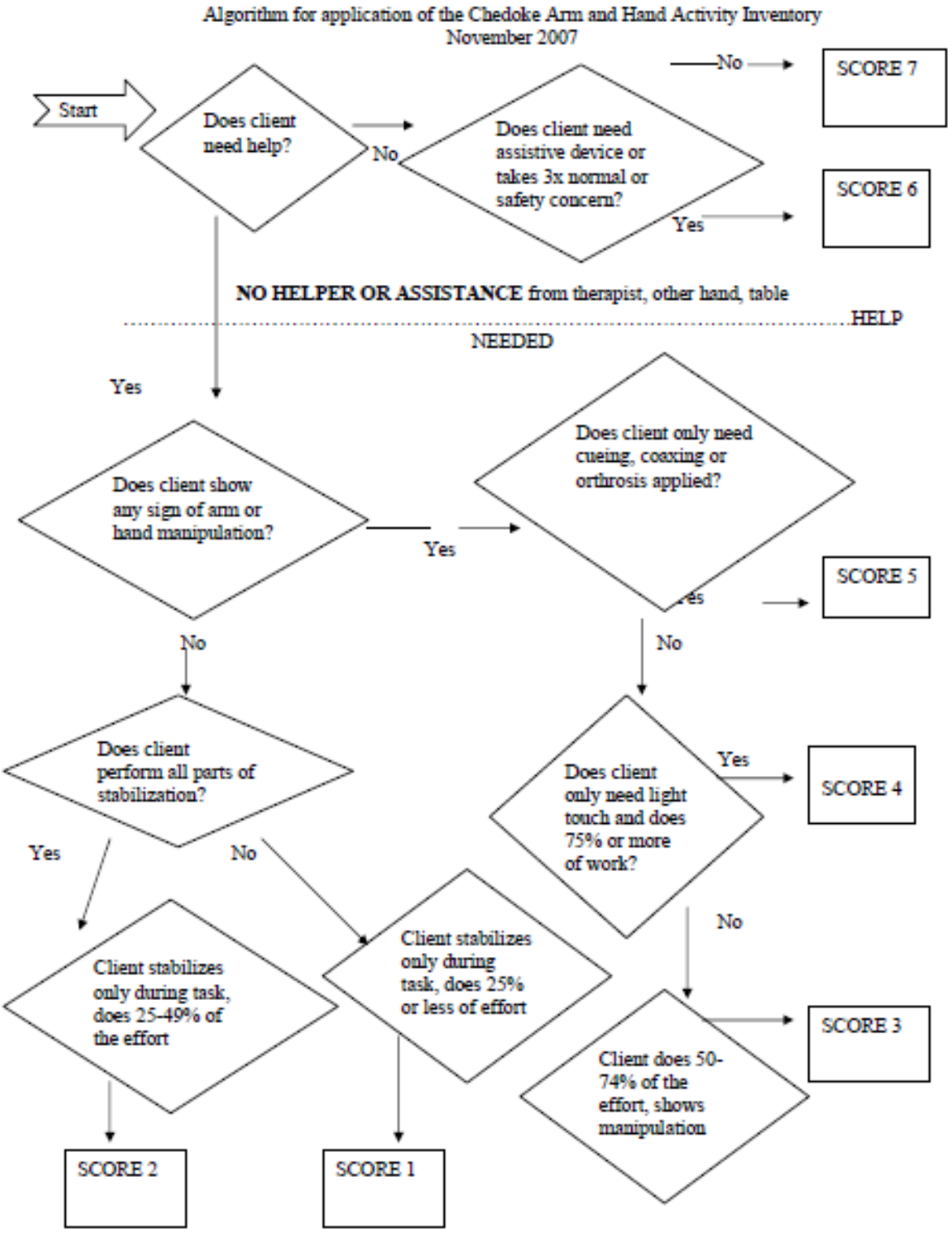
- 75ml toothpaste with screw lid, >50% full
- toothbrush

CAHAI-9 Version (Items 1-9) requires all items in Equipment List A, B, and C
Equipment List C

- dinner plate (Melamine or heavy plastic, 25 cm. in diameter)
- medium resistance putty
- knife and fork
- built up handles the length of the utensil handle

CAHAI-13 Version (Items 1-13) requires all items in Equipment List A, B, C, and D
Equipment List D

- 27”/67cm metal zipper in polar fleece poncho
- eyeglasses
- handkerchief
- Rubbermaid 38L container (50 x 37 x 27cm)
- 4 standard size steps with rail
- plastic grocery bag holding 4lb/2kg weight


Algorithm for application of the Chedoke Arm and Hand Activity Inventory
November 2007
Start
Does client need help?
No
Does client need assistive device or takes 3x normal or safety concern?
No
SCORE 7
Yes
SCORE 6
NO HELPER OR ASSISTANCE from therapist, other hand, table
HELP NEEDED
Yes
Does client show any sign of arm or hand manipulation?
Yes
Does client only need cueing, coaxing or orthrosis applied?
Yes
SCORE 5
No
No
Does client perform all parts of stabilization?
Does client only need light touch and does 75% or more of work?
Yes
SCORE 4
Yes
No
No
Client stabilizes only during task, does 25-49% of the effort
Client stabilizes only during task, does 25% or less of effort
Client does 50-74% of the effort, shows manipulation
SCORE 3
SCORE 2
SCORE 1

THE CHEDOKE ARM AND HAND ACTIVITY INVENTORY

OPEN JAR OF COFFEE

Instructions: "Open this jar using both of your hands."
Positioning: Standard starting position with jar placed at extended arm distance.
Unacceptable: To place jar between knees to stabilize
Required: To use both hands.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to hold jar off the table and use the other hand to open the jar, without resting arms on the table.

6 **MODIFIED INDEPENDENCE** - Requires use of assistive device (e.g. dycem) OR requires more than reasonable time OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing).

4 **MINIMAL ASSISTANCE** - The weak upper limb requires light touch assistance to manipulate or stabilize during the task. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. hand over hand technique OR uses table or body as support). Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. hand over hand technique). Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 1: Open jar of coffee

If affected hand is holding the jar	If affected hand is holding the jar lid
Components of arm mobility and hand manipulation • Reaches and grasps jar • Lifts jar off the table **Components of stabilization** • Maintains grasp on jar • Maintains jar off the table	**Components of arm mobility and hand manipulation** • Turns and removes lid **Components of stabilization** • Maintains grasp on lid while it is removed

CALL 911

Instructions: " Call 911 using both of your hands"
Positioning: Standard, phone placed at extended arm distance in front of client.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up receiver and hold to ear with one hand while using other hand to dial the above listed number, without resting arms on table.

6 **MODIFIED INDEPENDENCE** - Requires use of assistive device (e.g. splint) OR requires more than reasonable time to complete task OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing).

4 **MINIMAL ASSISTANCE** - Requires light touch assistance (e.g. to maintain phone at ear, OR to place phone in hand, OR to guide finger towards number pads). Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. to bring the receiver to ear OR uses table as support). Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. to pick up the receiver, hold it to the ear and dial). Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 2: Call 911

If affected hand is holding receiver	If affected hand is dialing 911
Components of arm mobility and hand manipulation • Reaches and grasps ear/mouth piece • Brings phone to ear **Components of stabilization** • Maintains sufficient grasp on phone and holds to ear	**Components of arm mobility and hand manipulation** • Reaches for buttons • Pushes individual buttons clearly

DRAW A LINE WITH A RULER

Instructions: "Draw a straight line the length of the ruler using both of your hands."
Required: Not to rest forearms on table
Positioning: Standard, pencil and ruler set at top edge of paper. Paper placed horizontally at the edge of the table.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up pencil and ruler,correctly position ruler across the page, hold ruler in place and draw a straight line the length of the ruler, without resting arms on the table.

6 **MODIFIED INDEPENDENCE** - Requires use of assistive device (e.g. splint or built up handle) OR requires more than reasonable time.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing)

4 **MINIMAL ASSISTANCE** - Requires light touch assistance (e.g. to stabilize proximal or distal segment of upper limb) OR uses strong hand to pick up pencil or ruler and place in weak hand OR able to complete task but while drawing line with weak hand, produces an uneven line. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. to place pencil in hand appropriately, but then able to complete task but not smoothly OR uses table as support). Client performs 50 - 74% of the effort to complete the task.

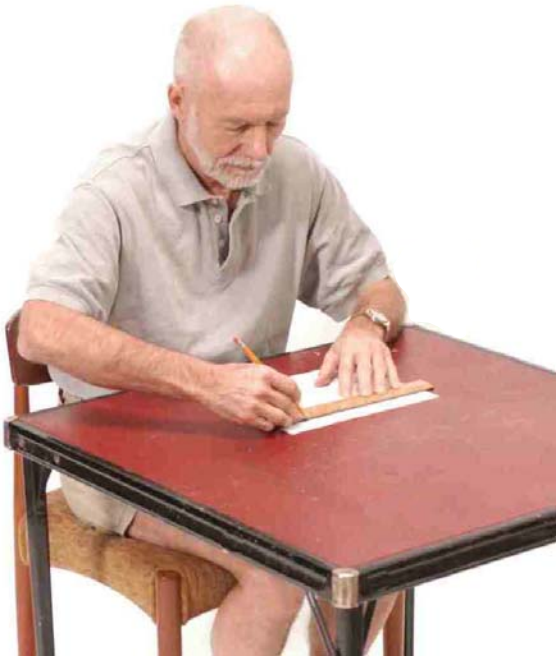
2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. hand over hand to maintain position of pencil in hand and then able to complete task) OR uses weak hand to stabilize ruler but not able to hold sufficiently to draw half of the line. Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 3: Draw a line with a ruler

If affected hand is holding the ruler	If affected hand is holding the pencil
Components of arm mobility and hand manipulation • Reaches and picks up ruler • Places ruler horizontally on paper **Components of stabilization** • Places fingers on ruler • Applies sufficient force to keep ruler in place	**Components of arm mobility and hand manipulation** • Reaches and picks up pencil • In-hand manipulation to allow for writing with pencil • Drawing action along ruler **Components of stabilization** • Maintains grip on pencil



POUR A GLASS OF WATER

Instructions: "Pour a full glass of water using both of your hands."
Positioning: Standard position, 250 ml glass beside 2.3L pitcher full with water placed at extended arm length distance.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up glass and pitcher, then fill the glass with water to 2 cm. from the top without resting glass, pitcher or arms on the table.

6 **MODIFIED INDEPENDENCE** - Requires assistive device (e.g. splint) OR client stabilizes elbows only on table OR takes more than reasonable time to complete task OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing) Any spillage is scored as a 5.

2 **MINIMAL ASSISTANCE** - The weak upper limb requires light touch assistance (e.g. with either the glass or the pitcher in order to fill the glass with water). Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance OR client reaches for glass and holds it on table while lifting pitcher to fill glass with water. Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. hand over hand technique throughout all the components of the task). Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client initiates reaching for glass or pitcher, but unable to complete task even with hand over hand assistance. Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 4: Pour a glass of water

If affected hand is holding the glass	If affected hand is holding the pitcher
Components of arm mobility and hand manipulation • Reaches and grasps glass • Lift glass off the table **Components of stabilization** • Maintain sufficient grasp to hold the glass away from table • Maintain glass steady while pouring	**Components of arm mobility and hand manipulation** • Reaches and grasps pitcher • Lifts picture off the table • Pours water from pitcher **Components of stabilization** • Maintain sufficient grasp to hold the pitcher off the table • Maintain pitcher steady while pouring

WRING OUT WASHCLOTH

Instructions: "Wring out the washcloth using both of your hands"
Positioning: Standard position, washcloth placed in basin half full of water at table's edge.
Unacceptable: To squeeze washcloth, must use wringing action.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up washcloth from basin and wring out washcloth completely, without resting arms on the table. Therapist wrings out washcloth to ensure task is complete.

6 **MODIFIED INDEPENDENCE** - Requires more than reasonable time

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing). Any spillage is scored as a 5.

4 **MINIMAL ASSISTANCE** - The weak upper limb requires light touch assistance OR client able to wring out 75% of water from washcloth. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. hand over hand technique to complete the task but client able to wring out at least 50% of the water out of the washcloth OR uses table as support). Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. hand over hand) OR client holds washcloth and squeezes with the other hand (i.e. client does not perform wringing action). Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 5: Wring out washcloth

Score the affected hand on ability to:
Components of arm mobility and hand manipulation • Reaches and grasps washcloth • Hand in wringing action **Components of stabilization** • Holds washcloth in place • Holds washcloth to permit wringing action

DO UP FIVE BUTTONS

Instructions: "Do up five buttons using both of your hands, starting at the top"
Positioning: Sitting away from table, client wearing shirt

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able do up five buttons on the shirt.

6 **MODIFIED INDEPENDENCE** - Requires use of assistive device OR requires more than reasonable time OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing)

4 **MINIMAL ASSISTANCE** - The weak upper limb requires light touch assistance to manipulate or stabilize during the task OR client is able to fasten four buttons. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance OR client able to fasten three buttons. Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance OR able to fasten two buttons. Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client unable to fasten more than one button. Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 6: Do up five buttons

If the affected hand is holding the material	If the affected hand is holding the buttons
Components of arm mobility and hand manipulation • Reaches and grasps material • Brings sides of material together • Assists in threading the button through the holes • Releases material **Components of stabilization** • Holds and maintains grasp on material	**Components of arm mobility and hand manipulation** • Reaches and grasps buttons • Brings sides of material together • Assists in threading the button through the holes • Releases buttons **Components of stabilization** • Holds and maintains grasp on buttons

DRY BACK WITH TOWEL

Instructions: "Dry your entire back with the towel using both of your hands"
Positioning: Sitting away from table. Towel is placed on the table at extended arm distance.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to take towel, place it over back and use both hands to maneuver towel to dry entire back.

6 **MODIFIED INDEPENDENCE** - Requires more than reasonable time OR there are safety considerations (e.g. balance).

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing)

4 **MINIMAL ASSISTANCE** - Weak upper limb requires light touch assistance to manipulate or stabilize during the task OR only dries half of back. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance. Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance. Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 7: Dry back with towel

If the affected hand is reaching and grasping for towel	If the affected hand is grasping the towel end
Components of arm mobility and hand manipulation • Reaches and grasps towel • Manipulates towel in hand to place on back • Rubbing motion along upper and lower back **Components of stabilization** • Maintains grasp on towel sufficient to complete task	**Components of arm mobility and hand manipulation** • Grasps towel end • Manipulates towel in hand to place on back • Rubbing motion along upper and lower back **Components of stabilization** • Maintains grasp on towel sufficient to complete task

PUT TOOTHPASTE ON TOOTHBRUSH

Instructions: "Put the toothpaste on the toothbrush using both of your hands."
Positioning: Standard position, toothbrush and toothpaste positioned horizontally on table at extended arm distance.
*note: The new tube of toothpaste should be marked at half its length and the tube rolled up, as it is used, until it reaches this point. It should not be used for testing after that.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up toothpaste, undo cap, pick up toothbrush in opposite hand and apply toothpaste to toothbrush, without resting arms on the table.

6 **MODIFIED INDEPENDENCE** - Requires the use of assistive device (e.g. splint or built up handle) OR requires more than reasonable time.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing)

4 **MINIMAL ASSISTANCE** - Requires light touch assistance (e.g. to remove cap from toothpaste OR steadying assistance while applying toothpaste). Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. either to place toothbrush and/or tube in hands OR unscrew cap and initiate the squeezing of the toothpaste OR uses table as support). Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task.Requires assistance (e.g. hand over hand technique). Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 8: Put toothpaste on toothbrush

If affected hand is holding toothpaste	If affected hand is holding toothbrush
Components of arm mobility and hand manipulation • Reaches and grasps toothpaste • Squeezes toothpaste with enough force to get toothpaste on brush **Components of stabilization** • With sufficient force holds toothpaste while manipulating lid	**Components of arm mobility and hand manipulation** • Unscrews lid • Reaches and grasps toothbrush **Components of stabilization** • Sufficient force holding toothbrush

CUT MEDIUM RESISTANCE PUTTY

Instructions: "Cut 5 small separate pieces using both of your hands."
Positioning: Standard position, putty (size of examiner's palm) on plate at table edge. Knife and fork on either side of plate.
Unacceptable: To cut large pieces. (larger than approximately 2.5 cm long)

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up knife and fork appropriately and cut putty into 5 bite size separate pieces, without resting arms on the table.

6 **MODIFIED INDEPENDENCE** - Requires use of assistive device (e.g. built up handles, dycem) OR requires more than reasonable time to cut 5 bite size separate pieces OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing) OR set up is required, then able to cut 5 bite size separate pieces.

4 **MINIMAL ASSISTANCE** - The weak upper limb requires light touch assistance (e.g. to place utensils into hands) and then able to cut at least 5 bite size separate pieces. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. to place utensils into hands OR hand over hand technique OR stabilizes forearms on the table) and then able to cut 4 bite size separate pieces. Client performs 50 -74%. of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. to place utensils into hands OR hand over hand technique) and then able to cut 3 bite size separate pieces. Client performs 25 -49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 9: Cut Medium Resistance Putty

If affected hand is holding the knife	If affected hand is holding the fork
Components of arm mobility and hand manipulation • Reaches and grasps knife and manipulate (in-hand) to prepare for the task • Places knife in putty • Cutting motion with knife (not pulling) **Components of stabilization** • Sufficient grasp to hold knife throughout task	**Components of arm mobility and hand manipulation** • Reaches and grasps fork and manipulate (in-hand) to prepare for task • Places fork in putty • Places cut pieces to the side with fork **Components of stabilization** • Sufficient grasp to hold fork throughout task • Maintains position of putty while knife cuts

ZIP UP THE ZIPPER

Instructions: "Zip up the zipper using both of your hands "
Positioning: Sitting away from table, therapist puts poncho on client.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up both ends of zipper and join ends together. Using one hand to stabilize zipper, client uses other hand to grasp tab and close zipper.

6 **MODIFIED INDEPENDENCE** - Requires use of assistive device (e.g. splint) OR requires more than reasonable time OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing).

4 **MINIMAL ASSISTANCE** - The weak upper limb requires light touch assistance (e.g. to stabilize proximal or distal segment of upper limb). Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. to place zipper end in weak hand or to start closure of zipper) OR uses lap to stabilize. Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. to join zipper ends but can complete closing zipper on own OR joins zipper but needs assistance to close zipper). Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 10: Zip up the zipper

If affected hand is holding the zipper	If affected hand is holding the zipper pull
Components of arm mobility and hand manipulation • Reaches and grasps end of zipper • Places ends of zipper together **Components of stabilization** • Stabilizes bottom of poncho while zipper is pulled up	**Components of arm mobility and hand manipulation** • Reaches and grasps one end of zipper • Places ends of zipper together • Grasps zipper pull • Pulls zipper up **Components of stabilization** • Maintains grasp on zipper pull throughout task

CLEAN A PAIR OF EYEGLASSES

Instructions: "Clean the glasses with the handkerchief using both of your hands."
Positioning: Standard position. Wet both lenses and place open glasses bridge down at extended arm distance. Handkerchief placed beside the glasses.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up eyeglasses in one hand, pick up handkerchief with the other hand and clean both lenses completely, without resting arms on the table.

6 **MODIFIED INDEPENDENCE** - Requires assistive device (e.g. splint) OR requires more than reasonable time OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing)

4 **MINIMAL ASSISTANCE** - Weak upper limb requires light touch assistance to manipulate or stabilize during the task. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance OR uses table as support, then able to pick up glasses or handkerchief with weak hand. Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance. Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 11: Clean a pair of eyeglasses

If the affected hand is holding/grasping glasses	If the affected hand is wiping lens of glasses
Components of arm mobility and hand manipulation • Reaches and grasps glasses • Manipulation of hand or glasses to be able to clean all areas of the glasses **Components of stabilization** • Maintains grasp on glasses throughout task	**Components of arm mobility and hand manipulation** • Reaches and grasps handkerchief • In hand manipulation of the handkerchief • Rubbing motion using handkerchief **Components of stabilization** • Maintains grasp on handkerchief throughout task

THE CHEDOKE ARM AND HAND ACTIVITY INVENTORY

PLACE CONTAINER ON TABLE

Instructions: "Place the container on the table."
Positioning: Client standing, with strong side facing table. Container filled with 10lb/5Kg weight (total weight = 8.6kg/19lbs) and placed on the floor in front of client.
Unacceptable: To twist trunk while feet remain planted on the floor, trunk extension to lift container.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to reach down for container, pick it up, turn, step and place the container on the table.

6 **MODIFIED INDEPENDENCE** - Requires use of assistive device (e.g. splint) OR requires more than reasonable time OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing)

4 **MINIMAL ASSISTANCE** - Requires light touch assistance (e.g. steadying while lifting container OR to maintain balance) or the container is not lifted high enough to easily clear table. Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g. to complete lifting into standing position). Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance through entire phase of lifting container. Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** - Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 12: Place container on table

Using both the affected and unaffected hand
Components of arm mobility and hand manipulation • Reaches down and grasps container • Elbow flexion to lift container enough to easily clear table • Places container on table **Components of stabilization** • Maintains sufficient grasp • Stabilizes container during lifting without using body for support

THE CHEDOKE ARM AND HAND ACTIVITY INVENTORY

CARRY THE BAG UP THE STAIRS

Instructions: "Carry the bag up 4 steps using your affected arm."
Positioning: Client standing or sitting in front of stairs, bag containing 4 lb./ 2 kg weight is placed on floor in front of client.
Required: To use the weak limb to carry the bag.

Please score the above task as follows:

7 **COMPLETE INDEPENDENCE** - Able to pick up bag with the weak hand, while sitting or standing and carry bag in weak hand up 4 steps safely without use of handrail.

6 **MODIFIED INDEPENDENCE** - Requires the use of a handrail or cane OR requires more than reasonable time OR there are safety considerations.

5 **SUPERVISION** - Requires supervision (e.g. standby, cueing or coaxing).

4 **MINIMAL ASSISTANCE** - Requires light touch assistance (e.g. for balance OR to pick up bag). Client performs 75% or more of the effort to complete the task.

3 **MODERATE ASSISTANCE** - Weak upper limb partially **manipulates and stabilizes during task.** Requires assistance (e.g**.** hand over hand technique required to maintain hold of bag) OR only able to carry bag up 2 steps. Client performs 50 - 74% of the effort to complete the task.

2 **MAXIMAL ASSISTANCE** - Weak upper limb **stabilizes** during task. Requires assistance (e.g. to place bag in hand and hand over hand technique required to maintain hold of bag). Client performs 25 - 49% of the effort to complete the task.

1 **TOTAL ASSISTANCE** -Client performs less than 25% of the effort to complete the task.

TASK COMPONENT CHART

Task 13: Carry the bag up the stairs.

Score the affected hand on the ability of
Components of arm mobility and hand manipulation • Grasps bag through both handles **Components of stabilization** • Maintains grasp and holds bag with hand or crook of arm

Chedoke Arm and Hand Activity Inventory: Score Form

CAHAI-13 Version

Name: **Date:**

Activity Scale			
1. total assist (weak U/L < 25%) 2. maximal assist (weak U/L = 25-49%) 3. moderate assist (weak U/L = 50-74%) 4. minimal assist (weak U/L > 75%)	5. supervision 6. modified independence (device) 7. complete independence (timely, safely)		
	Affected Limb:		Score
1. Open jar of coffee	☐ holds jar	☐ holds lid	☐
2. Call 911	☐ holds receiver	☐ dials phone	☐
3. Draw a line with a ruler	☐ holds ruler	☐ holds pen	☐
4. Pour a glass of water	☐ holds glass	☐ holds pitcher	☐
5. Wring out washcloth			☐
6. Do up five buttons			☐
7. Dry back with towel	☐ reachs for towel	☐ Grasps towel end	☐
8. Put toothpaste on toothbrush	☐ holds toothpaste	☐ holds brush	☐
9. Cut medium resistance putty	☐ holds knife	☐ holds fork	☐
10. Zip up the zipper	☐ holds zipper	☐ holds zipper pull	☐
11. Clean a pair of eyeglasses	☐ holds glasses	☐ wipes lenses	☐
12. Place container on table			☐
13. Carry bag up the stairs			☐
Total Score			☐ **/91**
Comments			

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Chedoke Arm and Hand Activity Inventory: Score Form

CAHAI-9 Version

Name: **Date:**

Activity Scale

1. total assist (weak U/L < 25%)
2. maximal assist (weak U/L = 25-49%)
3. moderate assist (weak U/L = 50-74%)
4. minimal assist (weak U/L > 75%)
5. supervision
6. modified independence (device)
7. complete independence (timely, safely)

	Affected Limb:		Score
1. Open jar of coffee	☐ holds jar	☐ holds lid	
2. Call 911	☐ holds receiver	☐ dials phone	
3. Draw a line with a ruler	☐ holds ruler	☐ holds pen	
4. Pour a glass of water	☐ holds glass	☐ holds pitcher	
5. Wring out washcloth			
6. Do up five buttons			
7. Dry back with towel	☐ reachs for towel	☐ grasps towel end	
8. Put toothpaste on toothbrush	☐ holds toothpaste	☐ holds brush	
9. Cut medium resistance putty	☐ holds knife	☐ holds fork	
Total Score			**/63**

Comments

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Chedoke Arm and Hand Activity Inventory: Score Form

CAHAI-8 Version

Name: **Date:**

Activity Scale			
1. total assist (weak U/L < 25%) 2. maximal assist (weak U/L = 25-49%) 3. moderate assist (weak U/L = 50-74%) 4. minimal assist (weak U/L > 75%)	5. supervision 6. modified independence (device) 7. complete independence (timely, safely)		
	Affected Limb:		Score
1. Open jar of coffee	☐ holds jar	☐ holds lid	☐
2. Call 911	☐ holds receiver	☐ dials phone	☐
3. Draw a line with a ruler	☐ holds ruler	☐ holds pen	☐
4. Pour a glass of water	☐ holds glass	☐ holds pitcher	☐
5. Wring out washcloth			☐
6. Do up five buttons			☐
7. Dry back with towel	☐ reachs for towel	☐ grasps towel end	☐
8. Put toothpaste on toothbrush	☐ holds toothpaste	☐ holds brush	☐
Total Score			☐ **/56**
Comments			

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Chedoke Arm and Hand Activity Inventory: Score Form

CAHAI-7 Version

Name: **Date:**

Activity Scale

1. total assist (weak U/L < 25%)
2. maximal assist (weak U/L = 25-49%)
3. moderate assist (weak U/L = 50-74%)
4. minimal assist (weak U/L > 75%)
5. supervision
6. modified independence (device)
7. complete independence (timely, safely)

	Affected Limb:		Score
1. Open jar of coffee	☐ holds jar	☐ holds lid	
2. Call 911	☐ holds receiver	☐ dials phone	
3. Draw a line with a ruler	☐ holds ruler	☐ holds pen	
4. Pour a glass of water	☐ holds glass	☐ holds pitcher	
5. Wring out washcloth			
6. Do up five buttons			
7. Dry back with towel	☐ reachs for towel	☐ grasps towel end	
Total Score			**/49**

Comments

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