

Stroke Upper Limb Capacity Scale (SULCS)

Patient name :
Date of birth :
Diagnosis :
Date of stroke :
Therapist name :
Assessment date :

Appendix A: general instructions and list of test material for SULCS

Appendix B: SULCS form tasks 9 and 10

Score

0 = patient is unable to perform the task in the manner described

1 = patient is able to perform the task in the manner described

Note

Option 1: start the test at task 1 and move forward from there. When 3 consecutive tasks *cannot* be performed, the test may be stopped. Each remaining item is scored with 0.






Option 2: start the test at task 10 and move backward from there. When 3 consecutive tasks *can* be performed, the test may be stopped. Each remaining item is scored with 1.

Stroke Upper Limb Capacity Scale (SULCS)


Score

0 = patient is unable to perform the task in the manner described


1 = patient is able to perform the task in the manner described

	Description	Picture	Score
1	<p>What Using the forearm for support while seated</p> <p>How Reaching forward across the body, leaning on the affected forearm</p> <p>Preparation The patient is seated at a table. The affected arm is on the table, parallel to the edge where the patient is sitting. A pen is placed on the table, in front of the affected elbow and far enough away that complete extension of the non-affected arm and movement of the upper torso is needed to reach the pen.</p> <p>Task The patient reaches to pick up the pen with the non-affected hand. The affected forearm is used as a support.</p> <p>Note The affected arm must not move position as the patient reaches forward to pick up the pen.</p>		<input type="checkbox"/>
2	<p>What Clamping an object between torso and affected upper arm</p> <p>How Pressing the arm firmly against the side of the body</p> <p>Preparation The patient is standing (sitting, if necessary) at a table. A magazine folded lengthways in half is on the table. The affected upper arm is hanging freely next to the body.</p> <p>Task The patient picks up the magazine using the non-affected hand and clamps it between the torso and the affected upper arm.</p> <p>Note The magazine must be held firmly for 10 s. The therapist checks this, if necessary, by lightly pulling on the magazine.</p>		<input type="checkbox"/>
3	<p>What Sliding on object across a table while seated</p> <p>How Using controlled sliding movement of the affected hand</p> <p>Preparation The patient is seated at a table. The affected hand is on a tea towel that has been folded in four, with the palm facing downwards and the fingers pointing forwards.</p> <p>Task The patient pushes the tea towel forwards over the table.</p> <p>Note The elbow must be extended by at least 160°, and may be lifted off the table. Fully extended fingers are not necessary.</p>		<input type="checkbox"/>
4	<p>What Turning a screw top lid</p> <p>Preparation The patient is sitting at a table with both arms on the table. A closed peanut butter jar with a plastic screw top lid is 15cm/ 6 inches in front of the patient on the table.</p> <p>Task The patient holds the jar firmly on the table with the non-affected hand and, using the affected hand, turns the lid at least a quarter of a turn.</p> <p>Note The jar must remain in the same place on the table and may not turn.</p>		<input type="checkbox"/>
5	<p>What Picking up a glass of water and drinking from it</p> <p>Preparation The patient is sitting at a table with both arms on the table. A glass, ½ filled with water, is 15 cm/6 inches in front of the patient on the table.</p> <p>Task The patient picks up the glass from the table using the affected hand, takes a drink and places the glass back on the table without spilling.</p> <p>Note The non-affected hand is not used.</p>		<input type="checkbox"/>


6 **What Grasping a high ball**
 Preparation The patient is standing (sitting, if necessary) with no other support within reach. The therapist holds a tennis ball in front of and above the affected shoulder in such a way that the patient has to fully extend the affected arm and must raise the arm $\pm 120^\circ$ to grasp the tennis ball.
 Task The patient reaches for the ball and takes it with the affected hand.



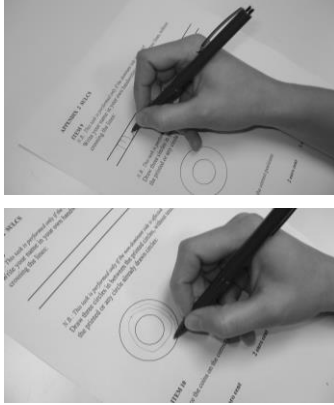
7 **What Combing one's hair**
 Preparation The patient is standing (sitting, if necessary) at a table. A comb is within reach on the table.
 Task The patient combs his/her hair with at least two strokes on the top and each side of the head.
 Note The head should be held straight. The patient may reach the sides from above or from the side. Where the personal situation is less suited to this test, an 'as-if' movement should be made.



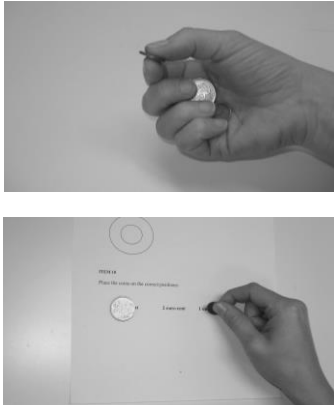
8 **What Fastening buttons**
How Working with two hands
 Preparation The patient is sitting at a table. A man's shirt is on the table directly in front of the patient. The collar is at the top, facing upwards. The top button is fastened, all the others are unfastened.
 Task The patient fastens four buttons within 60s using both hands.
 Note The affected fingers must be used actively, either to hold the material or the button, or to open the button hole.



9 **What Writing**
How See Appendix 1.2
 Preparation The patient is sitting at a table. The sheet of paper, included as Appendix 1.2, is 15 cm/6 inches in front of the patient on the table. A pen is on the sheet of paper.
 Task (*affected side not the dominant side*): The patient picks up the pen and draws three circles between the two circles on the sheet, without touching the edges of the printed circles or any circle already drawn.
 Note Explain the instruction in full before-hand and suggest the patient starts near to the inner circle. The patient may move the sheet of paper.
 Task (*affected side is the dominant side*): The patient picks up the pen and writes his/her first and last name legibly in his/her own handwriting between the lines.
 Note The patient may move the sheet of paper.



10 **What Manipulating coins**
How See Appendix 1.2
 Preparation The patient is sitting at a table. The sheet of paper, included as Appendix 1.2, is on the table, directly in front of the patient. There are a 50 eurocent coin, a 2 eurocent coin and a 1 eurocent coin (or their equivalents in size and weight) on the table. The affected forearm is on the table with the hand facing palm-up. Using the non-affected hand, the patient puts the coins in the affected hand.
 Task The patient manipulates the coins within the affected hand, one at a time to between the tips of the thumb and index finger and places them on their designated positions on the sheet.
 Note It does not matter in which order the coins are placed in their designated spots. During the manipulation, the forearm must rest on the table.



TOTAL SULCS SCORE

APPENDIX A: GENERAL INSTRUCTIONS AND LIST OF TEST MATERIAL FOR SULCS

Instructions & explanation

1. The 10 tasks on the list are in order of difficulty and complexity.
2. The tasks are performed standing and sitting. It is permissible to deviate from the prescribed order of the test items for reasons of practicality.
3. All tasks must be performed unaided.
4. It is important to score whether the task can be performed in line with the instructions, (yes/no), not the quality of how it is performed.
5. If necessary, it is permissible to repeat the instructions or to demonstrate the task.
6. Starting with item 1 or 10 can be decided by making a before-hand judgment of the level of upper limb capacity. Start with item 1 for low level capacity and item 10 for high level capacity.

Test materials

- A height-adjustable table
- A chair
- A pen
- A weekly magazine approximately A4 or Letter size (± 210 grams/7 ½ ounces) folded in half lengthways
- One tea towel
- An empty peanut butter jar, ± 400 grams/12 fluid ounces, with a plastic screw top lid (diameter lid ± 77 mm/3 inches, ± 20 mm/0.8 inches high). The closed lid and the jar are marked with a marker pen so that each time the jar is re-closed, as it would be after normal use, the marks line up. (This is to ensure that the degree of difficulty is the same each time the test is carried out.)
- A long drinks glass (diameter ± 55 mm/2.2 inches, ± 150 mm/5.9 inches high)
- A tennis ball
- A comb
- A man's shirt
- A stopwatch
- Three different sized coins: a 50 euro cent coin (diameter ± 23 mm/0.9 inches), a 2 cent coin (diameter ± 17 mm/0.7 inches) and a 1 euro cent coin (diameter ± 15 mm/0.6 inches), or their equivalents in size and weight
- Appendix 2

Contact information

For more information:

<https://www.maartenskliniek.nl/zorgprofessionals/sulcs-stroke-upper-limb-capacity-scale>

For questions, contact the occupational therapy department of the Maartenskliniek:

ergotherapie@maartenskliniek.nl

APPENDIX B: SULCS form tasks 9 and 10

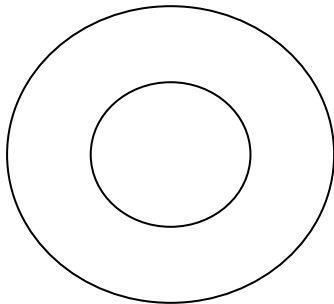
TASK 9

Note: This task is performed only if the dominant side is affected

Write your name in your own handwriting between the two lines, without crossing the lines:

Note: This task is performed only if the non-dominant side is affected

Draw three circles in between the printed circles, without touching the edges of the printed or any circle already drawn circles:



TASK 10

Place the coins on the correct positions:

50 euro cent

2 euro cent

1 euro cent