



## Instructions for the ABILHAND-RA questionnaire

### The ABILHAND-RA questionnaire

The ABILHAND questionnaire was developed as a measure of manual ability as perceived by the patient. It explores the most representative inventory of manual activities. Some items were selected from existing scales; others were devised to extend the range of activities. The original questionnaire was applied to a sample of rheumatoid arthritis patients (Arch Phys Med Rehabil 1998; 79: 1038-42). A second application showed that a subset of 23 bimanual activities (usually realized with two hands) was the most discriminating and valid in chronic stroke patients (Stroke 2001; 32: 1627-34). A third application showed that a subset of 27 activities presented good psychometric properties in rheumatoid arthritis patients (Ann Rheum Dis. 2007; 66(8): 1098-105). ABILHAND was originally developed using the Rasch measurement model. It allows ordinal scores to be converted into linear measures located on a unidimensional scale.

### Procedures

The ABILHAND questionnaire is administered on an interview basis (patients do not realize the activities). Patients are asked to estimate the ease or difficulty in performing each activity, when the activities are done:

- Without other technical or human help (even if the patient actually uses help in daily life);
- Irrespective of the limb(s) actually used to do the activity;
- Whatever the strategy used (any compensation is allowed).

During the evaluation, a 3-level response scale is presented to the patients. Patients are asked to rate their perception on the response scale as either "Impossible", "Difficult" or "Easy". Activities not attempted in the last 3 months are not scored and are entered as missing responses (tick the question mark). For any activity the four potential answers are:

- **Impossible:** the patient is unable to perform the activity without using any other help;
- **Difficult:** the patient is able to perform the activity without any help but experiences some difficulty;
- **Easy:** the patient is able to perform the activity without any help and experiences no difficulty;
- **Question mark:** the patient cannot estimate the difficulty of the activity because he/she has never done the activity. Note that when a patient has never attempted the activity, the rater needs to make sure why it is so. If an activity was never attempted because it is impossible, then it must be scored as "Impossible" rather than "Question mark".

The instructions are given to the patient only at the beginning of the test. Five items are used for training in order to help the patient in feeling each level of the rating scale and in using the whole amplitude of the response scale. The subsequent activities are neither preceded nor followed by any instruction. The examiner can repeat the instructions whenever the patient shows some hesitation in answering.

### Activities order

The activities of the ABILHAND questionnaire are presented in a random order to avoid any systematic effect. Ten different random orders of presentation are used. The rater must select the next one of the 10 orders for each new assessment, no matter which patient is tested.

### Package content

- 1 instruction sheet;
- Testing forms in 10 random orders (10 sheets);
- Response scale presented to the patient during the evaluation (1 sheet).

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

	How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1.	Picking up a can				
2.	Handling a stapler				
3.	Writing a sentence				
4.	Using a screwdriver				
5.	Screwing a nut on				
6.	Replacing a light bulb				
7.	Cutting meat				
8.	Peeling potatoes with a knife				
9.	Taking a coin out of the pocket				
10.	Sharpening a pencil manually				
11.	Filing one's nails				
12.	Handling a 4 colour ballpoint pen with one hand				
13.	Grasping a coin on a table				
14.	Wrapping up gifts				
15.	Turning a key in a keyhole				
16.	Peeling onions				
17.	Brushing one's hair				
18.	Opening a pack of chips				
19.	Turning off a faucet				
20.	Zippering up a jacket				
21.	Opening a screw-topped jar				
22.	Hammering a nail				
23.	Fastening a snap (jacket, bag, ...)				
24.	Threading a needle				
25.	Taking the metallic cap off a bottle using a bottle opener				
26.	Cutting one's nails				
27.	Combing one's hair				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

	How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1.	Combing one's hair				
2.	Turning off a faucet				
3.	Picking up a can				
4.	Zippering up a jacket				
5.	Cutting meat				
6.	Handling a 4 colour ballpoint pen with one hand				
7.	Opening a screw-topped jar				
8.	Opening a pack of chips				
9.	Hammering a nail				
10.	Turning a key in a keyhole				
11.	Wrapping up gifts				
12.	Handling a stapler				
13.	Filing one's nails				
14.	Fastening a snap (jacket, bag, ...)				
15.	Using a screwdriver				
16.	Peeling onions				
17.	Taking a coin out of the pocket				
18.	Peeling potatoes with a knife				
19.	Cutting one's nails				
20.	Grasping a coin on a table				
21.	Threading a needle				
22.	Taking the metallic cap off a bottle using a bottle opener				
23.	Sharpening a pencil manually				
24.	Writing a sentence				
25.	Replacing a light bulb				
26.	Screwing a nut on				
27.	Brushing one's hair				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1. Sharpening a pencil manually				
2. Threading a needle				
3. Peeling potatoes with a knife				
4. Peeling onions				
5. Opening a screw-topped jar				
6. Cutting meat				
7. Grasping a coin on a table				
8. Turning a key in a keyhole				
9. Writing a sentence				
10. Opening a pack of chips				
11. Wrapping up gifts				
12. Fastening a snap (jacket, bag, ...)				
13. Cutting one's nails				
14. Filing one's nails				
15. Brushing one's hair				
16. Replacing a light bulb				
17. Using a screwdriver				
18. Screwing a nut on				
19. Handling a stapler				
20. Handling a 4 colour ballpoint pen with one hand				
21. Turning off a faucet				
22. Picking up a can				
23. Combing one's hair				
24. Taking a coin out of the pocket				
25. Zipping up a jacket				
26. Taking the metallic cap off a bottle using a bottle opener				
27. Hammering a nail				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1. Turning a key in a keyhole				
2. Fastening a snap (jacket, bag, ...)				
3. Screwing a nut on				
4. Opening a screw-topped jar				
5. Threading a needle				
6. Turning off a faucet				
7. Handling a 4 colour ballpoint pen with one hand				
8. Sharpening a pencil manually				
9. Opening a pack of chips				
10. Peeling potatoes with a knife				
11. Brushing one's hair				
12. Taking the metallic cap off a bottle using a bottle opener				
13. Peeling onions				
14. Cutting one's nails				
15. Filing one's nails				
16. Combing one's hair				
17. Zipping up a jacket				
18. Picking up a can				
19. Wrapping up gifts				
20. Handling a stapler				
21. Using a screwdriver				
22. Hammering a nail				
23. Grasping a coin on a table				
24. Replacing a light bulb				
25. Taking a coin out of the pocket				
26. Writing a sentence				
27. Cutting meat				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1. Sharpening a pencil manually				
2. Handling a stapler				
3. Peeling potatoes with a knife				
4. Zipping up a jacket				
5. Writing a sentence				
6. Taking the metallic cap off a bottle using a bottle opener				
7. Cutting one's nails				
8. Using a screwdriver				
9. Replacing a light bulb				
10. Opening a pack of chips				
11. Picking up a can				
12. Turning off a faucet				
13. Threading a needle				
14. Taking a coin out of the pocket				
15. Wrapping up gifts				
16. Fastening a snap (jacket, bag, ...)				
17. Opening a screw-topped jar				
18. Hammering a nail				
19. Combing one's hair				
20. Turning a key in a keyhole				
21. Cutting meat				
22. Grasping a coin on a table				
23. Brushing one's hair				
24. Peeling onions				
25. Handling a 4 colour ballpoint pen with one hand				
26. Filing one's nails				
27. Screwing a nut on				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

	How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1.	Turning a key in a keyhole				
2.	Handling a stapler				
3.	Taking a coin out of the pocket				
4.	Brushing one's hair				
5.	Grasping a coin on a table				
6.	Handling a 4 colour ballpoint pen with one hand				
7.	Combing one's hair				
8.	Cutting meat				
9.	Filing one's nails				
10.	Peeling potatoes with a knife				
11.	Hammering a nail				
12.	Peeling onions				
13.	Screwing a nut on				
14.	Fastening a snap (jacket, bag, ...)				
15.	Wrapping up gifts				
16.	Zippering up a jacket				
17.	Taking the metallic cap off a bottle using a bottle opener				
18.	Sharpening a pencil manually				
19.	Turning off a faucet				
20.	Picking up a can				
21.	Opening a pack of chips				
22.	Threading a needle				
23.	Replacing a light bulb				
24.	Writing a sentence				
25.	Opening a screw-topped jar				
26.	Using a screwdriver				
27.	Cutting one's nails				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

	How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1.	Handling a 4 colour ballpoint pen with one hand				
2.	Zippering up a jacket				
3.	Peeling potatoes with a knife				
4.	Using a screwdriver				
5.	Taking a coin out of the pocket				
6.	Taking the metallic cap off a bottle using a bottle opener				
7.	Screwing a nut on				
8.	Filing one's nails				
9.	Replacing a light bulb				
10.	Fastening a snap (jacket, bag, ...)				
11.	Sharpening a pencil manually				
12.	Handling a stapler				
13.	Turning a key in a keyhole				
14.	Writing a sentence				
15.	Peeling onions				
16.	Brushing one's hair				
17.	Opening a screw-topped jar				
18.	Picking up a can				
19.	Threading a needle				
20.	Turning off a faucet				
21.	Cutting one's nails				
22.	Wrapping up gifts				
23.	Hammering a nail				
24.	Grasping a coin on a table				
25.	Cutting meat				
26.	Combing one's hair				
27.	Opening a pack of chips				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

	How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1.	Wrapping up gifts				
2.	Peeling onions				
3.	Cutting meat				
4.	Opening a screw-topped jar				
5.	Replacing a light bulb				
6.	Peeling potatoes with a knife				
7.	Threading a needle				
8.	Hammering a nail				
9.	Using a screwdriver				
10.	Zippering up a jacket				
11.	Sharpening a pencil manually				
12.	Turning a key in a keyhole				
13.	Turning off a faucet				
14.	Brushing one's hair				
15.	Handling a stapler				
16.	Picking up a can				
17.	Cutting one's nails				
18.	Fastening a snap (jacket, bag, ...)				
19.	Filing one's nails				
20.	Taking the metallic cap off a bottle using a bottle opener				
21.	Handling a 4 colour ballpoint pen with one hand				
22.	Taking a coin out of the pocket				
23.	Grasping a coin on a table				
24.	Writing a sentence				
25.	Opening a pack of chips				
26.	Combing one's hair				
27.	Screwing a nut on				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1. Threading a needle				
2. Grasping a coin on a table				
3. Turning a key in a keyhole				
4. Sharpening a pencil manually				
5. Combing one's hair				
6. Cutting one's nails				
7. Cutting meat				
8. Opening a pack of chips				
9. Fastening a snap (jacket, bag, ...)				
10. Writing a sentence				
11. Picking up a can				
12. Screwing a nut on				
13. Handling a 4 colour ballpoint pen with one hand				
14. Opening a screw-topped jar				
15. Turning off a faucet				
16. Wrapping up gifts				
17. Brushing one's hair				
18. Filing one's nails				
19. Replacing a light bulb				
20. Peeling onions				
21. Zipping up a jacket				
22. Using a screwdriver				
23. Taking a coin out of the pocket				
24. Peeling potatoes with a knife				
25. Handling a stapler				
26. Hammering a nail				
27. Taking the metallic cap off a bottle using a bottle opener				

**ABILHAND-RA - Manual Ability Measure****English version - Canada**

Patient \_\_\_\_\_

Date \_\_\_\_\_

How <b>DIFFICULT</b> are the following activities?	<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>	<b>?</b>
1. Combing one's hair				
2. Turning off a faucet				
3. Cutting one's nails				
4. Picking up a can				
5. Handling a 4 colour ballpoint pen with one hand				
6. Peeling potatoes with a knife				
7. Using a screwdriver				
8. Turning a key in a keyhole				
9. Brushing one's hair				
10. Grasping a coin on a table				
11. Hammering a nail				
12. Replacing a light bulb				
13. Taking the metallic cap off a bottle using a bottle opener				
14. Zipping up a jacket				
15. Screwing a nut on				
16. Peeling onions				
17. Writing a sentence				
18. Fastening a snap (jacket, bag, ...)				
19. Opening a pack of chips				
20. Taking a coin out of the pocket				
21. Handling a stapler				
22. Opening a screw-topped jar				
23. Wrapping up gifts				
24. Cutting meat				
25. Threading a needle				
26. Sharpening a pencil manually				
27. Filing one's nails				

		
<b>Impossible</b>	<b>Difficult</b>	<b>Easy</b>

## Test package record

Scale definition	
Scale name	ABILHAND-RA
Scale version	1.0
Item orders	10
Scale reference	Ann Rheum Dis 2007; 66: 1098-105.
Calibration definition	
Online analysis	<a href="http://www.rehab-scales.org">http://www.rehab-scales.org</a>
Calibration reference	No specific calibration, refer to Ann Rheum Dis 2007; 66: 1098-105.
Language definition	
Language	English
Country	Canada
Translated instructions	Yes
Translated items	Yes
Translated response scale	Yes
Translated from	English
Translation methodology	See TransPerfect Translations International Inc
Translation reference	None
Translation credits	Original translation credited to TransPerfect Translations International Inc
Cross-cultural validation	None