SARAH Trial



PARTICIPANTS ID:	

Strengthening And stretching for Rheumatoid Arthritis of the Hand (SARAH) Trial

Baseline Participant Questionnaire

If you need to get in touch with the SARAH Trial research team, please contact:

SARAH Trial team Warwick Clinical Trials Unit



Phone: Fax: E-mail:





Please read these instructions before completing the questionnaire:

Thank you for agreeing to take part in this study. The answers you give in this questionnaire will help us find out if the treatments you receive are helpful for your rheumatoid arthritis.

Please answer all the questions. Although it may seem that questions are asked more than once, it is still important that you answer every one.

Please follow the instructions for each section carefully.

Crosses

Some questions request that you place a cross in the box provided. If so, please use a cross rather than a tick, so that we can tell when you really meant to choose a particular box.

For example in the following question, if your answer 'yes', you should place a cross firmly in the box next to yes.

Do you drive a car?	Yes	No	
Do you drive a car:	\boxtimes		

Circles

Some questions request that you draw a small circle around a number that best represents your answer. If so, please use a circle rather than rather than underlining a number, or placing a cross or a tick.

For example in the following question, if your answer is 'fair', you should draw a small circle around the number '3'.

How well did you drive today?	Very Good	Good	Fair	Poor	Very Poor
	1	2	3	4	5

Please use a BLACK or BLUE pen. Please do not use a pencil.

Please check that you have completed all sections and return your completed questionnaire to the research clinician.

You will be asked to complete another questionnaire in approximately 4 months. Please keep a record of any days off work, and hospital or medical procedures you undergo as a result of your rheumatoid arthritis.

Please write any notes you have for the research team on the back page.

Baseline V1.0 14/08/09

This section is to find out some general information about you. Please answer the following questions as completely as you can.

What is the date you are completing this questionnaire?				this	Approximately when were you firs diagnosed with rheumatoid arthrit				you first d arthritis?
D D M M	Υ	Υ	Υ	Υ		M	M	YY	YY
3. Date of birth:					4. Se	ΣX			
		,	[T				Male	Female
D D M M	Υ	Υ	Υ	Υ				LI₁	\bigsqcup_2
5. What is your home postcode?									
6. To which of these ethnic დ	groups	do y	ou c	onsider	you belon	g? (P	lease	tick one box)
White],	Mixed				
Indian]3	Pakista	ani			\square_4
Bangladeshi] ₅	Black or Black British				\square_6
Chinese			Е],	Other ethnic group			\square_{8}	
Prefer not to say]9					
7. What is your current marit	tal stat	us?							
Single				\rfloor_1	Marrie	d			
Separated]3	Divorc	ed			\square_4
Widowed				$ m J_{\scriptscriptstyle 5}$	Cohab	iting			□ ₆
8. Are you right-handed or l	eft-har	nded	?						
Right				\mathbf{J}_1					
Left]2					
Not clearly one or the other]3					

This section asks for your views about your hands and your health. This information will provide information on how you feel and how well you are able to do your usual activities. Please answer <u>every</u> question by marking the answer that you judge to be most appropriate. If you are unsure about how to answer a question, please give the best answer you can.

Section 2.1

The following questions refer to the function of your hands/wrists **during the past week** (Please <u>circle</u> **one** answer for each question)

A. The following questions refer to your right hand/wrist.

	Very Good	Good	Fair	Poor	Very Poor
Overall, how well did your right hand work?	1	2	3	4	5
How well did your right fingers move?	1	2	3	4	5
How well did your right wrist move?	1	2	3	4	5
4. How was the strength in your right hand?	1	2	3	4	5
How was the sensation (feeling) in your right hand?	1	2	3	4	5

B. The following questions refer to your left hand/wrist.

	Very Good	Good	Fair	Poor	Very Poor
Overall, how well did your left hand work?	1	2	3	4	5
How well did your left fingers move?	1	2	3	4	5
How well did your left wrist move?	1	2	3	4	5
4. How was the strength in your left hand?	1	2	3	4	5
How was the sensation (feeling) in your left hand?	1	2	3	4	5

The following questions refer to the ability of your hands to do certain tasks **during the past week**. If you have not performed a task during the past week, please estimate the difficulty that you would have had when performing it. (*Please* <u>circle</u> **one** answer for each question)

A. How difficult was it for you to perform the following activities using your right hand?

	Not at all difficult	A little difficult	Somewhat difficult	Moderately difficult	Very difficult
1. Turn a door knob?	1	2	3	4	5
2. Pick up a coin?	1	2	3	4	5
3. Hold a glass of water?	1	2	3	4	5
4. Turn a key in a lock?	1	2	3	4	5
5. Hold a frying pan?	1	2	3	4	5

B. How difficult was it for you to perform the following activities using your left hand?

	Not at all difficult	A little difficult	Somewhat difficult	Moderately difficult	Very difficult
1. Turn a door knob?	1	2	3	4	5
2. Pick up a coin?	1	2	3	4	5
3. Hold a glass of water?	1	2	3	4	5
4. Turn a key in a lock?	1	2	3	4	5
5. Hold a frying pan?	1	2	3	4	5

C. How difficult was it for you to perform the following activities using both of your hands?

	Not at all difficult	A little difficult	Somewhat difficult	Moderately difficult	Very difficult
1. Open a jar?	1	2	3	4	5
2. Button a shirt/blouse?	1	2	3	4	5
3. Eat with a knife/fork?	1	2	3	4	5
4. Carry a grocery bag?	1	2	3	4	5
5. Wash dishes?	1	2	3	4	5
6. Wash your hair?	1	2	3	4	5
7. Tie shoelaces/knots?	1	2	3	4	5

The following questions refer to how you did in your normal work (including both housework and studying) **during the past 4 weeks**. (*Please <u>circle</u> one answer for each question)*

		Always	Often	Sometimes	Rarely	Never
1.	How often were you unable to do your work because of problems with your hands/ wrists?	1	2	3	4	5
2.	How often did you have to shorten your work day because of problems with your hands/wrists?	1	2	3	4	5
3.	How often did you have to take it easy at your work because of problems with your hands/wrists?	1	2	3	4	5
4.	How often did you accomplish less in your work because of problems with your hands/ wrists?	1	2	3	4	5
5.	How often did you take longer to do the tasks in your work because of problems with your hands/wrists?	1	2	3	4	5

The following questions refer to how much pain you had in your hands/wrists during the past week. (Please circle one answer for each question)

1. How often did you have pain in your hands/wrists?

Always	1
Often	2
Sometimes	3
Rarely	4
Never	5

If you answered 'Never', please skip the following questions and go to Section 2.5 on the next page.

2. Please describe the pain you have in your hands/wrists

Very mild	1
Mild	2
Moderate	3
Severe	4
Very severe	5

	Always	Often	Sometimes	Rarely	Never
How often did the pain in your hands/wrists interfere with your sleep?	1	2	3	4	5
 How often did the pain in your hands/wrists interfere with your daily activities (such as eating or bathing)? 	1	2	3	4	5
5. How often did the pain in your hands/ wrists make you unhappy?	1	2	3	4	5

The following questions refer to the appearance (look) of your hands **during the past week**. (*Please* <u>circle</u> **one** answer for each question)

A. The following questions refer to your **right** hand.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I was satisfied with the appearance (look) of my right hand.	1	2	3	4	5
The appearance (look) of my right hand sometimes made me uncomfortable in public	1	2	3	4	5
The appearance (look) of my right hand made me depressed.	1	2	3	4	5
The appearance (look) of my right hand interfered with my normal social activities	1	2	3	4	5

B. The following questions refer to your left hand.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I was satisfied with the appearance (look) of my left hand.	1	2	3	4	5
The appearance (look) of my left hand sometimes made me uncomfortable in public	1	2	3	4	5
The appearance (look) of my left hand made me depressed.	1	2	3	4	5
The appearance (look) of my left hand interfered with my normal social activities	1	2	3	4	5

The following questions refer to your satisfaction with your hands/wrists **during the past week**. (Please <u>circle</u> **one** answer for each question)

A. The following questions refer to your right hand/wrist.

		Very satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Very dissatisfied
1.	Overall function of your right hand	1	2	3	4	5
2.	Motion of the fingers in your right hand	1	2	3	4	5
3.	Motion of your right wrist	1	2	3	4	5
4.	Strength of your right hand	1	2	3	4	5
5.	Pain level of your right hand	1	2	3	4	5
6.	Sensation (feeling) of your right hand	1	2	3	4	5

B. The following questions refer to your **left** hand/wrist.

	Very satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Very dissatisfied
Overall function of your left hand	1	2	3	4	5
Motion of the fingers in your left hand	1	2	3	4	5
3. Motion of your left wrist	1	2	3	4	5
4. Strength of your left hand	1	2	3	4	5
5. Pain level of your left hand	1	2	3	4	5
6. Sensation (feeling) of your left hand	1	2	3	4	5

<u>Se</u>	ection 3						
	During the	past week, ho		-	•		g areas?
		(pleas	e provide an ar	iswer for <u>both r</u>	nands and wris	<u>ts</u>)	
		No pain experienced	Not at all troublesome	Slightly troublesome	Moderately troublesome		Extremely troublesome
1.	Right hand			Пз		\square_{5}	
2.	Left hand	□₁		\square_3	\square_4		$\square_{\scriptscriptstyle 6}$
3.	Right wrist			\square_3	\square_4		$\square_{\scriptscriptstyle 6}$
4.	Left wrist		\square_2	Пз	\square_4		$\square_{\scriptscriptstyle 6}$

The following questions refer to how confident you feel in performing certain tasks. (*Please* <u>circle</u> **one** answer for each question)

 How confident are you that you can do all the things necessary for you to manage condition on a regular basis? 									your			
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident	
	2. How confident are you that you can judge when the changes in your condition mean you should visit a doctor?											
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident	
3. How o							asks and e a doct		ies need	led to m	nanage	
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident	
						the emo	otional d e?	istress (caused	oy your	health	
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident	
5. How o	onfiden your illn					s other t	han just	taking r	medicati	on to re	duce how	
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident	
6. How on three to	onfiden o four ti			ou can c	lo gentle	e exercis	ses for m	nuscle s	trength	and flex	ribility	
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident	
7. How o	confiden	t are vo	u that vo	ou can e	exercise	without	making	vour sv	mptoms	worse'	?	
Not at all	1	2	3	4	5	6	7	8	9	10	Totally	
confident		_		-			ſ		J		confident	



PARTICIPANTS ID:					

Strengthening And stretching for Rheumatoid Arthritis of the Hand (SARAH) Trial

Baseline

Research Clinic Assessment Form

If you need to get in touch with the SARAH Trial research team, please contact:

SARAH Trial team

Warwick Clinical Trials Unit

Phone:
Fax:





This section is to ensure the research team have sufficient details about the assessment that you are performing. Please ensure that you have entered the participant's ID number on the front cover of this assessment form.

Date you are completing this assess	1	2. Time asse	that you ssment (began 24 hour	complet clock):	ing this		
D D M M Y Y	ΥΥ	,		Н	Н	M	M	
3. Centre ID:			4. Rese	arch clin	ician's r	ame:		
Section 2 This section relates to information will need to collect from their me				orovided	I from b	lood te	sts tha	t you
1. Latest CRP level (mg/l):	2. Date	e latest C	RP was	measur	ed:			,
	D	D	M	M	Y	Υ	Y	Y
3. Latest ESR level (mm/hour):	e latest E	SR was	measur	ed:		 		
	D	D	М	М	Υ	Υ	Υ	Υ
5. Rheumatoid factor: Positive Negative Not	availab	ile						

This section relates to the medication that the participant is taking. **This information can be** provided by the participant or you may need to collect it from their medical records.

3. Prescribed current medications:			
Drug	Yes	Dose	How often
lbuprofen			
Naproxen			
Diclofenac	\square_3		
Indomethacin	\square_4		
Other non-steroidal anti-inflammatory			
Sulfasalazine			
Hydroxychloroquine			
Methotrexate	\square_{8}		
Gold injections			
Leflunomide			
Azathioprine			
Prednisolone			
Infliximab [Remicade]			
Etanercept [Enbrel]	□ ₁₄		
Adalimumab [Humira]			
Other:			
Any additional 'as required' medication (only those used in last 7 days):	ons		
Drug	Yes		
Extra non-steroidal anti-inflammatory	\square_1		
Steroid tablet	\square_2		
Steroid injection into joint	\square_3		
Steroid injection into muscle			

Measuring Metacarpophalangeal (MCP) Joint Deformity

Participants should be advised to sit comfortably in a chair, with their forearms and hands supported on a table in front in a pronated position (palm facing down). All potentially interfering jewellery should be removed.

When measuring MCP joint deformity, a goniometer is placed on the back of the hand. The centre of the goniometer is placed over the MCP joint, with one arm placed along the midline of the finger (centred over the PIP joint), and the other arm placed along the associated metacarpal, lining the 180 degree marker up with the midline of the finger (see figure below). This process should be repeated for all four fingers on each hand.

NB: Ulnar deviation (fingers bent away from thumb) is recorded as a positive value. Radial deviation (fingers bent towards the thumb) is recorded as a negative value.

In this example, all values would be recorded as positive as all the fingers bend away from the thumb.



Figure 4.1. Measuring MCP joint deformity



MCP Joint Deformity (degrees)

	Left hand	Right hand	
Index finger			
Middle finger			
Ring finger			
Little finger			

Measuring Active Wrist Flexion

Participants should be advised to sit comfortably in a chair with their elbow supported on a table in front of them and all potentially interfering jewellery removed.

The elbow is bent to approximately 90 degrees and the wrist should be in a neutral position (palm neither facing up nor down, similar to an 'arm wrestling' position).

When measuring wrist flexion, a goniometer is placed on the back of the forearm and the hand in line with the midline of the forearm and the metacarpal/phalanx of the middle (3rd) finger.

Participants are instructed to "bend your wrist down as far as you can go with your fingers in a relaxed position" and then the measurement should be recorded.



Figure 5.1. Measuring wrist flexion

Active wrist flexion (degrees)

	Left wrist	Right wrist	
Wrist flexion			

Measuring Active Wrist Extension

When measuring wrist extension, a goniometer is placed on the palmar side of the forearm and the hand (as shown in Figure 5.2), in line with the midline of the forearm and the middle (3^{rd}) metacarpal/phalanx.

Participants are instructed to "bend your wrist back as far as you can go with your fingers in a relaxed position" and then the measurement should be recorded.



Figure 5.2. Measuring wrist extension

Active wrist extension (degrees)

	Left wris	 ht st
Wrist extension		

Measuring Combined Finger Flexion

Combined Finger Flexion is a measurement from each distal corner of the nail bed on the radial border (thumb side) to the distal palmar crease of the palm.

To perform a measurement, the elbow is bent to approximately 45 degrees and the wrist should be in a neutral position (palm neither facing up nor down).

Participants are instructed to "make a fist as much as you can" and then the ruler on the end of the goniometer is used to measure the distance between the tip of the distal corner of the nail bed on the radial border (thumb side) to the distal palmar crease of the palm.



Figure 5.3. Measuring Composite Finger Flexion

Combined Finger Flexion (mm)

	Left hand	Right hand	
Index finger			
Middle finger			
Ring finger			
Little finger			

Method A - Measuring Composite Finger Extension

For composite finger extension, the elbow is bent to approximately 45 degrees and palm should be facing down (wrist pronated) to rest flat on the table.

If the patient is unable to achieve this position (they have flexion deformities) please use the next page

Participants are instructed to "lift your finger up towards the ceiling as much as you can" and then the ruler on the end of the goniometer is used to measure the distance between the tip of the distal corner of the nail bed on the radial border (thumb side) to the table top. This process is repeated for all the fingers (not the thumb).

<u>NB:</u> if the amount of extension is greater than what can be recorded by the ruler, mark the distance on a sheet of paper and then use the ruler to measure this afterwards.



Figure 5.4a. Measuring Composite Finger Extension

Combined Finger Extension (mm)

	Left hand	Right hand	
Index finger			
Middle finger			
Ring finger			
Little finger			

Method B - Measuring Composite Finger Extension with patients who have finger flexion deformities.

* Only use this page if you were unable to complete the previous page *

For composite finger extension, the elbow is bent to approximately 45 degrees and palm should be facing up (wrist supinated).

Participants are instructed to "try and straighten your fingers towards the table as much as you can" and then the ruler on the end of the goniometer is used to measure the distance between the tip of the distal corner of the nail bed on the radial border (thumb side) to the table top. This process is repeated for all the fingers (not the thumb).

NB: if the amount of extension is greater than what can be recorded by the ruler, mark the distance on a sheet of paper and then use the ruler to measure this afterwards.



Figure 5.4b. Measuring Composite Finger Extension for finger flexion deformities

Combined Finger Extension (mm)

	Left hand	Right hand	
Index finger			
Middle finger			
Ring finger			
Little finger			

Thumb Opposition

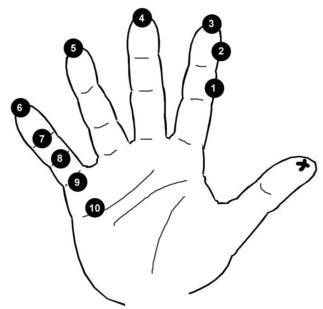
The Kapandji test of thumb opposition has been chosen as it offers a simple system of using the hand as a system of reference³⁰. The patient is asked to do the following movements with the tip of the thumb (see 'x' on Figure below):

- 1. Touch the lateral side of the second phalanx of the index finger
- 2. Touch the lateral side of the third phalanx of the index finger
- 3. Touch the tip of the index finger
- 4. Touch the tip of the middle finger
 5. Touch the tip of the ring finger
 6. Touch the tip of the little finger

- 7. Touch the palmar DIP crease of the little finger
- 8. Touch the palmar PIP crease of the little finger
- 9. Touch the proximal palmar crease of the little finger
- 10. Touch the distal palmar crease of the hand

The score is the highest number that the participant can achieve (maximum =10).

Figure 5.5. The 10 points of the Kapandji test of thumb opposition



Thumb Opposition Score (1-10)

	Left Thumb	Right Thumb
Score		

Swollen & Tender joint count

<u>Joint swelling</u> is defined as soft tissue swelling that is detectable along the joint margins. Neither bony enlargement nor deformity of the joint constitutes swelling. Each swollen joint should be marked on the diagram below, and the total count should be written in the adjoining boxes.

<u>Joint tenderness</u> is defined as pain at rest that is induced by pressure. The examiner uses his/her thumb and index finger to exert pressure that is sufficient to cause 'whitening' of the examiner's nail beds. Each tender joint should be marked on the diagram below, and the total count should be written in the adjoining boxes.

Procedure

Participants should be advised to sit comfortably in a chair, with their forearms and hands supported on a table in front in a pronated position (palm facing down). All potentially interfering jewellery should be removed.

PIP/MCP joints

Examine each joint in turn starting with the PIP joints. Examine right and left anterior joint margins using both thumbs while the fingers are supporting the patient's hand. Repeat process on dorsal and palmar joint margins.

Wrist joint

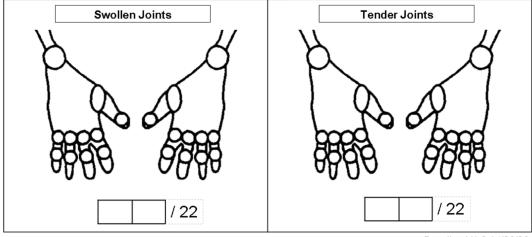
Using the same procedure as above, examine the wrist in the neutral position. Use both hands to examine with thumbs on the dorsal surface and fingers on palmar surface of the patient's wrist.







Please mark each swollen and tender joint on the diagrams below and write the total joint counts in the adjoining boxes.



Baseline V1.0 14/08/09

Timed upper limb dexterity

1. The Nine-hole peg test-instructions

The test involves the subject placing 9 dowels in 9 holes, and then removing them. Participants are scored by the amount of time it takes to do this.

For this test you will require:

- A pen
- Nine Hole Peg Test (board and pegs)
- Plastic bowl
- Digital stopwatch

The participant should be:

- Sitting at a desk in a straight-backed chair (without armrests) with their feet flat on the floor.
- The pegboard should be centred in front of the subject.
- A shallow round bowl (or similar container) containing the nine pegs should be placed on the same side as the hand being tested.

The following instructions should be given to the participant as you briefly demonstrate the test:

"Pick up the pegs one at a time, using your right (or left) hand only and put them into the holes in any order until all the holes are filled. Then remove the pegs one at a time and return them to the container. Stabilise the peg board with your left (or right) hand. This is a practice test. See how fast you can put all the pegs in and take them out again. Are you ready? Go!"

After the subject completes the practice trial, you say:

"This will be the actual test. The instructions are the same. Work as quickly as you can. Are you ready? Go! [During the test] Fast as you can. [As soon as the last peg is in the board] Out again...as fast as you can."

- The stopwatch should be started as soon as the subject touched the first peg and stopped when the last peg hit the container.
- The container is then placed on the opposite side of the pegboard. The test is then repeated in the same way for the non-dominant hand.



The Nine-hole peg test—measurements (minutes and seconds)

	М		S	S	s	s
Right upper limb		:				
Left upper limb]:				

Full-hand and pinch grip strength—instructions

Test Position:

Sitting in a straight-backed chair (without armrests) with feet flat on the floor the participant should be positioned as in the pictures below. Refer to p34 of the manual for full details.





Remember:

- For the measurement of full-hand grip, the red band should be positioned closest to the examiner
- 2. For the measurement of tripod pinch grip, the red band should be positioned on the side of the index and middle finger.
- Make sure the measuring device is the correct width for the participant and record this on the form.
- You need to reset the machine before every test. You do this by pushing the "zero" button with the measuring device flat on the table.
- 5. Ensure the 'hold' button remains depressed throughout all tests.

Verbal instructions for each test:

""When I say "go" I want you to squeeze as hard as you can, and as quickly as you can and hold it for 3 seconds. Go! 1, 2, 3. Stop."

Order of testing:

Practice full-hand grip with each hand

Dominant hand maximum *full-hand* grip (3 seconds) 30 seconds rest
Non-dominant hand maximum *full-hand* grip (3 seconds) 30 seconds rest
Repeat 3 times in total

Practice pinch grip with each hand

Dominant hand maximum *pinch* grip (3 seconds) 30 second rest
Non-dominant hand maximum *pinch* grip (3 seconds) 30 seconds rest
Repeat 3 times in total

Full-hand and pinch grip strength—measurements

1. Maximum full-hand grip force (Newtons)

Full grip	grip Left Right hand hand		Grip Handle Width used using inside edges (mm):
1st trial			
2nd trial			
3rd trial			

2. Maximum 'tripod' pinch grip force (Newtons)

Pinch grip	Left hand	Right hand
1st trial		
2nd trial		
3rd trial		

Use the same Grip Handle Width as full-hand grip test

Please check that all sections have been completed .

Please ensure that you have entered <u>the participant's ID number</u> on the front cover of this questionnaire.

Please write any notes you have for the SARAH trial team in the space below.

Thank you very much for your time.



PARTICIPANTS ID:	

Strengthening And stretching for Rheumatoid Arthritis of the Hand (SARAH) Trial

Participant 12 month Follow-up Questionnaire

If you need to get in touch with the SARAH Trial research team, please contact:

SARAH Trial team
Warwick Clinical Trials Unit

Phone:
Fax:
E-mail:





Please read these instructions before completing the questionnaire:

Thank you for agreeing to take part in this study. The answers you give in this questionnaire will help us find out if the treatments you get are helpful for your rheumatoid arthritis.

Please answer all the questions. Although it may seem that questions are asked more than once, it is still important that you answer every one.

Please follow the instructions for each section carefully.

Crosses

Some questions request that you place a cross in the box provided. If so, please use a cross rather than a tick.

For example in the following question, if you answer 'yes', you should place a cross firmly in the box next to yes.

Do you drive a car?	Yes	No
Do you drive a car:	\times	

Circles

Some questions request that you draw a small circle around a number that best represents your answer. If so, please use a circle rather than underlining a number, or placing a cross or a tick.

For example in the following question, if your answer is 'fair', you should draw a small circle around the number 3.

How well did you drive today?	Very Good	Good	Fair	Poor	Very Poor
	1	2	3	4	5

Please use a BLACK or BLUE pen. Please do not use a pencil.

Please check that you have completed all sections and return your completed questionnaire to the research clinician.

Please write any notes you have for the research team on the back page.

What is the date you are completing this questionnaire?									
D	D		М	М		Υ	Υ	Υ	Υ

This section asks for your views about your hands and your health. This information will provide information on how you feel and how well you are able to do your usual activities. Please answer every question by marking the answer that you judge to be most appropriate. If you are unsure about how to answer a question, please give the best answer you can.

Section 1.1

The following questions refer to the function of your hands/wrists **during the past week** (*Please <u>circle</u>* **one** *answer for each question*)

A. The following questions refer to your right hand/wrist.

	Very Good	Good	Fair	Poor	Very Poor
Overall, how well did your right hand work?	1	2	3	4	5
2. How well did your right fingers move?	1	2	3	4	5
3. How well did your right wrist move?	1	2	3	4	5
4. How was the strength in your right hand?	1	2	3	4	5
How was the sensation (feeling) in your right hand?	1	2	3	4	5

B. The following questions refer to your left hand/wrist.

	Very Good	Good	Fair	Poor	Very Poor
Overall, how well did your left hand work?	1	2	3	4	5
How well did your left fingers move?	1	2	3	4	5
How well did your left wrist move?	1	2	3	4	5
4. How was the strength in your left hand?	1	2	3	4	5
How was the sensation (feeling) in your left hand?	1	2	3	4	5

The following questions refer to the ability of your hands to do certain tasks **during the past week**. If you have not performed a task during the past week, please estimate the difficulty that you would have had when performing it. (*Please* <u>circle</u> **one** answer for each question)

A. How difficult was it for you to perform the following activities using your right hand?

	Not at all difficult	A little difficult	Somewhat difficult	Moderately difficult	Very difficult
1. Turn a door knob?	1	2	3	4	5
2. Pick up a coin?	1	2	3	4	5
3. Hold a glass of water?	1	2	3	4	5
4. Turn a key in a lock?	1	2	3	4	5
5. Hold a frying pan?	1	2	3	4	5

B. How difficult was it for you to perform the following activities using your left hand?

	Not at all difficult	A little difficult	Somewhat difficult	Moderately difficult	Very difficult
1. Turn a door knob?	1	2	3	4	5
2. Pick up a coin?	1	2	3	4	5
3. Hold a glass of water?	1	2	3	4	5
4. Turn a key in a lock?	1	2	3	4	5
5. Hold a frying pan?	1	2	3	4	5

C. How difficult was it for you to perform the following activities using both of your hands?

	Not at all difficult	A little difficult	Somewhat difficult	Moderately difficult	Very difficult
1. Open a jar?	1	2	3	4	5
2. Button a shirt/blouse?	1	2	3	4	5
3. Eat with a knife/fork?	1	2	3	4	5
4. Carry a grocery bag?	1	2	3	4	5
5. Wash dishes?	1	2	3	4	5
6. Wash your hair?	1	2	3	4	5
7. Tie shoelaces/knots?	1	2	3	4	5

The following questions refer to how you did in your normal work (including both housework and studying) **during the past 4 weeks**. (*Please <u>circle</u> one answer for each question)*

		Always	Often	Sometimes	Rarely	Never
1.	How often were you unable to do your work because of problems with your hands/ wrists?	1	2	3	4	5
2.	How often did you have to shorten your work day because of problems with your hands/wrists?	1	2	3	4	5
3.	How often did you have to take it easy at your work because of problems with your hands/wrists?	1	2	3	4	5
4.	How often did you accomplish less in your work because of problems with your hands/ wrists?	1	2	3	4	5
5.	How often did you take longer to do the tasks in your work because of problems with your hands/wrists?	1	2	3	4	5

The following questions refer to how much **pain** you had in your hands/wrists **during the past week**. (*Please <u>circle</u> one answer for each question)*

1. How often did you have pain in your hands/wrists?

Always	1
Often	2
Sometimes	3
Rarely	4
Never	5

If you answered 'Never', please skip the following questions and go to Section 1.5 on the next page.

2. Please describe the pain you have in your hands/wrists

		Always	Often	Sometimes	Rarely	Never
3. How o	ften did the pain in your hands/wrists re with your sleep?	1	2	3	4	5
interfe	ften did the pain in your hands/wrists re with your daily activities (such as or bathing)?	1	2	3	4	5
	ften did the pain in your hands/ make you unhappy?	1	2	3	4	5

The following questions refer to the appearance (look) of your hands **during the past week**. (*Please* <u>circle</u> **one** answer for each question)

A. The following questions refer to your **right** hand.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I was satisfied with the appearance (look) of my right hand.	1	2	3	4	5
The appearance (look) of my right hand sometimes made me uncomfortable in public	1	2	3	4	5
The appearance (look) of my right hand made me depressed.	1	2	3	4	5
The appearance (look) of my right hand interfered with my normal social activities	1	2	3	4	5

B. The following questions refer to your left hand.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I was satisfied with the appearance (look) of my left hand.	1	2	3	4	5
The appearance (look) of my left hand sometimes made me uncomfortable in public	1	2	3	4	5
The appearance (look) of my left hand made me depressed.	1	2	3	4	5
The appearance (look) of my left hand interfered with my normal social activities	1	2	3	4	5

The following questions refer to your satisfaction with your hands/wrists **during the past week**. (*Please* <u>circle</u> **one** answer for each question)

A. The following questions refer to your **right** hand/wrist.

	Very satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Very dissatisfied
Overall function of your right hand	1	2	3	4	5
2. Motion of the fingers in your right hand	1	2	3	4	5
3. Motion of your right wrist	1	2	3	4	5
4. Strength of your right hand	1	2	3	4	5
5. Pain level of your right hand	1	2	3	4	5
6. Sensation (feeling) of your right hand	1	2	3	4	5

B. The following questions refer to your left hand/wrist.

	Very satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Very dissatisfied
Overall function of your left hand	1	2	3	4	5
Motion of the fingers in your left hand	1	2	3	4	5
Motion of your left wrist	1	2	3	4	5
Strength of your left hand	1	2	3	4	5
5. Pain level of your left hand	1	2	3	4	5
6. Sensation (feeling) of your left hand	1	2	3	4	5

Section 2						
During the past	week, how tr	oublesome h	as your pain	been in the f	ollowing are	as?
	(pleas	e provide an ar	nswer for <u>both h</u>	nands and wrist	<u>'s</u>)	
	No pain experienced	Not at all troublesome	Slightly troublesome	Moderately troublesome	Very troublesome	Extremely troublesome
1. Right hand			\square_3	\square_4	\square_{5}	\square_{6}
2. Left hand			\square_3	\square_4	\square_{5}	
3. Right wrist	\square_1		\square_3	$\square_{\scriptscriptstyle 4}$	\square_{5}	
4. Left wrist	\Box_1				\square_{5}	
Section 3 1. In what way h (Please place a Completely r	•	oox)			the <u>past four</u>	months?
Much improv	red			L	2	
Slightly impro	oved				3	
No change					4	
Slightly wors	ened				5	
Much worser	ned				6	
Vastly worse	ned			\Box	I ₇	

The following questions refer to how confident you feel in performing certain tasks. (*Please <u>circle</u>* **one** *answer for each question*)

	confiden on a regu			ou can d	lo all the	things	necessa	ry for y	ou to ma	anage y	our condi-
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident
How shoul	confiden d visit a		u that yo	ou can ju	udge wh	en the o	changes	in your	conditio	n mear	n you
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident
3. How your	confiden health co								ies need	led to n	nanage
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident
	confiden so that i						ional dis	tress ca	aused by	your h	ealth con-
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident
	confiden your illn					other t	han just	taking r	medicati	on to re	duce how
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident
6. How three	confiden to four ti			ou can d	lo gentle	exercis	ses for m	nuscle s	strength	and flex	cibility
Not at all confident	1	2	3	4	5	6	7	8	9	10	Totally confident
7. How	confiden	t are vo	u that vo	ou can e	xercise	without	making	vour sv	mptoms	worse	?
Not at all	1	2	3	4	5	6	7	8	9	10	Totally confident

The following questions refer to the treatment you have received **as part of the SARAH Trial**. (*Please <u>circle</u>* **one** *answer for each question*)

How often was each of the following statements true for you during the past 4 weeks?

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
I had a hard time doing what the therapist suggested I do	1	2	3	4	5	6
I followed the therapist's suggestions exactly	1	2	3	4	5	6
I was unable to do what was necessary to follow the therapist's treatment plans	1	2	3	4	5	6
I found it easy to do the things the therapist suggested I do	1	2	3	4	5	6
5. Generally speaking, I was able to do what I was told by the therapist	1	2	3	4	5	6

6. How much benefit have you	gained from the advice	or treatment you ha	ve received as part of the SA	٧-
RAH Trial?		•	·	

Substantial benefit	1
Moderate benefit	2
No benefit	3
Moderate harm	4
Substantial harm	5

7. How satisfied were you with the advice or treatment that you received as part of the SARAH Trial?

Extremely dissatisfied	1
Very dissatisfied	2
Somewhat dissatisfied	3
Neither satisfied nor dissatisfied	4
Somewhat satisfied	5
Very satisfied	6
Extremely satisfied	7

12 months V1.0 3/12/09

Section 5 cont'd

8. Are you currently doing any hand or wrist exercises to help with your arthritis? (please circle)
No
Yes go to question 9
9. If yes , how often are you doing these exercises? (please circle)
Daily
3-4 times a week
1-2 times a week
Other:

 $\underline{\textbf{Section 6}}$ - The following questions are to ask about your general health state $\underline{\textbf{at the moment}}$. By placing a cross in one box in each group below, please indicate which statement best describes your own health state $\underline{\textbf{today}}$.

Please place a cross within one box for each question

1. Mobility	
I have no problems in walking about	\square_1
l have some problems in walking about	\square_2
I am confined to bed	
2. Self Care	
I have no problems with self-care	
I have some problems washing or dressing myself	\square_2
I am unable to wash or dress myself	\square_{3}
3. Usual Activities (e.g. work, study, housework, family or leisure activities)?	
I have no problems with performing my usual activities	\square_1
I have some problems with performing my usual activities	
I am unable to perform my usual activities	\square_3
4. Pain / Discomfort	
I have no pain or discomfort	\sqcup_1
I have moderate pain or discomfort	
I have extreme pain or discomfort	Пз
5. Anxiety / Depression	
I am not anxious or depressed	\square_1
I am moderately anxious or depressed	$\square_{\scriptscriptstyle 2}$
I am extremely anxious or depressed	\square_3

Your own health state today

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked by 100 and the worst state you can imagine is marked by 0.

We would like you to indicate on this scale how good or bad is your own health today, in your opinion.

Please do this by <u>drawing a line</u> <u>from the box below</u>, to whichever <u>point on the scale indicates how</u> <u>good or bad your current health</u> <u>state is today</u>.

Your own health state TODAY



This section asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. For each of the following questions please place a cross in the one box that best describes your answer.

1. In general, would	you say your health is:						
Excellent	Excellent Very good		Good 3		F	Poor ₅	
2. The following que	stions are about activities	s you might o	do during a ty	pical day.			
Does your health	now limit you in these	activities? If	so, how muc				
				Yes, limited a lot	Yes, limited a little	No, not limited at all	
 a. Moderate activiti cleaner, bowling o 	es, such as moving a tab r playing golf	ole, pushing	a vacuum			\square_3	
b. Climbing several	flights of stairs						
a. Accomplished le	ss than you would like	All of the time	Most of the time	Some of the time	A little of the time	None of the time	
b. Were limited in the activities	e kind of work or other			Пз	\square_4	\square_{5}	
	weeks, how much of the ular daily activities as a r ious)?						
		All of the time	Most of the time	Some of the time	A little of the time	None of the time	
a. Accomplished le	ss than you would like	\sqcup_1	\bigsqcup_2	Шз	\bigsqcup_4	\bigsqcup_{5}	
 b. Were limited in the activities 	e kind of work or other			\square_3	\square_4	\square_{5}	

Section 7 cont'd

5. During the past 4 weeks , how much did pain interfere with your normal work (including both work outside the home and housework)?						
Not at all	A little bit	Moderate	ly C	Quite a bit	Ex	tremely
L 1	L 2	 3		4		— 5
For each question	are about how you feel on, please give the one a ne time during the past	answer that co	•	•		
		All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Have you felt ca	lm and peaceful?	□₁			\square_4	\square_{5}
b. Did you have a l	ot of energy?				\square_4	\square_{5}
c. Have you felt do	wnhearted and low?	\square_1	\square_2	Пз	\square_4	
interfered with yo	4 weeks, how much of thour social activities (like v	risiting with fri	ends, relative	es, etc.)?		•
All of the time	Most of the time	Some of the time		A little of the time	1	None of he time

This section asks about your current work status and income. This is because we want to ensure that this research reaches everybody who is entitled to treatment, including people of all backgrounds, income and status. Furthermore, loss of income has an impact on society as a whole and it is therefore important that we attempt to measure this.

1. During the past 4 months, have you rheumatoid arthritis?	had to take any o	lays off work as	sick leave be	ecause of
	Yes	No D ₂	Not Applica	ble
If yes , how many days did you have to t	ake off work as s	ick leave?		
Has your benefit status changed in the page.	ast 4 months?	Yes	No	
		□₁		
If yes, please insert a cross next to all be	enefits that you a	re receiving?		
Housing and Homeless Assistance	\square_1	Attendance All	owance	\square_2
Severe Disablement Allowance	Пз	Carer's Allowa	nce	$\square_{\scriptscriptstyle 4}$
Disability Living Allowance	$\square_{\scriptscriptstyle 5}$	Income Suppo	rt	
Working Tax Credit	\square_{7}	Social Fund Pa	ayment	\square_{8}
Council Tax Benefit	П9	Child Benefit		☐ ₁₀
Income based Jobseekers' Allowance		Housing Benef	its	
Pension Credit		Child Tax Cred	lit	□ ₁₄
Other (please specify)	□ ₁₅			

This section is about health care you have received because of rheumatoid arthritis during the last 4 months.

Please read each question carefully. For each question, if you have had no treatments or visits, please enter '0'.

NHS health care: this section is about any treatment you have received on the NHS only

1. During the past 4 months, how often have you used any of the following rheumatoid arthritis?	ing <u>NHS sei</u>	<u>vices</u> because of
Please do not include any sessions or treatments that you attended as	part of the S	ARAH Trial.
	Number of times	
Your GP or another GP		If none enter '0'
Rheumatologist (consultant or a doctor from their team)		If none enter '0'
Orthopaedic surgeon (consultant or a doctor from their team)		If none enter '0'
Other hospital specialist (consultant or a doctor from their team)		If none enter '0'
Nurse		If none enter '0'
Physiotherapist		If none enter '0'
Occupational therapist		If none enter '0'
Podiatrist / Chiropodist		If none enter '0'
Self-management group eg Expert Patient Programme		If none enter '0'
Other NHS service (please specify)		If none enter '0'
During the past 4 months, have you spent <u>one or more nights</u> in an MHS hospital because of rheumatoid arthritis?	Yes	No
If yes , what was the total <u>number of nights</u> that you spent in hospital?		nights
Was this hospital admission for <u>surgery</u> ?	Yes	No
If yes, a) in which hospital was the surgery performed?		
b) What was the operation performed?		

3. During the past 4 months , have you spent <u>one or more nights</u> in an <u>NHS hospital</u> for any other reason (apart from rheumatoid arthritis)?		Yes 1	No D ₂
If yes , what was the total <u>number of nights</u> that you spent in hospital?			nights
Please state reason for admission			
4. During the past 4 months, have you attended an <u>NHS hospital</u> as a 'day case' patient (you were admitted to the hospital for tests or treatment but you did not stay overnight) because of rheumatoid arthritis?	Yes	1 [No 2
If yes, a) how many times did you attend?		tiı	mes
b) Were these 'day case' attendances for receiving medicatio	Yes n?	-	0
(i) If yes, what medication did you receive?			
(ii) If no, please state reason			
c) which hospital did you attend for this treatment?			
 During the past 4 months, have you had any of the following tests in a <u>NHS hospital</u> because of rheumatoid arthritis? (If none please en the boxes) 		of	
X-ray			If none enter '0'
CT Scan			If none enter '0'
MRI Scan			If none enter '0'
Blood test (count all blood tests done on one day, as one test)			If none enter '0'
Other (please specify)			If none enter '0'
6. During the past 4 months , have you been issued free of charge any medical devices, such as collars, orthopaedic devices, or any other produce equipment (including adaptations to your home) by the NHS because rheumatoid arthritis?	icts Ye	es]	No D
f yes, please list items below.			
em issued			
			
3			
ļ			
		12 mon	ths V1.0 3/12/0

 $\underline{\text{Private health care:}} \text{ This section is about any treatment that has been paid for by you or your medical insurance.}$

7. During the past 4 months, how of cause of rheumatoid arthritis?	ten have you	rused an	y of the followin	g <u>private s</u>	ervices be-	
Please detail total treatment costs you pdo not include any treatments paid for b					ırance. <u>Plea</u>	<u>se</u>
	Number of times		dical Insurance Contribution		Personal Contribution	
Private GP		£		£		
Private Physiotherapist		£		£		
Private Occupational Therapist		£		£		
Private Rheumatologist		£		£		
Private Orthopaedic surgeon		£		£		
Private other hospital specialist / consultant		£				
Private nurse		£				
Private Podiatrist / Chiropodist		£		£		
Other (please specify)		£		£		
8. During the past 4 months, have yo private hospital because of rheuma			nights in a	Yes	No D ₂	
Was this hospital admission for <u>surger</u>	γ?			Yes	No D ₂	
If yes, a) in which hospital was the surge		?			,	_
c) what were the total costs born (Please round the total costs						
d) what were the total costs borr (Please round the total costs		st pound.) £[
If no , what was the reason for the admiss	sion?					
				12 m	onths V1.0 3/	12/09

9. During the past 4 months, have you attended a <u>private hospital</u> as a 'day case' patient (you were admitted to the hospital for tests or treatment but you did not stay overnight) because of rheumatoid arthritis?	Yes	No D ₂
If yes , a) how many times did you attend?		times
b) Were these 'day case' attendances for receiving medication	Yes n?	No D
(i) If yes, what medication did you receive?		
(ii) If no, please state reason		
c) which hospital did you attend for this treatment?		
d) what were the total costs borne by medical insurance?	£	
(Please round the total costs to the nearest pound.)		
e) what were the total costs borne by you?	£	
(Please round the total costs to the nearest pound.)		
10. During the past 4 months, have you had any of the following test of rheumatoid arthritis?	s in a <u>private</u> Number of times	hospital because
of rheumatoid arthritis?	Number of	hospital because
of rheumatoid arthritis?	Number of	
of rheumatoid arthritis? X-ray	Number of	If none enter '0'
of rheumatoid arthritis? X-ray CT Scan	Number of	If none enter '0'
of rheumatoid arthritis? X-ray CT Scan MRI Scan	Number of	If none enter '0' If none enter '0' If none enter '0'
of rheumatoid arthritis? X-ray CT Scan MRI Scan Blood test (count all blood tests done on one day, as one test)	Number of	If none enter '0' If none enter '0' If none enter '0'
of rheumatoid arthritis? X-ray CT Scan MRI Scan Blood test (count all blood tests done on one day, as one test)	Number of times	If none enter '0' If none enter '0' If none enter '0' If none enter '0'
of rheumatoid arthritis? X-ray CT Scan MRI Scan Blood test (count all blood tests done on one day, as one test) Other (please specify) 11. During the past 4 months, have you bought (other than by a pre	Number of times	If none enter '0' If none enter '0' If none enter '0' If none enter '0'
of rheumatoid arthritis? X-ray CT Scan MRI Scan Blood test (count all blood tests done on one day, as one test) Other (please specify) 11. During the past 4 months, have you bought (other than by a pre	Number of times	If none enter '0' If none enter '0' If none enter '0' If none enter '0'
of rheumatoid arthritis? X-ray CT Scan MRI Scan Blood test (count all blood tests done on one day, as one test) Other (please specify) 11. During the past 4 months, have you bought (other than by a pre medicinal products because of rheumatoid arthritis?	Number of times	If none enter '0' If none enter '0' If none enter '0' If none enter '0'
of rheumatoid arthritis? X-ray CT Scan MRI Scan Blood test (count all blood tests done on one day, as one test) Other (please specify) 11. During the past 4 months, have you bought (other than by a pre medicinal products because of rheumatoid arthritis? Pain killers (for example, paracetamol)	Number of times	If none enter '0' If none enter '0' If none enter '0' If none enter '0'

12. During the past 4 months , have you bought medical devices, such as collars, orthopaedic devices, or any other products or equipment because of rheumatoid arthritis?		Yes	No
If yes, please list items and enter cost below to the nearest pound.			
Item Bought			
1	£		
2	£		
3	£		
4	£		
5	£		

That is the end of this questionnaire.

Please check that you have completed all sections and return your completed questionnaire to the research clinician.

Please feel free to write any notes for the research team in the space below, and continue over the page, if necessary.

Thank you very much for your time.



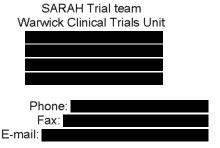
PARTICIPANTS ID:	

Strengthening And stretching for Rheumatoid Arthritis of the Hand (SARAH) Trial

12 month

Research Clinic Assessment Form

If you need to get in touch with the SARAH Trial research team, please contact:





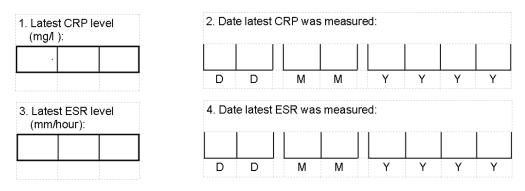


This section is to ensure the research team have sufficient details about the assessment that you are performing. Please ensure that you have entered <u>the participant's ID number</u> on the front cover of this assessment form.

Date you are completing this assessment	Time that you began completing this assessment (24 hour clock):
D D M M Y Y Y	H H M M
3. Centre ID:	4. Research clinician's name:

Section 2

This section relates to information about the participant provided from blood tests that you will need to collect from their medical records.



5. Ha:	s the participant suffered from any of the following in the last 8 months? (please circle)
	Tendon rupture in the hand or wrist
	Flare up of hand and/or wrist symptoms for longer than 1 week

Nb: if participant has suffered from a tendon rupture, then <u>DO NOT</u> go any further with the assessment.

This section relates to the medication that the participant is taking. **This information can be provided by the participant or you may need to collect it from their medical records**.

Prescribed current medications:			
Drug	Yes	Dose	How often
Ibuprofen			
Naproxen			
Diclofenac	Пз		
Indomethacin	\square_4		
Other non-steroidal anti-inflammatory			
Sulfasalazine			
Hydroxychloroquine			
Methotrexate	□ 8		
Gold injections			
Leflunomide			
Azathioprine			
Prednisolone			
Infliximab [Remicade]			
Etanercept [Enbrel]			
Adalimumab [Humira]			
Other:	□ ₁₆		
4. Any additional 'as required' medication (only those used in last 7 days):	ons		
Drug	Yes		
Extra non-steroidal anti-inflammatory			
Steroid tablet			
Steroid injection into joint	Пз		
Steroid injection into muscle			

Measuring Metacarpophalangeal (MCP) Joint Deformity

Participants should be advised to sit comfortably in a chair, with their forearms and hands supported on a table in front in a pronated position (palm facing down). All potentially interfering jewellery should be removed.

When measuring MCP joint deformity, a goniometer is placed on the back of the hand. The centre of the goniometer is placed over the MCP joint, with one arm placed along the midline of the finger (centred over the PIP joint), and the other arm placed along the associated metacarpal, lining the 180 degree marker up with the midline of the finger (see figure below). This process should be repeated for all four fingers on each hand.

NB: Ulnar deviation (fingers bent away from thumb) is recorded as a positive value. Radial deviation (fingers bent towards the thumb) is recorded as a negative value.

In this example, all values would be recorded as positive as all the fingers bend away from the thumb.



Figure 4.1. Measuring MCP joint deformity



MCP Joint Deformity (degrees)

	Left hand	Right hand	
Index finger			
Middle finger			
Ring finger			
Little finger			

Measuring Active Wrist Flexion

Participants should be advised to sit comfortably in a chair with their elbow supported on a table in front of them and all potentially interfering jewellery removed.

The elbow is bent to approximately 90 degrees and the wrist should be in a neutral position (palm neither facing up nor down, similar to an 'arm wrestling' position).

When measuring wrist flexion, a goniometer is placed on the back of the forearm and the hand in line with the midline of the forearm and the metacarpal/phalanx of the middle (3rd) finger.

Participants are instructed to "bend your wrist down as far as you can go with your fingers in a relaxed position" and then the measurement should be recorded.



Figure 5.1. Measuring wrist flexion

Active wrist flexion (degrees)

	Left wrist	Right wrist	
Wrist flexion			

Measuring Active Wrist Extension

When measuring wrist extension, a goniometer is placed on the palmar side of the forearm and the hand (as shown in Figure 5.2), in line with the midline of the forearm and the middle (3^{rd}) metacarpal/phalanx.

Participants are instructed to "bend your wrist back as far as you can go with your fingers in a relaxed position" and then the measurement should be recorded.



Figure 5.2. Measuring wrist extension

Active wrist extension (degrees)

	_	eft rist	Rig wr	ıht ist	
Wrist extension					

Measuring Combined Finger Flexion

Combined Finger Flexion is a measurement from each distal corner of the nail bed on the radial border (thumb side) to the distal palmar crease of the palm.

To perform a measurement, the elbow is bent to approximately 45 degrees and the wrist should be in a neutral position (palm neither facing up nor down).

Participants are instructed to "make a fist as much as you can" and then the ruler on the end of the goniometer is used to measure the distance between the tip of the distal corner of the nail bed on the radial border (thumb side) to the distal palmar crease of the palm.



Figure 5.3. Measuring Composite Finger Flexion

Combined Finger Flexion (mm)

	Left hand	Right hand	
Index finger			
Middle finger			
Ring finger			
Little finger			

Method A - Measuring Composite Finger Extension

For composite finger extension, the elbow is bent to approximately 45 degrees and palm should be facing down (wrist pronated) to rest flat on the table.

If the patient is unable to achieve this position (they have flexion deformities) please use the next page

Participants are instructed to "lift your finger up towards the ceiling as much as you can" and then the ruler on the end of the goniometer is used to measure the distance between the tip of the distal corner of the nail bed on the radial border (thumb side) to the table top. This process is repeated for all the fingers (not the thumb).

NB: if the amount of extension is greater than what can be recorded by the ruler, mark the distance on a sheet of paper and then use the ruler to measure this afterwards.



Figure 5.4a. Measuring Composite Finger Extension

Combined Finger Extension (mm)

	Left hand	Right hand	
Index finger			
Middle finger			
Ring finger			
Little finger			

Method B - Measuring Composite Finger Extension with patients who have finger flexion deformities .

* Only use this page if you were unable to complete the previous page *

For composite finger extension, the elbow is bent to approximately 45 degrees and palm should be facing up (wrist supinated).

Participants are instructed to "try and straighten your fingers towards the table as much as you can" and then the ruler on the end of the goniometer is used to measure the distance between the tip of the distal corner of the nail bed on the radial border (thumb side) to the table top. This process is repeated for all the fingers (not the thumb).

NB: if the amount of extension is greater than what can be recorded by the ruler, mark the distance on a sheet of paper and then use the ruler to measure this afterwards.



Figure 5.4b. Measuring Composite Finger Extension for finger flexion deformities

Combined Finger Extension (mm)

	Left hand	Right hand	
Index finger			
Middle finger			
Ring finger			
Little finger			

12mth V1.0 03/12/09

Thumb Opposition

The Kapandji test of thumb opposition has been chosen as it offers a simple system of using the hand as a system of reference³⁰. The patient is asked to do the following movements with the tip of the thumb (see 'x' on Figure below):

- 1. Touch the lateral side of the second phalanx of the index finger
- 2. Touch the lateral side of the third phalanx of the index finger
- 3. Touch the tip of the index finger
- 4. Touch the tip of the middle finger
 5. Touch the tip of the ring finger
 6. Touch the tip of the little finger

- 7. Touch the palmar DIP crease of the little finger
- 8. Touch the palmar PIP crease of the little finger
- 9. Touch the proximal palmar crease of the little finger
- 10. Touch the distal palmar crease of the hand

The score is the highest number that the participant can achieve (maximum =10).

Figure 5.5. The 10 points of the Kapandji test of thumb opposition

Thumb Opposition Score (1-10)

	Left Thumb	Right Thumb		
Score				

Swollen & Tender joint count

<u>Joint swelling</u> is defined as soft tissue swelling that is detectable along the joint margins. Neither bony enlargement nor deformity of the joint constitutes swelling. Each swollen joint should be marked on the diagram below, and the total count should be written in the adjoining boxes.

<u>Joint tenderness</u> is defined as pain at rest that is induced by pressure. The examiner uses his/her thumb and index finger to exert pressure that is sufficient to cause 'whitening' of the examiner's nail beds. Each tender joint should be marked on the diagram below, and the total count should be written in the adjoining boxes.

Procedure

Participants should be advised to sit comfortably in a chair, with their forearms and hands supported on a table in front in a pronated position (palm facing down). All potentially interfering jewellery should be removed.

PIP/MCP joints

Examine each joint in turn starting with the PIP joints. Examine right and left anterior joint margins using both thumbs while the fingers are supporting the patient's hand. Repeat process on dorsal and palmar joint margins.

Wrist joint

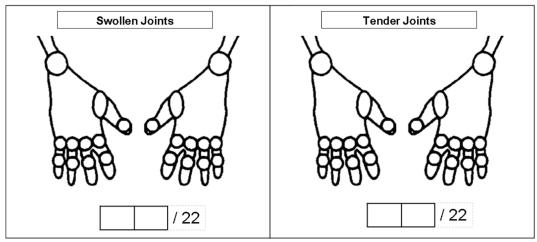
Using the same procedure as above, examine the wrist in the neutral position. Use both hands to examine with thumbs on the dorsal surface and fingers on palmar surface of the patient's wrist.







Please mark each swollen and tender joint on the diagrams below and write the total joint counts in the adjoining boxes.



12mth V1.0 03/12/09

Timed upper limb dexterity

1. The Nine-hole peg test-instructions

The test involves the subject placing 9 dowels in 9 holes, and then removing them. Participants are scored by the amount of time it takes to do this.

For this test you will require:

- A pen
- Nine Hole Peg Test (board and pegs)
- Plastic bowl
- Digital stopwatch

The participant should be:

- Sitting at a desk in a straight-backed chair (without armrests) with their feet flat on the floor.
- The pegboard should be centred in front of the subject.
- A shallow round bowl (or similar container) containing the nine pegs should be placed on the same side as the hand being tested.

The following instructions should be given to the participant as you briefly demonstrate the test:

"Pick up the pegs one at a time, using your right (or left) hand only and put them into the holes in any order until all the holes are filled. Then remove the pegs one at a time and return them to the container. Stabilise the peg board with your left (or right) hand. This is a practice test. See how fast you can put all the pegs in and take them out again. Are you ready? Go!"

After the subject completes the practice trial, you say:

"This will be the actual test. The instructions are the same. Work as quickly as you can. Are you ready? Go! [During the test] Fast as you can. [As soon as the last peg is in the board] Out again...as fast as you can."

- The stopwatch should be started as soon as the subject touched the first peg and stopped when the last peg hit the container.
- The container is then placed on the opposite side of the pegboard. The test is then repeated in the same way for the non-dominant hand.



The Nine-hole peg test—measurements (minutes and seconds)

	М		S	S		s	s
Right upper limb		:			-		
Left upper limb		:] -		

Full-hand and pinch grip strength—instructions

Test Position:

Sitting in a straight-backed chair (without armrests) with feet flat on the floor the participant should be positioned as in the pictures below. Refer to p34 of the manual for full details.





Remember:

- For the measurement of full-hand grip, the red band should be positioned closest to the examiner
- For the measurement of tripod pinch grip, the red band should be positioned on the side of the index and middle finger.
- Make sure the measuring device is the correct width for the participant and record this on the form.
- 4. You need to reset the machine before every test. You do this by pushing the "zero" button with the measuring device flat on the table.
- 5. Ensure the 'hold' button remains depressed throughout all tests.

Verbal instructions for each test:

""When I say "go" I want you to squeeze as hard as you can, and as quickly as you can and hold it for 3 seconds. Go! 1, 2, 3. Stop."

Order of testing:

Practice full-hand grip with each hand

Dominant hand maximum *full-hand* grip (3 seconds) 30 seconds rest
Non-dominant hand maximum *full-hand* grip (3 seconds) 30 seconds rest
Repeat 3 times in total

Practice pinch grip with each hand

Dominant hand maximum *pinch* grip (3 seconds) 30 second rest
Non-dominant hand maximum *pinch* grip (3 seconds) 30 seconds rest
Repeat 3 times in total

Full-hand and pinch grip strength—measurements

1. Maximum full-hand grip force (Newtons)

Full grip	Left hand	Right hand		
1st trial				
2nd trial				
3rd trial				

Grip Hai using in:		

2. Maximum 'tripod' pinch grip force (Newtons)

Pinch grip	Left hand	Right hand
1st trial		
2nd trial		
3rd trial		

Use the same Grip Handle Width as full-hand grip test

Research Clinician to answer:						
1) Whic	1) Which type of treatment was received by the participant? (please circle)					
	Don't know► (go to question 2)					
	Usual care only (control)					
	Usual care + exercise (experimental)					
Give rea	sons for your answe	er (please circle)				
	Patient said	Patient implied	Change in participants condition			
	Other:					
2) If you	ı don't know, which	type of treatment	do you think they received? (please circle)			
	Usual care only (control)					
	Usual care + exercise (experimental)					
Give rea	Give reasons for your answer (please circle)					
	Patient said	Patient implied	Change in participants condition			
	Other:					

Please check that all sections have been completed .

Please ensure that you have entered <u>the participant's ID number</u> on the front cover of this questionnaire.

Please write any notes you have for the SARAH trial team in the space below.

Thank you very much for your time.