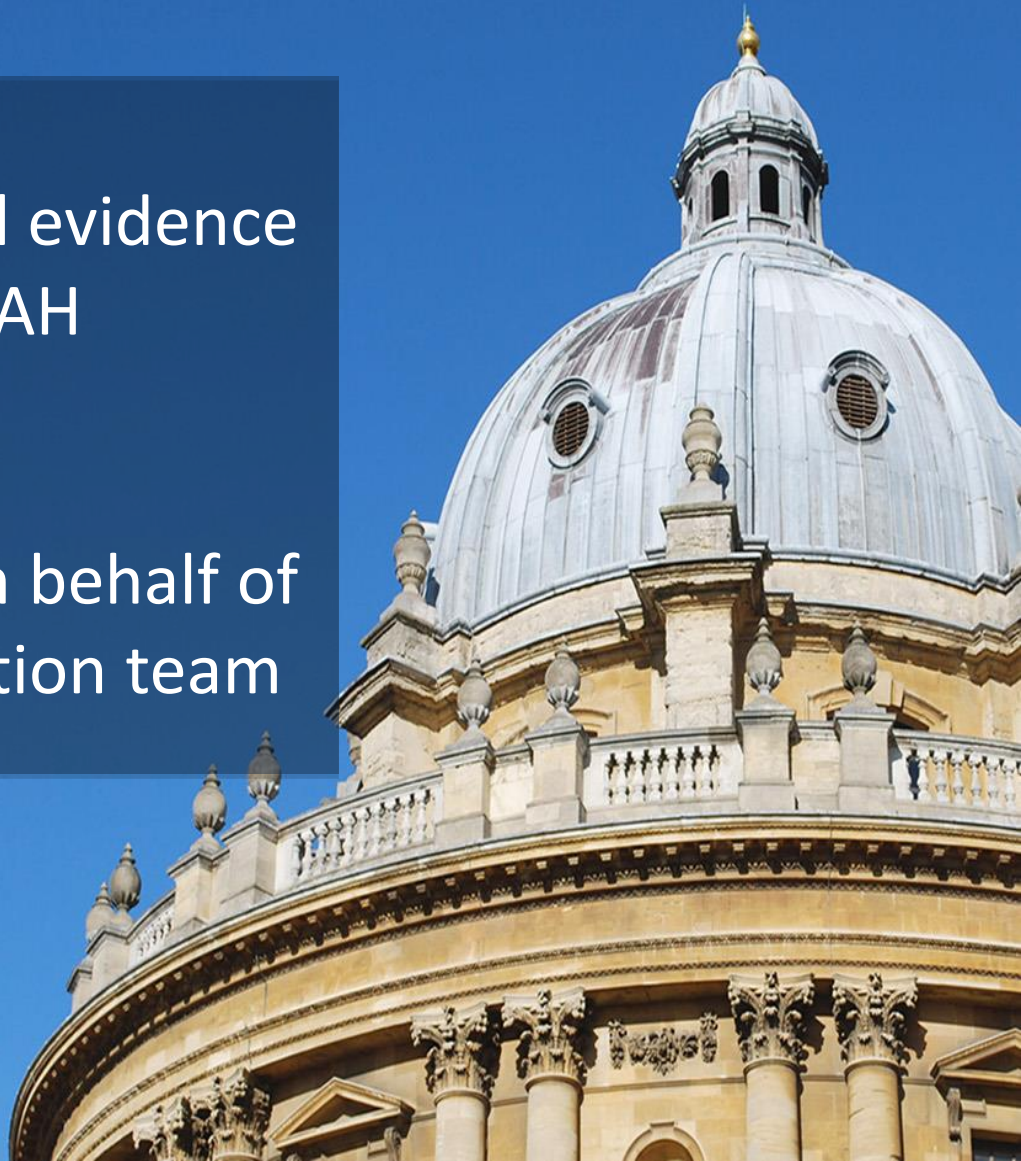


Implementation of MSK randomised control trial evidence into NHS practice – SARAH implementation

Dr Esther Williamson on behalf of
the SARAH implementation team



Background

People with rheumatoid arthritis (RA) report hand and wrist pain, weakness, ↓mobility

Clinical guidelines recommend access to hand therapy

Evidence base for this was weak – HTA commissioned trial



Research questions



1. What is the clinical effectiveness of adding a progressive strengthening and stretching exercise programme to usual care in the reduction of hand dysfunction and pain for patients with stable RA?



2. What is the cost-effectiveness of adding this programme to usual care?

Inclusion criteria

People with RA

Pain and dysfunction of the hands and/or wrist joints

Not on a disease modifying medication (DMARD), or on a stable DMARD regime for at least 3 months

Exclusion criteria

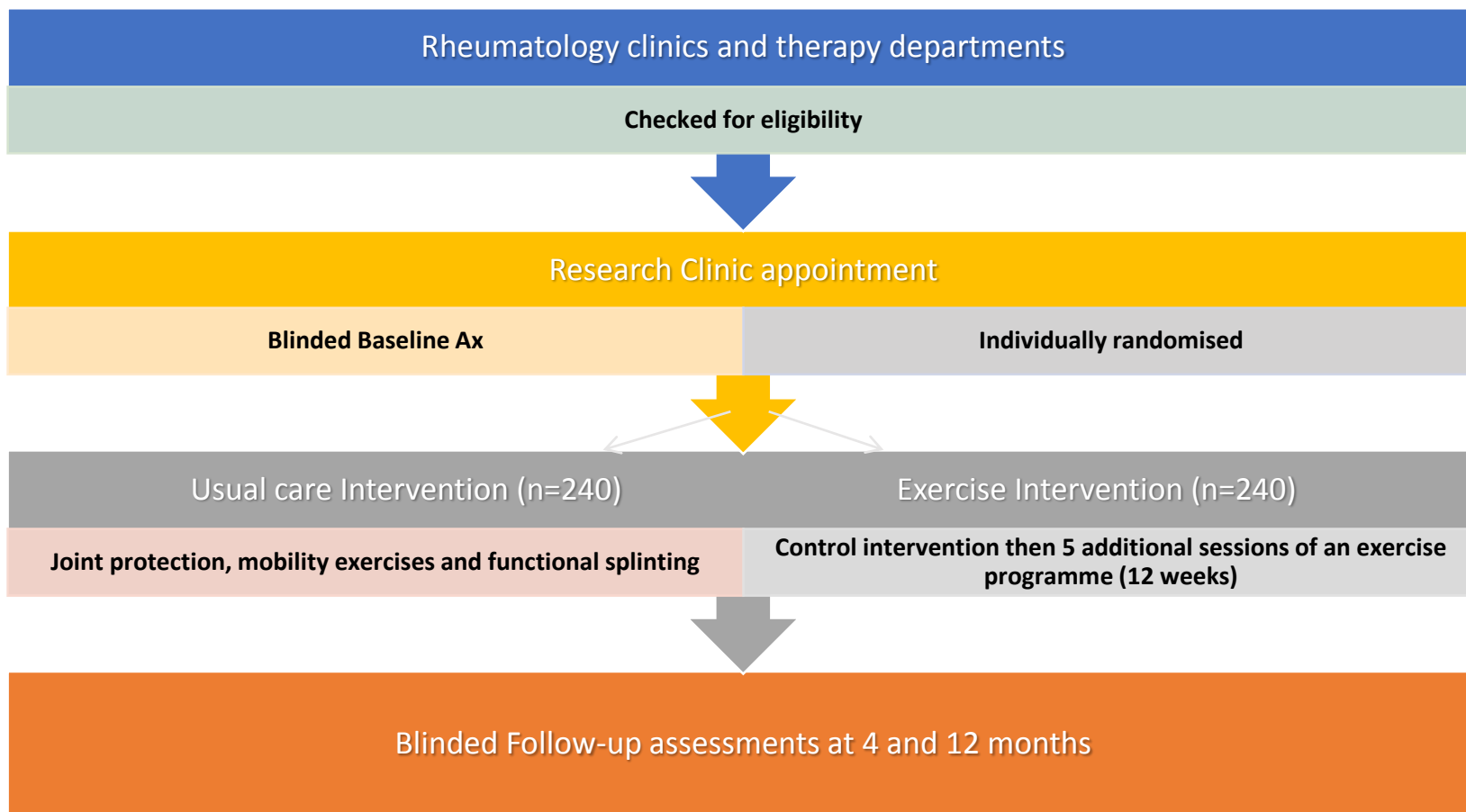
Upper limb joint surgery, or fracture, in the last 6 months

On a waiting list for upper limb orthopaedic surgery

Pregnancy

Aged <18 years

Study design



Trial treatments

Usual Care – Best Practice

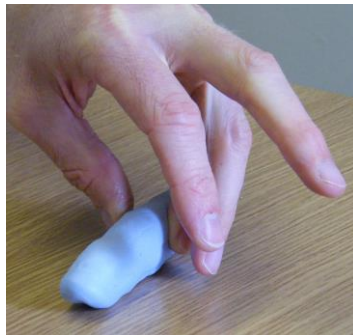
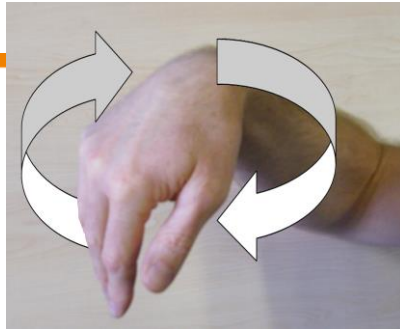
1-3 sessions, joint protection education, general exercise advice, ± functional splint

Exercise programme Intervention

Usual care plus 5 additional sessions of supervised exercises and home exercises

Adherence-promoting strategies for daily home exercise programme

Exercises



Behavioural strategies to encourage adherence

Personal Exercise Guide

Patient name : DOB:

My general goal is:

My specific exercise goal

What am I going to do?

My confidence

On a scale of 1 to 10, how confident am I that I can achieve my specific exercise goal? (circle)

Not confident 1 --- 2 --- 3 ---4 --- 5 --- 6 --- 7 --- 8 --- 9 --- 10 Very confident

My action plan

Where am I going to do it?

When am I going to do it?

Exercise diary

It is important to measure and record your progress, so that you can see when you are succeeding, as well as to work out what you can change if your plan is not working.

When will I record it?

Where will I complete my diary?

<p>Patient</p> <p>I will do the exercises (My specific goal), record my progress (Exercise Diary) and bring my exercise diary to the next meeting.</p> <p>Signature:</p> <p>Date:</p>	<p>Practitioner</p> <p>I will discuss with you your exercise diary and how you got on when you bring it back at the next meeting.</p> <p>Signature:</p> <p>Date:</p>
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Review

If none of the above has changed since the last session, review the form again along with the Exercise Diary, re-check their goals and confidence level and go through their action plans for the programme and Exercise Diary completion. Re-read through the Patient and Practitioner statements above and then re-sign below. If any part changes OR NEEDS TO CHANGE, you must fill out a new sheet.

<p>Patient</p> <p>Signature:</p> <p>Date:</p> <p>Signature:</p> <p>Date:</p> <p>Signature:</p> <p>Date:</p> <p>Signature:</p> <p>Date:</p>	<p>Practitioner</p> <p>Signature:</p> <p>Date:</p> <p>Signature:</p> <p>Date:</p> <p>Signature:</p> <p>Date:</p> <p>Signature:</p> <p>Date:</p>
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Outcomes



1° outcome – Michigan Hand Outcomes Questionnaire (MHQ) hand function subscale

2 ° outcomes – MHQ, pain, quality of life, physical impairments, self-efficacy

Intention to treat analysis

Health economics – intervention costs, resource use, EQ-5D

Results

N=490

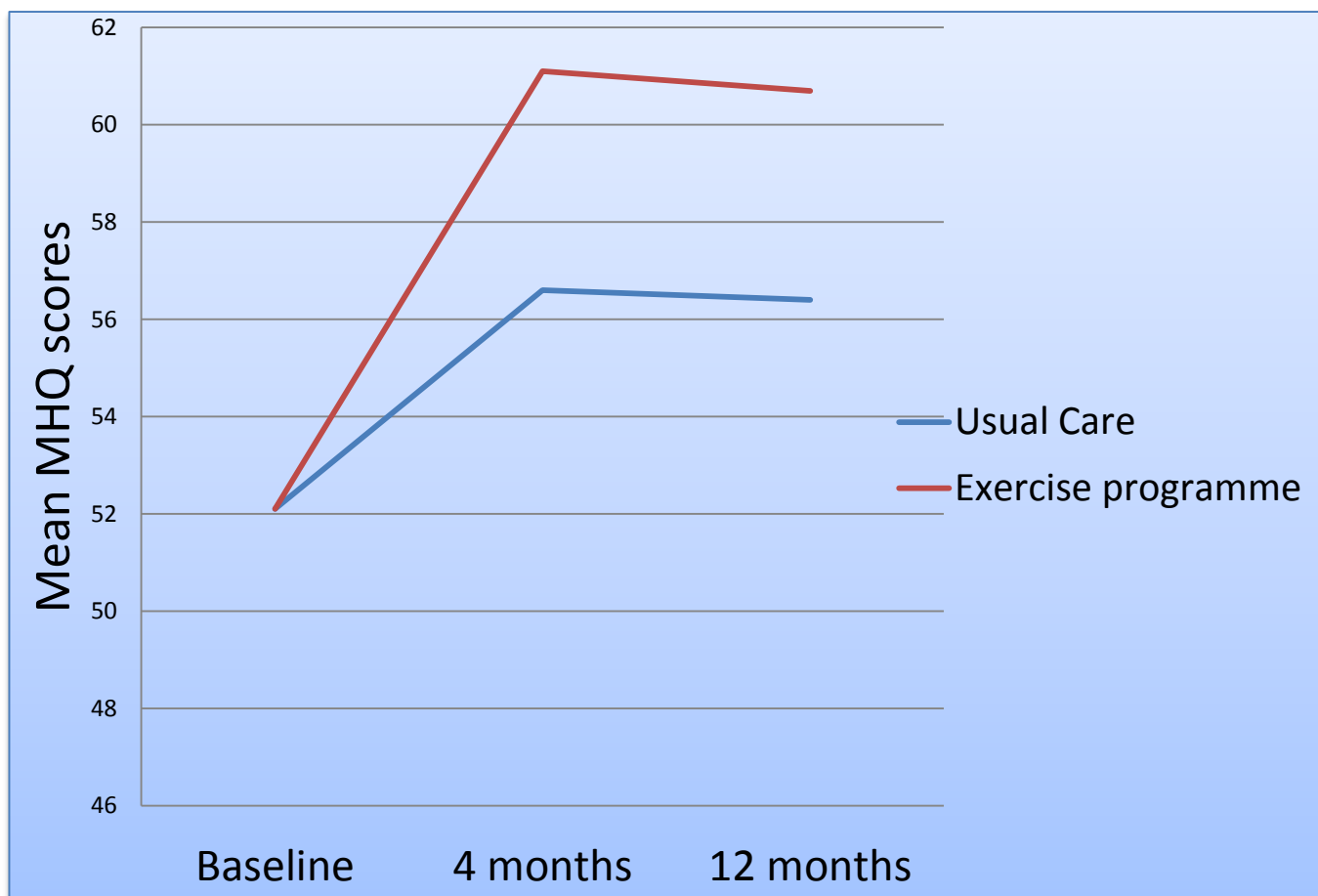
$\frac{3}{4}$ were female

Average age = early 60s

89% follow up at 12 months

Stable disease – 10 years

Reduced hand function and strength



Results



Small difference in self-efficacy in favour of exercises.

More participants in exercise group doing hand exercises than in control group.

No difference in pain scores or adverse events

The programme is likely to be cost-effective (12 month mean difference in QALYs = 0.01 (95%CI -0.03 to 0.05, corresponding ICER of £10,689).

Key publications

THE LANCET

Exercises to improve function of the rheumatoid hand (SARAH): a randomised controlled trial



*Sarah E Lamb, Esther M Williamson, Peter J Heine, Jo Adams, Sukhdeep Dosanjh, Melina Dritsaki, Matthew J Glover, Joanne Lord, Christopher McConkey, Vivien Nichols, Anisur Rahman, Martin Underwood, Mark A Williams, on behalf of the Strengthening and Stretching for Rheumatoid Arthritis of the Hand Trial (SARAH) Trial Team**

NICE National Institute for Health and Care Excellence

Rheumatoid arthritis

The management of rheumatoid arthritis in adults

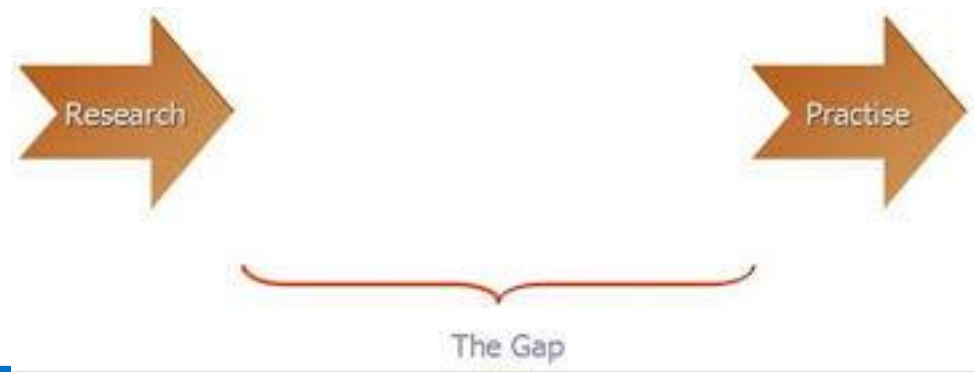
Issued: February 2009 last modified: August 2013

NICE clinical guideline 79
guidance.nice.org.uk/cg79

Clinical Trial to Clinical Practice – the problem

Materials were made available to NHS clinicians following the trial – downloadable from the OCTRU website.

However, the provision of these materials did not translate into implementation.



Clinical Trial to Clinical Practice - solutions



Train the Trainer

For NHS occupational therapists and physiotherapists

An online course on how to deliver the SARAH programme (*iSARAH*)

Direct access to people with arthritis

For People with Rheumatoid Arthritis

SARAH programme website (*mySARAH*)

Home-based & Self-managed by patients

Train the Trainer

A free online course on SARAH for NHS occupational therapists & physiotherapists

ADDIE Model: 1) **A**nalysis 2) **D**esign 3) **D**evelopment 4) **I**mplementation 5) **E**valuation

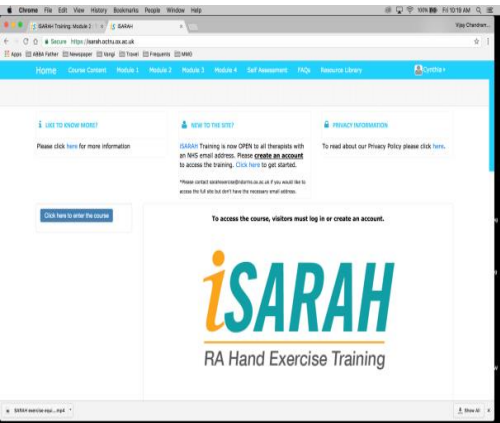
Phases 1 to 3: Inputs from hand therapists and researchers

Phase 4: iSARAH Live - 4 modules/ Self-assessment/ Course certificate/Unlimited access

Phase 5:

Impact Evaluation among therapists who completed iSARAH training
Service Evaluation in people with RA

https://isarah.octru.ox.ac.uk



iSARAH Training

Frequently Asked Questions

Click on a question to view the answer

What are the key SARAH outcomes to be evaluated?

Do patients need to do all SARAH exercises at the same time?

Can patients exercise with their splints/braces on?

What if a patient has severe joint pain/a flare up?

What if my patient requests additional appointments?

Do I have to conduct all five exercise training (review) sessions? How many sessions do I need to see them?

How long should each SARAH session be?

Can I omit any SARAH exercise?

Assessment + Advice session

Assessment

We suggest that you do the routine assessment that you would conduct for an individual with rheumatoid arthritis affecting the hands. Your physical evaluation may include measures of range of motion, strength, and dexterity, and or disease activity which may include joint counts, pain, Erythrocyte Sedimentation Rate (ESR) etc. We recommend that you measure patient's self-reported hand function using the [Hand Function Subscale](https://isarah.octru.ox.ac.uk/mod/folder/view.php?id=51) of Michigan Hand Outcome Questionnaire (MHQ) before prescribing the SARAH programme.

Patient advice

The provision of information and advice about joint protection and exercise are a core element of best practice care for patients with rheumatoid arthritis.

You should also provide advice on functional splinting and/or assistive devices as required. You should briefly introduce the SARAH exercise programme and explain what it involves.

The Arthritis Research UK (ARUK) educational booklets 'Rheumatoid Arthritis', 'Looking after your joints when you have arthritis' and 'Keep moving' are available for you to download from <https://isarah.octru.ox.ac.uk/mod/folder/view.php?id=51>.

This video below provides a very brief overview of the 'Assessment and Advice' session:














[< Back](#) [Next >](#)

[<](#) **PREVIOUS SECTION**
[Frequently Asked Questions](#)



Resource Library

All the resources you might need to deliver the SARAH programme.

-  SARAH patient education package
-  SARAH exercises package
-  SARAH behavioural strategies package
-  SARAH outcome measures package
-  SARAH publications & reports package
-  Cochrane review_Dynamic exercise programmes in RA
-  NICE Guidelines for rheumatoid arthritis
-  Hand and wrist orthoses for adults with rheumatological conditions
-  SARAH exercise booklet
-  Modified Borg scale
-  Patient discharge advice sheet

UNIVERSITY OF
OXFORD

Personal Exercise Guide

Patient name:

My general goal is:

My specific exercise goal

What am I going to do?

.....

My confidence

On a scale of 1 to 10, how confident am I that I can achieve my specific exercise goal? (Circle)

Not confident 1—2—3—4—5—6—7—8—9—10 Very confident

My action plan

Where am I going to do it?

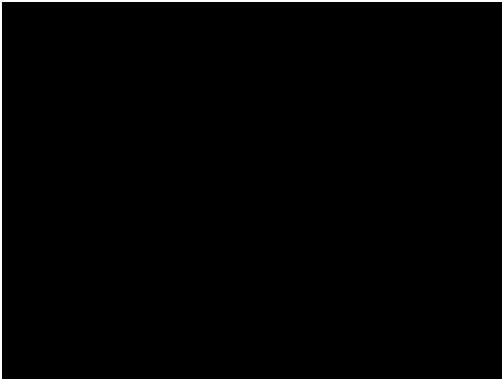
When am I going to do it?

.....

review

If none of the above has changed since the last session, review the form again along with the Exercise Diary, re-check their goals and confidence and go through their action plans for the programme and Exercise Diary completion. If any part changes OR IEEDS TO CHANGE, you must fill out a new sheet.

A video from iSARAH



Impact evaluation of iSARAH

Therapists are asked to fill in a brief online questionnaire upon completion of training

Perceived competence, Intention to use, Satisfaction with iSARAH, and Foreseen barriers in daily practice were evaluated

6 month follow up – use in clinical practice



Impact evaluation of iSARAH

As of 06 November 2017:
501 registrants, 238 therapists
completed training



N=238, as of November 06, 2017

Females: 209; Males: 29

Occupational therapists: 170; Physiotherapists: 68

Graduates: 170; Post-graduates: 42; Others: 26

Age groups

34 therapists above 50 years of age

63 therapists between 40-50 years

88 therapists between 30-40 years

53 therapists between 21-30 years

Work experience

27 therapists with above 15 years of experience

42 therapists between 10-15 years

49 therapists between 5-10 years

120 therapists with less than 5 years

Number of RA patients treated per month

88 therapists treat between 10-15 patients

73 therapists treat between 5-10 patients

74 therapists treat less than 5 patients

Impact evaluation of iSARAH

237 therapists confident in implementing SARAH

227 therapists intend to use SARAH in their clinical practice

213 therapists 'very or extremely satisfied' with iSARAH training

Foreseen barriers in daily practice: Lack of time (40%),
Not seeing enough number of patients (28%), No
exercise equipment (20%)

Adoption into practice, 6-month follow-up: November
2017

Service evaluation – patient outcomes

Pre and post-treatment

Hand function

Hand grip strength

Post treatment

Global rating of recovery

Satisfaction

4 months

Hand function

Global rating of recovery

Satisfaction

Service evaluation – patient outcomes

82 therapists have expressed an interest in taking part in the SARAH Service Evaluation

Four NHS sites started service evaluation; Ten sites to start soon

Target – service evaluation data for 300 patients

Service evaluation - challenges

Number of sessions

Lack time for focused hand treatment – rheumatology clinicians

Equipment

Concerned they don't see enough patients

Approvals by clinical audit department/clinical governance team

Rotational staff – do the training but unable to implement it

Next steps for iSARAH

Identify more sites for the service evaluation

Follow up the hand therapists completing the training to find out about their actual use of SARAH in clinical practice – 6 months

Widening Implementation: South Asia, Europe & North America

Guided online exercise programme with behavioural support

6 online sessions over 12 weeks

Daily home exercises

To eventually provide unlimited & free access to people with Rheumatoid arthritis

Usability testing completed (n=10)

The screenshot displays the mySARAH website interface. At the top, a horizontal progress bar is divided into six colored segments: orange, purple, red, dark blue, light blue, and green. Below this, a timeline shows six sessions: Session 1 (0w), Session 2 (1w), Session 3 (2w), Session 4 (3w), Session 5 (4w), and Session 6 (12w). The main content area is titled "My Record" and "Session 1". A progress bar indicates 12% completion. The text reads: "Welcome to Session 1 of the online SARAH programme for people with rheumatoid arthritis affecting their hands. We will start Session 1 by asking you to complete a short questionnaire. This information will allow you to track your progress during the SARAH programme. Your answers will also give us some general background information about you and allow us to see if the programme is helping the people who are using it. All information is kept secure and is completely confidential." To the right is an image of hands typing on a keyboard. Below the text, it says: "Then we will cover information about managing rheumatoid arthritis including joint protection and splints as well as exercise." To the left is an image of a person in a blue tank top performing a hand exercise. To the right is an image of colorful blocks spelling "GOAL SETTING". At the bottom are "Go Back" and "Continue" buttons.

Proof of concept study (n=12)

Assess acceptability, feasibility and safety of the programme

Is it an acceptable treatment for people with RA?

Are people with RA able to work through the whole programme?

Do they complete it?

Do they do the daily exercises?

Are the exercises done safely and correctly?

Next steps

Complete mySARAH proof of concept study

Decide where mySARAH sits in the pathway for care for people with RA

More comprehensive evaluation

Acknowledgements

Therapists and people with RA who have assisted with this project

The British Association for Hand Therapists

National Rheumatoid Arthritis Society

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The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

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