

## **Title**

mySARAH: a web based version of the SARAH programme for people with rheumatoid arthritis affecting their hands and wrists

## **Background**

The Strengthening and Stretching for Rheumatoid Arthritis of the Hand (SARAH) programme is a 12-week progressive hand and arm exercise programme for people with rheumatoid arthritis (RA). It is underpinned with behavioural support strategies of goal setting, confidence building and action planning to encourage adherence with the programme. The programme was shown to be both clinical and cost-effective in a large clinical trial and is now recommended in the NICE guidelines for RA (December 2015). The programme was designed to be delivered by a hand therapist but participants in the clinical trial suggested it would be helpful to people with RA if they could access the programme online. A web based version of the SARAH programme (mySARAH) is being developed so that people with RA across the UK can access the programme directly and increase their access to evidenced based treatment

## **Objectives**

To develop and evaluate mySARAH

## **Methods**

The SARAH programme was mapped to create a paper prototype of mySARAH and the essential functional requirements were discussed and agreed with information technology experts. Feedback on the prototype was collected from patient volunteers (n=5), which was further reviewed and finalised to inform the preliminary version of mySARAH.

A usability evaluation of the preliminary version will be conducted with up to 10 volunteers to identify and resolve issues technical issues with navigating through the website. mySARAH will then be refined and further testing will be carried out to ensure that people with RA can progress through the exercise programme as intended (n=??). We will do pre- and post-testing of hand strength and function as well as monitoring adverse events and measuring satisfaction with the programme. Further modifications will be made as necessary before making the programme more broadly available.

## **Results**

The paper prototype replicated the patient-therapist assessment, exercise and review sessions of the clinical trial. It was proposed to deliver the content through informational text, digital documents, exercise videos, clinician interviews and online patient and therapist forms. Functional requirements, a few examples such as user authentication, system responsiveness, secured data storage, user dashboard page, and exercise widget were also agreed.

Patient volunteers reviewed the prototype and expressed interest having exercise videos, links to additional information, involving patients in the exercise videos, making 'short' videos and providing e-mail links as exercise reminders, and insisted keeping mySARAH 'short and simple'.

The preliminary version of mySARAH is in the final stages of development and usability testing is scheduled for August 2017. Ethical approval has been given by XXXX.

### **Conclusions**

The final version of mySARAH and results from the usability and pilot testing will be presented at the BAHT conference.