Participant Information Sheet v0.5 29 05 26 IRAS 368373

Power Assisted Circuit Exercise for Stroke

Summary

You are invited to consider taking part in a research project which will help us to develop exercise pathways for people living with stroke. We are seeking volunteers to join an eight-week programme of exercise using seated equipment with a motor which helps users to move their arms and legs. The study will be at the Advanced Wellbeing Research Centre in Attercliffe, Sheffield. We will take some measurements at the start and end of the eight-week programme to see whether the exercise has changed your walking, fitness and quality of life. The adapted exercise machines are shown in the image below:

Power assisted equipment







Images accessed with permission from Clowne Leisure Centre and Innerva.com

What is the purpose of this project?

We know that physical activity or exercise helps people living with stroke to improve their mobility, fitness and quality of life.

However, some people living with stroke find it difficult to use normal exercise equipment due to muscle weakness and reduced balance. This project will help us to understand whether power assisted exercise might be a solution to this challenge.

What's already known?

Power assisted exercise machines are available in some gyms and leisure centres in the UK and are already used by some people living with stroke. However, no previous research study has measured whether power assisted exercise can help to improve mobility, fitness and wellbeing following stroke.

Why are we doing this research?

Most areas in the UK do not have access to power assisted exercise equipment. It is important that we measure the extent to which power assisted exercise can help people living with stroke so that we can improve rehabilitation opportunities.

How many participants will be involved in this study?

We have space for 30 people living with stroke in South Yorkshire to join the 8-week exercise programme between Spring 2026 and Winter 2027.

Who can take part in the study?

To be able to take part in the study you will need to have had a confirmed diagnosis of stroke and be living at home with some changes to your mobility. The list below provides more detail:

- History of one or more stroke(s)
- Aged 18 years or older
- Need some help with everyday activities and/or walking
- Able to stand and take a couple of steps (with assistance if needed)

If your doctor or a healthcare professional has advised you to avoid exercise or physical activity, then you may not be suitable for the study.

If you are unable to stand or transfer between seated surfaces without a hoist or transfer device, then you will not be able to take part in the study.

If you weigh more than 150 Kilograms/24 stone, then you will not be able to take part in the study.

If you are still in hospital, or your stroke was less than 28 days ago then you will need to wait until you have been discharged home and one month has passed since your most recent stroke.

The research team will check that all volunteers understand the purpose of the study and are able to give their informed consent to take part.

What if I would like to try a different type of exercise?

There are other services in the Sheffield area which help people living with stroke to take part in exercise. Local organisations including Sheffield Stroke Association and the Move Well Scheme can provide more information. Alternatively, you can talk to your GP about exercise options. Your decision about the project will not be shared with the person who gave you this information sheet.

What would taking part involve?

The information below describes how you can sign up to the study, the measurements which will be taken and details of the exercise programme itself.

Signing up

If you are interested in taking part in the project, you can send an email to **r.young@shu.ac.uk,** OR send a text or WhatsApp message to number **07811 467 134**. Please include your preferred name and contact number and/or email.

A member of the research team will get in touch with you to schedule either a telephone call or home visit, depending on which you prefer. The date and time of the telephone call or home visit will be confirmed by letter or email.

If you find it difficult to communicate in English, we can arrange for a family member or translator to help with the conversation.

Measurement session

If you decide that you would like to take part in the study, you will be invited to the Advanced Wellbeing Research Centre in Attercliffe, Sheffield. We can arrange taxi transport if required and we will cover travel expenses.

We will measure your heart rate, blood pressure, oxygen levels, height and weight. You will complete a supervised 10-minute exercise session on one of the power assisted exercise machines whilst we measure your heart rate. If we notice anything unusual about the way in which your body responds to the exercise, we will contact your GP or a medical doctor for further guidance.

If you can walk 10 metres or more, we will measure how long it takes you to stand up, walk 3 metres and return to your seat. If you are able, we will measure how long it takes you to walk 10-metres in a straight line.

You will be asked to complete some questionnaires which will ask you about your quality of life and how your stroke has affected you. You can complete these with help from the research team or on your own.

At the end of the 8-week study the measurements described above will be repeated.

Exercise programme

The exercise programme will run for 8-weeks, with two sessions planned per week. At the start of each session, the research team will check how you are feeling and measure your heart rate and blood pressure. The aim will be to exercise on three power assisted machines, spending between 10 and 15 minutes on each machine. We expect that it may take several sessions to build up to this.

More information about power assisted equipment can be accessed at the manufacturer's website: https://www.innerva.com/

A Chartered Physiotherapist plus two trained research assistants will supervise your first two sessions. The research assistants will supervise the

remaining exercise sessions. They will help you to get on and off the machines, monitor your heart rate and help you to progress towards your goals. Each exercise session will be a maximum of one hour long.

We know that living with stroke can be unpredictable. The research team will understand that you may need to occasionally miss sessions, or that you may feel tired and only be able to exercise at a low effort level during some visits.

All exercise sessions will be at the Advanced Wellbeing Research Centre in Attercliffe, Sheffield.

At the end of your exercise programme, you will have the option of taking part in an interview or focus group to talk about your experiences of taking part in the project.

Can I bring a family member of carer?

Yes, a family member or carer will be welcome to join you during your exercise sessions. Translators are also welcome.

Will I be exercising on my own or in a group?

The exercise sessions will be delivered to small groups of 2-3 people. If you would prefer single gender sessions, please tell the research team and this will be arranged for you.

Do I need any special clothing or equipment?

We will recommend that you wear loose, comfortable clothing and flat shoes for the exercise sessions. You will not need any specialist equipment and clothing. Headscarves may be worn on the motor-assisted machines.

Can I choose the time and day of my sessions?

We will ask you about your weekly routines to aim to plan your sessions at a time which is convenient for you. We will not be able to offer evening or weekend sessions.

How will travel to the research centre be supported?

The research project will cover all transport costs. If you can drive or arrange a lift with a carer or family member then we will reimburse travel at

45-pence per mile. There is free parking directly outside the entrance to the research centre which is reserved for research participants.

If you would prefer to travel by taxi, then the research team can book these for you and pay directly. This includes wheelchair taxis. If you prefer to book your own taxi service, then the cost of these will be reimbursed. You will be required to retain receipts.

Can I do other types of exercise or therapy during the study?

You can continue your existing therapies or exercise routines. We will request that you avoid taking up any other new types of physical activity during the 8-week study.

Disclosure

If you decide to take part in the study, we will send a letter to your GP which describes the purpose of the study and your involvement in it.

What if I want to drop out of the study?

You may opt out of the study at any time without giving any reason to the research team. If you indicate that you would be happy to talk to us about reasons for opting out, then we might invite you to a follow-up interview. Opting out of the study will **not** affect your access to future treatment, healthcare or other research opportunities.

What are the possible benefits of taking part?

We know that exercise can help stroke recovery and it is possible that the power-assisted exercise will improve your fitness, mobility and quality of life. You may also enjoy the social contact with the research team and other study volunteers. We will give you a £30 retail voucher as a 'thank you' for taking part. **What are the possible disadvantages and risks of taking part?**

There is a small risk of injury or health complication associated with any type of exercise for people living with stroke. You will be observed and assisted throughout your exercise sessions to minimise this risk. If an injury or health complication does occur, then medical advice will be arranged immediately. You may feel tired after the exercise sessions.

Project insurance

Sheffield Hallam University is the sponsor of this research and holds indemnity insurance for the project.

How will we use information about you?

We will need to use information from you for this research project.

This information will include your

- Name, address and contact details
- Emergency contact details

People will use this information to do the research or to check your records to make sure that the research is being done properly.

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a code number instead.

Sheffield Hallam University is the sponsor of this research.

Sheffield Hallam University is responsible for looking after your information. We will not share your information related to this research project with any other organisations.

We will keep all information about you safe and secure by:

- Identifying data will be stored in a secured network drive within Sheffield Hallam University's internal IT system.
- Electronic files containing identifying data will be password protected.
- Research data will be stored separately using an anonymised code to protect your identity.

Your data will not be shared outside the UK.

How will we use information about you after the study ends?

Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study.

We will keep your study data for a maximum of 10 years. The study data will then be fully anonymised and securely archived or destroyed.

What are your choices about how your information is used?

- you can stop being part of the study at any time, without giving a reason, but we will keep information about you that we already have
- you have the right to ask us to access, remove, change or delete data we hold about you for the purposes of the study. You can also object to our processing of your data. We might not always be able to do this if it means we cannot use your data to do the research. If so, we will tell you why we cannot do this

Where can you find out more about how your information is used?

You can find out more about how we use your information:

- our leaflet **(www.hra.nhs.uk/patientdataandresearch)**
- by asking one of the research team
- by sending an email to **DPO@shu.ac.uk**
- by ringing us on **0114 225 3333.**

Risk of disclosure

Please note that whilst we will treat your data and the information about you with us securely, there may be exceptions if we identify any evidence or concerns about a potential risk, harm or wrongdoing for yourself or another person. Examples of this could include concerns about your mental health, risk of suicide or driving without medical approval. If we are concerned about your physical or mental wellbeing, we may contact your GP. For other concerns we may be obliged to contact other relevant statutory bodies or agencies in line with Sheffield Hallam University safeguarding policy: https://www.shu.ac.uk/about-us/governance/governance-documents/safeguarding

You should contact the Data Protection Officer if:	**You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:**
• you have a query about how your data is used by the University • you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately) • you would like to complain about how the University has used your personal data DPO@shu.ac.uk	• you have concerns with how the research was undertaken or how you were treated ethicssupport@shu.ac.uk

Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555