The use of a mobile system to support care pathways for joint replacement surgery.

Lead supervisor: [Dr Andrew Barnes](#)

Co-supervisor(s): [Dr Rachel Young](#)

School/Institute: [Sport and Physical Activity](#)

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Project summary

Osteoarthritis is a common degenerative disease where joint replacement is a common intervention to reduce physical limitations. Increased pressure on NHS services has led to growing surgical waiting times with more than 800 people in Sheffield alone currently waiting for surgery, with more than 250 people waiting more than a year. Evidence supports the benefits of strength training for patients waiting for surgery and has the potential to be monitored and feedback through smartphone cameras and applications. There is a need to optimise care for patients through monitoring of engagement and progress while maintaining a supported self-management approach to care. This project aims to develop a mobile system to support patients waiting for a joint replacement to get ready for surgery. This is a research project funded by South Yorkshire Digital Health hub which aims to improve our health through digital interventions.

This internship will be an opportunity to work as part of research team on the pilot testing of this new mobile device. It will allow you to gain experience of working on a health-related research project, develop your research knowledge, as well as developing your transferable skills such as teamwork and communication to support your employment prospects. Specifically, you will support with the pilot testing of the new system and the collection and analysis of physical function tests and patient evaluations.

Specific skills and experience required for this project

Please also refer to the advert on our jobs pages for the person specification for these internships

In order to succeed in this role, you should posses the following relevant knowledge or skills

Knowledge :

- Knowledge of research designs.
- Knowledge of tests to assess physical function in patients with osteoarthritis.
- Knowledge of quantitative and qualitative analysis approaches.

Competencies:

- Ability to communicate effectively with staff and patients
- Ability to source and critique relevant literature

- Excellent numerical and quantitative analytical skills
- Excellent written communication skills
- Excellent team working skills and the ability to establish good working relationships
- Excellent planning and organisational skills
- Passion for supporting patients
- Enthusiasm and willingness to develop as an individual
- Professional, punctual, and reliable

Project location

AWRC

Home working may be available

Project delivery

This internship will operate on a part time basis (2-3 days per week) and will combine remote working and on campus activity. The schedule of work will be flexible and can be agreed with the student and project team based on project progress and other commitments of the student.