Occupational support for patients undergoing hip or knee replacement

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
30/01/2023		[X] Protocol		
Registration date	Overall study status Ongoing Condition category Musculoskeletal Diseases	Statistical analysis plan		
09/02/2023		Results		
Last Edited		Individual participant data		
17/09/2025		[X] Record updated in last year		

Plain English summary of protocol

Background and study aims

Hip and knee joint replacements relieve pain and improve function in patients with arthritis. One in four patients are in work at the time of their hip or knee replacement surgery, equivalent to 50,000 people in the UK each year. Many patients get back to work after surgery, however, the time this takes varies considerably. A lengthy recovery time can affect patients' physical and mental wellbeing. Patients receive little or no return-to-work support from their hospital or GP specific to their individual needs and work situation. As part of an earlier research study we developed an 'occupational' (back-to-work) programme (known as OPAL) that supports return-to-work after surgery. We now need to assess whether this is effective in supporting a timely, safe and sustained return-to-work.

The OPAL occupational support programme provides personalised, targeted support for people in a range of jobs. As part of the programme, patients receive a variety of resources to help them plan their return-to-work. This includes access to a trained co-ordinator who helps and supports them before and after surgery. We will compare the OPAL occupational support programme against standard care.

Who can participate?

All adults listed for elective primary hip or knee replacement from a minimum of 14 UK hospitals, who are in paid or unpaid work, will be invited to take part.

What does the study involve?

Consenting participants will be randomly assigned (using a computer) to receive either the OPAL programme or standard care. We aim to recruit 742 participants over 15 months. We will ask participants to complete questionnaires for 12 months following surgery in relation to when and how they return to work, and their normal activities. From these, we will understand if the OPAL programme helps to reduce the length of time until full, sustained return-to-work. We will find out if the cost of care differs between the two groups, to determine whether one is a better value for money for the NHS.

What are the possible benefits and risks of participating? Individual participants may not benefit directly from this research. Those in the intervention

group have access to a) a website which supports key aspects of returning to work, and b) a return-to-work coordinator (RTWC) who provides 1:1 support and helps the participant understand and interact with the information and guidance provided. This approach provides greater support than a typical standard care approach of sign-posting.

For participants in the standard care group, although there is no direct benefit, they are participating in research that could help to update the current approach to benefit future patients.

Where is the study run from?
South Tees Hospitals NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for? June 2022 to January 2027

Who is funding the study? National Institute for Health and Care Research (NIHR) (UK).

Who is the main contact? Lucy Sheehan, lucy.sheehan@york.ac.uk

Contact information

Type(s)

Principal investigator

Contact name

Prof Paul Baker

Contact details

South Tees Hospitals NHS Foundation Trust James Cook Hospital Marton Road Middlesborough United Kingdom TS4 3BW +44 1642 850850. Ext 54168 paul.baker1@nhs.net

Type(s)

Public

Contact name

Ms Lucy Sheehan

Contact details

York Trials Unit Ground Floor ARRC Building Department of Health Sciences University of York Heslington York
United Kingdom
YO10 5DD
None available
lucy.sheehan@york.ac.uk

Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

Integrated Research Application System (IRAS)

320809

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

CPMS 55035, NIHR133880

Study information

Scientific Title

Occupational support for Patients undergoing Arthroplasty of the Lower limb trial (OPAL trial)

Acronym

OPAL

Study objectives

We aim to evaluate the OPAL occupational support programme to find out whether it assists patients to make a timely, safe and sustained return-to-work and normal activities after hip or knee joint replacement surgery.

The OPAL feasibility study is registered on ISRCTN at https://www.isrctn.com/ISRCTN27426982

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approval 08/02/2023, West Midlands - Edgbaston Research Ethics Committee (Barlow House, 3rd Floor, 4 Minshull Street, Manchester, M1 3DZ, UK; +44 (0)2071048070; edgbaston.rec@hra.nhs.uk), ref: 23/WM/0013

Study design

Interventional randomized controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Occupational support for patients undergoing arthroplasty of the lower limb

Interventions

The OPAL trial is a two-arm multi-centre, randomised, superiority trial with parallel groups. Patients will be allocated to a) the OPAL support intervention or b) standard care. There will be a 6-month internal pilot, and embedded economic and process evaluations. The trial will assess the effect on time to full, sustained RTW of the OPAL occupational support intervention versus standard care in 742 people undergoing elective primary hip and knee replacement in the UK. The risk of group contamination is low due to the experimental intervention being tailored to participants and being delivered when patients are physically separated.

Allocation will be on a 1:1 ratio (intervention: control). Randomisation will be carried out using a secure web-based randomisation system (REDCap) ensuring allocation concealment and stratified by site with randomly permuted blocks of randomly varying size. Stratification by surgical site (hip or knee joint) will be included within the randomisation process. The randomisation service will require the recording of information and a check of patient eligibility to avoid inappropriate entry of patients into the trial. This will be conducted by local site teams including clinicians and research nurses. The randomisation system will provide an immediate allocation and a confirmation email. The email confirming randomised allocation will be sent to the PI and all authorised users of the randomisation system at the recruiting site. The local site team/treating clinician will inform the participant of their group allocation.

For the Process evaluation and to address important issues of fidelity and acceptability of the intervention, we will undertake the following:

- Qualitative observations of the RTWC during an initial appointment with a sample of participants pre-surgery (n=15-20) to understand how the intervention is implemented in practice.
- Qualitative interviews with trial participants from the intervention arm (n=15-20). Participants will be purposively sampled to ensure maximum variation (on the basis of age, gender, job role and site) to ascertain the acceptability of the interventions, ease of use and perceived impact of the intervention.
- Interviews with a sample of trial participants' employers (n=5) will be conducted to understand key stakeholder perspectives.
- Interviews with RTWCs (n=14) will be conducted on two occasions. At the start of the study brief interviews will be conducted regarding reasons for applying for the position, expectations for the post/intervention, anticipated barriers and facilitators to using the intervention. At the end of the intervention period, RTWCs will be asked about their experience of delivering the service, interfacing with other service providers and to highlight challenges/facilitators associated with service delivery.
- Interviews with service leaders/key stakeholders (n=15-20) including clinicians, and commissioners will be conducted at two time points: during project set up to discuss current provision, how the new intervention will fit within existing services and how this will be funded; and at end of trial to discuss incorporating trial findings into service development.

Intervention Type

Behavioural

Primary outcome(s)

Time until 'full' sustained return to any work, defined as work resumption to the same hours as prior to joint replacement, in any role, without any day of sick leave for a consecutive 4-week period. This is measured monthly via questionnaire.

Key secondary outcome(s))

- 1. Time to any return to work, measured monthly via questionnaire.
- 2. Measures of functional recovery to daily activities and social participation using the following:
- 2.1. Oxford hip/knee score (OKS/OHS) at baseline, 3, 6, 9, and 12 months.
- 2.2. Lower extremity functional scale (LEFS) at baseline, 3, 6, 9, and 12 months.
- 2.3. PROMIS social participation short form questionnaires (social roles and activities questionnaire, satisfaction with participation in social roles questionnaires) at baseline, 3, 6, 9, and 12 months.
- 3. Number of 'sick days' between surgery and 'full' sustained return to work measured monthly via questionnaire.
- 4. Participant adherence to the intervention and the intervention's physical rehabilitation programme self-reported Likert scales upon achieving the primary outcome.
- 5. Proportion of participants using workplace interventions, adaptions and modifications to facilitate their RTW measured by questionnaire upon achieving the primary outcome.
- 6. Health-related quality of life measured via EQ-5D-5L at baseline, 3, 6, 9, and 12 months.
- 7. Work Productivity measured via Work Limitations Questionnaire at baseline, 3, 6, 9, and 12 months.

Completion date

31/01/2027

Eligibility

Key inclusion criteria

Adults (>=16 years) listed for elective primary hip or knee replacement in paid or unpaid work who intend to RTW after surgery.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

16 years

Sex

All

Key exclusion criteria

- 1. Patients undergoing emergency arthroplasty (e.g. for trauma).
- 2. Adults listed for elective ankle replacement.
- 3. Adults planned to undergo further surgery within the 6 months after their joint replacement.

Added 07/06/2024:

4. Patients listed for bilateral knee replacements.

Date of first enrolment

19/04/2023

Date of final enrolment

30/09/2025

Locations

Countries of recruitment

United Kingdom

England

Scotland

Wales

Study participating centre Royal Derby Hospital

Uttoxeter Road Derby United Kingdom DE22 3NE

Study participating centre Sunderland Royal Hospital

Kayll Road Sunderland United Kingdom SR4 7TP

Study participating centre Northern General Hospital

Northern General Hospital NHS Trust C Floor, Huntsmnan Building Herries Road Sheffield United Kingdom S5 7AU

Study participating centre Freeman Road Hospital

Freeman Road High Heaton Newcastle upon Tyne United Kingdom NE7 7DN

Study participating centre Norwich

Norfolk & Norwich University Hosp' Colney Lane Colney Norwich United Kingdom NR4 7UY

Study participating centre James Paget University Hospital

Lowestoft Road Gorleston Great Yarmouth United Kingdom NR31 6LA

Study participating centre James Cook University Hospital

Marton Road Middlesbrough United Kingdom TS4 3BW

Study participating centre North Tyneside General Hospital

Rake lane North Shields United Kingdom NE29 8NH

Study participating centre

University Hospital of Hartlepool

Holdforth Road Hartlepool United Kingdom TS24 9AH

Study participating centre Royal National Orthopaedic Hospital

Brockley Hill Stanmore United Kingdom HA7 4LP

Study participating centre St Helier Hospital

Wrythe Lane Carshalton United Kingdom SM5 1AA

Study participating centre Royal London Hospital

80 Newark Street London United Kingdom E1 2ES

Study participating centre John Radcliffe Hospital

Headley Way Headington Oxford United Kingdom OX3 9DU

Study participating centre NHS Lothian

Waverley Gate 2-4 Waterloo Place Edinburgh United Kingdom EH1 3EG

Study participating centre NHS Lanarkshire

14 Beckford Street Hamilton United Kingdom ML3 0TA

Study participating centre Darlington Memorial Hospital

Hollyhurst Road Darlington United Kingdom DL3 6HX

Study participating centre Guys Hospital

Great Maze Pond London United Kingdom SE1 9RT

Study participating centre Dewi Sant Hospital

Albert Road Pontypridd United Kingdom CF37 1LB

Sponsor information

Organisation

South Tees Hospitals NHS Foundation Trust

ROR

https://ror.org/02js17r36

Funder(s)

Funder type

Government

Funder Name

NIHR Evaluation, Trials and Studies Co-ordinating Centre (NETSCC)

Results and Publications

Individual participant data (IPD) sharing plan

The current data sharing plans for this study are unknown and will be available at a later date

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol article</u>		16/09/2024	26/09/2024	Yes	No
HRA research summary			28/06/2023		No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Protocol file	version 3.0	15/04/2024	10/06/2024	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes