The clinical and cost effectiveness of a personalised living well support package on health-related quality of life in older people with knee and/or hip joint pain and at least one other long term health condition

Submission date	Recruitment status	[X] Prospectively registered	
05/10/2023	Recruiting	[X] Protocol	
Registration date	Overall study status	Statistical analysis plan	
16/10/2023	Ongoing Condition category	☐ Results	
Last Edited		Individual participant data	
09/04/2025	Musculoskeletal Diseases	[X] Record updated in last yea	

Plain English summary of protocol

Background and study aims

Knee and hip osteoarthritis affect 1 in 2 adults aged over 70 years with nearly 7 in 10 osteoarthritis sufferers having more than one medical condition, resulting in complex health needs. Demand for treatment is high but care across services is often fragmented and not based on individual user needs and preferences. The complex interaction of painful arthritis and long-term conditions is associated with reduced independence and quality of life in terms of self-care, mobility, activity levels, pain, anxiety, and depression. Individuals with arthritis and multiple long-term conditions (MLTC) are also less active than the general population, which has a negative impact on their physical and mental health. They often struggle with the knowledge, confidence, and skills to self-manage their health alongside their arthritis. Overall, arthritis and MLTCs can lead to high demand for coordinated care across different services, and admission to hospital, which is costly to the individual and society. Holistic personalised treatments for older adults that help them live well alongside managing their arthritis and MLTCs are urgently needed.

The aim of the study is to evaluate how effective this new TIPTOE living well support is and see whether it can help individuals with knee and/or hip joint pain and other long-term conditions understand their conditions more and be able to cope with the challenges they experience in everyday life.

Who can participate?

People aged 65 years and older who are living independently in the community, or with carer support or in assisted living. You must also have knee and/or hip joint pain, which is impacting on daily living, and at least one other long-term mental or physical health condition.

What does the study involve?

Participants who are randomised to receive the personalised living well support package

(TIPTOE intervention) will receive up to six, one-to-one coaching sessions with trained healthcare practitioners and be sent a living well book which features stories and tips from people living with joint pain. Those who are randomised to the control group will continue to receive their usual care.

What are the possible benefits and risks of participating?

At this stage of the research, we don't know if there will be any direct benefits for you but by being involved you will help us gather evidence about different ways that may help individuals with knee and/or hip joint pain and other long-term condition(s) manage better in everyday life. There is a chance that you might find some topics sensitive or challenging whilst taking part in one-to-one support sessions or whilst answering questionnaires.

Where is the study run from?

The study is being sponsored by Cardiff University and the Centre for Trials Research at Cardiff University is managing the study on a day-to-day basis. We have worked extensively with a Patient and Public Involvement (PPI) group who have helped us shape the study.

When is the study starting and how long is it expected to run for? January 2023 to August 2026

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

Who is the main contact?
The study team can be contacted at TIPTOE@cardiff.ac.uk

Contact information

Type(s)

Scientific

Contact name

Dr Elizabeth Randell

Contact details

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Additional identifiers

EudraCT/CTIS number Nil known

IRAS number

324783

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

CPMS 58743, IRAS 324783

Study information

Scientific Title

MulTI-domain Self-management in Older People wiTh OstEoarthritis and Multi-Morbidities

Acronym

TIPTOE V1.0

Study objectives

Participants receiving the TIPTOE, personalised multi-dimensional self-management intervention, in addition to treatment as usual will have different outcomes as measured by the Musculoskeletal Health Questionnaire, than those receiving treatment as usual alone.

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 18/09/2023, Wales REC 2 (Health and Care Research Wales Support and Delivery Centre, Castlebridge 4, 15-19 Cowbridge Road East, Cardiff, CF11 9AB, United Kingdom; +44 2922 941119; Wales.REC2@wales.nhs.uk), ref: 23/WA/0221

Study design

Interventional randomized controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

To follow

Health condition(s) or problem(s) studied

Knee and hip osteoarthritis

Interventions

Intervention Name: TIPTOE personalised living well support intervention

Intervention Details: The trial intervention is a self-management-based approach described as TIPTOE living well support. It will involve six one-to-one (lasting up to 60 minutes) personalised living well support coaching sessions (over 6 months) incorporating digital, and paper-based living well support resources applicable to this population. Individual coaching sessions will primarily be delivered face-to face through clinics, community services or within participants homes, with the option of remote delivery where required. The available resources will include stories and narratives of the experiences, challenges and successes of other people living with Osteoarthritis and Multiple Long-Term Conditions, which might act as a source of ideas or motivation.

Participants allocated to the intervention arm will receive coaching sessions by Healthcare Professionals (HPs), including physiotherapists, occupational therapists, and nurses, who have experience of working with people with complex health problems from primary and secondary care or community settings. Participants will also gain access to the co-designed Living Well with Joint Pain book. Space within the book will allow individuals to record goals and plans, explore personal social networks and reflect on progress. The book will also be available as an interactive PDF with links to digital resources and updates. All HPs will be trained in Bridges self-management that has been adapted for TIPTOE. This will mean that practitioners will develop the knowledge, skills, and confidence to facilitate the coaching sessions in a collaborative and non-directive way whilst also addressing concepts such as polypharmacy, physical activity, weight management, nutrition, safety, and frailty in their conversations (if required). The training will allow HPs to reflect on the social context of the individual and to value the skills and experiences of individuals and their nominated supporter.

The control group will receive usual care.

Intervention Type

Behavioural

Primary outcome measure

Musculoskeletal Health Questionnaire (MSK-HQ) measured at baseline, 6- and 12-month follow up

Secondary outcome measures

- 1. Chronic disease self-efficacy as measured on the Self-Efficacy Scale for managing Chronic Diseases (SESMCD) at baseline, 6- and 12-months follow up.
- 2. Directly measured step count, using an ActivPAL physical activity monitor. Physical activity monitoring will be completed at baseline, and at 12-months follow-up.
- 3. Aspects of health related QoL as measured on the EQ-5D-5L questionnaire at baseline, 6- and 12-month follow up.
- 4. Self-Assessment of frailty as measured on the Pictorial Fit-Frail Scale (PFFS) at baseline, 6- and 12-month follow up.
- 5. Number of falls recorded using a Falls History Questionnaire at baseline and at 6- and 12-months follow-up.
- 6. Healthcare resource use, obtained through consented linkage to NHS Digital and SAIL. Datasets will include primary care (where available), hospital admissions, surgery, outpatient, and emergency care. A CSRI will also be used to capture additional healthcare resource use, which cannot be obtained through NHS Digital or SAIL in the detail required (e.g., primary care

data, social care data, prescription data). Completed at baseline, 6- and 12-month follow up. 7. Health literacy as measured on the Health Literacy Questionnaire (HLQ). The HLQ evaluates the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in a way that promotes and maintains good health. We will be employing a sub-set of domains from the HLQ which cover basic/functional health literacy and communicative/interactive health literacy. The HLQ will only be completed at baseline only.

Overall study start date

01/01/2023

Completion date

01/08/2026

Eligibility

Key inclusion criteria

Current inclusion criteria as of 10/10/2024:

- 1. Aged 65 years or older
- 2. Living in the community independently, or with carer support, or in assisted living
- 3. With self-reported knee and/or hip joint pain in the osteoarthritis affected joint, with an average pain severity in the past week of 4 or greater on a 0-10 numerical rating scale
- 4. Osteoarthritis and at least one other co-morbidity identified using the self-administered co-morbidity questionnaire or
- 5. Osteoarthritis and mild to moderate clinical frailty on the CHSA Clinical Frailty Scale (for clinician referral routes only)

Previous inclusion criteria:

- 1. Aged 70 years or older
- 2. Living in the community independently, or with carer support, or in assisted living
- 3. With self-reported knee and/or hip joint pain in the osteoarthritis-affected joint, with an average pain severity in the past week of 4 or greater on a 0-10 numerical rating scale
- 4. Osteoarthritis and at least one other co-morbidity identified using the self-administered co-morbidity questionnaire or
- 5. Osteoarthritis and mild to moderate clinical frailty on the CHSA Clinical Frailty Scale (for clinician referral routes only)

Participant type(s)

Patient

Age group

Senior

Lower age limit

65 Years

Sex

Both

Target number of participants

Planned Sample Size: 824; UK Sample Size: 824

Key exclusion criteria

- 1. Joint pain attributed to a palliative condition or fracture
- 2. Knee and/or hip surgery or joint replacement in the last 12 months
- 3. Living in a care home (residential or nursing care)

Date of first enrolment

10/01/2024

Date of final enrolment

31/08/2025

Locations

Countries of recruitment

England

United Kingdom

Wales

Study participating centre Centre for Trials Research

College of Biomedical & Life Sciences 7th Floor, Neuadd Meirionnydd Heath Park Cardiff United Kingdom CF14 4YS

Study participating centre Cardiff & Vale University Lhb

Woodland House Maes-y-coed Road Cardiff United Kingdom CF14 4HH

Study participating centre University Hospitals Dorset NHS Foundation Trust

Management Offices
Poole Hospital
Longfleet Road
Poole

United Kingdom BH15 2JB

Study participating centre Homerton Healthcare NHS Foundation Trust

Homerton Row London United Kingdom E9 6SR

Study participating centre Llandaff Campus (podiatry)

Cardiff Metropolitan Uiniversity 200 Western Avenue Cardiff United Kingdom CF5 2YB

Study participating centre Sheffield Teaching Hospitals NHS Trust - Optical Site

8 Claremont PLACE Sheffield United Kingdom S10 2TB

Study participating centre

Cwm Taf Morgannwg University Local Health Board

Dewi Sant Hospital Albert Road Pontypridd United Kingdom CF37 1LB

Study participating centre Betsi Cadwaladr University Lhb Colwyn Bay Office

Princes Park
Princes Drive
Colwyn Bay
United Kingdom
LL29 8PL

Study participating centre Powys Teaching Local Health Board

Glasbury House Bronllys Hospital Brecon United Kingdom LD3 0LY

Study participating centre Swansea Bay University Local Health Board

Tonna Hospital Tonna Uchaf Tonna Neath United Kingdom SA11 3LX

Study participating centre Wigan and Leigh Health Services NHS Trust

Royal Albert Edward Infirmary Wigan Lane Wigan United Kingdom WN1 2NN

Study participating centre Newquay Health Centre

St Thomas Road Newquay United Kingdom TR7 1RJ

Study participating centre Compass House Medical Centre

2 Langdon Ln Galmpton Brixham United Kingdom Q5 0PG

Study participating centre East Quay Medical Centre

East Quay Bridgwater United Kingdom TA6 4GP

Study participating centre Bovey Tracey & Chudleigh Practice

Riverside Surgery
Le Molay-littry Way
Bovey Tracey
Newton Abbot
United Kingdom
TQ13 9QP

Sponsor information

Organisation

Cardiff University

Sponsor details

Park Place Cardiff Wales United Kingdom CF10 3AT +44 (0)2920688359 resgov@cardiff.ac.uk

Sponsor type

University/education

Website

http://www.cardiff.ac.uk/

ROR

https://ror.org/03kk7td41

Funder(s)

Funder type

Government

Funder Name

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

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

Intention to publish date

01/08/2026

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request. Data can be requested via the Centre for Trials Research (CTR) at Cardiff University through the completion of a data request form Data requests - Centre for Trials Research - Cardiff University.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		23/08/2024	27/08/2024	Yes	No