

Better post-operative prediction and management of chronic pain in adults after total knee replacement: the multidisciplinary STAR research programme including RCT

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Declared competing interests of authors

Full disclosure of interests: Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at <https://doi.org/10.3310/WATM4500>.

Primary conflicts of interest: Rachael Goberman-Hill reports grants from the National Institute for Health and Care Research (NIHR), the Wellcome Trust, the Medical Research Council and Versus Arthritis during the conduct of this study. She is co-chair of the UK Committee on Research Integrity (2022 to present) and was a member of an NIHR Programme Grants for Applied Research sub-panel (2014-19). Vikki Wylde, Wendy Bertram, Andrew J Moore, Rafael Pinedo-Villanueva, Sian Noble and Andrew D Beswick report grants from NIHR during the conduct of the study. Andrew Judge reports grants from NIHR, Health Data Research UK, the Royal College of Physicians, Healthcare Quality Improvement Partnership and the charities Tommy's and Versus Arthritis (Chesterfield, UK), during the conduct of the study. Andrew Judge is chair of the Data Monitoring Committee for the NIHR Health Technology Assessment (HTA) Dupuytren's Interventions Surgery vs. Collagenase (DISC) trial, University of Leicester (2017 to present) and the Trial Steering Committee for the NIHR HTA The Gentle Years Yoga Trial Newcastle University (2019 to present). They declare memberships of the following: NIHR PGfAR programme sub-panel (2015-20); Versus Arthritis Health Subcommittee (2016-21); Nuffield Foundation Oliver Bird Fund Expert Panel (2019-); Steering Committee, Nuffield Foundation, Multilevel Integrated Data for musculoskeletal health intelligence and Actions (MIDAS), University of Keele (2020 to present); Data Monitoring Committee, Robotic Arthroplasty: a Clinical and cost effectiveness Randomised controlled trial (RACER), Warwick Clinical Trials Unit (CTU) (2020 to present). Tim J Peters reports grants from NIHR during the conduct of the study. They were a member of the NIHR CTU Standing Advisory Committee (2008-15). Julie Bruce reports grants from NIHR during the conduct of the study and travel expenses from professional organisations. Stewart Long reports grants from Versus Arthritis. David Walsh reports grants from AbbVie Inc. (North Chicago, IL, USA), Pfizer (New York, NY, USA), Lilly (Indianapolis, IN, USA), Galapagos (Mechelen, Belgium), Reckitt Benckiser Health Ltd (Slough, UK), Love Productions Ltd (London, UK) and GlaxoSmithKline (Brentford, UK) during the conduct of the study. He has received personal fees from the Irish Society for Rheumatology (Dublin, Ireland). Andrew Price reports grants from NIHR during the conduct of the study and personal fees from Zimmer Biomet (Warsaw, IN, USA). He is a BOA trustee and member of the Health and Social Care Delivery Research (HSDR) Funding committee (Seacole) (2020 to present). Nigel Arden reports grants from MERCK and personal fees from Pfizer, Lilly and Bristows LLP (London, UK) during the conduct of the study. Andrew Toms reports grants from NIHR, Versus Arthritis and Stryker (Kalamazoo, MI, USA) and consultancies with Corin (Cirencester, UK), Stryker, and Smith and Nephew (Watford, UK) during the conduct of the study. Ashley W Blom reports grants from NIHR and Stryker during the conduct of the study.

Published June 2023

DOI: 10.3310/WATM4500

Plain language summary

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Programme Grants for Applied Research 2023; Vol. 11: No. 3
DOI: 10.3310/WATM4500

NIHR Journals Library www.journalslibrary.nihr.ac.uk

Plain language summary

People with severe knee osteoarthritis may have knee replacement surgery to reduce pain and disability. Although highly successful for many people, some people report long-term pain.

Our research looked at why some people are more likely to have long-term pain, its personal and economic consequences, and how to prevent and treat it. We reviewed previous research; analysed UK health-care databases; interviewed and met with patients, surgeons and health-care professionals; and developed and evaluated a new care pathway for patients with pain after knee replacement.

We found that about one in seven people experience significant pain 6 months after knee replacement. For many, pain fluctuates over time. Some people with long-term pain feel that nothing more can be done to help and that further treatments may even cause harm. Changes to aspects of patient health and care merit further research as they may prevent the development of long-term pain.

The Support and Treatment After joint Replacement pathway comprises a detailed assessment by a trained health-care professional; referral to appropriate services, such as an orthopaedic surgeon, physiotherapist, general practitioner for treatment of depression or anxiety, or pain specialist; and telephone follow-up. A total of 363 people with pain at 3 months after their knee replacement were randomly allocated to receive either the Support and Treatment After joint Replacement pathway or their hospital's usual care. Participants were followed for 1 year to assess their long-term pain. We also looked at health-care costs and the acceptability of the Support and Treatment After joint Replacement pathway to patients and health-care professionals. This research was supported by a dedicated patient advisory group.

For people with pain after knee replacement, the Support and Treatment After joint Replacement pathway leads to reduced long-term pain severity and reduced interference with everyday life, and is acceptable to patients and health-care professionals. NHS, personal social services and patient costs were lower in the group receiving the Support and Treatment After joint Replacement pathway.

Programme Grants for Applied Research

ISSN 2050-4322 (Print)

ISSN 2050-4330 (Online)

Programme Grants for Applied Research (PGfAR) was launched in 2013 and is indexed by Europe PMC, NCBI Bookshelf, DOAJ, Ulrichsweb™ (ProQuest LLC, Ann Arbor, MI, USA) and Scopus® (Elsevier, Amsterdam, Netherlands).

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This report

The research reported in this issue of the journal was funded by PGfAR as project number RP-PG-0613-20001. The contractual start date was in October 2015. The final report began editorial review in May 2021 and was accepted for publication in June 2022. As the funder, the PGfAR programme agreed the research questions and study designs in advance with the investigators. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The PGfAR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health and Care Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, CCF, PGfAR or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, the PGfAR programme or the Department of Health and Social Care.

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