A systematic review and economic evaluation of exercise referral schemes in primary care: a short report

Fiona Campbell,¹* Mike Holmes,¹ Emma Everson-Hock,¹ Sarah Davis,¹ Helen Buckley Woods,¹ Nana Anokye,² Paul Tappenden¹ and Eva Kaltenthaler¹

¹Health Economics and Decision Science, School of Health and Related Research (ScHARR), University of Sheffield, Sheffield, UK
²Health Economics Research Group (HERG), Brunel University, Uxbridge, UK

*Corresponding author

Declared competing interests of authors: none

Plain English summary

Exercise referral schemes in primary care
Health Technology Assessment 2015; Vol. 19: No. 60
DOI: 10.3310/hta19600

NIHR Journals Library www.journalslibrary.nihr.ac.uk
Plain English summary

Exercise referral schemes (ERSs) are schemes in which health professionals refer patients to external exercise providers to increase their physical activity to recommended levels. These schemes have been widely rolled out across the UK, despite concerns that they may not produce sustained changes.

We combined data from eight randomised controlled trials to examine the effectiveness of ERSs. We found that, compared with usual care, ERSs results in a small increase in the number of people who report that they achieve the recommended level of physical activity. Referral to an ERS did not lead to changes in objective measures of health such as weight or blood pressure.

Based on the experiences of those involved in the trials (those referred and those providing ERSs), people who lacked their own transport or who lived in more deprived neighbourhoods were less likely to take up a referral to an ERS, and people who had a history of being more physically active, who were referred for coronary heart disease risk factors or who were older appeared to be more likely to increase their levels of physical activity.

We found that the cost savings and health benefits attributable to reducing long-term risk stroke, type 2 diabetes mellitus and coronary heart disease through ERSs were small, although there may be some immediate short-term health gain associated with becoming physically active. Overall, the upfront costs of providing ERSs outweigh the benefits, although there was a large amount of uncertainty in our estimates of the health benefits.
Health Technology Assessment

Criteria for inclusion in the Health Technology Assessment journal
Reports are published in Health Technology Assessment (HTA) if (1) they have resulted from work for the HTA programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

Reviews in Health Technology Assessment are termed ‘systematic’ when the account of the search appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

HTA programme
The HTA programme, part of the National Institute for Health Research (NIHR), was set up in 1993. It produces high-quality research information on the effectiveness, costs and broader impact of health technologies for those who use, manage and provide care in the NHS. ‘Health technologies’ are broadly defined as all interventions used to promote health, prevent and treat disease, and improve rehabilitation and long-term care.

The journal is indexed in NHS Evidence via its abstracts included in MEDLINE and its Technology Assessment Reports inform National Institute for Health and Care Excellence (NICE) guidance. HTA research is also an important source of evidence for National Screening Committee (NSC) policy decisions.

For more information about the HTA programme please visit the website: http://www.nets.nihr.ac.uk/programmes/hta

This report
The research reported in this issue of the journal was funded by the HTA programme as project number 13/45/01. The contractual start date was in July 2013. The draft report began editorial review in November 2013 and was accepted for publication in July 2014. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors’ report and would like to thank the reviewers for their constructive comments on the draft 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 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, NETSCC, the HTA programme or the Department of Health. 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, NETSCC, the HTA programme or the Department of Health.

© Queen’s Printer and Controller of HMSO 2015. This work was produced by Campbell et al. under the terms of a commissioning contract issued by the Secretary of State for Health. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk).
Editor-in-Chief of *Health Technology Assessment* and NIHR Journals Library

**Professor Tom Walley**  Director, NIHR Evaluation, Trials and Studies and Director of the HTA Programme, UK

NIHR Journals Library Editors

**Professor Ken Stein**  Chair of HTA Editorial Board and Professor of Public Health, University of Exeter Medical School, UK

**Professor Andree Le May**  Chair of NIHR Journals Library Editorial Group (EME, HS&DR, PGfAR, PHR journals)

**Dr Martin Ashton-Key**  Consultant in Public Health Medicine/Consultant Advisor, NETSCC, UK

**Professor Matthias Beck**  Chair in Public Sector Management and Subject Leader (Management Group), Queen's University Management School, Queen's University Belfast, UK

**Professor Aileen Clarke**  Professor of Public Health and Health Services Research, Warwick Medical School, University of Warwick, UK

**Dr Tessa Crilly**  Director, Crystal Blue Consulting Ltd, UK

**Dr Peter Davidson**  Director of NETSCC, HTA, UK

**Ms Tara Lamont**  Scientific Advisor, NETSCC, UK

**Professor Elaine McColl**  Director, Newcastle Clinical Trials Unit, Institute of Health and Society, Newcastle University, UK

**Professor William McGuire**  Professor of Child Health, Hull York Medical School, University of York, UK

**Professor Geoffrey Meads**  Professor of Health Sciences Research, Faculty of Education, University of Winchester, UK

**Professor John Norrie**  Health Services Research Unit, University of Aberdeen, UK

**Professor John Powell**  Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK

**Professor James Raftery**  Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

**Dr Rob Riemsma**  Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

**Professor Helen Roberts**  Professor of Child Health Research, UCL Institute of Child Health, UK

**Professor Helen Snooks**  Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

**Professor Jim Thornton**  Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

Please visit the website for a list of members of the NIHR Journals Library Board:
www.journalslibrary.nihr.ac.uk/about/editors

**Editorial contact:**  nihredit@southampton.ac.uk