

Managing Faecal INcontinence in people with advanced dementia resident in Care Homes (FINCH) study: a realist synthesis of the evidence

Claire Goodman,^{1*} Christine Norton,² Marina Buswell,¹ Bridget Russell,¹ Danielle Harari,^{3,4} Rowan Harwood,⁵ Brenda Roe,⁶ Jo Rycroft-Malone,⁷ Vari M Drennan,⁸ Mandy Fader,⁹ Michelle Maden,¹⁰ Karen Cummings¹¹ and Frances Bunn¹

¹Centre for Research in Primary and Community Care, University of Hertfordshire, Hatfield, UK

²Florence Nightingale Faculty of Nursing and Midwifery, King's College London, London, UK

³Department of Ageing and Health, Guy's and St Thomas' NHS Foundation Trust, London, UK

⁴Division of Health and Social Care, King's College London, London, UK

⁵Health Care of Older People, Nottingham University Hospitals NHS Trust, University of Nottingham, Nottingham, UK

⁶Faculty of Health and Social Care, Edge Hill University, Ormskirk, UK

⁷School of Healthcare Sciences, Bangor University, Bangor, UK

⁸Centre for Health and Social Care Research, Faculty of Health, Social Care and Education, Kingston and St George's, London, UK

⁹Health Sciences, University of Southampton, Southampton, UK

¹⁰School of Health Sciences, University of Liverpool, Liverpool, UK

¹¹Order of St John Care Trust, Witney, UK

*Corresponding author c.goodman@herts.ac.uk

Declared competing interests of authors: Claire Goodman is a National Institute for Health Research Senior Investigator. Rowan Harwood is a member of the Health Technology Assessment Primary Care, Community and Preventive Interventions Panel. Jo Rycroft-Malone is Programme Director and Chairperson of the Health Services and Delivery Research Commissioning Board.

Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

Published August 2017

DOI: 10.3310/hta21420

Scientific summary

The FINCH study

Health Technology Assessment 2017; Vol. 21: No. 42

DOI: 10.3310/hta21420

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

Scientific summary

Background

Eighty per cent of care home residents in the UK are living with dementia. The prevalence of faecal incontinence (FI) in UK care homes is estimated to range from 30% to 50%. FI has a negative impact on a person's quality of life, dignity and comfort, and staff morale. There is a paucity of evidence on how to reduce and manage FI in care homes. For this realist synthesis, FI was initially defined as the involuntary loss of liquid or solid stool that is a social or personal hygiene problem. The aim was to provide a theory-driven explanation of the effectiveness of programmes that aim to improve FI in people with advanced dementia in care homes.

Objectives

- To identify which interventions could potentially be effective, how they work and on what range of outcomes.
- To establish what evidence there is on the relative feasibility and (when appropriate) cost of interventions to manage FI.

Review methods

The realist synthesis followed RAMESES (Realist And Meta-narrative Evidence Syntheses: Evolving Standards) guidelines (Wong G, Greenhalgh T, Westhorp G, Buckingham J, Pawson R. RAMESES publication standards: realist syntheses. *J Adv Nurs* 2013;**69**:1005–22). To define the scope of the review and establish candidate theories for further testing in the literature, we consulted on the principles of good practice in continence care for this population with five stakeholder groups and collated and summarised existing literature to identify theories that could explain what supported the reduction and management of FI for care home residents, when and with what outcomes. We systematically searched the published and unpublished evidence and tested possible links between context–mechanism–outcome (C–M–O) configurations within and across the evidence reviewed. To test and refine emergent propositions of what supports effective care in what circumstances for people living in care homes with dementia and FI, we discussed findings and implications for future research and practice with a purposive sample of stakeholders.

Data sources

Four separate searches were completed in phase 1, which were refined and expanded in phase 2. Databases searched included PubMed, Cumulative Index to Nursing and Allied Health Literature, The Cochrane Library, Scopus, SocAbs, Applied Social Sciences Index and Abstracts BiblioMap, Sirius, OpenGrey, Social Care Online and the National Research Register.

Data extraction

Bespoke data extraction forms based on the programme theories were populated according to what the evidence revealed about C–M–O configurations of the different programme theories and the patterns that cut across the evidence to either support or negate them. All members of the team were involved in data extraction and all papers were read by at least two members.

Results

The scoping phase identified six programme theories with related C–M–O configurations that could explain how to improve continence care for people living with dementia and FI. These were (1) clinician-led support, assessment and review, (2) ongoing teaching, review and feedback for care home staff on how to reduce and manage FI, (3) addressing the causes and prevention of constipation, (4) interventions that reflect the degree of cognitive and physical capacity of the resident, (5) a common understanding of the potential for recovery, reduction and management of FI and (6) when care of people living with dementia and FI is integral to the everyday work patterns of the care home and its staff. The scoping also identified the limitations of defining FI solely in terms of elimination without linking it to how a dementia diagnosis can affect toileting behaviours and recognition of the need to defaecate. Detailed data extraction was completed on 62 core papers with iterative searches of linked literature.

Dementia was identified as a risk factor for FI, but the evidence we reviewed did not address in sufficient detail the way in which dementia affects the uptake of different interventions or the dementia-specific continence skills that staff require. Most care home residents with FI will be doubly incontinent, which suggests that there is limited value in focusing solely on FI or on one possible cause of FI such as constipation. Clinical assessment, knowledge of the causes of FI, including nutrition, hydration, constipation, and pharmacological and behavioural approaches such as exercise, prompted voiding and strategies that recognise the individuals' preferences and priorities are necessary contextual factors. To achieve change in continence-related practice or resident outcomes, however, it is *how* staff can act on their knowledge and training and whether or not an intervention 'fits' into the everyday care work of a care home that are important. The valuing of the intimate and personal care work that care home staff provide to people living with dementia and the recognition of the challenges that arise when providing continence care, we propose, are what link evidence on best practice with care home staff's capacity to implement practices that are likely to reduce and manage FI in this population.

Limitations

The review and synthesis of key contextual factors were constrained by the limited evidence from the UK setting on supporting continence care in care homes. From the evidence we reviewed, we were unable to address our objective on the relative feasibility and (when appropriate) cost of interventions to manage FI or to consider how differences in care home staffing, staff experience and staff qualifications are linked to resident outcomes.

Family carers of people living with dementia and FI identified it as a limitation that FI and impact of dementia-specific behaviours on contamination of the shared environment, carer stress and risk of cross-infection were not addressed. Neither were we able to provide, from the evidence reviewed, a theory of how best to assess a person's need for continence aids, specifically pads (and what type), at different points in the dementia trajectory and as an aid in the daily management of FI.

Conclusions and implications for health care

This realist synthesis provides a theory-driven understanding of the conditions influencing how care home staff understand continence care and the conditions under which improvement is likely to be successful. Medical and nursing support for continence care is an important resource, but it is unhelpful to create a distinction between what constitutes continence care and what constitutes personal or intimate care. Valuing the work of unqualified and junior staff and providing ongoing support and reinforcement of good practice and education in ways that are meaningful to this workforce are important clinician-led activities. The focus on avoiding or treating constipation may be exacerbating FI, and careful thought

needs to be given to how the assessment and management of constipation is linked to other activities that promote bowel health and the reduction and management of FI.

Recommendations for research

Future research should assess how the functional abilities, behaviours and responses of the person living with dementia affect their ability to benefit from different care home sensitive interventions that address both faecal and urinary incontinence. In addition, future studies should include clear costings of time and resources used in any intervention.

Study registration

This study is registered as PROSPERO CRD42014009902.

Funding

Funding for this study was provided by the Health Technology Assessment programme of the National Institute for Health Research.

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 4.236

Health Technology Assessment is indexed in MEDLINE, CINAHL, EMBASE, The Cochrane Library and the Clarivate Analytics Science Citation Index.

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: journals.library@nhr.ac.uk

The full HTA archive is freely available to view online at www.journalslibrary.nhr.ac.uk/hta. Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: www.journalslibrary.nhr.ac.uk

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.nhr.ac.uk/programmes/hta>

This report

The research reported in this issue of the journal was funded by the HTA programme as project number 13/75/01. The contractual start date was in September 2014. The draft report began editorial review in February 2016 and was accepted for publication in December 2016. 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 2017. This work was produced by Goodman *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.nhr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk).

Health Technology Assessment Editor-in-Chief

Professor Hywel Williams Director, HTA Programme, UK and Foundation Professor and Co-Director of the Centre of Evidence-Based Dermatology, University of Nottingham, UK

NIHR Journals Library Editor-in-Chief

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

NIHR Journals Library Editors

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

Professor Andrée Le May Chair of NIHR Journals Library Editorial Group (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

Dr Tessa Crilly Director, Crystal Blue Consulting Ltd, UK

Dr Eugenia Cronin Senior Scientific Advisor, Wessex Institute, UK

Ms Tara Lamont Scientific Advisor, NETSCC, UK

Dr Catriona McDaid Senior Research Fellow, York Trials Unit, Department of Health Sciences, University of York, UK

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

Professor Geoffrey Meads Professor of Health Sciences Research, Health and Wellbeing Research Group, University of Winchester, UK

Professor John Norrie Chair in Medical Statistics, University of Edinburgh, 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 Jonathan Ross Professor of Sexual Health and HIV, University Hospital Birmingham, 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

Professor Martin Underwood Director, Warwick Clinical Trials Unit, Warwick Medical School, University of Warwick, 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: journals.library@nihr.ac.uk