Improving the effectiveness of multidisciplinary team meetings for patients with chronic diseases: a prospective observational study

Rosalind Raine,^{1*} Isla Wallace,¹

Caoimhe Nic a' Bháird,¹ Penny Xanthopoulou,¹ Anne Lanceley,² Alex Clarke,³ Archie Prentice,⁴ David Ardron,⁵ Miriam Harris,⁶ J Simon R Gibbs,⁷ Ewan Ferlie,⁸ Michael King,⁹ Jane M Blazeby,¹⁰ Susan Michie,¹¹ Gill Livingston⁹ and Julie Barber¹²

¹Department of Applied Health Research, University College London, London, UK

²University College London Elizabeth Garrett Anderson Institute for Women's Health, University College London, London, UK

³Department of Plastic and Reconstructive Surgery, Royal Free Hospital, London, UK

⁴Royal College of Pathologists, London, UK

⁵North Trent Cancer Research Network, Consumer Research Panel, South Yorkshire Comprehensive Local Research Network, Sheffield, UK

⁶London, UK

⁷National Heart and Lung Institute, Imperial College London, London, UK ⁸Department of Management, School of Social Science and Public Policy, King's College, London, UK

⁹Division of Psychiatry, University College London, London, UK

¹⁰School of Social and Community Medicine, Bristol University, Bristol, UK ¹¹UCL Centre for Behaviour Change, University College London, London, UK ¹²Department of Statistical Science, University College London, London, UK

*Corresponding author

Declared competing interests of authors: none

Published October 2014 DOI: 10.3310/hsdr02370

Plain English summary

The effectiveness of MDT meetings for patients with chronic diseases

Health Services and Delivery Research 2014; Vol. 2: No. 37 DOI: 10.3310/hsdr02370

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

Plain English summary

Our study investigated multidisciplinary team (MDT) meetings for chronic illnesses: cancer, dementia, heart failure and mental illnesses. These teams are widely used across the NHS. They comprise different professionals, for example doctors, nurses, social workers and psychologists, and meet weekly to discuss their patients and make treatment plans. The teams work in a wide variety of different ways, not all of which may be helpful for making high-quality decisions for patients. We wanted to identify the factors that influence effective decision-making in these teams (by which we mean decisions being carried out).

We found that 78% of treatment plans were implemented overall, though this varied across teams: mental health teams were less likely to have implemented the agreed plan than cancer, heart failure and memory clinic teams. By observing 370 meetings we identified factors that help explain this. Teams with many different types of professionals present at the meeting were less likely to carry out the treatment plans agreed by the team. It was also crucial to have a good team atmosphere, and clear goals and processes.

We found that patients living in more deprived areas were less likely to get the treatment recommended by the team. This was not explained by whether or not patients' preferences or their other illnesses had been discussed.

We also found that individual teams had varying aims and organisational structure, and discussed different information when making decisions. Based on these differences, we asked a group of experts to recommend improvements to MDT meetings, which could help all teams regardless of whether they care for cancer, heart failure or mental health patients. They agreed on 21 indications for good practice, including that there should be yearly audits to check that MDT meetings are achieving their goals, and that the most appropriate time to discuss treatment options with patients is after the meeting, when information about treatment options is more complete.

© Queen's Printer and Controller of HMSO 2014. This work was produced by Raine *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.

Health Services and Delivery Research

ISSN 2050-4349 (Print)

ISSN 2050-4357 (Online)

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

Editorial contact: nihredit@southampton.ac.uk

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

Criteria for inclusion in the Health Services and Delivery Research journal

Reports are published in *Health Services and Delivery Research* (HS&DR) if (1) they have resulted from work for the HS&DR programme or programmes which preceded the HS&DR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

HS&DR programme

The Health Services and Delivery Research (HS&DR) programme, part of the National Institute for Health Research (NIHR), was established to fund a broad range of research. It combines the strengths and contributions of two previous NIHR research programmes: the Health Services Research (HSR) programme and the Service Delivery and Organisation (SDO) programme, which were merged in January 2012.

The HS&DR programme aims to produce rigorous and relevant evidence on the quality, access and organisation of health services including costs and outcomes, as well as research on implementation. The programme will enhance the strategic focus on research that matters to the NHS and is keen to support ambitious evaluative research to improve health services.

For more information about the HS&DR programme please visit the website: http://www.nets.nihr.ac.uk/programmes/hsdr

This report

The research reported in this issue of the journal was funded by the HS&DR programme or one of its proceeding programmes as project number 09/2001/04. The contractual start date was in November 2010. The final report began editorial review in December 2013 and was accepted for publication in March 2014. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR 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 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 HS&DR 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 HS&DR programme or the Department of Health.

© Queen's Printer and Controller of HMSO 2014. This work was produced by Raine *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).

Health Services and Delivery Research Editor-in-Chief

Professor Ray Fitzpatrick Professor of Public Health and Primary Care, University of Oxford, UK

NIHR Journals Library Editor-in-Chief

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 Jane Norman Professor of Maternal and Fetal Health, 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, University College London, UK

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