Drivers of ‘clinically unnecessary’ use of emergency and urgent care: the DEUCE mixed-methods study

Alicia O’Cathain,1* Emma Knowles,1 Jaqui Long,1 Janice Connell,1 Lindsey Bishop-Edwards,1 Rebecca Simpson,1 Joanne Coster,1 Linda Abouzeid,2 Shan Bennett,2 Elizabeth Croot,1 Jon M Dickson,3 Steve Goodacre,1 Enid Hirst,2 Richard Jacques,1 Miranda Phillips,4 Joanne Turnbull5 and Janette Turner1

1School of Health and Related Research (ScHARR), University of Sheffield, Sheffield, UK
2Sheffield Emergency Care Forum, Sheffield, UK
3Academic Unit of Primary Medical Care, University of Sheffield, Sheffield, UK
4National Centre for Social Research, London, UK
5Health Sciences, University of Southampton, Southampton, UK

*Corresponding author a.ocathain@sheffield.ac.uk

Declared competing interests of authors: Jon M Dickson reports grants from UCB Pharma Ltd (Slough, UK) outside the submitted work. Steve Goodacre is deputy director of the National Institute for Health Research (NIHR) Health Technology Assessment (HTA) programme, chairperson of the NIHR HTA Commissioning Committee and a member of the NIHR HTA Funding Board Policy Group. Miranda Phillips reports grants from NIHR during the conduct of the study and grants from The King’s Fund, Nuffield Trust and Public Health England outside the submitted work. Joanne Turnbull reports grants from the NIHR Health Services and Delivery Research (HSDR) programme for project 14/19/16 outside the submitted work.

Published March 2020
DOI: 10.3310/hsdr08150

Plain English summary

The DEUCE mixed-methods study
Health Services and Delivery Research 2020; Vol. 8: No. 15
DOI: 10.3310/hsdr08150

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

The pressure on emergency and urgent care services has led to concern that some patients use these services for problems that could be treated by a less urgent service (known as 'clinically unnecessary' use).

We wanted to understand why people make 'clinically unnecessary' use of ambulances, emergency departments and same-day general practitioner appointments, and what might help them make different decisions. We did this in three ways:

1. We reviewed previous research.
2. We carried out interviews and focus groups with 53 patients whom health professionals thought were 'clinically unnecessary' users of their service. We focused on parents of young children, young adults and people in socially deprived areas.
3. We used a national survey of attitudes to seeking care for health problems. This also identified those people most likely to be 'clinically unnecessary' users of these services.

We found that people used services for a complex range of reasons that were often connected. Some reasons related to people's symptoms. These included worrying about how serious symptoms were and wanting reassurance, feeling unable to get on with daily life, needing immediate relief and not wanting to wait any longer for things to get better. Patients' circumstances also influenced their decisions. Poor mental health, stress or isolation could make it difficult to cope with physical symptoms. Some people felt responsible for someone else, particularly children, or were advised by family or friends to attend services. People's experiences and perceptions of health services also affected their decisions; these included having difficulty getting a general practitioner appointment quickly enough and being attracted by the facilities at emergency departments.

When all of these factors were considered, patients' decisions were often understandable, even if those decisions led to 'clinically unnecessary' use. These issues could be addressed by strengthening general practice, improving public education and reducing the wider social stresses that affect people.
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: journals.library@nihr.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, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

HS&DR programme

The HS&DR programme funds research to produce evidence to impact on the quality, accessibility and organisation of health and social care services. This includes evaluations of how the NHS and social care might improve delivery of services.

For more information about the HS&DR programme please visit the website at https://www.nihr.ac.uk/explore-nihr/funding-programmes/health-services-and-delivery-research.htm

This report

The research reported in this issue of the journal was funded by the HS&DR programme or one of its preceding programmes as project number 15/136/12. The contractual start date was in February 2017. The final report began editorial review in June 2019 and was accepted for publication in October 2019. 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 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 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, NETSCC, the HS&DR programme or the Department of Health and Social Care.

© Queen’s Printer and Controller of HMSO 2020. This work was produced by O’Cathain et al. under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. 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 Services and Delivery Research* and NIHR Journals Library

**Professor Ken Stein**  Professor of Public Health, University of Exeter Medical School, UK

**NIHR Journals Library Editors**

**Professor John Powell**  Chair of HTA and EME Editorial Board and Editor-in-Chief of HTA and EME journals. Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK, and Senior Clinical Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford, UK

**Professor Andrée Le May**  Chair of NIHR Journals Library Editorial Group (HS&DR, PGfAR, PHR journals) and Editor-in-Chief of HS&DR, PGfAR, PHR journals

**Professor Matthias Beck**  Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

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

**Dr Eugenia Cronin**  Senior Scientific Advisor, Wessex Institute, UK

**Dr Peter Davidson**  Consultant Advisor, Wessex Institute, University of Southampton, UK

**Ms Tara Lamont**  Director, NIHR Dissemination Centre, 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 Wellbeing Research, University of Winchester, UK

**Professor John Norrie**  Chair in Medical Statistics, University of Edinburgh, UK

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

**Dr Rob Riemsmma**  Reviews Manager, Kleijnis Systematic Reviews Ltd, UK

**Professor Helen Roberts**  Professor of Child Health Research, UCL Great Ormond Street 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 Ken Stein**  Professor of Public Health, University of Exeter Medical School, UK

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

**Professor Martin Underwood**  Warwick Clinical Trials Unit, Warwick Medical School, University of Warwick, UK

Please visit the website for a list of editors: [www.journalslibrary.nihr.ac.uk/about/editors](http://www.journalslibrary.nihr.ac.uk/about/editors)

**Editorial contact:** journals.library@nihr.ac.uk