# A qualitative study of decision-making and safety in ambulance service transitions

Rachel O'Hara, 1\* Maxine Johnson, 1 Enid Hirst, 2 Andrew Weyman,<sup>3</sup> Deborah Shaw,<sup>4</sup> Peter Mortimer,<sup>5</sup> Chris Newman,<sup>6</sup> Matthew Storey,<sup>5</sup> Janette Turner,<sup>7</sup> Suzanne Mason,<sup>7</sup> Tom Quinn,<sup>8</sup> Jane Shewan<sup>5</sup> and A Niroshan Siriwardena<sup>4,9</sup>

Declared competing interests of authors: none

Published December 2014

DOI: 10.3310/hsdr02560

## **Plain English summary**

Decision-making and safety in ambulance service transitions

Health Services and Delivery Research 2014; Vol. 2: No. 56

DOI: 10.3310/hsdr02560

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

<sup>&</sup>lt;sup>1</sup>Public Health Section, School of Health and Related Research (ScHARR), University of Sheffield, Sheffield, UK

<sup>&</sup>lt;sup>2</sup>Sheffield Emergency Care Forum, Sheffield, UK

<sup>&</sup>lt;sup>3</sup>Department of Psychology, University of Bath, Bath, UK

<sup>&</sup>lt;sup>4</sup>East Midlands Ambulance Service NHS Trust, Nottingham, UK

<sup>&</sup>lt;sup>5</sup>Yorkshire Ambulance Service NHS Trust, Wakefield, UK

<sup>&</sup>lt;sup>6</sup>South East Coast Ambulance Service NHS Trust, Guildford, UK

<sup>&</sup>lt;sup>7</sup>Health Services Research Section, School of Health and Related Research (ScHARR), University of Sheffield, Sheffield, UK

<sup>&</sup>lt;sup>8</sup>Faculty of Health and Medical Sciences, University of Surrey, Guildford, UK

<sup>&</sup>lt;sup>9</sup>Community and Health Research Unit, College of Social Science, University of Lincoln, Lincoln, UK

<sup>\*</sup>Corresponding author

# **Plain English summary**

In this study we aimed to look at influences on decisions made about patients by front-line ambulance service staff (paramedics). We were particularly interested in whether and where patients were transported and the impact of decisions on patient safety. We were also interested in safety culture within the organisation and how this might influence staff.

We used a number of research methods including interviews, observations, digital diaries and focus groups with staff and service users to collect data at three ambulance service trust sites. This allowed us to gather information that represented a wide range of views and experiences. We fed back the study findings to ambulance service staff and service user participants at three workshops.

Data were analysed to identify the main issues of importance in relation to influences on staff decision-making. A number of different types of decisions that paramedics make on scene were identified along with a number of influences on decision-making. The main influences were demand, access to care services, performance targets, fear of risk, training and education, communication and resources (staff and equipment). The workshop attendees felt that these findings reflected their experiences and concerns.

Recommendations for future research include exploring effective ways of providing access to care for people who do not need to attend the accident and emergency department, assessing the effects of different staff skill levels on patient safety, exploring safe ways of improving initial telephone assessments and exploring public awareness and expectations of the ambulance service.

## **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 10/1007/53. The contractual start date was in May 2012. The final report began editorial review in November 2013 and was accepted for publication in May 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 O'Hara 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 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

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