## Understanding how front-line staff use patient experience data for service improvement: an exploratory case study evaluation

Louise Locock,<sup>1,2</sup>\* Chris Graham,<sup>3</sup> Jenny King,<sup>3</sup> Stephen Parkin,<sup>1</sup> Alison Chisholm,<sup>1</sup> Catherine Montgomery,<sup>1</sup> Elizabeth Gibbons,<sup>4</sup> Esther Ainley,<sup>3</sup> Jennifer Bostock,<sup>5</sup> Melanie Gager,<sup>6</sup> Neil Churchill,<sup>7</sup> Sue Dopson,<sup>8</sup> Trish Greenhalgh,<sup>1</sup> Angela Martin,<sup>1</sup> John Powell,<sup>1</sup> Steve Sizmur<sup>3</sup> and Sue Ziebland<sup>1</sup>

<sup>1</sup>Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK
<sup>2</sup>Health Services Research Unit, University of Aberdeen, Aberdeen, UK
<sup>3</sup>Picker Institute Europe, Oxford, UK
<sup>4</sup>Nuffield Department of Population Health, University of Oxford, Oxford, UK
<sup>5</sup>Lay representative, Oxford, UK
<sup>6</sup>Critical Care, Royal Berkshire NHS Foundation Trust, Reading, UK
<sup>7</sup>Division of Experience, Participation and Equalities, NHS England, London, UK
<sup>8</sup>Saïd Business School, Oxford, UK

\*Corresponding author louise.locock@abdn.ac.uk

**Declared competing interests of authors:** Louise Locock declares personal fees from The Point of Care Foundation (London, UK) outside the submitted work, and membership of the National Institute for Health Research (NIHR) Health Services and Delivery Research (HSDR) Funding Board. Jennifer Bostock declares membership of the NIHR HSDR Funding Board. Chris Graham declares a conflict of interest in financial activities outside the submitted work (he is employed by the Picker Institute). Neil Churchill declares a conflict of interest in financial activities outside the submitted work (he is employed by the Picker Institute). Neil Churchill declares a conflict of interest in financial activities outside the submitted work (he is employed by NHS England). John Powell is chairperson of the NIHR Health Technology Assessment (HTA) and Efficacy and Mechanism Evaluation (EME) Editorial Board and Editor-in-Chief of HTA and EME journals. He is the principal investigator on another NIHR HSDR programme-funded project that was funded under the same call [HSDR 14/04/48: Improving NHS Quality Using Internet Ratings and Experiences (INQUIRE)]. Sue Ziebland declares a conflict of interest in financial activities outside the submitted work (Programme Director of NIHR Research for Patient Benefit). She is the co-investigator on another NIHR HSDR programme-funded project that was funded under the same call (HSDR 14/04/48: INQUIRE).

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

Published March 2020 DOI: 10.3310/hsdr08130

## **Scientific summary**

**Front-line staff use of patient experience data** Health Services and Delivery Research 2020; Vol. 8: No. 13 DOI: 10.3310/hsdr08130

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

# **Scientific summary**

## Background

The NHS has been an international leader in collecting data on patient experience, particularly through the national patient survey programme, but there are concerns that it does not use these data to improve care.

Although there are a growing number of studies about how patient experience data are (or are not) used at board or whole-organisation level, we still know remarkably little about how front-line staff make sense of or contest patient experience data, what supports or hinders them in making patient-centred improvements, and what motivates staff – and patients and families – to become involved in improvement work.

Gleeson *et al.*'s systematic review (Gleeson H, Calderon A, Swami V, Deighton J, Wolpert M, Edbrooke-Childs J. Systematic review of approaches to using patient experience data for quality improvement in healthcare settings. *BMJ Open* 2016;**6**:e011907) has helped consolidate the evidence base. The results include several points of significance for this report:

- Patient experience data were most commonly collected through surveys (despite many authors acknowledging that clinical and ward staff generally find qualitative comments more insightful).
- Qualitative data were acknowledged to be more difficult to use in terms of time and expertise.
- Data were used to identify small incremental service changes that did not require a change in clinician behaviour.
- Recording of the changes that were made or the impact that they had was poor.
- Experience-based co-design appeared to generate more improvement efforts than questionnaire-based data, but the effects of quality improvement (QI) interventions were not measured or reported.
- In many cases staff reported using data not to only to identify areas for improvement but to support or justify existing improvement projects.

Sheard *et al.* (Sheard L, Marsh C, O'Hara J, Armitage G, Wright J, Lawton R. The Patient Feedback Response Framework – understanding why UK hospital staff find it difficult to make improvements based on patient feedback: a qualitative study. *Soc Sci Med* 2017;**178**:19–27) have proposed a conceptual 'patient feedback response framework' to understand why front-line staff may find it difficult to respond to feedback. This framework has three components:

- normative legitimacy (i.e. staff members express a personal belief in the importance of responding to patient feedback and a desire to act)
- structural legitimacy (i.e. staff perceive that they have sufficient ownership, autonomy and resource available to establish a coherent plan of action in response to patient feedback)
- organisational readiness (i.e. the capacity for interdepartmental working and collaboration at meso level, and senior hospital management/organisational support for staff to work on improvement).

Meanwhile, Martin *et al.* (Martin GP, McKee L, Dixon-Woods M. Beyond metrics? Utilising 'soft intelligence' for healthcare quality and safety. *Soc Sci Med* 2015;**142**:19–26) report on the value of 'soft' intelligence on patient experience: insights for improvement from qualitative and informal sources. Despite recognising their value, staff often do not feel confident in interpreting or acting on such data.

The study summarised in this report explores how front-line staff use patient experience data for service improvement, and adds to this evidence base.

<sup>©</sup> Queen's Printer and Controller of HMSO 2020. This work was produced by Locock *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.

#### Aims

- To explore and analyse whether or not, and how, NHS front-line teams use different types of patient experience data for improvement.
- To develop a practical toolkit for the NHS on strategies for making patient experience data more convincing, credible and useful for front-line teams and trusts.

## Methods

The study combined quantitative and qualitative components, involving an analysis of existing national survey data and a new survey of NHS trust patient experience leads, followed by a formative and exploratory case study evaluation of how front-line staff in six sites use patient experience data for improvement, with baseline and follow-up surveys exploring the experiences of medical patients in each site.

#### Phase 1

A re-analysis was undertaken of existing data from the NHS Adult Inpatient Survey, NHS Staff Survey questions on patient experience, Friends and Family Test response rates, and Care Opinion usage data. A new survey was sent to the designated patient experience lead in all NHS acute trusts to map what data they currently collect, how often they collect the data, and how the data are used for improvement.

The results were used to assess trusts' performance on patient experience and to develop a matrix showing trusts in the top, middle or bottom third across these various performance criteria. This informed the selection of six case study sites. The study deliberately included sites with varied past experience of patient-centred QI so that it could explore how organisational context affected what happened. Senior patient experience leads at each site were asked to identify a front-line medical ward interested in taking part in phase 2.

#### Phase 2

Case studies were undertaken in the six medical wards using ethnographic observations and interviews. A baseline patient experience survey was conducted on each ward, supplemented by in-depth interviews.

The six wards were invited to send a front-line team to an initial learning community, at which different approaches to learning from and improving patient experience were presented with facilitated discussion. Materials were also summarised in a 'resource book' provided online and in hard copy.

Teams developed and implemented their own interventions and measures. Emerging findings from the ethnographic research were shared formatively with front-line teams, particularly at a second learning community event at the case study mid-point, to help them identify and overcome problems and to encourage further work. A follow-up survey of ward patient experiences was undertaken, and a final learning community event was held to discuss themes in the research findings, and to celebrate success with senior guests invited from each trust.

Qualitative data were recorded in transcripts and field notes, which were coded using a framework developed iteratively by the ethnographic team. The team met fortnightly during the fieldwork period to share emergent findings and develop a comparative narrative. Our findings and reflections were also discussed in regular meetings with members of the wider research team. Analysis had several steps:

- 'thick' case descriptions produced for each site by the ethnographer responsible
- visual process mapping highlighting key events and contextual factors on a timeline
- comparative thematic analysis, drawing on the case descriptions, process maps and coding reports, as well as on patient experience survey findings.

In accordance with our protocol and ethics approval, identities are anonymised throughout.

#### Phase 3

An online guide for NHS staff was produced in collaboration with The Point of Care Foundation (London, UK), combining material from the resource book and findings from the study with video clips from participating staff.

#### Lay co-investigator and panel

The research team was advised by a lay panel of 10 people, chaired by the lay co-investigator. All had recent personal or family experience of inpatient care. Panel members attended all three learning communities, and met regularly with the principal investigator and other members of the research team to reflect on and make sense of emerging findings.

### **Key findings**

## Phase 1: re-analysis of existing survey data and new survey of trust heads of patient experience

The purpose of phase 1 was primarily to provide a sampling frame for the selection of case studies for phase 2. However, some findings from the survey of trust heads of patient experience are of interest in their own right. Out of 153 trusts, 57 responded to the survey. All but one reported that there was a dedicated person within the trust responsible for co-ordinating the collection and use of patient experience data. Two-thirds (67%, n = 38) of trusts had a dedicated QI team. However, nearly half of all respondents (48%, n = 27) reported that they spent  $\leq 40\%$  of their overall time on supporting the collection and use of patient experience data. The most commonly cited barrier to using patient experience data was a lack of staff time to examine the data (75%, n = 43), followed by cost (35%, n = 20), lack of staff interest/support (21%, n = 12) and too many data (21%, n = 12).

Eighty per cent of respondents were either 'very positive' (40%, n = 23) or 'positive' (40%, n = 23) about their trust's progress towards improving patient experience. Only two trusts responded that they were 'not very positive'. However, only half of trusts (51%, n = 29) had a specific plan/strategy for the collection and use of patient experience data. Sixty per cent of trusts (n = 34) said that their QI strategy included how they would use patient experience data. Of those trusts responding, four (7%) said that they did not have a QI strategy.

Given that only 39% of hospital NHS trusts responded to the survey, some caution is needed when interpreting the results, as it is possible that those trusts that responded hold stronger views about patient experience data.

#### Phase 2: ethnographic case studies in six sites

#### Changes made and survey results

In every site, staff undertook QI projects using a range of data sources. The nature of the improvement projects ranged in different sites from introducing a single intervention to a series of interlinked projects on multiple topics. The scale of these, and the extent to which they drew directly on patient experience data, varied considerably, as did the degree of involvement from patients.

In addition to specific improvement projects, it was anticipated that involvement in patient experiencefocused QI work might lead to broader changes in culture, attitude and behaviour. Again, the extent to which this happened in different sites varied. Some sites chose to focus more on cultural change and improving staff experience as an indirect route to improving patient experience.

<sup>©</sup> Queen's Printer and Controller of HMSO 2020. This work was produced by Locock 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.

A few statistically significant improvements in patient experience scores were noted, as were many non-statistically significant improvements. In some cases these appeared to be linked to specific targeted QI, but many other score changes appeared unrelated to the project.

The relative lack of significant positive score changes may reflect several factors, in particular delays resulting from the exceptional winter pressures of 2016–17; the length of time QI work may take to filter through to patients; and difficulties in identifying in advance sensitive enough survey questions to capture the impact of a diverse range of local patient experience projects.

#### Who was selected to be part of the core team?

The composition of front-line core teams to work on the project varied from entirely nursing-focused to a varied mix of nurses, health-care assistants, ward clerks, allied health professionals and doctors. Progress was generally greater when the ward team drew on a range of professionals from different backgrounds, who could access help and resources from across the organisation.

Patient and family involvement in core teams was lower than expected. This is not to say patients and families were not involved in specific local QI projects, but we had anticipated that patient involvement in core teams would be an important driver; its absence may have contributed to limited change in some cases. We suggest direct patient involvement is something about which staff lack confidence and feel some ambivalence, despite a commitment to the value of being patient-centred. Greater training, support and practical sharing of good examples may be helpful.

#### Involvement of central patient experience/quality improvement teams

Against the background of exceptional winter pressures, a strong relationship between ward teams and a central in-house patient experience/QI function seemed to exercise a protective effect, enabling wards to be more ambitious in the number and range of QI activities attempted.

Occasionally a more distant relationship was observed, with little involvement of or contact with the patient experience team. These sites tended to focus on a smaller number of improvements and faced greater implementation challenges.

#### Making sense of patient experience 'data'

It was not self-evident to front-line staff how to use patient experience data for improvement in most sites, nor indeed what constituted 'data':

- Survey data remain the most commonly recognised and valued form of patient experience data.
- More locally relevant, ward-specific survey data were strongly welcomed by staff.
- Ward teams found the infographics produced to accompany the baseline survey particularly engaging as a guide to action.
- Staff find other sources of data, such as patient narratives and observation exercises, intuitively appealing and motivating, but they may lack confidence in using these for improvement.
- Positive feedback from patients is welcome and motivating, but is not necessarily seen as a source of ideas for QI.
- Unstructured and unsought online feedback, such as Care Opinion, is rarely used proactively. Although staff may find it interesting and potentially useful, they do not necessarily have organisational endorsement to work with it.
- Other forms of 'soft' and informal intelligence may all be valuable routes to understanding and improving patient experience, but may not be recognised or authorised as such.
- Staff enacting improvements to make care more patient-centred could not always point to a specific source of patient experience 'data' that led to that project. Sometimes they reported acting on what they felt they already knew needed changing.
- What counts as patient experience 'data' could be expanded to include these perspectives, although this is not without risk if it leads to staff assuming that they do not need to ask what patients want.

We suggest that staff were engaged in a process of sense-making from a range of formal and informal sources of intelligence.

#### Staff experience as a route to improving patient experience

Some sites explicitly focused on staff motivation and experience on the assumption that this would improve patient experience through indirect cultural and attitudinal change, and by making staff feel empowered and supported.

Staff participants identified several potential interlinked mechanisms through which this may occur:

- Motivated staff provide better care (which leads to better patient experience).
- Staff who feel that their experience is taken seriously are more likely to be motivated and receptive to feedback.
- Involvement in patient-centred QI is itself motivating.
- Improving patient experience can directly improve staff experience.

#### 'Team-based capital' in NHS settings

We propose a key mechanism mediating between the contexts in our case studies and the outcomes observed, namely 'team-based capital' in NHS settings. By this we mean the extent to which staff command varied practical, organisational and social resources that enable them to set agendas, drive process and implement change. These resources include not just material or economic resources, but also, for example, status, time, space, relational networks and influence. Teams involving a range of clinical and non-clinical staff from multiple disciplines and levels of seniority could assemble a greater range of capital than those that adopted a unidisciplinary, ward-focused approach, particularly when compared with teams that drew directly on the support of individuals from the patient experience office.

## **Dissemination and impact**

An online guide to using patient experience data for improvement was developed in collaboration with The Point of Care Foundation. This is being used alongside a new training course for patient experience team members.

## Limitations

This study was primarily an exploratory, ethnographic study of how and why NHS front-line staff do or do not use patient experience data for QI. It was not a 'what works?' study designed to demonstrate whether particular types of patient experience data or QI approaches are more effective than others.

## **Implications for practice**

- Provide specialised training and career development pathways for trust staff involved in patient experience teams.
- Strengthen collaboration between teams responsible for patient experience and QI in trusts.
- Improve the availability of more tailored local, ward-specific surveys.
- Increase training in using less obvious forms of data, and support staff and boards to see these as legitimate, actionable sources of improvement ideas.
- Promote the inclusion of a broad mix of staff in teams working on QI.
- Offer front-line staff more training and support in involving patients in QI.
- Consider interventions to improve staff experience as a route to improving patients' experience.

© Queen's Printer and Controller of HMSO 2020. This work was produced by Locock *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: INIRH Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

## **Implications for research**

We offer three key suggestions for future research:

- 1. developing and testing interventions focused specifically on staff but with patient experience as the outcome, with a health economics component
- 2. studies focusing on the effect of team composition and diversity on the impact and scope of patient-centred QI
- 3. research into using unstructured feedback and soft intelligence.

## Funding

Funding for this study was provided by the Health Services and Delivery Research programme of the National Institute for Health Research.

## **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 14/156/06. The contractual start date was in November 2015. The final report began editorial review in May 2018 and was accepted for publication in November 2018. 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 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 NHR, 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 Locock *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).

## **NIHR Journals Library Editor-in-Chief**

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 Riemsma Reviews Manager, Kleijnen 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

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