Research protocol

Full title of project

Improving NHS Quality Using Internet Ratings and Experiences (INQUIRE)

Chief investigator

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Summary

AIM:
To improve NHS capability to interpret online feedback from patients and the public, and to understand whether and how to act on this to improve services.

RESEARCH QUESTIONS:
1. What is current knowledge on using online feedback on patient experiences and what do experts and stakeholders in the field (including patients) consider the most important related issues for the NHS?
2. Why and how do people choose whether to provide feedback, who are these people and what is the likely effect of any bias?
3. How do NHS staff and organisations interpret social media and ratings sites amongst other indicators of patient experience ? What are the barriers and facilitators to using online feedback to improve NHS quality? What skills and capacity are required to draw benefit (eg immediacy, efficiency, transparency) and avoid harm (eg bias, confusion).

BACKGROUND AND RATIONALE:
As the NHS embraces a responsive, patient-centred, listening culture, it is important that it is listening, interpreting and responding to the right signals. As in many sectors, these ‘signals’ are increasingly coming from online content as patients use the internet to comment on their experiences of the NHS. We need to establish whether this is (or could be) credible and useful for NHS service improvement.

RESEARCH PLAN:
Five interlinked projects of applied health services research, each delivering NHS benefit and academic outputs in their own right, and adding value to each other.
Project-1 What is known regarding online feedback from patients? A stakeholder/expert consultation and scoping literature review.
Project-2 Population survey to identify attitudes and characteristics: who gives online feedback and who uses it?
Project-3 In-depth qualitative work to explore the motivations and actions of people who choose to create or use online feedback.
Project-4 What are the attitudes and behaviours of frontline NHS staff to online feedback? Surveys and focus groups of health professionals to understand practice, attitudes and use of online feedback.
Project-5 NHS case studies to capture the views of other staff groups (NHS managers, and other non-clinical workers) to examine organisational practices in relation to online feedback.

Background and Rationale

Patient-centeredness is a fundamental pillar of healthcare quality [1, 2]. Patient experience is associated with patient safety and self-rated and objectively measured health outcomes for a wide range of disease and service areas[3-5]. Despite the importance placed on creating a patient-centered, responsive health system, a series of recent, high-profile investigations, including those by Sir Robert Francis[6], Sir Bruce Keogh’s investigation into struggling trusts[7] and Don Berwick’s national review of patient safety[8] noted a failure at both the team and organisational level within the NHS in recognising and responding to feedback from patients.

At the same time as most existing feedback mechanisms are struggling to have an effect, healthcare providers are receiving large amounts of commentary from patients and carers via a new route: the internet[9-16]. This includes comments on structured patient rating sites (e.g. NHS Choices and

PatientOpinion) and also unstructured and unsolicited narratives about treatment, health services and illness in online settings such as blogs, fora and social media (in this document we use terms like feedback or comments to refer to all of this solicited and unsolicited content). As in all other areas of life, use of the internet is increasing in healthcare. Many people use the internet to find health information (69% UK population, 2013)[17]. Data in both the UK and US show that online feedback on healthcare is increasing and likely to grow fast in the coming years[18, 19].

NHS England has committed to using internet feedback as part of its vision for a digital NHS founded on the pillars of participation, transparency and transaction. It is investing considerable resources in this area - for example, the NHS England Insights pilot site (http://insights.england.nhs.uk) launched in September 2013 and the multi-channel Care Connect initiative https://www.nhs.uk/careconnect/choices. if these initiatives are to have an effect, NHS managers and healthcare practitioners will need to understand how to interpret, respond to, and harness, online content from patients. Patients, carers and the public need to understand how they can provide useful feedback to the NHS and what influence this can have. There is no consensus or clear policy about how to use online feedback to deliver NHS and patient benefit, and there is a very limited evidence base to draw upon.

We are aware of case studies and single initiatives aimed at gauging and responding to online patient feedback (e.g. Birmingham Children's Hospital feedback tool; NHS Institute Patient Feedback Challenge), but they are fragmented, diverse and highlight the need for an evidence-based and strategic response. The limited previous work has not been synthesised, and the lessons learned or examples of best practice have not been identified, nor the ethical issues fully understood[20]. We are aware of a few studies examining the content of feedback sites[10, 11, 14, 21-25], and some comparing this with measures of health service quality [26-29] which show moderate to low correlations but suggest an incomplete understanding of what this feedback represents and how it relates to traditional quality metrics. A recent review of the relationship between online ratings and quality indicators found evidence of an association but also identified problems with online ratings being vulnerable to fraud and bias [11].

Little is known about the people who provide online content on their experience of care, why they do this, whether there are issues of inequality, and what influence this feedback has on other patients, practitioners, and organisations. We need to understand the strengths, weaknesses and biases of the data. There is some limited work on this from outside the UK[13, 30, 31], e.g. from surveys conducted by the Pew organisation[13]. However, research exploring motivation to provide feedback in general is sparse and the focus is on administrative procedures for handling complaints, rather than patients themselves[32]. In the US 40% of a nationally representative sample believed that online ratings were "very important" in choosing a physician [12]. In Germany online raters were more likely to be (e.g.) younger, female and more educated [13]. A small UK study suggested that ratings may (e.g.) overrepresent views of individuals from low income groups[14]. The NHS needs to understand the strengths, weaknesses and biases of online comments and we need robust UK survey data. We also need to undertake the first in-depth exploration of the attitudes and motivations to comment online or to be influenced (or not). There is still a 'digital divide' in society, with older and more deprived groups less likely to be active online [33]. What consequences might such inequalities have for whose interests are represented and how comment is received and acted upon?

There has been little examination of the individual and organisational barriers and facilitators to the use of online feedback in the NHS. We know that the diffusion of innovations in healthcare, especially information technology-based innovation, is complex and influenced by multiple factors, including individual and organisational ones [34-36]. For example, many clinicians appear resistant to the idea of online feedback, worrying about selection bias, vulnerability to 'gaming' or malice, and concerned that there is no fundamental relationship between subjective patient experience and objective care quality [37]. A pilot review of Patient Opinion in Scotland suggests that some organisations regarded patients' comments as 'unreasonable' [38]. But we have no representative data on the attitudes and behaviour of health professionals to online feedback, and no in-depth analysis of the barriers and facilitators to guide its use in NHS organisations.

Why this research is needed now

Gathering, interpreting and responding to solicited and unsolicited online consumer feedback is both established practice and fundamental to success in the retail, travel and hospitality industries[40, 41]. The quality improvement movement in healthcare has often been at its innovative best when adopting concepts from other industries, such as airline safety culture[39]. The internet is having a major impact on the consumer relationship with healthcare and people are already putting their NHS experiences online. [9, 42-46]. Yet the NHS has not harnessed this phenomenon. How should the NHS respond? How can online user-generated content be harnessed to improve NHS services?

NHS England's planning document highlights the need for rapid, comparable feedback on the experience of patients and carers and capacity and capability in both providers and commissioners to act on patient feedback[47]. The public is also supportive of stronger feedback mechanisms: a 2013 IpsosMori poll found that 40% of people rated 'listening to patients about how services could be improved' as the highest priority to prevent further failings[48].

Current mechanisms for obtaining and using feedback in the NHS, particularly surveys and complaints, have limitations. Annual national patient surveys lack timeliness. Robert and Cornwell suggest that such surveys have become a 'box-ticking' compliance activity[49]. As DeCourcy and colleagues have noted, the patient survey in itself is not a quality improvement tool and that 'simply providing feedback' does not lead to quality improvement [50]. The net promoter score, widely used across the NHS in England appears to be poorly understood by patients and its reliability is uncertain [51]. NHS complaints and Patient Advice and Liaison Services (PALS) services struggle to cope with demand and the imperative to drive improvement[52]. Complaints in the NHS are both common and badly managed, and are rising at 8% a year [53]. The NHS often fails to respond or learn from complaints adequately [54], and tends to handle them badly [55].

User-generated online content represents an important but relatively unexplored opportunity for the NHS to address these challenges – by providing a timely, accessible and transparent means to measure care quality, understand patients' experience of care and to act as a responsive feedback mechanism, and potentially a disruptive innovation [43, 56, 57], to drive quality improvement and to deliver care which is truly patient-centred. Internationally, there is growing evidence linking patient-centred care with decreased mortality and lower hospital-acquired infection rates; patient feedback about hospital cleanliness is a positive predictor of staff participation in activities such as hand-washing, and of MRSA rates; good patient experience is also linked to other organisational goals such as reduced malpractice claims, lower operating costs, increased market share and better staff retention; patient adherence seems to improve, length of stay is shorter and fewer medication errors and adverse events occur in organisations where care is patient-centred[58-63]. Just taking this latter example: adverse events affect c.500000 patients per year in the NHS and are estimated to cost well in excess of £1billion per year [64].

This multidisciplinary series of five projects of applied health services research is therefore designed to provide a comprehensive assessment of the potential value of online patient feedback from multiple perspectives and to inform how it should (and when it should not) be used by the NHS to guide service improvements to create a more patient-centred, responsive NHS. We understand that much of this will require organisational and cultural change (especially in a 'post-Francis' NHS) and our research will provide the necessary evidence and know-how.

Aims and objectives

While organisations often struggle to reach a decent response rate to questionnaire surveys on patient experience there has been a dramatic increase in feedback and comment in online settings such as review and ratings sites which solicit such feedback, as well as unsolicited feedback in more general settings such as online social media, forums, and blogs. The challenge for NHS organisations to is to know how to interpret these types of 'feedback' in relation to other sources of data on patient experience, and how to act on these combined resources to improve services.

Therefore, the overarching aim of this study is to provide the understanding that will enable NHS organisations to make best use of the immediacy, transparency and early warning capacities of online feedback in combination with other local qualitative and quantitative information on patients' experiences.

Objective 1: to identify the current practice, state of the art, and future challenges, for online patient feedback, and to determine the implications for the NHS. We will review existing literature and undertake an extensive consultation with experts and national and local stakeholders (patients, practitioners, commissioners, policymakers) and engage them in implementing our findings.

Objective 2: to understand what online feedback from patients represents and who is excluded, with what consequences. We will undertake a questionnaire survey of the public (objective 2a). We will undertake qualitative interviews with patients and carers (objective 2b), to investigate why and how people choose to (or do not) provide online feedback on health services, how they expect their feedback to be used by the NHS and other patients and to identify who are the users and non-users of internet content.

Objective 3: to understand the potential barriers and facilitators to the use of online patient feedback by NHS staff and organisations and the organisational capacity required to combine, interpret and act upon patient experience data. We will use questionnaires, focus groups, and in-depth case studies to assess the knowledge, attitudes and behaviours of NHS staff and organisations towards the different sources of patient experience data (online feedback, locally collected quantitative and qualitative data).

Objective 4 to use the study findings to develop a toolkit and training resources for NHS organisations (providers and commissioners) to encourage appropriate use of online feedback (social media and ratings sites) in combination with other patients' experience data.

Research Plan/methods

We propose a series of 5 projects:

Project-1: *(Objective 1) Stakeholder consultation and evidence synthesis (scoping review) regarding use of online feedback in health care. We will consult with experts in the field of online patient feedback and patient experience of NHS services, and engage with patients, practitioners, policymakers, and local commissioners. This will be combined with a scoping review of the literature. This will establish current practice and 'state-of-the-art' in this field, and provide a horizon scan of future developments. It will identify what online patient feedback service initiatives and research projects are currently underway or planned, and what lessons can be learned from previous work.*

In this project we will undertake a stakeholder consultation with experts in the field of online patient feedback and patient experience of NHS services. This will be combined with a scoping review of the literature on the topic. This consultation and scoping work will take place at the start of the programme to establish both the current practice and the 'state-of-the-art' in this field, as well as providing a horizon scan of future developments. It will identify what online patient feedback service initiatives and research projects are currently underway, or planned, and what lessons can be learned from previous work, with a particular focus on our research objectives. This contact with stakeholders will be maintained through regular updates and invitations to an annual INQUIRE workshop.

In our consultation we will cast our net wide and informants will include those working in the NHS; the independent and voluntary health sector; patient groups; academia; health policy settings; as well as those in other customer-facing industries that use online comments, including the travel and hospitality sector and the retail sector. We will include the views of those involved in initiatives in the UK and elsewhere. We will identify experts through our existing networks, through the published literature, through online resources, and through snowball sampling from suggestions provided by interviewees. Several experts have already been approached and through our networks we know many people in this area. We will interview representatives from patient organisations. We will interview clinical leaders and representatives of professional bodies and advisors at policy institutes/think tanks with interests in this and related areas including patient experience and quality improvement. Formal consultation will be supplemented with informal conversations on social media. This work will also give us direct routes to key opinion leaders to support our dissemination.

Interviews will be face-to-face (or telephone if impractical) and audio-recorded and transcribed. While this is not an in-depth sociological study, we believe there is value in a rigorous qualitative analysis approach to our data to ensure our findings are synthesised systematically and reliably. We will therefore use the Framework Approach [65] a method for analysing qualitative data consisting of familiarisation with the data, identification of a thematic framework, indexing, charting, and mapping and interpretation, developed for use in applied policy research. One researcher will lead the analysis with reference to a second researcher who will supervise and read all transcripts.

In our scoping review we will build on and supplement our consultation (which we anticipate will identify much of the relevant previous work) using bibliographic database searching and internet searches to identify research, descriptions of current practice, and policy discussions. Bibliographic databases such as Medline, Embase, CINAHL, will be searched from 1990 (birth of internet, although explosion of user-generated content is obviously much more recent) to present day using MeSH and key word searching (e.g. “feedback”, “rating$”, “comment$” AND “internet”, “online” etc.). Relevant papers (based on title and/or abstract) will be obtained and screened for inclusion. As this is scoping work, our focus will be broad, and guided by topics identified in the consultation. This is not a narrow piece of evidence synthesis, but a broad scope of the field. Internet searching will be used to capture grey literature, including policy and strategy documents from key organisations, and project reports from initiatives (such as the NHS Institute Patient Feedback Challenge projects and the Birmingham Children’s Hospital feedback system). The non-health areas which have been most at the forefront of online reviews and ratings are the travel and retail sectors. In our scoping review we will identify key transferable lessons from these other sectors and these will be integrated into our findings from the health sector. We anticipate that much of this work will be found within the business and management literature (including journals which cover retail, travel and hospitality) as well as some in the psychology (such as consumer psychology) literature. We know that previous studies in this area have (these are just examples) considered issues such as trust, helpfulness and persuasiveness of online comments, and the manipulation of reviews and ratings, and we will draw out the generic lessons from these non-health studies.

We will examine the issues of information governance and ethics in relation to online health comments. It is important to identify these for the NHS, and for our subsequent projects. For example, questions of consent, confidentiality, disclosure, identity and authenticity were raised in our initial scoping [20,66].

We will produce a narrative consensus document examining current practice and the state-of-the-art in this field, as well as implications for practice (including ethics and governance, and digital inclusion/inequalities issues) and future directions for research. Digital inclusion is an area of key interest to us and lessons learned and implications which relate to digital inclusion (and exclusion) will be drawn out. This document will include an Appendix of all existing quality improvement initiatives attempting to harness online patient comments, identified through interviews and internet searching. To provide respondent validation and to ensure we have captured all relevant views and information, we will share the draft document with our informants, and invite comments to be incorporated in the final version.

Project-2: *(Objective 2a) Survey of the public. This project will provide the very first representative UK population data on the use of online comment on health services, and allow examination of equity and inclusion issues. We propose a face-to-face household survey of members of the public, and to deliver best value for the NIHR, our intention is to collaborate with the Oxford Internet Institute to add questions to their existing Oxford Internet survey (OxIS) of 2000 people in the UK. OxIS is a highly-regarded source of information on internet access, use and attitudes of people in the UK.*

The NHS needs to know who the people are (patients, carers and public) creating, and using, online health content in the UK. Who comments, and who doesn’t? What motivates or deters them? There may be certain groups that remain underrepresented, and it is important that provision is made for these groups as the health service becomes more digital in its interactions with the public, such that the issue of digital inclusion (and exclusion) can be addressed.

We propose a face-to-face household survey of members of the public so that we can obtain information on who is creating and using this content. In order to do this, and to deliver best value for the NIHR, we intend to collaborate with the Oxford Internet Institute (OII) (co-applicant Margetts is the Director of OII) to add questions to their existing Oxford Internet survey (OxIS)[17]. OxIS has been conducted every two years since 2003, and uses nationally representative random samples of 2000 people across the UK. It is a highly-regarded source of information on internet access, use and attitudes of people in the UK. It collects extensive socio-demographic information on individuals and the data can also be linked to ONS output areas (and therefore to indices such as Multiple Deprivation) and currently includes data on digital and social inclusion and exclusion; regulation and governance of the internet; privacy, trust and risk concerns; social networking and entertainment; and online education amongst other factors. Because of the timing of this survey our hope is that questions will form part of OxIS2017 (fieldwork in February/March 2017).

The existing survey collects information on prevalence of online health information seeking. We will add further questions that will specifically ask about the use of the internet to provide feedback on health services, including the use of online reviews and rankings; and of social media for health more generally. These questions have already been validated and used by the respected Pew organisation in the USA [13]. We will also have the opportunity to collaborate with Pew on comparative data analyses. We will pilot our questions with public volunteers with the help of our lay representatives.

The survey is methodologically rigorous. It provides a fully representative sample of the population of Great Britain aged 14+, with the option to split the dataset by nation. Additionally, the data are weighted to gender, age, region and household size. Analysis of the survey will be conducted in conjunction with OxIS who offer extensive experience. We will have all the survey questions available to us (not just our additions) so we can examine associations between online health commentary and socio-demographic variables. Descriptive statistics will be calculated for the variables relating to use of online comment. Multivariate analysis will be used to investigate associations between online comment variables, and variables such as age, gender, ethnicity, educational status, employment status, and general health status. Statistical analysis will be conducted using Stata v13. Our PPI representatives will contribute to the interpretation of findings regarding public use/attitudes/self-reported behaviour regarding online health comments.

This project will provide the very first representative UK population data on the use of online comment on health services, and allow examination of inclusion/inequalities issues.

Project-3: *(Objective 2b) Qualitative study of patients' and carers' experiences of creating and using online comment. Qualitative interviews will develop our detailed understanding of the creation and use of online comment, exploring motivations and experiences of commenting on and reading other people's feedback on the NHS; analysing the effects these practices have on healthcare decision-making and relationship with NHS services and practitioners. We will aim for a diverse maximum variation national sample of around 40-50 patients and carers who have used various methods and platforms to comment on their experiences of NHS services, or who have read other people's comments. Recruitment will be supported by our PPI lead and our Patients, Carers and Public Reference Group, as we seek those who have used and/or provided feedback via formal NHS and other online and offline routes.*

Here we will use qualitative interviews to develop a detailed understanding of the creation and use of online comment, exploring people's experiences of commenting on and reading other people's feedback on the NHS (positive and negative); analysing people's accounts of any effects these practices have on healthcare decision-making and relationship with NHS services and practitioners. This will provide in-depth insight on the experiences of patients who have actually commented on the NHS as a means of improving how service providers respond to these comments.

We will aim for a diverse maximum variation national sample [67], of around 40-50 patients and carers who have used various methods and platforms to comment on their experiences of NHS services, or who have read other people's comments. Recruitment will be supported by our PPI lead as we seek those who have used formal NHS feedback routes (such as complaints services) as well those who have provided online patient feedback – whether on patient opinion websites or via informal blogs, YouTube, Twitter, etc. This will include contacting contributors to PatientOpinion, online advertisements, email approaches to health bloggers and snowball sampling. Participants will be interviewed, by an experienced qualitative researcher, about their motivations and experiences of commenting and using other people's comments.

Guided by the areas of NHS care that people are most likely to complain about [68-70], we will initially seek interviews with people who have commented on either their own, or a family member's, experiences of primary care, A&E or hospital in-patient care. Within these settings we will focus on areas that have already been shown to be frequently commented on: clinical treatment and decisions (especially around contested conditions and treatments); maternity services; nursing care; care of the elderly and palliative care; organisation and administration (including access issues such as appointment booking and transport). As the study progresses, an iterative approach to recruitment will be taken, to include topics that emerge during the early interviews.

The interviews will be audio recorded with written consent established before each interview. A semi-structured interview protocol will be developed, this will include the use of specific prompts to solicit information on experiences and issues around the positive and negative consequences of online user-generated comments and how the NHS responds to them. The interviews will be fully transcribed and analysed by the qualitative researcher responsible for the data collection under senior supervision. A specialist software package (NVivo) will be used to help organise and analyse emergent (i.e. unexpected) themes as well as those that were anticipated, using the method of constant comparison [71,72]. Data collection and analysis will proceed simultaneously and continue until we have reached data saturation on the main analytic categories.

Project-4: (Objective 3) Survey and focus groups of healthcare professionals. We will undertake surveys and focus groups with NHS professionals to investigate their awareness and attitudes in relation to online sources of patient feedback (either specific to their own practice, or more generally). For doctors and nurses, we will administer questionnaire surveys to quota-sampled representative groups. To capture the views of other health professionals we will run focus groups.

Issues of quality and patient experience are relevant to all NHS staff, and especially to frontline clinical staff. Health professionals will often be the subject of online comment which may or may not be moderated. Many clinicians appear cautious about the value of online content, but evidence on health professional attitudes and behaviours is lacking. The attitudes of healthcare professionals towards new technologies have a strong influence on the speed and success of their adoption by the health service[34].

We will undertake questionnaire surveys with two key groups of frontline clinical staff: doctors and nurses and focus groups with other health professionals. The questionnaires will establish who uses online sources of patient feedback (either specific to their own practice, or more generally) and their attitudes towards this type of commentary.

For the survey of doctors, we intend to administer a questionnaire survey to a quota-sampled representative group of 500 secondary care (across specialties) and 500 primary care doctors using Doctors.net.uk, the UK online portal and network for the medical profession. Doctors.net.uk has 200,000 members, a large proportion of the 234,711 doctors currently on the list of registered medical practitioners, with 25,000 doctors active on the website on any one day. We are aware that using an online survey will have some limitations and may bias our sample to those doctors who are more frequent internet users, who are perhaps younger, and qualified more recently. For this reason we will stratify our sample by age, specialty, and seniority. We are also aware of the pros and cons of quota sampling versus random sampling, we have chosen the former due to the low response rate associated with internet-delivered random surveys. An alternative would have been a more costly postal or telephone survey of a random sample of the medical profession drawn from the GMC register, and we believe our proposed approach offers better value to the NIHR, while still answering our research question.

For the survey of nurses we aim to work with the Royal College of Nursing (RCN) where we have links and who we have approached and who have indicated their interest in this work. They undertook a recent e-health survey (which did not ask about patient-generated content)[73]. A random sample of RCN members (from the 50,000 total members) will be invited via email to complete the survey, aiming for a respondent sample size of 1000. The sample will span all categories of membership. The survey would also be publicised via direct mailings, member newsletters and Twitter.

For both surveys, the questionnaire will be piloted with convenience samples of doctors and nurses before it is distributed. The surveys will collect demographic data, as well as factors relating to attitudes, use and experience of online content. We will examine associations between attitudes to online commentary, role location, gender and other socio-demographic variables. Descriptive statistics will be used for variables related to use; where possible we will use multivariate analysis to investigate doctors and nurses use/attitudes/self-reported behaviour regarding online health comments from patients. Possible explanatory variables include age, gender, ethnicity, clinical position and institution type.

To capture the views of other health professionals, where we do not have a ready sampling frame to send a questionnaire survey, we will conduct focus groups within hospital Trusts (in parallel with the case study work in Project-5 which is examining four Trusts in detail – Project-5 will also capture the views of NHS managers). Within these Trusts we will advertise, via noticeboards and emails, for volunteers to take part in a one hour focus group. Focus groups will take place within the Trust site. We plan to hold four focus groups with relatively homogenous groups of allied health professionals in each one. Between six and eight participants will be sought for each group (this number allows for rich discussion) Refreshments and vouchers will be offered to compensate people for their time in attending the group.

The focus groups will explore similar issues to the survey ie use of online commentary and the opportunities, concerns and cautions that it generates. In addition, the focus group facilitator will use the flexibility of the groups i) to examine whether (and why) they think that there are particular issues facing online feedback for their professional group ii) their ideas about which professions might be more or less enthusiastic about online feedback and iii) to reflect on what (if anything) they would want to know before acting on feedback from patients – and why?

Two researchers will attend each group, one to lead discussion and the other to record and take field notes. Each group will be audio recorded and transcribed for analysis. First, transcripts will be analysed thematically using a constant comparative approach to explore what people said in response to the prompts, as well as drawing out any emergent (unexpected) themes in the discussion. Second, we will reflect on how the talk was constructed in each group, which views provoked approval, disagreement or laughter and whether any views were silenced, Finally we will compare the findings from the different groups and consider whether there are any patterns which might be explored further in the survey data.

This project will provide the first UK data on the characteristics, attitudes and self-reported behaviour of health professionals towards online feedback, identifying potential barriers and facilitators to the use of such content for health service improvement.

<u>Project-5:</u> *(Objective 3) In-depth organisational case studies. In collaboration with the Said Business School (co-investigator Steve Woolgar is a leading expert in Science and Technology Studies and leads this project) we will use in-depth case ethnographic studies with 4 NHS secondary care provider organisations and their local related organisations (including commissioners at CCGs) (secondary care focus as majority of online feedback is on secondary care). While this in-depth case study approach necessarily means a small sample (due to being resource intensive), we will aim for diversity of organisational size and current level of performance. We believe an in-depth analysis is the correct approach to gaining a deep understanding of how and why online patient feedback is currently viewed and used (or not) by NHS staff and NHS organisations and commissioners, how it relates to other sources of data on patient experiences, and crucially understand how to use this knowledge to improve NHS care.*

A key component of this programme of research is to discover how user-generated content and feedback is currently viewed and used by the health service, in the context of other sources of patient feedback and experience, and in the quality and outcome landscape as a whole. At present we do not know how such content is viewed or dealt with at a managerial level, and what the barriers or facilitators are to its adoption. This work package will therefore examine how NHS managers in particular, but also other staff groups, and the organisations they work for, use (and resist using) user-generated online content in practice.

We will conduct in-depth case studies with four NHS provider organisations in different settings (including at least two acute Trusts and at least one mental health/community Trust). While this in-depth case study approach necessarily means a relatively small sample (due to being resource intensive), we will aim for diversity in our case study sites, in terms of organisational size and current level of performance. We believe an in-depth analysis is the correct approach to gaining a deep understanding of how and why online patient feedback is currently viewed and used (or not) by NHS staff and NHS organisations.

We will examine organisational and workforce factors, including the mechanisms in place for eliciting, gathering, moderating, recording and processing user comments. We will also examine how local and organisational arrangements affect the management of comment and feedback. This includes investigation of the criteria used in deciding the significance (or otherwise) of comments, as well as who in the organisation holds what authority for judging and moderating patient feedback and what kind of training and expertise they have. We will set this in the context of what the organisation currently does in relation to conventionally generated feedback such as patient experience survey results and complaints. Staff perspectives are important and we want to determine the key assumptions held by members of staff about the value of patient feedback. We will undertake multiple (brief) interviews at each case study site with staff working at all levels of the organisation, with a focus on capturing the views of managers and those working in quality improvement and complaints handling, but also including other stakeholder groups whose area of work may have particular salience to online feedback – such staff working in cleaning, catering, or administrative roles (comments on health service quality often relate to cleanliness or the quality of food, or the experience of appointments or hospital administration). For healthcare professionals there will be synergy with Project-4 which will conduct focus groups within the same Trust sites.

The case studies will take an ethnographic approach, using mixed methods including face-to-face interviews, observations of meetings, documentary analysis, and researcher’s field notes. The researcher will work in situ, adopting an appropriate fieldwork role to facilitate the close examination of the day-to-day activities involved in processing user generated comment. In each case the researcher will spend approximately 6 weeks undertaking interviews and fieldwork with each organisation. Data (in the form of field note descriptions, documents and interview recordings) will be analysed through thematic analysis and comparative case study analysis. The analysis will examine the organisations’ interpretations and processing of user generated comment impartially and symmetrically, rather than merely accepting the organisation’s own determinations of its value. This analysis and interpretation will be informed by previous projects, and input from our steering group and PPI colleagues. This work will improve understandings about the uptake of and the main impediments to use of online patient feedback in the NHS.

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