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Improving patient experience in primary care: a multimethod programme of research on the measurement and improvement of patient experience

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This report should be referenced as follows:

Burt J, Campbell J, Abel G, Aboulghate A, Ahmed F, Asprey A, *et al*. Improving patient experience in primary care: a multimethod programme of research on the measurement and improvement of patient experience. *Programme Grants Appl Res* 2017;**5**(9).

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This report

Abstract

Improving patient experience in primary care: a multimethod programme of research on the measurement and improvement of patient experience

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Background: There has been an increased focus towards improving quality of care within the NHS in the last 15 years; as part of this, there has been an emphasis on the importance of patient feedback within policy, through National Service Frameworks and the Quality and Outcomes Framework. The development and administration of large-scale national patient surveys to gather representative data on patient experience, such as the national GP Patient Survey in primary care, has been one such initiative. However, it remains unclear how the survey is used by patients and what impact the data may have on practice.

Objectives: Our research aimed to gain insight into how different patients use surveys to record experiences of general practice; how primary care staff respond to feedback; and how to engage primary care staff in responding to feedback.

Methods: We used methods including quantitative survey analyses, focus groups, interviews, an exploratory trial and an experimental vignette study.

Results: (1) *Understanding patient experience data*. Patients readily criticised their care when reviewing consultations on video, although they were reluctant to be critical when completing questionnaires. When trained raters judged communication during a consultation to be poor, a substantial proportion of patients rated the doctor as 'good' or 'very good'. Absolute scores on questionnaire surveys should be treated with caution; they may present an overoptimistic view of general practitioner (GP) care. However, relative rankings to identify GPs who are better or poorer at communicating may be acceptable, as long as statistically reliable figures are obtained. Most patients have a particular GP whom they prefer to see; however, up to 40% of people who have such a preference are unable regularly to see the doctor of their choice. Users of out-of-hours care reported worse experiences when the service was run by a commercial provider than when it was run by a not-for profit or NHS provider. (2) *Understanding patient experience in minority ethnic groups*. Asian respondents to the GP Patient Survey tend to be registered with practices with generally low scores, explaining about half of the difference in the poorer reported experiences of South Asian patients than white British patients. We found no evidence that South Asian patients used response scales differently. When viewing the same consultation in an experimental vignette study, South Asian respondents gave higher scores than white British respondents. This suggests that the low scores given by South Asian respondents in patient experience surveys reflect care that is genuinely worse than that experienced by their white British counterparts. We also found that service users of mixed or Asian ethnicity reported lower scores than white respondents when rating out-of-hours services. (3) *Using patient experience data*. We found that measuring GP–patient communication at practice level masks variation between how good individual doctors are within a practice. In general practices and in out-of-hours centres, staff were sceptical about the value of patient surveys and their ability to support service reconfiguration and quality improvement. In both settings, surveys were deemed necessary but not sufficient. Staff expressed a preference for free-text comments, as these provided more tangible, actionable data. An exploratory trial of real-time feedback (RTF) found that only 2.5% of consulting patients left feedback using touch screens in the waiting room, although more did so when reminded by staff. The representativeness of responding patients remains to be evaluated. Staff were broadly positive about using RTF, and practices valued the ability to include their own questions. Staff benefited from having a facilitated session and protected time to discuss patient feedback.

Conclusions: Our findings demonstrate the importance of patient experience feedback as a means of informing NHS care, and confirm that surveys are a valuable resource for monitoring national trends in quality of care. However, surveys may be insufficient in themselves to fully capture patient feedback, and in practice GPs rarely used the results of surveys for quality improvement. The impact of patient surveys appears to be limited and effort should be invested in making the results of surveys more meaningful to practice staff. There were several limitations of this programme of research. Practice recruitment for our in-hours studies took place in two broad geographical areas, which may not be fully representative of practices nationally. Our focus was on patient experience in primary care; secondary care settings may face different challenges in implementing quality improvement initiatives driven by patient feedback. Recommendations for future research include consideration of alternative feedback methods to better support patients to identify poor care; investigation into the factors driving poorer experiences of communication in South Asian patient groups; further investigation of how best to deliver patient feedback to clinicians to engage them and to foster quality improvement; and further research to support the development and implementation of interventions aiming to improve care when deficiencies in patient experience of care are identified.

Funding: The National Institute for Health Research Programme Grants for Applied Research programme.

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ANOVA	analysis of variance	NRES	National Research Ethics Service
CFI	comparative fit index	ONS	Office for National Statistics
CI	confidence interval	OPQ	Out-of-hours Patient Questionnaire
CQC	Care Quality Commission	OR	odds ratio
CRT	Customer Research Technology	PCA	principal component analysis
DIF	differential item functioning	PCT	primary care trust
EQ-5D-3L	EuroQol-5 Dimensions three-level version	PFC	patient feedback questionnaire on consultation skills
GCRS	Global Consultation Rating Scale	PPG	Patient Participation Group
GMC	General Medical Council	PPI	patient and public involvement
GP	general practitioner	QOF	Quality and Outcomes Framework
ICC	intraclass correlation coefficient	RCT	randomised controlled trial
IMD	Index of Multiple Deprivation	RMSEA	root-mean-square error of approximation
IMPROVE	improving patient experience in primary care	RTF	real-time feedback
IQR	interquartile range	SD	standard deviation
NIHR	National Institute for Health Research	SHA	strategic health authority
NPT	normalisation process theory	VOP	Value of Patient Feedback
NQR	National Quality Requirement		

Plain English summary

We aimed to gain a better understanding of how patients in general practice use surveys to record their experiences, to understand how staff respond to feedback and to find ways of engaging staff more actively in the process. We did this in a number of ways, including carrying out surveys, having discussions with patients and staff and trying out different ways of gathering patient feedback.

Patients were reluctant to be critical when completing questionnaires after consultations even when they did not think that their care had been very good and they explained their reasons for this. Considering the results of the national GP Patient Survey, we found that the most common reason for dissatisfaction was patients not being able to see a doctor of their choice, something that has got worse in the past few years.

We carried out several studies to understand why minority ethnic groups give low scores on patient surveys. Part of this is because they tend to be registered in practices with low scores. However, our studies also suggest that low scores from South Asian patients reflect poor care rather than, for example, different expectations.

We found that, in both primary and out-of-hours care settings, staff do not trust the results of patient surveys and do not usually make big changes in clinical care as a result of these. We looked for ways of engaging staff more actively with patient feedback. We tested 'real-time feedback' in which patients use a touch screen in the waiting room, with staff being provided with results fortnightly. Although patients found this useful, few actually used it unless they were reminded to do so by receptionists.

We describe the implications of our research for practice and make recommendations for future research.

Scientific summary

This programme had seven aims:

1. to understand how general practices respond to low patient survey scores
2. to estimate the extent to which practice-level scores mask differences between individual doctors
3. to investigate how patients' ratings on questions in the GP Patient Survey [see https://gp-patient.co.uk (accessed 23 January 2017)] relate to actual behaviour by general practitioners (GPs) in consultations
4. to understand patients' responses to questions on communication and seeing a doctor of their choice
5. to understand the reasons why minority ethnic groups, especially South Asian respondents, give lower scores on patient surveys than white British respondents
6. to carry out an exploratory randomised controlled trial (RCT) of an intervention to improve patient experience, using tools developed in earlier parts of the programme
7. to investigate how the results of the GP Patient Survey can be used to improve out-of-hours care.

In this report, we group our results under three headings:

1. understanding patient experience data (aims 3 and 4)
2. understanding patient experience in minority ethnic groups (aim 5)
3. using data on patient experience for quality improvement (aims 1, 2, 6 and 7).

We conducted empirical studies in general practices (varying in location, deprivation and performance on patient experience measures) and out-of-hours providers nationally. A total of 47 general practices and 11 out-of-hours providers participated in the programme of work, although some were involved in more than one study. We additionally completed multiple analyses of GP Patient Survey data and, for an experimental vignette study, collected data from the general public.

1. Understanding patient experience data

Patient surveys are widely used in many countries, yet comparatively little is known about what experiences actually lead patients or service users to respond in particular ways when completing them. We approached this issue in two studies in which we (1) used video elicitation interview methods to ask 52 patients directly about how they chose certain questionnaire responses while showing them a video of their consultation and (2) used statistical analyses to compare assessments of videoed consultations by 56 patients with those of expert raters using standardised assessment instruments.

The first study showed that, although patients readily criticised their care when reviewing consultations on video, they described how they had been reluctant to be critical when completing a questionnaire. Reasons for this included the need to maintain a relationship with the GP, gratitude for NHS care that they had received in the past and power asymmetries. We concluded that patients find questionnaires to be limited tools for feeding back concerns about consultations.

The second study reinforced our conclusion from the first study. When trained raters judged communication in a consultation to be good, patients generally did the same. However, when trained raters judged communication in a consultation to be poor, patients' assessments varied from 'poor' to 'very good'.

The tendency for patients to choose positive responses suggests that absolute survey scores should be treated with caution; they may present an overoptimistic view of GP care. Surveys can be used to look at relative scores: scores for a GP that are lower than those in comparable practices are likely to indicate a problem.

We spoke to GPs about their survey results through both focus groups and face-to-face interviews. They reported that, although positive about the concept of patient feedback, they struggled to engage with and make changes under the current approaches to measurement.

A second aspect of care that we identified as being of importance as part of our programme of work relates to patients' ability to see a doctor of their choice. Our analyses of GP Patient Survey data showed that for all age groups most patients have a particular GP whom they prefer to see. However, up to 40% of people who have such a preference are unable regularly to see the doctor of their choice. This is a significant quality issue for the NHS.

In out-of-hours care we found that patients reported worse experiences when the service was run by a commercial provider than when it was run by a not-for-profit or NHS provider.

2. Understanding patient experience in minority ethnic groups

Minority ethnic groups provide consistently low scores in English surveys. In this study, our analyses of GP Patient Survey data focused on South Asian respondents and on questionnaires completed in English. Although the GP Patient Survey is available in 15 languages, fewer than 0.2% of surveys are completed in languages other than English. First, we showed that Asian respondents to the GP Patient Survey tend to be registered in practices with generally low scores, explaining about half of the difference between South Asian and white British patients in their experience of care. Then, using item response theory, we found no evidence that South Asian respondents used the scales in a different way from white British respondents.

We then conducted an experimental vignette study for which we filmed 16 simulated consultations based on transcripts of real consultations using various combinations of white and Asian doctors and patients, half scripted to be 'good' and half scripted to be 'poor' for communication. We showed three randomly sampled videos to each of 1120 people (half white British, half Pakistani, equally split between those aged < 55 years and those aged ≥ 55 years) and asked them to score the consultation using the communication items from the GP Patient Survey. If the low scores of Pakistani patients in real-life settings were the result of higher expectations of care, then we would expect them to give lower scores in the experimental vignette situation. In fact, the reverse was observed. When viewing the same consultation, Pakistani respondents gave scores that were much higher when adjusted for sociodemographic characteristics than white British respondents. This suggests that the low scores given by Pakistani patients in surveys such as the GP Patient Survey reflect care that is genuinely worse, and possibly much worse, than that experienced by their white British counterparts.

It is sometimes suggested that survey scores should be adjusted for the ethnicity of the respondents to be able to compare practices with high or low proportions of minority ethnic patients. Our results suggest that this should not be performed. Rather, low scores from South Asian patients should be taken at 'face value' and investigated as possible indicators of poor care.

3. Using data on patient experience for quality improvement

We carried out a patient experience survey to explore assessment of care conducted at practice level compared with assessment of care carried out at individual GP level. We used focus groups and interview studies to investigate the views of GPs and practice staff on the survey results. Finally, we carried out a qualitative interview study with out-of-hours staff responsible for collecting and acting on patient feedback to explore the same issues, alongside other work on measuring patient experiences of out-of-hours care.

By conducting a patient experience survey at individual doctor level, we demonstrated that practice-level ratings of GPs' communication skills can mask considerable variation between GPs within a practice.

This is particularly the case in poorer-performing practices in which patients may experience wide variation in communication skills between individual doctors.

Across both settings, staff neither believed nor trusted patient surveys. Concerns were expressed about their validity and reliability and of the likely representativeness of respondents. Staff expressed a preference for free-text comments as they provided more tangible, actionable data. It was easiest for practices to engage with office functions such as appointment systems and telephone answering. Addressing an individual doctor's performance (e.g. communication skills) was much more difficult.

In interviews, doctors expressed markedly ambivalent views about surveys. However, despite their concerns about surveys, they expressed broadly positive views about the importance of patient feedback in monitoring and improving services.

These results led us to consider how patient feedback might be obtained and delivered in a way that would engage doctors to use patient surveys for quality improvement. We conducted a preliminary evaluation of a real-time feedback (RTF)-based intervention in general practice, using touch screens that patients could use to leave feedback following a consultation. As RTF has not been widely used, an exploratory RCT and qualitative study were conducted to answer questions about feasibility, estimate likely response rates, obtain patient and staff views on RTF and estimate the costs to a practice of introducing RTF. We also included facilitated feedback in one arm of the exploratory trial. In our exploratory trial, only 2.5% of consulting patients left any RFT without prompting; however, if encouraged to use RTF by staff, as many as 60% of patients did so. Of patients who used RTF, 86% found it easy to use and were positive about it as a feedback method. Lack of awareness of the screens and lack of time were the commonest reasons for not giving feedback.

Practice staff were broadly positive about using RTF and practices valued the ability to include their own questions in the survey. Practices that had open communication between staff members tended to be more positive about using patient feedback. Practice staff identified clear benefits from having a facilitated session for discussion of patient feedback and having protected time to discuss the results.

Our programme of work was supported by two study advisory groups consisting of lay members and health-care professionals. One was based in Cambridge and provided support across all streams of work except for the out-of-hours research; the other was based in Exeter and was convened specifically to provide input to the out-of-hours workstreams.

Implications for practice

The work that we have carried out over the 5 years of the programme grant has clear implications for practice.

The importance of patient experience
Our research supports the continuing emphasis on obtaining patient experience feedback as an important means of informing NHS care. Although continuing efforts should be invested in refining the most effective and meaningful mechanism to capture patient feedback, the key challenge remains to provide primary care staff with the support and means to enable them to act on patient feedback.

The need for action on the quality of care for minority ethnic groups
There has been much speculation whether the lower survey scores reported by minority ethnic groups are 'real', reflecting poorer quality of care, or an artefact of the questionnaires used or higher expectations of care. Our series of studies strongly suggests it is the former, with patients from South Asian backgrounds experiencing considerably poorer communication with GPs than their white British counterparts. Effort should be invested to ensure that lower scores on patient experience surveys from such groups are investigated as markers of poorer quality of care.

Patients give overly positive responses when rating their care

Our results highlight the difficulty that patients have in feeding back negative experiences in questionnaire surveys. However, patients' reluctance to criticise a doctor or provider with whom they have to maintain an ongoing relationship will not be addressed simply by changing the survey method. Providers and managers need to understand that absolute scores paint an optimistic picture of patients' true views.

Surveys are not sufficient to fully capture patient feedback

Across primary and out-of-hours care settings, staff members view patient surveys as necessary but not sufficient. Alternative methods for gaining more qualitative feedback were commonly used to supplement survey scores, with free text viewed as providing more actionable data than responses to standard survey questions.

The need for individual-level feedback for doctors

Reporting patient experience at the practice level masks substantial variation in performance within practices for aspects of care related to individual doctors (e.g. doctor–patient communication). However, if a practice has an overall high score for doctor–patient communication, it is unlikely that it contains a low-scoring doctor. Robust mechanisms are needed to help lower-scoring practices identify and support doctors whose individual patient feedback identifies areas for potential improvement.

Patient surveys need to become more meaningful to staff

Practices found it easier to engage with items on surveys that related to practice management (e.g. availability of appointments, ability to get through on the telephone) than to issues around communication between patients and clinical staff. Effort should be invested to focus the attention of staff on the whole range of feedback provided by service users and on making available suitable support and learning opportunities to act on such feedback.

Immediacy of feedback, regularity of feedback and having some control over the questions asked were all aspects of our experiment with RTF that were valued by practices and had the potential to make feedback more useful. However, a number of important questions remain before RTF could be recommended as a replacement for postal questionnaires.

The value of surveys in monitoring national trends

Despite their limited value in stimulating quality improvement, surveys are important for monitoring national trends. For example, the GP Patient Survey is the only source of data which demonstrates that, year on year, from 2010 to 2015, patients have had increasing difficulty in terms of seeing a doctor of their choice. For out-of-hours services the GP Patient Survey is the only way of monitoring trends. However, when national surveys are used to monitor trends in care it is important that the questions (such as questions on access in the GP Patient Survey) do not keep changing. Much smaller sample sizes are required to monitor national trends: tens of thousands of participants rather than millions.

Development of surveys in out-of-hours care

Out-of-hours services are required to audit patient experience but are provided with no information on how to do this, leading to diverse and non-comparable data. Our work shows that, subject to minor amendments, the GP Patient Survey *is* suitable for the national monitoring of out-of-hours care. However, it is not sufficiently detailed to support quality improvement and is unlikely at present to replace in-house approaches, leading to duplication of effort.

Concluding remarks

Large-scale postal surveys are likely to remain the dominant approach for gathering patient feedback for the time being, although a range of other methods are being developed. These include RTF, focus groups, online feedback, analyses of complaints, practice participation groups and social media. In the final section

of our report we outline recommendations for research and identify the criteria that any new methods will need to meet to become useful quality improvement tools.

Future work recommendations

Alternative feedback methods to better support patients to identify poor care should be considered. Investigation into the factors driving poorer experience of communication in South Asian patient groups; further investigation of how best to deliver patient feedback to clinicians to engage them and foster quality improvement; and further research to support the development and implementation of interventions aiming to improve care when deficiencies in patient experience of care are identified are recommended as areas for future work.

Funding

Chapter 1 Introduction to the IMPROVE (improving patient experience in primary care) programme

Context

Improving the health status of individuals and populations is a central ambition of health-care systems in high-income countries, and the US Institute of Medicine has suggested that high-quality health-care delivery should be safe, effective, patient-centred, timely, efficient and equitable.[1] Berwick et al.[2] have noted the importance of patient experience of care as one of the suggested 'triple aims' of an advanced health-care system. A recent US report highlighted the important contribution that listening to, and acting on, patient feedback can potentially make to health-care improvement efforts.[3]

New developments within the English NHS highlight the embedding of public performance assessment within the regulation of the health-care system, including NHS England's consultation on the production of general practitioner (GP) league tables[4] and the Care Quality Commission's (CQC) parallel development of a rating system for primary care.[5] A transparent health-care system is regarded by policy-makers as essential to enable patients to make informed choices about the care that they receive[6] and patient feedback on health-care services is now commonly gathered in the USA, Canada, Europe, Australia and China.

Efforts to improve quality of care in the NHS over the last 15 years have focused on providing prompt access to care (e.g. the time taken to see a GP or hospital waiting times) and on providing evidence-based clinical care [e.g. through the development of National Service Frameworks and the UK Quality and Outcomes Framework (QOF)[7]]. A direct link between patient feedback and quality improvement efforts was previously operationalised by including results arising from patient surveys as a component of the QOF.[7] This performance management system provides financial incentives for GPs within the NHS to achieve agreed quality indicators covering areas including chronic disease management, practice organisation and additional services offered. With the introduction of the QOF it was possible, for the first time, to rank all practices according to their patient feedback and the results of surveys, aggregated at practice level, formed the basis of a pay-for-performance scheme between 2009 and 2011, when the UK government withdrew the pay-for-performance arrangements for patient experience.

Some of these policies have been highly effective. For example, associated with a wide range of quality improvement initiatives over a decade, there have been greater improvements in the UK for the clinical care of conditions such as heart disease and diabetes than in any other major developed country.[8] Although relatively neglected in the early years of the millennium, patient experience of health care is now a high policy priority, and in 2008 the Next Stage Review suggested that:

> . . . quality of care includes quality of caring. This means how personal care is – the compassion, dignity and respect with which patients are treated. It can only be improved by analysing and understanding patient's satisfaction with their own experiences.
>
> Department of Health, p. 47, emphasis in original.[9] © Crown copyright 2008, contains public sector information licensed under the Open Government Licence v3.0

The review[9] noted, however, that '[up until 2008] progress has been patchy, particularly on patient experience' (p. 48) and announced the development of quality accounts for all NHS organisations in which 'healthcare providers will be required to publish data . . . looking at safety, patient experience, and outcome' (p. 51) (© Crown copyright 2008, contains public sector information licensed under the Open Government Licence v3.0).

Since 2008, therefore, there has been a major policy initiative to improve patient experience in the NHS. Most recently, the focus on patient experience has been enshrined in the NHS Outcomes Framework, which, in Domain 4, focuses on ensuring that 'patients have a positive experience of care'[10] (contains public sector information licensed under the Open Government Licence v3.0). In primary care, these policy initiatives and statements have been implemented primarily through the development and conduct of the GP Patient Survey,[11] first sent to 5.6 million patients in January 2009. The large sample size was intended to provide sufficient responses to characterise patient experience of primary care in all 8300 general practices in England. Detailed responses for individual practices were published on the NHS Choices website[12] and made available online and included information on access to GP services and interpersonal aspects of care, out-of-hours care and care planning. The questionnaire specifically included validated questions about interpersonal aspects of care based on questionnaires that the authors of the present report previously designed and on which we have previously reported.[13] This large-scale survey is, of course, an expensive undertaking and its utility and impact need to be commensurable with this investment.

In seeking to achieve improvement in the quality of NHS services, gathering data is important both to inform the process of service development and innovation and to assess the impact of such changes in practice. It has been suggested that data to support such improvement initiatives need to be of sufficient quality to assess whether or not an innovation can be made to work, rather than being the more rigorous level of research data needed to assess whether or not an innovation works.[14]

Communication in the consultation has always been an important part of primary care and is closely linked to continuity of care. At the outset of this research, there had been many anecdotal accounts that GPs were more focused on meeting clinical targets identified on their computer screens than on the needs of the patient sitting in front of them. It seemed therefore an appropriate time to balance the focus on improving clinical care with a renewed focus on interpersonal care and communication in the consultation. The ability of patients to choose their own doctor is also important. Our research prior to commencing this programme showed that continuity of care had deteriorated since the introduction of the new GP contract in 2004[15] and previous research had also highlighted that patients were less likely to report overall positive experiences if they were not able to choose a doctor whom they know.[16,17]

Experience and satisfaction

Previous research has identified considerable confusion and overlap relating to the concepts of patient experience and satisfaction. The two concepts are closely linked, although at a simple level reports of experience relate to recounting or commenting on what actually happened during the course of a clinical encounter whereas reports of satisfaction focus on the patient's or carer's subjective evaluation of the encounter (i.e. asking for 'ratings' of care rather than simple 'reports' of care). Individual items in a survey may thus examine patients' reports of their experience of care, whereas other items may explore patients' evaluation of that care, with the linkage between report and evaluation/rating item pairs offering potential for the development of cut points in scales of performance.[18] In practice, however, the terms are often used interchangeably and survey items designed as report items often have an evaluative component; for example, the question 'Were you involved as much as you wanted to be in decisions about your care and treatment?' from the NHS Inpatient Survey[19] contains elements of both. Within the GP Patient Survey,[11] the instrument behind much of this programme of work, items often relate to ratings of care. For example, the communication questions ask patients to consider 'how good' the doctor was at providing various elements during a consultation, including giving enough time, involving in decisions about care and treating with care and concern.

Patient satisfaction may be seen as a multidimensional construct, focusing on the subjective experiences of patients, and related to their expectations of care and the perceived technical quality of the care provided.[20] Russell[21] has recently summarised some of the problems associated with surveys of patient satisfaction with care, including problems with the validity and reliability of satisfaction survey instruments, the lack of a

universal definition of the term 'satisfaction', the disinclination for patients to be critical of care received because of not wanting to jeopardise their treatment, satisfaction being determined by factors other than the actual health care received and the frequently non-specific nature of the findings arising from such surveys. In contrast, reports and surveys of patient experience may offer the potential to discriminate more effectively between practices than do reports of patient satisfaction,[22] thus potentially offering greater external accountability of health-care providers, enhanced patient choice and the ability to improve the quality of care and measure the performance of the health-care system as a whole.[23]

Patient experience matters

Patient experience is an important end point for NHS care in its own right. Patients consistently report that personal care is central to effective care and, in that context, the development and refinement of GPs' interpersonal skills is a key priority.[23,24] It is noteworthy that many complaints regarding care centre not on technical and 'clinical' aspects of care, but on issues relating to interpersonal aspects of care and communication.[25,26] Good communication with patients is not just an end in its own right; it brings three important additional benefits.

First, our research[27] has confirmed earlier work which showed that patients balance a range of beliefs and concerns when making decisions about taking medicines. Adherence is related both to the quality and duration of the consultation and to the doctor's ability to elicit and respect the patient's concerns.[28–30] Better communication may lead to improved patient outcomes[31] through, for example, improved blood pressure control in hypertensive patients.[32]

Second, there is a close relationship between poor communication and serious medical error.[33] This is partly because not listening to the patient's perspective may lead doctors to miss important clinical information and partly because patients react more negatively when things go wrong if communication has been poor during the clinical episode in question. A significant proportion of cases referred to medical defence societies have at their heart poor communication in the consultation[34] and improving communication with patients and engaging them more closely in their care is seen as key to improving patient safety.[35,36]

Third, the increasing emphasis in the NHS on self-care and prevention demands good information and shared decision-making in the consultation. Our research shows that GPs and practice nurses are currently poorly prepared for roles in which they encourage patients to take greater responsibility for their own care[37] or their lifestyle choices.

Although intuitively of importance, enhanced patient experience of care also matters on account of an important range of other associations reported in the research literature, including improved safety-related outcomes,[38] improved self-reported health and well-being,[39] enhanced recovery,[31] increased uptake of preventative health interventions[40,41] and reduced utilisation of health-care services including hospitalisation and emergency department visits.[42]

Capturing patient experience of care

Although several approaches have been adopted to obtain information on patient experience of care – for example through the use of focus groups, patient participation groups, in-depth patient interviews, feedback booths placed in health-care settings and direct observation of patient experience[43] and the use of compliment and complaint cards to capture qualitative feedback – the only practical approach to capturing large-scale feedback with the intent of providing actionable information remains the use of surveys of patients. In primary care in England, this culture of feedback has been embedded into routine practice in several ways. Central among these is the use of structured patient feedback obtained through surveys of patients' experience of care, at both national and practice levels.[44]

Qualitative approaches may be judged to offer greater depth of feedback than quantitative approaches,[45] but such approaches are intensive in respect of data collection, although Locock *et al.*[46] have drawn on secondary analysis of a large national qualitative data archive to inform service improvements.

Newer forms of capturing feedback, such as the use of tablets and kiosks to capture real-time feedback (RTF), is an area of great current interest, but, as yet, these newer forms lack a strong evidence base from primary care. During the course of this research a report from a preliminary observational study[47] suggested that RTF offers potential in primary care settings and similar findings[48] have emerged from reports provided by patients with cancer attending oncology outpatient departments. Although there may be potential for the widespread use of real-time data capture of patient experience in primary care, the acceptability and feasibility of the approach in routine primary care is not known and nor is the nature of the feedback provided. Such an investigation needs detailed feasibility and pilot work using an experimental design of RTF of patient experience of primary care.

Large-scale surveys of NHS patients and staff have been in use since the mid-1990s, building on the experience of smaller-scale surveys conducted at local level or on the experience of surveys conducted for research purposes. Large-scale surveys of patient experiences of primary care were first introduced in 1998[49] with the express purpose of addressing issues relating to the quality of care and reducing inequalities in care by taking account of patients' views in informing local service developments. Surveys of patients have been used extensively since the introduction of the UK QOF in 2004, when two questionnaires [General Practice Assessment Questionnaire (GPAQ)[13] and CFEP[50]] were 'approved' for use by the NHS and adopted as the basis of linking the pay of GPs to their participation in the patient survey programme.[51]

Such surveys may be administered in a variety of ways. In health-care contexts, paper-based surveys are most commonly used, although digital e-platforms are now commonly and widely used as a means of capturing information, most frequently using online processes. Computer-administered personal interviews[52] and computer-administered telephone interviews may also be used, most commonly in research settings.

The NHS has established a major programme of surveys[53] developed for a wide range of settings. Several of these surveys focus on patient experience of care, emulating the suite of Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys introduced in the USA in 1995.[54]

The content of primary care surveys of patient experience

Historically, the content of UK primary care surveys has evolved from the 1998 survey,[55] which covered a wide range of issues including primary care access and waiting times, GP–patient communication, patients' views of GPs and practice nurses in terms of knowledge, courtesy and other personal aspects of care and the quality and range of services provided such as out-of-hours care and hospital referrals. The GP Patient Survey in 2008 developed and presented an expanded suite of items from the surveys of 2006 and 2007, which were focused almost exclusively on the accessibility of GP services; the 2008 survey focused on domains of care identified as being of importance to patients[56,57] including the accessibility of care, technical care, interpersonal care, patient centredness, continuity, outcomes and hotel aspects of care. More recently, the English NHS has outlined eight domains believed to be of critical importance in respect of patient experience. Overlapping with earlier thinking, these include respect for patient-centred values, information, communication and education, emotional support, physical comfort, continuity and access to care,[58] all being reflected, at least to some extent, in the ongoing GP Patient Survey programme.[11]

Most recently, the Friends and Family Test has been introduced widely across the NHS, acting as a single-question proxy for patient experience based on the willingness of respondents to recommend their health-care provider to close acquaintances. The widespread use of the test has been accompanied by specific guidance on its implementation in practice[59,60] and research reports have recently started to

emerge following the use of the test in hospital settings, in which concerns have been raised about the reliability of the test.[61,62] The test was rolled out to general practice settings in December 2014.

Out-of-hours services

Beyond the domains mentioned in the previous section, additional areas of enquiry incorporated in the 2008 version of the GP Patient Survey included out-of-hours care and care planning. Variation in patients' experiences of out-of-hours care has been identified as an area of concern since 2000, with numerous influential reports considering the structures suitable for delivering out-of-hours care, as well as highlighting the variable experience of patients across the UK in respect of service delivery. In 2000, Dr David Carson reported on the structural aspects of out-of-hours care pertaining at the time and recommended an expanded role for NHS Direct as a facilitator of access to these GP-led services, proposing that patients should use a single telephone access point to enter the system.[63] Much less emphasis was placed on patients' experience of out-of-hours care, although recommendations were made regarding the need to monitor patients' experience of the developing service. The transfer of responsibility for out-of-hours care from GPs to primary care trusts (PCTs) was foreshadowed in a report by the House of Commons Health Committee,[64] which once again focused on structural and organisational issues relating to care provision. It was not until 2006,[65] following the publication of national quality requirements in respect of out-of-hours care in October 2004,[66] that patient experience of such services began to attract serious attention, with a recognition that, by 2006, although patient experience of out-of-hours services was generally 'good', one in five patients was dissatisfied with the service at that time. In addition, 40% of respondents in an independent survey of out-of-hours service users reported that the overall quality of the service was less than 'good'.[65] The incorporation of six items in the 2008 GP Patient Survey with the intent of capturing information on aspects of out-of-hours GP services thus represented an extension of earlier versions of the questionnaire, recognising the growing importance of patient experience of care, and offered the potential to examine the experience of patients from various subgroups of the population and the potential to compare out-of-hours service providers in respect of their patients' experience of care.

Measuring patient experience of care

The potential utility of questionnaires capturing patient feedback is, like other questionnaire-based feedback, dependent on the psychometric performance of the questionnaire in practice. Issues centring on the validity of the resulting data – whether or not the questionnaire items are measuring what is intended to be measured rather than some extraneous domain – underpin the reliability of inferences and conclusions that might be drawn following data collection. Validity and reliability themselves each consist of several elements and demonstrating validity of an assessment is generally regarded as having priority over demonstrating reliability.

Our previous research identified concerns expressed by doctors regarding the use of patient survey data for the purposes of providing individual feedback regarding a doctor's performance.[67] Some of those concerns focused on the reliability and validity of the resulting data and on the conclusions being drawn regarding a doctor's professional practice.

The validity of items within a questionnaire may be assessed in a number of ways, for example in exploring the pattern of item response using quantitative approaches such as factor analysis to investigate the latent variables identifiable within the theoretically related item responses. Qualitative approaches may also be used in the questionnaire design phase; for example, cognitive interviews were undertaken with patients from a range of sociodemographic backgrounds in the early stages of developing the GP Patient Survey.[68] Such interviews are designed to assess the interpretability and accessibility of the putative questionnaire items. Qualitative studies using cognitive interviewing or similar approaches may, however, be undertaken following respondents' completion of questionnaires, seeking to explore the basis on which respondents

are providing their evaluation. Such studies are unusual, but they potentially offer great value in exploring respondents' insights and whether or not items presented are interpreted as originally intended.

Patients' varying experiences of care

Our earlier research, and the research of others, has previously identified substantial variation between practices in patients' reports of their experience of, and satisfaction with, care received and recent studies have also identified a range of patient experience being reported among doctors providing care in similar clinical specialties and settings.[69–73] This acted as the basis for the inclusion of patient feedback as an element required by UK regulatory authorities for the routine appraisal and revalidation of doctors. Despite these observations, few studies have examined the relationship between feedback on patient experience aggregated at practice level and the performance of individual doctors within practices, with one observational study[74] identifying a substantial range of performance among doctors from a sample of eight Scottish general practices; the authors noted a number of possible contributing factors that might have accounted for differences observed at doctor level, including the experience of the doctors themselves, as well as the doctors' mental health and professional disillusionment.

Systematic differences in patients' reports of their experience of care have also been reported to be related to the characteristics of patients themselves. Older patients, patients from white ethnic backgrounds, the better educated, the less deprived and those reporting a better health status have generally reported more favourable experiences of care than younger patients, those from minority ethnic groups, the less well educated and more deprived and those with a poorer health status. Similar differences have been reported across many health-care systems and have given rise to calls to take account of the characteristics of participating patients when considering the results of patient feedback on care. To date, however, such calls have generally not been heeded in practice, as the relative contribution of practice, doctor and patient to overall variation in feedback remains to be defined. Uncertainty regarding the need for, and effect of, such 'case-mix adjustment' remains a concern for doctors in their consideration of patient feedback.

Specifically in respect of variation in experience among patients from different ethnic backgrounds, previous analyses have identified variations in patient experience in relation to ethnic group, age and gender and have found an interaction between ethnicity and age for cancer referrals.[75,76] However, no studies to date have yet investigated such an interaction in respect of patients' experience of communicating with their GP, for example investigating differences between older and younger patients, by gender and among patients representing a range of minority ethnic groups.

In addition, although communication between doctors and patients is a core component of patient experience,[77] and minority ethnic groups have reported lower patient experience scores for communication than the majority population,[75,78,79] such differences are not consistent for all minority ethnic groups. Previous analysis of patient experience data conducted by the authors highlighted that South Asian patients reported particularly negative experiences, including for waiting times for GP appointments, time spent waiting in surgeries for consultations to start and continuity of care.[75] However, such analyses have not been repeated using GP Patient Survey data.

A number of potential explanations have been suggested for the lower ratings provided by South Asian and other minority ethnic groups in respect of their experience of care. Broadly, these relate to whether South Asian patients (1) receive lower-quality care or (2) receive the same care but rate this more negatively.[75] For example, differences in the use of questionnaire response scales might lead to South Asian groups being less likely to endorse the most positive options when asked to evaluate a doctor's communication skills.[80] Alternatively, there could be systematic variations in evaluations of consultations because South Asian respondents vary in their expectations of, or preferences for, care. However, recent evidence from the USA points to lower quality of care as the main driver of variations.[81] Gaining understanding of why minority ethnic groups give relatively poor evaluations of their care is key to forming an effective response, as

determining appropriate action is difficult until it is ascertained whether differences in evaluations relate to true differences in care or to variations in expectations, scale use and preferences. Exploring these observed differences between patients from various ethnic backgrounds is challenging using only observational, real-world data. More robust approaches are required, drawing on experimental designs in which some key elements of the consultation–interaction can be accounted for in the analysis, for example through the use of standardised consultations and video vignettes.[81,82]

Using patient survey data to improve care

Although there is a belief, articulated in the Darzi Review,[9] that patient surveys can be used to improve care, a systematic review from 2008[83] suggested that there is considerable uncertainty about how and whether or not this can actually be achieved. Several causal pathways for achieving improvements in provider performance through the release of publicly reported performance data have been proposed.[84–86] Some invoke market-like selection, claiming that patients will modify their choice of provider using publicly available data, such as that provided by patient experience websites.[84,87–89] Evidence to support this pathway is, however, weak.[85] A more likely mechanism driving performance improvement in response to the publication of performance data is health professionals' concern for reputation, in which peer comparison motivates individuals and organisations to improve their care.[85,86]

Furthermore, at the outset of this research, PCTs were poorly prepared to support and work with general practices to improve patient experience. In addition, the Darzi review[9] had noted that progress in improving patient experience in the NHS had been slow, and our research had identified that some aspects of care, especially out-of-hours care[90,91] and continuity of care,[15] may actually have worsened in recent years. In addition, as observed earlier, it had been noted that patients from minority ethnic communities consistently reported lower evaluations of the quality of primary care.[75] Although these problems had been clearly identified in published research, the research had provided less clarity about the meaning and interpretation of these findings and the best way to intervene to improve patient experience.

Irrespective of its potential to stimulate change, the publication of performance data is central to the openness and transparency that are seen as essential for a safe, equitable, patient-centred health-care system.[92] Thus, regardless of any effect on quality improvement, such initiatives are likely to be here to stay.[85] In refining the information made public, it is important that performance data are accurate and relevant to all potential users. The US-based Robert Wood Johnson Foundation[93] has noted that, whilst there is a patient preference for information to be provided at the level of individual clinicians (and not at practice level), such information is only rarely available. Currently, there is some move towards publication of performance data from an organisational level to that of individual doctors. In the UK, for example, patients referred to the cardiology service at the University Hospital of South Manchester NHS Foundation Trust may go online to view both mortality and patient experience data for each cardiologist or cardiac surgeon.[94] However, within English primary care, the practice-level aggregation of data from the GP Patient Survey used to derive practice performance indicators potentially masks variation in performance among individual GPs, thereby inappropriately advantaging or disadvantaging particular doctors. Current indicators may consequently fail to provide users, providers or commissioners with an accurate assessment of performance within a practice.

Although intuitively simple, patient satisfaction is a complex concept[95] and patient questionnaire scores must be interpreted carefully. For example, practices need to understand if low ratings for communication reflect particular consultation behaviours or whether they are in fact the result of broader issues such as practice culture or the structure and availability of consultations and appointments.

Once the causes of low ratings have been better understood, interventions to improve care can then be designed. However, the current literature on the effects of feedback of patient assessments is insufficient in scope, quality and consistency to design effective interventions.[83] There are many reasons why simple

feedback on patients' experience of care is likely to have limited effects. Our research is designed to address these gaps in knowledge, enable managers, patients and professionals to have confidence in the meaning of patient assessments and provide effective interventions to improve care when problems are identified.

Summary

In summary, therefore, capturing patients' experience of primary care is a current ambition of major importance in UK government health policy. Patient surveys, incorporating opportunities for people to comment on various aspects of their care, are a convenient means of capturing relevant information at scale. It is not clear, however, how health-care staff operating in practices respond to the resulting information. Previous experience suggests that staff may rationalise scores on the basis of concerns regarding the scientific properties of the survey, or uncertainty regarding the implications arising from providing care in their particular circumstances, for example taking account of the sociodemographic mix of respondents. On a similar vein, it remains unclear the extent to which overall practice performance, based on aggregated patient feedback, might relate to the performance of individual doctors within the practice. It is also unclear whether or not patients provide reliable evaluations of care – and the extent to which such evaluations might vary according to the sociodemographic characteristics of respondents. New modes of capturing patients' experiences of their care have become available in recent years, but to date it is not clear whether or not novel, technology-based approaches can be successfully implemented in routine primary care settings, nor the extent to which any resulting data might reflect the results of the wider population.

In recent years, care provided by out-of-hours GP services has been a particular area of interest for the NHS and has been the subject of national audit and standard setting. However, it is not clear whether or not patients' reports of their experience of out-of-hours care are valid and reliable. Neither is it clear the extent to which factors relating to the structure and organisation of such care might be associated with systematic differences in patients' reports of their care. Furthermore, as for in-hours care, it is not clear how staff providing out-of-hours care might respond to patient feedback and how service managers might utilise such information in the planning and design of services aimed at being responsive to the needs of NHS patients.

Aims of the programme

This programme had seven aims:

1. to understand how general practices respond to low patient survey scores, testing a range of approaches that could be used to improve patients' experience of care
2. to estimate the extent to which aggregation of scores to practice level in the national study masks differences between individual doctors
3. to investigate how patients' ratings on questions in the GP Patient Survey relate to actual behaviour by GPs in consultations
4. to understand better patients' responses to questions on communication and seeing a doctor of their choice
5. to understand the reasons why minority ethnic groups, especially South Asian respondents, give lower scores on patient surveys than the white British population
6. to carry out an exploratory randomised controlled trial (RCT) of an intervention to improve patient experience, using tools developed in earlier parts of the programme
7. to investigate how the results of the GP Patient Survey can be used to improve patients' experience of out-of-hours care.

In presenting our work, we report our research and findings under three major themes: (1) understanding patient experience data, (2) understanding patient experience in minority ethnic groups and (3) using data on patient experience for quality improvement. These are outlined in brief in the following sections. The relationships between individual studies and the three themes are shown in *Figure 1*, which also outlines methods and participants.

During the course of the programme we conducted empirical studies across a number of general practices and out-of-hours providers. General practices were initially recruited to take part in a suite of studies (presented in *Chapters 7–9*) in which we conducted a patient experience survey at the level of individual GPs, gave feedback from this survey to both the practice and the individual doctors (see *Chapter 9*) and, for some practices, conducted focus groups with practice staff and interviews with GPs. Sampling was initially designed around the survey study: practices were sampled on the basis of location (two study areas, the South West and North London/East of England, covering both urban and rural settings), performance on the GP Patient Survey, practice size and area-level deprivation. Once the survey was completed, a number of practices were purposively sampled to take part in focus groups with staff (see *Chapter 7*) and interviews with GPs (see *Chapter 8*) and additional filming of consultations (see *Chapter 3*).
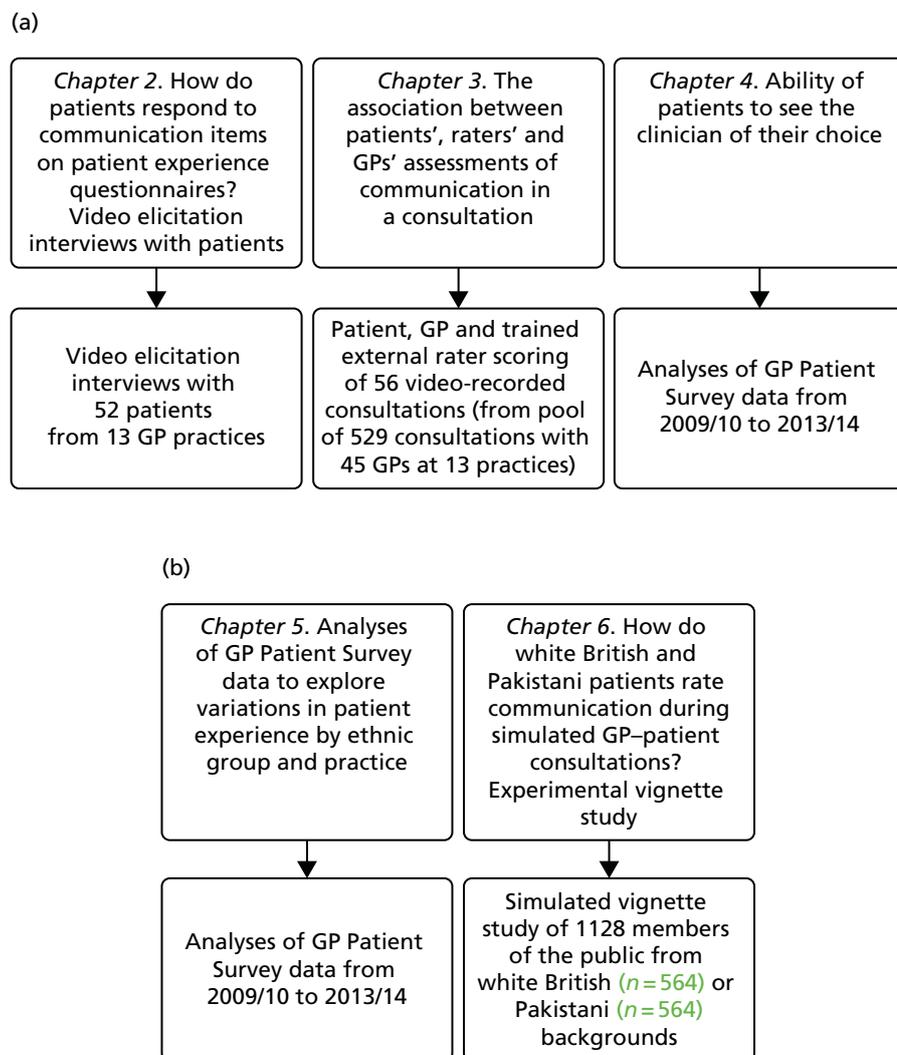
FIGURE 1 The IMPROVE (improving patient experience in primary care) programme themes and studies contained within workstreams: (a) understanding patient experience data; (b) understanding patient experience in minority ethnic groups; and (c) using data on patient experience for quality improvement. OOH, out of hours. (*continued*)

(c)

Chapter 7. Attitudes to receiving feedback from patient experience surveys: focus groups with practice staff	*Chapter 8.* Attitudes to receiving feedback from patient experience surveys: interviews with GPs	*Chapter 9.* Understanding high and low patient experience scores: analysis of patients' survey data for practices and individual GPs	*Chapter 10.* Exploratory trial of a real-time feedback intervention to improve patient experience in general practice	*Chapter 11.* The validity and use of patient experience survey data in out-of-hours care
14 focus groups with general practice staff (128 health-care professionals in total) following receipt of practice-level survey feedback	Interviews with 21 GPs across 14 practices following receipt of individual survey feedback	Patient experience survey of 7721 patients (from a sample of 15,172; response rate of 50.9%) who consulted with 105 GPs in 25 practices	Exploratory trial in 10 general practices using multimethod approaches	(a) Analyses of 2012/13 GP Patient Survey data; (b) survey of 1396/5068 OOH users (27.5%) across six OOH providers; and (c) interviews with 31 staff from 11 OOH providers

FIGURE 1 The IMPROVE (improving patient experience in primary care) programme themes and studies contained within workstreams: (a) understanding patient experience data; (b) understanding patient experience in minority ethnic groups; and (c) using data on patient experience for quality improvement. OOH, out of hours.

Out-of-hours providers were recruited from across England. We worked with up to 11 providers in varying workstreams (see *Chapter 11*). We additionally completed multiple analyses of GP Patient Survey data[11] (see *Chapters 4*, *5* and *11*) and, for an experimental vignette study, collected data from members of the general public (see *Chapter 6*).

1. Understanding patient experience data

In this theme we explored the meaning of data gathered through patient experience surveys by video recording (with consent) a large number of GP–patient consultations. Patients and GPs completed a questionnaire evaluating the quality of communication during the consultation and trained external raters (all GPs) also scored a small number of filmed consultations for quality. We additionally interviewed a sample of patients who consented to have their consultations filmed, reviewing their recorded consultation with them while talking through the options that they chose on the questionnaire about their experiences. This theme relates to aims 3 and 4. In addition, we conducted analyses of GP Patient Survey data to explore variations in patient experience in patients whose contact was with a nurse rather than a GP. This was additional to the original aims of the programme.

2. Understanding patient experience in minority ethnic groups

Here, we conducted a number of studies to explore why South Asian groups often have lower patient experience scores than white British patients in national surveys and provide more robust evidence of the drivers of this variation. These included a series of analyses of GP Patient Survey data and an experimental vignette study in which we showed simulated GP–patient consultations to white British and Pakistani respondents. This theme relates to aim 5.

3. Using data on patient experience for quality improvement

In trying to understand how patient experience data are currently used, and how they could be used, we carried out a wide range of studies. We completed a large-scale survey of patients at 25 general practices and carried out focus groups with practice staff and interviews with GPs. We conducted similar research in out-of-hours services. Finally, we looked at a different way of collecting patient experience data, using RTF kiosks in general practices. This theme relates to aims 1, 2, 6 and 7.

Patient and public involvement

Our programme of work was supported by two study advisory groups: one was based in Cambridge and provided support across all streams of work except for the out-of-hours research and the other was based in Exeter and was convened specifically to provide input to the out-of-hours workstreams. In this section we briefly outline the formation and working of these groups over the course of the programme.

Formation and composition of the main study advisory group

In the original application for the IMPROVE (improving patient experience in primary care) programme we set out our plans to establish an advisory group composed of 50% lay members and 50% professional members, to provide continuing advice and input throughout the course of the programme. We envisaged that this group would provide advice on the design of all strands of the work, assist with the production of study materials and work with us on the interpretation of data. At the start of the study we therefore set out to invite a mix of lay people registered with a general practice, GPs and practice managers to join the group.

We worked with the patient and public involvement (PPI) co-ordinator of the West Anglia Comprehensive Local Research Network to identify potential lay members with an interest in patient experience and primary care research. Potential patient representatives were provided with guidance outlining what was involved in advisory group membership and were informed that any costs incurred in preparing for or attending advisory group meetings would be reimbursed. Four lay members were recruited through this route. Additionally, we recruited one local GP to the advisory group from a practice with a large minority

ethnic patient list. Despite a number of attempts to recruit an additional GP and two practice managers to the group, to ensure that we had input from all key stakeholders in the research, we were unable to do so. In spite of offering reimbursement to practices (e.g. we paid for a locum to enable our one GP member to attend advisory group meetings), GPs and practice managers were reluctant to commit to provide input into a research study over a number of years. We therefore proceeded with input from one GP only.

As a large focus of our work was on patient experience in minority ethnic communities, and particularly South Asian communities, we had additionally planned at the start of the study to recruit two additional lay members from a minority ethnic background to join the advisory group and provide specific advice on the development of our work in this area. In the event, this proved very difficult to achieve and we were unable to locate suitable representatives willing to sit on a formal group. We therefore considered alternative approaches to ensuring that we had input from these communities as we developed our study ideas and materials. As a result, we recruited a part-time researcher, Hena Wali Haque, and a senior advisor, Professor Cathy Lloyd, with specific expertise in and knowledge of research with minority ethnic groups. Hena liaised early on in our work with community groups representing Pakistani and Bengali communities and provided input on study materials and design. Although we would have preferred to have had such representation directly on our study steering group, through this route we were able to benefit from guidance on the most appropriate and effective approach to our research in this area.

We drew on guidance from INVOLVE to develop policies and documentation relating to the involvement of our advisory group members.[96] These included details of payment for particular activities, reimbursement, confidentiality, and data security. Group members completed a checklist to indicate what they were willing to assist with during the course of their involvement (e.g. reviewing different types of documents or attending meetings).

Formation and composition of the out-of-hours study advisory group
A stakeholder advisory group was convened specifically to provide guidance throughout the out-of-hours research. This consisted of three members from out-of-hours service providers, two academics with a particular expertise in this area and one lay representative. We had originally aimed to recruit two out-of-hours service users through local service providers, with assistance and guidance from local PPI groups; however, despite significant efforts, it proved difficult to recruit service users with relevant, lived experience. Our experiences were echoed by out-of-hours service providers, who noted that the relatively infrequent contacts that people made with out-of-hours services may in part drive the difficulties in recruiting service users to sit on advisory groups such as ours.

Activities of the main study advisory group
We set out to convene a face-to-face meeting of the main programme advisory group once a year throughout the course of the research. All meetings took place in Cambridge, with the first meeting taking place in October 2011 and the fifth and final meeting taking place in March 2015. At these meetings, group members reviewed and suggested changes to the study design, reviewed progress, discussed challenges and reflected on findings and interpretation. Particularly crucial input came, for example, in designing our approach to the recruitment of patients to our workstream involving the video recording of GP–patient consultations and in reflecting on the findings of our video elicitation interviews with patients. To keep group members up to date with progress and the research team, we sent out study newsletters on a roughly quarterly basis, with 13 being sent over the course of the programme.

Informal contact with group members by e-mail and letter continued throughout the rest of the year outside of the more structured meetings. One advisory group member, for example, was instrumental in organising a pilot focus group to reflect on study questionnaires. Additionally, all study materials aimed at patients or GPs (information sheets, consent forms and questionnaires) were reviewed and commented on by advisory group members and members were sent a summary of all findings and our conclusions to reflect on.

Activities of the out-of-hours study advisory group

Our out-of-hours advisory group, based in Exeter, had a more specific remit in guiding our research in this area. The group met initially to review study methods and procedures in light of the findings of the preliminary piloting and testing of methods (see *Chapter 11*, *Workstream 2*) and to comment on topic guides supporting interviewing in workstream 3. However, because of the logistical challenges of organising face-to-face meetings around staff availability, after an initial face-to-face meeting we communicated with the advisory group by e-mail and telephone.

Section A Understanding patient experience data

Chapter 2 How do patients respond to communication items on patient experience questionnaires? Video elicitation interviews with patients

Abstract

Background

Patient feedback instruments used in national survey programmes are robustly tested and evaluated, yet there remains a paucity of evidence on the drivers of a patient's choice of response option. The objective of this study was to understand how patients' responses to a questionnaire relate to their actual experience of a consultation with a GP, focusing on both implicit and explicit processes that respondents use to answer survey items.

Methods

We video recorded GP–patient consultations at 13 practices. Immediately following the consultation, patients were asked to complete a questionnaire about the GPs' communication skills. We purposively approached a sample of these patients to take part in a video elicitation interview ($n = 52$), in which they were shown the video of their consultation and asked to reflect on their completion of the questionnaire.

Results

Although participants were able to raise concerns about doctors' behaviours during the interview, they were reluctant to do so in their questionnaire responses. We identified three important drivers of this mismatch: (1) the patients' relationship with the GP, (2) the patients' expectations of the consultation and (3) perceived power asymmetries between patients and doctors.

Conclusions

Patients were inhibited in providing feedback to GPs through the use of questionnaires, with patients struggling to transform their experiences into a representative quantitative evaluation of GP performance. Our results suggest that patient surveys, as currently used, may be limited tools for enabling patients to feed back their views about consultations.

Introduction and rationale for the study

The overall purpose of patient surveys in primary care, such as the national GP Patient Survey,[11] is to improve patient experience by feeding back patients' evaluations to GPs and to the public. This process makes an important assumption, which is that the behaviours that doctors need to change are accurately assessed by responses given in patient experience questionnaires. For questionnaire items that relate to doctor–patient communication, the evidence that the items reflect doctors' behaviour rests on their face validity and the cognitive testing that has already been carried out. Face validity is often taken as sufficient. However, further understanding of questionnaire completion is needed before helpful advice can be given to GPs. For example, if more is understood about the nature of poor consultations identified by patients, better support and advice can be provided to GPs to improve the quality of their consultations.

Previous studies have examined the process of patient questionnaire completion in specialist clinics.[97,98] These highlighted that patients may struggle to accurately represent their experiences of a consultation on

standard survey instruments. Further, concerns have been raised about the perceived requirement for patients to assess health care from a 'consumerist' perspective.[99,100]

To date, little is known about the ways in which questionnaire responses relate to patient experience within primary care and, specifically, patients' perceptions of communication during GP consultations. The aim of this study was to understand, through the use of video elicitation interviews, how patients' responses to a questionnaire relate to their experience of a consultation with a GP.

Changes to study methods from the original protocol

The aim of this workstream, as stated in the original protocol, was to understand better patients' responses to questions on communication and seeing a doctor of their choice (aim 4).

In our application we set out plans to address this by conducting interviews with 40 patients, with 20 from a white British background and 20 from an Asian background. Interviews with minority ethnic participants were designed to contribute to our understanding of variations in patients' experience of care in these groups, complementing our analyses of GP Patient Survey data and our experimental vignette study (see *Chapters 5* and *6*, respectively). We envisaged all interviews drawing on psychological approaches to cognitive interviewing, focusing on (1) comprehension of the question, (2) recall and assessment, (3) decision processes and (4) response processes.

We have expanded on our original design in several important ways. First, following our application, literature on the use of video elicitation interviews to stimulate recall and reflection on a medical encounter was published and to us appeared to be of direct utility for the aims of this study.[101] Video elicitation approaches, outlined in the methods section, use a series of detailed and specific prompts to enable participants to 'relive, recall and reflect' on their recent medical consultation.[101] We therefore adopted this approach in preference to that of cognitive interviewing.

Second, following discussions with practices, we were concerned that a 'one size fits all' approach to recruiting patients to the study from both white British and South Asian backgrounds was unlikely to be sufficiently sensitive and robust. We therefore made the decision to conduct the South Asian interviews as a stand-alone study, recruiting three additional practices with a particularly large proportion of South Asian patients on their lists and using dedicated researchers fluent in South Asian languages, together with appropriate study materials. This resulted in 23 interviews specifically with patients from a Pakistani background, conducted in the language of their choice. Our analyses of these interviews identified broadly similar concerns between our South Asian sample and the sample in the main study and we report these briefly in this chapter.

Finally, we expanded our original sample size of 20 interviews with white British patients to > 50, from a variety of backgrounds (but all were fluent in English). Video elicitation interviews are challenging to conduct well and we felt that it was important to enable the research team to build up sufficient confidence and expertise to generate rich data, as well as to reach a more diverse patient population. This chapter focuses in the main on interviews with the English-speaking population ($n = 52$).

Methods

This strand of work was conducted alongside the quantitative study outlined in *Chapter 3*. The recruitment of practices, GPs and patients was, thus, the same for both. The work outlined in this chapter focuses on subsequent interviews with patients who gave consent for their consultation to be video recorded. The IMPROVE study advisory group made important contributions to study design, particularly our approach to recruiting patients and the use of both a 'brief' and a 'full' study information sheet, and reflected on our analysis and findings.

Recruitment of general practices

The study was conducted in general practices in two broad geographical areas (Devon, Cornwall, Bristol and Somerset and Cambridgeshire, Bedford, Luton and North London). Practices were eligible if they (1) had more than one GP working a minimum of four sessions a week in direct clinical contact with patients and (2) had low scores on GP–patient communication items used in the national GP Patient Survey [defined as practices below the lower quartile for mean communication score in the 2009/10 survey, adjusted for patient case mix (age, gender, ethnicity, self-rated health and deprivation)[102]]. Low-scoring practices were chosen to maximise the chance of consultations within the practice being given low patient ratings for communication (nationally, 94% of patients score all questions addressing doctor communication during consultations as 'good' or 'very good' in the GP Patient Survey). Some, but not all, of these practices had previously participated in our individual GP-level patient experience survey (see *Chapter 9* for details).

Recruitment of patients and recording of consultations

Video recording of GP–patient consultations took place for one or two GPs at a time within each participating practice. A member of the research team approached adult patients on their arrival in the practice to introduce the study. The patients were given a summary of the study as part of a brief information sheet, as well as a detailed full information sheet and a consent form. A member of the research team discussed these documents with each patient and sought consent to video record their consultation. Video cameras, set up in participating GPs' consulting rooms, were controlled by the GP; physical examinations took place behind a screen and were thus not captured on camera. Data collection ceased when we reached our required number of video-recorded consultations that patients judged to be less than good for communication, as required for the quantitative analysis described in *Chapter 3*. All videos were stored on an encrypted secure server accessible only to members of the core research team. The recordings were made available to GPs for the purposes of continuing professional development. Immediately after the consultation, the patients were asked to complete a short questionnaire. This contained items relating to GP communication that were adapted from the GP Patient Survey (*Table 1*), alongside participant information including age, ethnicity and health status.

Video elicitation interviews and analysis

The patient questionnaire contained a tick-box question asking patients if they were willing to participate in a face-to-face interview about their experience of the consultation. We subsequently contacted (by telephone or e-mail) those patients who expressed an interest in taking part. We aimed to interview at least one patient per participating GP. When more than one patient expressed an interest, we used a maximum variation sampling approach to reflect a mix of patient characteristics and questionnaire responses. Prior to the commencement of the study, we were particularly interested in interviewing

TABLE 1 General practitioner–patient communication items used in the patient experience survey

Thinking about the consultation that took place *today*, how good was the doctor at each of the following? Please put a *x* in one box for *each* row	Very good	Good	Neither good nor poor	Poor	Very poor	Doesn't apply[a]
Giving you enough time	☐	☐	☐	☐	☐	☐
Asking about your symptoms	☐	☐	☐	☐	☐	☐
Listening to you	☐	☐	☐	☐	☐	☐
Explaining tests and treatments	☐	☐	☐	☐	☐	☐
Involving you in decisions about your care	☐	☐	☐	☐	☐	☐
Treating you with care and concern	☐	☐	☐	☐	☐	☐
Taking your problems seriously	☐	☐	☐	☐	☐	☐

a Considered to be uninformative for the purposes of our analysis.

patients who had given at least one response of 'poor' or 'very poor' in relation to a doctor's communication skills.

We conducted video elicitation interviews with all participants ($n = 52$). In these interviews, participants were shown a recording of their consultation with the GP and asked specific questions relating to the consultation and their questionnaire responses (*Box 1*). The video elicitation technique is an established interview method that allows in-depth probing of experience during the interview by enabling participants to 'relive, recall and reflect' on their recent consultation.[101]

The interviewers watched each consultation usually on at least two occasions before the interview and identified particular points at which they wanted to stop the recording or when they wanted to use prompts specific to the consultation content or to the respondent's answers on the questionnaire. During the interview, the video recording of the consultation was shown to the participant, usually on two occasions. The participant was encouraged to stop the recording at any point to discuss a particular element of the consultation with the interviewer. The interviewer also stopped the recording as appropriate in response to a request from the participant, or to something said by the participant, or to her own prepared notes.

The analysis followed the principles outlined by Lofland *et al.*[103] These form a series of reflexive steps through which data are generated, coded and recoded, making particular use of memos to aid analytical thinking. Data analysis took place in two stages. The first stage occurred during data collection. A coding frame was devised from the topic guide, previous literature and early interviews. Each interviewer (JN, NL and AD) coded her own interviews in NVivo 10 software (QSR International, Warrington, UK). A number of analysis meetings were convened in which the interviewers and other members of the project team (JB, NE and JBe) discussed the data and themes. To ensure familiarisation with all of the data, the lead author (JN) listened to all interviews and read all of the transcripts. The coding frame was refined in response to discussions and as analysis progressed.

Ethics considerations

Approval for the study was obtained from the National Research Ethics Service (NRES) Committee East of England – Hertfordshire on 11 October 2011 (reference number 11/EE/0353).

BOX 1 Video elicitation interview approach

Video elicitation interviews

Data generation focused particularly on participants' recall of and reflection on the consultation and how this was expressed in their choice of responses on the questionnaire immediately post consultation. In each interview, the video of the consultation was used to encourage more accurate recall of specific events during the interaction. Our approach did not aim to establish the facts of what occurred, but rather explored the meaning to patients of actions that were performed in the consultation. The interview guide used was semistructured; however, we maintained a tight focus on specific moments and events captured in the recording.

Participants were asked some brief introductory questions about whether or not they had previously consulted with this doctor and whether the problem that they were consulting about was new or ongoing. Participants were then shown their consultation on the researcher's laptop. They were encouraged to reflect as they watched the recording. Participants were also given their questionnaire responses and invited to talk through them. The recorded consultation was used as a prompt, enabling further in-depth discussion of their experiences in the consultation and their responses to the survey questions. Participants were also asked to identify behaviours in the consultation that they considered as contributing to their question responses and which could be changed to improve consulting performance.

Results

Participant recruitment

Consultations were videoed with 45 participating GPs from 13 general practices. During the period of data collection, a total of 908 patients had face-to-face consultations with participating doctors. Of these, 167 (18.4%) were ineligible (mostly children) and 529 completed a questionnaire (71.4% response rate) (*Figure 2*).

Video elicitation interviews

A sample of patients whose consultation was video recorded participated in a video-elicitation interview. In total, interviews were conducted with 52 patients (35 women and 17 men) who had consulted with 34 different doctors across 12 GP surgeries in rural, urban and inner-city areas in the South West and East of England.

The interviews took place between August 2012 and July 2014, and were conducted in a location chosen by the participant within a maximum of 4 weeks of the recorded consultation (*Table 2*). Researchers preferred that interviews were not conducted at the GP surgery in case it inhibited patients in their narrative. However, a few participants specifically requested that their interviews be held at the GP surgery.
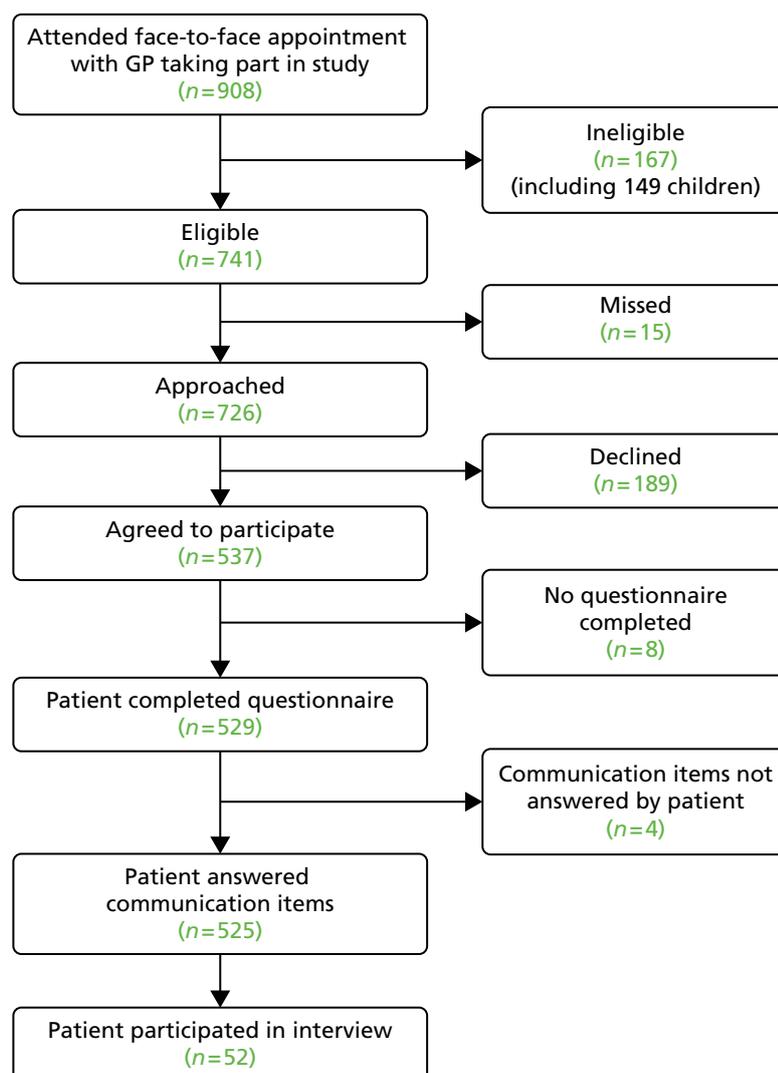
FIGURE 2 Flow of patients through the video elicitation interview recruitment process.

TABLE 2 Location of video elicitation interviews

Location	Number of interviews
Participant's home	44
GP surgery	6
Other location (chosen by participant)	2

All of the interviews were conducted in English and lasted between 26 and 97 minutes (average 58 minutes). The participants were aged between 19 and 96 years, with 22 (42%) aged > 64 years and 30 (58%) aged between 19 and 64 years. The participants consulted for a range of conditions, some chronic and some minor. The names used in the following sections are not respondents' real names.

Questionnaire completion

In interviews participants were well disposed towards the process of questionnaire completion and generally keen to contribute their views. Most participants described completing the questionnaire with relative ease and as a simple task. Despite this willingness to contribute, there was little variety in questionnaire responses: the majority of participants reported care to be 'good' or 'very good' across all seven communication items on the questionnaire. Indeed, no respondents in our interview sample chose to score 'poor' or 'very poor', despite our original aspiration to focus in particular on patients who expressed dissatisfaction with their care. Twelve respondents did, however, use the 'neither good nor poor' option in at least one domain, although five of these also scored 'very good' on at least one other domain. As a result, in our small sample we had a lower proportion of scores in which every domain of GP communication was judged to be 'good' or 'very good' than in the national GP Patient Survey sample (77% in our sample vs. 94% nationally). Thus, despite the lack of 'poor' responses, we were able to explore patients' responses in those who had expressed more dissatisfaction than average.

Disconnect between the 'tick and the talk'

Although scores on the questionnaire were largely positive, some narratives in the interviews were more critical of aspects of GP communication. We outline three types of narrative relating to the relationship between questionnaire responses and further reflection on the consultation experience expressed during the interview.

Rewatching the consultation endorsed positive questionnaire scores

For some participants, their reflection on the consultation during the video-elicitation interview led to a repeated endorsement of the questionnaire responses they had given, and thus their narrative account was consistent with their previous evaluation of care. In all cases these responses were positive. Participants had been pleased with the quality of the consultation at the time of completion of the questionnaire. On rewatching the consultation this view was endorsed and in some cases further strengthened. Some respondents pointed to elements in the videoed consultation that had impressed them:

> . . . his [GP's] movements, his mannerisms . . . I'm asking the question, he didn't exactly ignore me, he says no, that's for gout. He actually explained it . . . And he's still doing some work . . . So he's not stopped and put all his attention on me, because if you stop doing that you probably forget what you're doing here, so he's done both. He's answered my question and he's also continued working, and that's a good thing for me.
>
> *Colin (53151034)*

High quantitative scores were followed by some criticism in interviews

Some participants scored the consultation highly on the questionnaire, yet the subsequent interview was peppered with tones of criticism about aspects of the consultation.

Criticism in the interview was often subtle, with participants often seemingly unaware of the discrepancy between their narrative and their questionnaire responses. Although they spoke of their consultation in a tone that was not particularly positive, participants remained loyal to the positive scoring they had applied on the questionnaire immediately following the consultation:

I gave it 'good' because . . . well she was listening to me, but I guess most of the time she was the one talking rather than listened to what I was saying . . . Not in a negative way, like completely, but I feel she didn't really give me proper time to properly explain myself a little more . . . giving me a little bit more time, to explain my symptoms.

Steven (60121017)

Participant reappraises the consultation during the interview

A small group of participants who had scored their GP highly on the questionnaire underwent a process of reappraisal of the consultation during the video-elicitation interview. They voiced criticism of the doctor's behaviour and proceeded to review their original score. Through the process of rewatching, participants spontaneously identified more negative aspects of the consultation that they had not been aware of previously:

Jack (55161002): *I suppose you're proving to me that I marked that wrong [taps questionnaire] [laugh] . . . Yeah, but he [GP] did, he did, he was concentrating on my leg and not worrying about the fact that the tablets were upsetting me.*

Interviewer: *Mm. And how did you feel?*

Jack's wife: *Well, I felt the same thing. He, sort of, ignored the fact that he'd got all these side effects and all that.*

Emma had scored elements of her consultation as 'very good' on the questionnaire:

. . . now I'm thinking, well no, he didn't really sort of ask about symptoms or think, y'know, so perhaps not so good. Listening – yeah he listened but didn't pick up on things, like you say, like the cough, he didn't sort of pick up on erm, little things.

Emma (27131004)

On occasion there was a dramatic shift in point of view when the consultation was reshown. During the rewatching of the interview, Martha began to critique more aspects of the consultation, such as the doctor's lack of explanations and unexpected examination:

I remember him just like, because he, because it's quite rushed . . . you, er, can't, you don't, I don't know, you're just, it's just like, er, er, and then, fine, I don't know, I suppose I remember thinking why is he taking my temperature, and then just seeing how it must be OK, erm, I, I definitely remember him when he was just doing that with my, feeling my neck [slight pause] wondering what he was doing. [laughs] I just remember thinking, this is a bit weird, like why is this connected to my ear.

Martha (62111010)

In a number of the interviews, therefore, there was a mismatch between the subsequent account and previous responses to questions. At times participants were happy to critique an experience during the interview, sometimes at great length, yet they had been reluctant to do so on the questionnaire. Participants were able to explain in great detail elements of the consultation that they experienced to be negative, yet when asked to complete the questionnaire on that basis they still scored the doctor as 'good'. The use of the video-elicitation method identified the possibility that other factors fed into the choice of response options on the questionnaire, aside from the doctor's behaviour in the consultation.

There was, therefore, on a number of occasions, a disconnect between the 'tick' and the 'talk': differences between the narrative given in the interview and the responses recorded previously in the questionnaires. Although participants were able to raise concerns about doctors' behaviours during the interview, at times they appeared reluctant to do so in their questionnaire responses.

Factors that influence patients' reluctance to criticise on the questionnaire

This reluctance to record negative responses on the questionnaire leads to the question of why patients were reluctant to do so, given the negative views often apparent in their narratives. We therefore sought to further understand this phenomenon. We identified three key factors that appeared to influence patients' reluctance to criticise doctors' communication skills within the questionnaire:

1. the patients' relationship with their GP
2. the patients' expectations of the consultation
3. perceived power asymmetries between patients and doctors.

The following sections will examine each of these explanations in turn.

The patients' relationship with their general practitioner

Participants often spoke about the significance of the GP or the surgery in their lives. This affiliation was sometimes with the practice, even if the doctors had changed over the years. Some elderly patients interviewed had been with their surgery most of their lives and a number of participants expressed loyalty to a practice even if they did not often visit. Gratitude towards the wider health service and NHS provision was also commonly expressed.

In commenting on relationships with individual GPs, care given previously to participants or to their family and friends was often praised:

> . . . but I mean I've known him for – I mean he actually phoned when my mum died, you know. So that was nice of him, you know.
>
> *Janice (67131043)*

Some participants spoke particularly of their relationship with the doctor. In some cases this was the notion of 'getting on with' the doctor and liking him or her as a person. For some there were specific interests that were shared, such as an interest in sport or knowledge of the GP's family:

> Oh yes, yes [laughter] they go to my church as well you see, so in that sense the relationship I had with Fiona and Paul is very much the old-fashioned family doctor, where you know them.
>
> *Alan (19144016)*

Some participants used the term 'friend' to describe their relationship with their GP, often going on to explain that the relationship was different from a friendship:

> And as I said, y'know, he isn't a friend but you feel as if you are seeing a friend.
>
> *Bob (25111005)*

> I can see now the relationship. I have to be careful, you know, when I said to somebody one day well, you and I have a very good relationship, and I thought oh no, that's not the right word.
>
> *Janet (53181024)*

This was the case for participants who had not previously seen the doctor they consulted with, as well as for those who had a long relationship with their doctor. However, some found it difficult to create a relationship with the GP, which could lead to challenges in building a rapport.

Most respondents articulated that they were responding to the questionnaire based on the recorded consultation at hand. However, in explaining their scores, participants would often reflect on previous consultations with the GP. Consequently, it appeared challenging for them, when evaluating communication skills, to differentiate between this particular consultation and their wider relationship with the GP. This loyalty to and closeness with the GP at times inhibited patients from giving negative survey responses.

The patients' expectations of the consultation

A variety of patient expectations influenced the scoring process. First, we identified expectations that related to the communication skills of the GP, based either on previous experience of consulting with that same GP or on experiences of consultations with other GPs. Expectations were important, and participants used this relational knowledge of other GPs to compare care received in the consultation with experience of previous consultations as they reflected during the interview. Some participants compared the care they had received with high-quality care they had received from other doctors. More commonly, however, participants compared a GP's behaviour with poorer care that they had received. In particular, patients appeared to benchmark GPs' skills based on their experiences with other GPs:

> *And he's [GP], he's not as clipped as Dr Williams, but he can be sometimes a bit clipped in the way he speaks to you.*
>
> *Dave (67131012)*

Narratives covered both positive and negative expectations of care from a particular GP, so, for example, if the participant had high expectations and these were not met, he or she was disappointed. Conversely, if a participant had poor expectations of a GP but the consultation was better than he or she had expected, he or she might score the GP more positively, even if overall the experience of the consultation was poor.

Second, expectations relating to the outcome of consultations were often referred to in justifying questionnaire scores. Participants tended to rate consultations more positively on the questionnaire if the outcome was what they desired, for example if they wanted a particular type of medication, a referral or reassurance about their medical problem:

> *I worry that, like, yeah, that he's just going to be really dismissive. So the fact that he gave me medicine meant that it was higher than I expect . . . like it was better than I expected it to be, em, but perhaps by the more standards it wasn't amazing.*
>
> *Martha (62111010)*

Perceived power asymmetries between patients and doctors

Descriptions of power asymmetries were prevalent in many of the accounts. Participants were often reluctant to criticise their GP, fearing repercussions for him or her. One respondent, who shared a story of poor experience as a patient in her general practice, had scored the GP as 'neither good nor poor' on some elements. When asked why she had not used the 'poor' or 'very poor' options on the questionnaire, she replied:

> *. . . you don't want to get anybody into trouble, you know, but you do wish they did behave a little better, you know, treated you a little better, you know, in their response to you.*
>
> *Esther (53131010)*

At times participants expressed an associated dependency on the GP, with a corresponding view that they could not be critical for fear of compromising the relationship.

Participants often spoke of the trust they placed in the doctor. For some, the doctor had a status that they were in awe of. Although Amanda felt that this relationship had changed over time, the doctor was still revered:

> Amanda (24111009): *And I think the gap is not as wide as it used to be between doctors and patients is it? I mean when I was a young girl the doctor was even more of a god, whereas now it's less, it's definitely getting lesser, yeah definitely.*
>
> Interviewer: *And in terms of the GPs at the surgery, I know you mentioned about GPs being on a pedestal, how do you feel the GPs are there?*
>
> Amanda: *Oh I think they all are, yeah definitely yeah. But years ago perhaps it was a six-foot pedestal whereas now it's probably a couple of foot [laughs].*

In some ways participants had an inability to critique the doctor, or at least had a reluctance to do so. For example, some participants seemed to feel that they lacked the authority to judge the doctor's communication skills.

Allowances were often made by participants for elements of the GP's behaviour that they did not like, such as the GP looking at the screen a lot during the consultation:

> *She [GP] was reading so and I mean there's an awful lot on there [laugh] there's loads on that screen, bless her, so she's probably thinking oh my God, how many [laugh] but no I don't take a lot of notice to be honest.*
>
> Sue (24155004)

Respondents often commented on how busy the doctor was that day or how much he or she had to do. On a number of occasions participants were dismissive of other patients and the unreasonable requests they made of GPs.

During interviews, participants could be critical of their own behaviour, taking responsibility for their own poor communication during the consultation:

> Interviewer: *What makes you say that you weren't a very good patient?*
>
> Philip (60111001): *Because I was spending too much time . . . I wasn't giving out information as clearly as I should do, and, you know, I had gone in with an agenda.*

Additional interviews with South Asian respondents

Alongside the interviews conducted as part of the main study, we set out to recruit participants from a South Asian background to explore in particular their experiences of GP care and the factors that influenced their choice of response options on the patient experience questionnaire. We followed exactly the same procedures as for our main study sample but worked in three practices (in Bedford, Peterborough and Luton) that had a high proportion of Pakistani patients on their practice list. Our researchers for this workstream were fluent in Urdu and Punjabi, and all study documents were available in Urdu. We followed standard procedures for forward and backward translation of these documents.

We conducted 23 video elicitation interviews with respondents who self-identified as Pakistani (18 male and five female aged between 18 and 74 years). Study transcripts were analysed separately to consider the determinants of patient experience and questionnaire response tendencies in this patient group, following the same approach as outlined earlier for the main study sample. Only three participants chose 'neither good nor poor' as at least one response option for the communication items, with none choosing 'poor' or 'very poor'.

In line with our main study sample, respondents were broadly positive about their GP's communication skills when asked directly about these. Respondents were able to identify a number of approaches used by GPs that they rated positively, for example in explaining tests and treatments:

Yes, so I liked that [referring to the recording], the way she showed me on the . . . err . . . she had like a diagram of a body, she even pointed to . . . like, like . . . the nerve and where I've got a spasm. So I like a bit of that. So that explains to me more of the situation . . . So yeah, that part was quite good.

Tahir (66 18 5090)

And in relation to being given enough time:

Obviously they're very short of time, and he was obviously still getting prepared to see me, when I came in. So when I started the conversation he was still looking at the screen, but he immediately, once he got through that piece of work, he immediately established eye contact, which again helps, certainly, to put me at ease, and know that somebody's listening, responding and understanding. So that was good.

Sajid (65 13 5113)

However, within interview narratives it became evident that they drew on a number of factors external to the immediate encounter with the GP in evaluating communication competence. In spite of differences in cultural background, we identified the same issues driving evaluations of communication. First, respondents often drew on their relationship with their GP and others within the practice in making evaluations of care, rather than the specific events in a consultation. Many participants expressed high regard for their current GP and often compared them with GPs from their past to explain why they considered them to be so good:

I've been to other surgeries as well . . . and they're not really interested, they just want to get you in and out, but this practice itself, the doctor listens to you, gives you a lot of time, yeah.

Imran (65 13 5110)

Second, expectations of the consultation could influence assessments of care. For some Pakistani respondents, experiences of health care abroad and a sense that the NHS provided high-quality care meant that, regardless of a consultation experience, they were grateful for and positive about encounters:

In Pakistan, if you have money, it is OK otherwise you are on the road. There are very competent doctors in Pakistan, but you need a lot of money for them. Everyone can't afford that – some can and some can't . . . It means a lot to me. Big deal for me! Fine. Allah forbid, if I have to go to private, I can't do it, can I? I can't afford it. So we are on NHS account.

Mohammed (65 13 5085)

Finally, perceived power asymmetries between patients and doctors were often prominent: as one respondent clearly articulated, a core theme in Pakistani patients' narratives of experience was that doctors were perceived as having a sacred position in society:

The profession of a doctor is holy. Life and death is commanded by Allah. He saves, but the doctor is the best means.

Mohammed (65 13 5085)

Limited English proficiency did, however, have the potential to compound these issues; for example, participants could additionally blame their own difficulties in communicating as contributing to challenges during the consultation:

Our issue is the language, all doctors are good. Why would we question them? They have studied to be good, so for me the language creates hurdles.

Anam (65 13 5061)

Discussion

Although participants commonly showed reluctance to criticise GPs in their survey responses, our video-elicitation interviews opened up more nuanced discussions, in which patients voiced a number of criticisms about the GP's communication skills. Previous studies have identified a reluctance to critique doctors in users of mental health services[98] and patients undergoing elective orthopaedic surgery.[97] Our findings confirm that such reluctance persists for some patients in general practice, a setting in which an ongoing relationship between doctor and patient is more commonplace than in the secondary health-care setting.

Medical encounters have long been characterised by an asymmetrical power balance, despite attempts over the last 15 years of government policy[104] to embrace a more 'patient-centred' approach to health-care provision. Goodyear-Smith and Buetow[105] have urged that, although seeking to empower patients, we must be sure not to disempower doctors; they note that power can be beneficial in the consultation. Others have also argued that asymmetry is essential to the success of the medical encounter. Pilnick and Dingwell[106] distinguish between functional and dysfunctional asymmetry in this role, arguing that the former may prove useful in shaping the medical encounter. Within our findings the notion of power asymmetry was evident in many narratives, and this was not necessarily viewed negatively by participants. In fact, patients' accounts often displayed a respect and at times even reverence towards GPs and the work that they do. However, this relationship may make it difficult for patients to be critical when giving feedback to doctors and they therefore may need more encouragement or permission to report negative aspects of the consultation in questionnaire responses.

The role of expectation was important in our study. Previous work has suggested that non-fulfilment of expectations of care, such as examinations, tests and referrals, can be associated with lower patient satisfaction.[107,108] Our work suggests that reported experience may be influenced by the meeting of overall expectations, even if the overall standard of the communication was not seen favourably by participants.

Throughout our interviews, we identified a number of ways in which patients may be inhibited in choosing negative responses on experience questionnaires. Lupton,[100] in her examination of the concept of consumerism in health care, asserts that participants can hold both a 'consumerist' and a 'passive patient' position simultaneously or variously in interactions with doctors. In this study, patients appeared to struggle to inhibit the purely consumerist approach to health care, as Lupton *et al.*[99] found in the earlier study with patients in Australian general practices. Health may hold vested emotional significance in patients' lives, making it more challenging for them to provide 'objective' assessments of care so common in other areas of consumer experience. Coyle's[109] work has also highlighted the personal nature of health-care experiences and the threat to personal identity experienced when problems with health-care provision occurred.

Our study identified a number of contextual factors that impact on patients' choice of response to a questionnaire concerning their experience, including power dynamics, expectations of care, ongoing relationships and previous experience. For some patients, this translated into an inhibition to provide negative evaluations of care on a questionnaire, despite being able during interviews to identify a number of concerns about the quality of communication that they experienced. Questionnaires, although an important tool for gathering patient feedback, may be limited in the information provided in their absolute scores. Our quantitative evaluation of patient assessments of care, reported in *Chapter 3*, provides more details on how questionnaires may best be used for quality assurance and improvement initiatives. We note that GPs' professional development may benefit from other methods of feedback in addition to patient questionnaires, such as recording and reflecting on their own consultations or having peers watch and discuss their consultations.

Strengths and limitations

Our use of video-elicitation methods enabled us to probe in detail the link between a patient's responses on a questionnaire and his or her experience of the consultation. A number of patients attending participating practices declined to have their consultation recorded. It may be that these patients had particular conditions that made them more conscious of their privacy, such as gynaecological or mental health issues. We acknowledge that, as GPs and patients knew that the consultations were being video recorded, this may have altered behaviours. However, as the camera was in the room for most of the day a number of GPs commented on how its presence became normalised during the session. GPs were able to opt in or out of the study and it may be that doctors who were less confident in their communication skills declined to participate.

The use of the video-elicitation method and the ability of patients to experience the consultation through rewatching it after the event created a unique environment. Inevitably, the method prompts patients to reflect on a consultation in a novel way. The temporal element of the experience in the consulting room was emphasised and the re-experiencing sometimes led to an altered view of the consultation. For example, the critical self-reflection seen in the data may in part be an artefact of the method in which participants viewed themselves in the consultation during the interview. We also note that the time delay between the consultation and the interview may mean that any number of events (e.g. a worsening of their condition) may lead to a re-evaluation of the nature of the consultation and a more negative critique, particularly as the patients were (in most cases) further removed from the general practice and the consultation.

Although researchers gently prompted participants regarding their responses to the questionnaire, it may be that some felt the need to give an account of their responses in a socially acceptable way rather than their actual thoughts at the time of interview. For example, they may have preferred to present a rationalised explanation for their responses rather than admit that they rushed the questionnaire and did not give consideration when completing it. For interviews with Urdu-speaking patients, we used materials translated into Urdu; we did not, in this qualitative work, consider the cultural equivalency of the translated instrument using consensus meetings and there may be unidentified issues in understanding as a result. However, our bilingual interviewer had the opportunity to draw on shared understanding of concepts during interviews, albeit in an ad hoc manner.

Conclusions

Our findings suggest that patients may, on occasion, be inhibited in providing feedback to GPs through a questionnaire. The factors that we identified may account for some of the tendency of patients to score consultations highly on questionnaires, with issues including previous experiences, ongoing relationships and perceived power asymmetries contributing to evaluations of communication skills. Our results suggest that patient surveys, as currently used, may be limited tools for enabling patients to feed back their views about consultations. Doctors whose communication skills are rated 'very good' on a patient questionnaire are likely to conclude that no change in their consultation style is required; however, this work suggests that even a rating of 'very good' may in fact mask patient reservations about the quality of the encounter.

Chapter 3 The association between patients', raters' and general practitioners' assessments of communication in a consultation

Abstract

Background

Although patient feedback is widely used with the aspiration of quality improvement, the association between patients', external observers' and GPs' own evaluations of communication performance during a consultation remains little explored.

Methods

We video recorded 529 consultations with 45 GPs in 13 practices. Following each consultation, the patient rated the GP's communication skills and the GP did likewise. Subsequently, 56 consultations were sampled to include a range of patient scores for communication. Each video was rated by four trained clinical raters using the Global Consultation Rating Scale (GCRS). The ratings of patients, raters and GPs were compared.

Results

There was a modest positive correlation between patient ratings and those made by trained raters ($\rho = 0.29$, increasing to 0.33 after accounting for measurement error/reliability; $p = 0.054$). Consultations scored highly for communication by trained raters were also scored highly by patients. However, when trained raters judged communication to be of lower quality, mean patient scores ranged from 'poor' to 'very good'. There was no evidence that GP scores were associated with the scores of trained raters ($p = 0.721$) or with the scores of patients ($p = 0.854$).

Conclusions

Compared with patients, trained raters tended to give more negative scores for communication during consultations. This is consistent with the finding from the patient interviews that patients find it difficult to criticise GPs when completing questionnaires. Patient surveys are a useful tool for measuring relative performance of doctors' communication skills, but absolute scores should be interpreted with caution. Our results also cast doubt on how useful doctors' assessment of their own performance is when used as part of reflective practice.

Introduction and rationale for the study

A clear aspiration of the national GP Patient Survey programme is to facilitate changes in overall experience of care by feeding back patients' evaluations both to GPs and to the wider public. Confidence in the instruments used to assess – and potentially rank – performance is therefore essential if they are to make a meaningful contribution to quality assurance and improvement.[110] There has been extensive work on the reliability and validity of patient experience questionnaires.[111–116] However, although the face validity of communication items in questionnaires such as the GP Patient Survey has been well studied, evidence is sparser on whether or not the scores have construct validity, that is, whether or not behaviours that doctors may need to change are accurately represented by responses given in the questionnaires. For example, do patients reflect specifically on their experience of communication with the GP in their choice of response options or are they drawing on wider influences, which may be internal or external to the consultation? And how do patients' concepts of 'good' communication relate to professionally agreed norms of 'good' communication?

One approach to investigating the construct validity of items is to compare patient evaluations of consultation behaviours with those of external observers. Previous research has explored the relationship between patient and examiner ratings of trainee GP communication skills and has found either no evidence of an association (in an underpowered study, with a sample size of 19)[117] or a weak to moderate association.[118] This workstream aimed to provide more robust evidence of the association between patient assessments of communication skills using items from national survey programmes and observer assessment of the performance of practising GPs.

An additional area of concern for quality improvement efforts is that, despite the extensive psychometric testing of patient experience instruments, research shows that doctors often struggle to make sense of, and act on, feedback from patient surveys[119] (see *Chapter 8* for our work on this). A possible contributory factor in this may be incongruence between self (doctor) and patient assessments of performance. Evidence suggests that doctors tend, in fact, to rate themselves more negatively than patients or peers.[120,121] Indeed, there is a substantial body of evidence showing that doctors' perceptions of their own competence are frequently out of kilter with external assessments of the same.[122–124] Of particular concern, however, is that the highest levels of incongruence are found in doctors who are, by external evaluation, the least skilled but the most confident in their abilities.[122,125]

Previous research has tended to focus on the associations between doctor and other assessments at the level of overall performance, rather than performance at the level of a particular consultation. To understand in more detail where discrepancies arise between doctor and patient assessments of care, this workstream also considered how GPs' and patients' assessments of communication compared at the level of the individual consultation.

Changes to study methods from the original protocol

The aim of this workstream, as stated in the original protocol, was to investigate how patients' ratings on questions in the GP Patient Survey relate to actual behaviour by GPs in consultations (aim 3).

Our application envisaged this workstream taking place as part of our wider patient experience survey, with participants being drawn from patients attending the lowest-ranking 15 (out of 25) GP practices (programme aim 2, reported in *Chapter 9*). This would have entailed asking patients for consent to film their consultation as well as consent to participate in the exit survey, planned to take place face-to-face. However, with the change in survey mode from face-to-face to postal (see *Chapter 9* for details), we made the decision to separate this study entirely from the larger-scale survey. We thus recruited a sample of low-scoring practices specifically to participate in the filming of consultations, making this a completely stand-alone piece of work.

As this became a fully separate study, we were able to additionally ask GPs to rate, after each video-recorded consultation, their communication performance. This enabled us to undertake additional, originally unplanned analyses on how GPs' perceptions of their own performance relate to those of the patient or external raters.

Furthermore, in our original application we planned to ask external raters to use the GP Patient Survey communication items to evaluate the quality of communication during a consultation. However, we decided to take a more robust approach to assessment and thus developed our own instrument to assess communication quality (the GCRS[126]), based on a widely used international approach to communicating within a consultation, the Calgary–Cambridge guide to the medical interview.[127,128]

Finally, our original application had a focus on identifying specific behaviours that may have been associated with patient-reported communication scores. In particular, we were interested in identifying which dimensions were of most importance to patients and thus those that GPs might want to change to improve patient experience. However, the study design was powered to detect an overall association between patient and other ratings. The consequence of this is that we were underpowered to differentiate between different doctor behaviours and this was confirmed in the initial analysis. Given this realisation, we have chosen not to present that analysis and to concentrate instead on the overall associations.

Methods

This study took part alongside the video elicitation interviews described in *Chapter 2*. Briefly, we obtained consent from patients and GPs to video record face-to-face consultations in participating practices. Full details of our approach to sampling, recruitment and recording of consultations are provided in *Chapter 2*. As already stated, immediately following the consultation, patients were asked to complete a short questionnaire including a set of seven items taken from the national GP Patient Survey[11] to assess GP–patient communication (*Table 3*) and basic sociodemographic questions. At the same time, GPs answered the same questions about their own performance. We calculated two GP–patient communication scores, one from the patient responses and one from the GP responses. In line with previous work, we calculated communication scores by linearly rescaling responses between 0 and 100 and taking the mean of all responses when four or more informative answers were given.[129–131]

Ratings by trained external raters

Of the video-recorded consultations for which the patient had completed the communication items on the questionnaire, we sampled 56 for rating by experienced trained clinical raters. Raters scored each of the selected consultations using the GCRS.[126] We designed the GCRS to assess the effectiveness of communication across an entire GP–patient consultation; it is based on the widely used Calgary–Cambridge guide to the medical interview.[127,128] The instrument provides a basis for raters to score each consultation in 12 domains (including gathering information, building the relationship, providing structure and achieving a shared understanding) and results in a final score between 0 and 10 (see *Appendix 1*). Raters were GPs experienced in the teaching of communication skills; all attended a 2-hour training session on the GCRS delivered by one of the original authors of the Calgary–Cambridge guide (Jonathan Silverman). We used four raters for each consultation to increase reliability. Raters accessed videos via a secure online portal. Each rater scored the consultations in a different random order to minimise the consequences of any order effects, and the same raters were used for all consultations. A simple mean of the four raters was calculated for each consultation and used in subsequent analyses.

From the rating of 56 consultations we expected 80% power (0.05 significance level) to detect a correlation coefficient of 0.37. To obtain the strongest correlation we designed our sampling strategy to include consultations with a wide range of scores: 28 (half) from those for which all patient responses to the seven communication items were either good or very good and 28 (half) from those for which at least one rating was less than good. For the 28 'less than good' consultations, we selected those with the

TABLE 3 General practitioner–patient communication items used in the patient experience survey

Thinking about the consultation that took place *today*, how good was the doctor at each of the following? Please put a *x* in one box for *each* row	Very good	Good	Neither good nor poor	Poor	Very poor	Doesn't apply[a]
Giving you enough time	☐	☐	☐	☐	☐	☐
Asking about your symptoms	☐	☐	☐	☐	☐	☐
Listening to you	☐	☐	☐	☐	☐	☐
Explaining tests and treatments	☐	☐	☐	☐	☐	☐
Involving you in decisions about your care	☐	☐	☐	☐	☐	☐
Treating you with care and concern	☐	☐	☐	☐	☐	☐
Taking your problems seriously	☐	☐	☐	☐	☐	☐

a Considered to be uninformative for the purposes of our analysis.

lowest patient communication scores. The 28 'good' consultations were selected at random. We placed a restriction on the selection of consultations that barred the inclusion of more than two consultations involving the same GP.

Statistical analyses

Reliability of Global Consultation Rating Scale scores

We assessed the reliability of the GCRS scores by fitting a mixed-effect linear regression model to the 224 individual ratings (four ratings of 56 consultations). We anticipated that some raters would give systematically higher scores than others, resulting in an inflation of the within-consultation variance. As the same four raters were used to rate all 56 consultations this source of variation did not contribute to the reliability, as it manifests itself as a fixed offset in the mean consultation rating used in the analysis outlined below. Thus, a categorical fixed effect was included for rater in the models to account for this source of variance. The model additionally had a random intercept for consultation. In this model the variance of the random intercept represents the between-consultation variance (σ_b^2) and the residual variance represents the within-consultation, between-rater variance (σ_w^2) in ratings (after accounting for systematic differences between raters). The reliability (λ_{GCRS}) of the mean GCRS rating is then given by:

$$\lambda_{GCRS} = \frac{\sigma_b^2}{\sigma_b^2 + \dfrac{\sigma_w^2}{4}}. \tag{1}$$

Consultation scores

The 56 consultations selected for rating were used to explore the association between GPs' ratings of their own GP–patient communication, patient ratings of communication and the scores given by trained raters. The much larger sample of all videoed consultations was used to explore the association between GP and patient scores.

The association between patient scores and trained clinical raters' scores

We explored the association between patient ratings and the ratings obtained by trained raters using a simple correlation coefficient and scatterplot. This coefficient can be corrected to account for the attenuation produced by the less than perfect reliability of the GCRS rating by multiplying by $\sqrt{\lambda_{GCRS}}$. Consideration was given to adjusting for patient sociodemographic characteristics only if this resulted in reduced standard errors; however, this was not the case and so unadjusted results are shown. Because of potential concerns over normality assumptions, bootstrapping was used with 1000 bootstrap samples. To account for the non-independence of observations because of some GPs being represented twice, we performed the bootstrap sampling clustered by GP. Finally, we illustrated the relationship between single consultation ratings and GP ratings made up of many individual patient ratings by simulating scores for 100 hypothetical GPs with a range of communication skills as measured by the GCRS. The patient ratings for a given GCRS score were drawn from an appropriate distribution, informed by the findings of the observational work, and then, for each GP, mean patient scores were calculated for 1, 10, 30 and 100 patients.

The association between general practitioner scores and trained clinical raters' scores

We explored the association between GP ratings of their performance and the ratings obtained by trained raters by calculating correlation coefficients. Consideration was given to adjusting for patient sociodemographic characteristics only if this resulted in reduced standard errors; however, this was not the case and so unadjusted results are shown. Because of potential concerns over normality assumptions, bootstrapping was used, in this case with 500 bootstrap samples. Again, to account for the non-independence of observations because of some doctors being represented twice, we performed the bootstrap sampling clustered by doctor.

The association between general practitioner scores and patient scores

To compare GP and patient scores we used all available consultations. First, we carried out a correlation analysis, as above. Subsequently, we conducted a regression analysis with doctor rating as the outcome, adjusting for patient age, gender, ethnicity and self-rated health. Finally, to evaluate the within-doctor association between patient and doctor scores, we augmented the previous model with a random effect for doctor. This final model accounted for the fact that some doctors may, in general, be more generous or more critical than other doctors. Standardised regression coefficients (betas) are reported, being directly comparable to (and in the case of models with a single exposure equal to) correlation coefficients. As above, clustered bootstrapping was used for all analysis.

All analysis was carried out using Stata® 13.1 (StataCorp LP, College Station, TX, USA).

Ethics approval

Ethics approval for the study was obtained from the NRES Committee East of England – Hertfordshire on 11 October 2011 (reference number 11/EE/0353).

Results

Consultations were videoed with 45 participating GPs from 13 general practices. During the period of study, a total of 908 patients had face-to-face consultations with participating doctors. Of these, 167 (18.4%) were ineligible (mostly children) and 529 completed a questionnaire (71.4% response rate) (*Figure 3*). A further 26 (5.1%) consultations were excluded from our analyses because of missing data. The videos selected for rating using the GCRS came from all 13 general practices and represented 37 GPs. One further consultation was excluded from our analysis of how GP and rater scores compared because of a rated consultation missing the communication score from the GP.

Table 4 shows the self-reported demographics of those patients who completed a questionnaire and those whose consultation was selected for rating by trained raters. Male patients, patients aged 18–24 years and Asian patients were somewhat more likely to have been selected to have their consultation rated.

Reliability of Global Consultation Rating Scale scores

The distribution of patient scores and GCRS ratings is shown in *Figure 4*. Patient scores were highly skewed: the most common score was 100 out of a possible 100 (i.e. very good for all reported communication items; found for 21/56 consultations). The median score was 91 [interquartile range (IQR) 71–100] and the lowest score reported was 31 out of 100. In contrast, the GCRS ratings are reasonably symmetrical: the median score was 4.3 (IQR 3.6–5.5) and scores ranged from 2.2 to 6.8 out of a possible 10. From the mixed modelling of GCRS ratings (adjusted for rater) the estimated variances were 1.01 between consultations and 1.18 within consultations. Reliability for the mean of four ratings was 0.77.

The association between patient scores and trained clinical raters' scores

Figure 5 shows patient scores plotted against average GCRS ratings for each consultation. There is weak evidence ($p = 0.054$) of an association between patient scores and GCRS ratings, with a correlation coefficient of 0.29. This increases to 0.33 when corrected for attenuation because of the imperfect reliability of the mean GCRS rating. When trained raters assessed communication during a consultation to be of a high standard, patients tended to do the same (with the exception of a single outlying low patient score). However, when trained raters judged communication during a consultation to be of a poor standard, patients reported communication as anything from poor to very good.
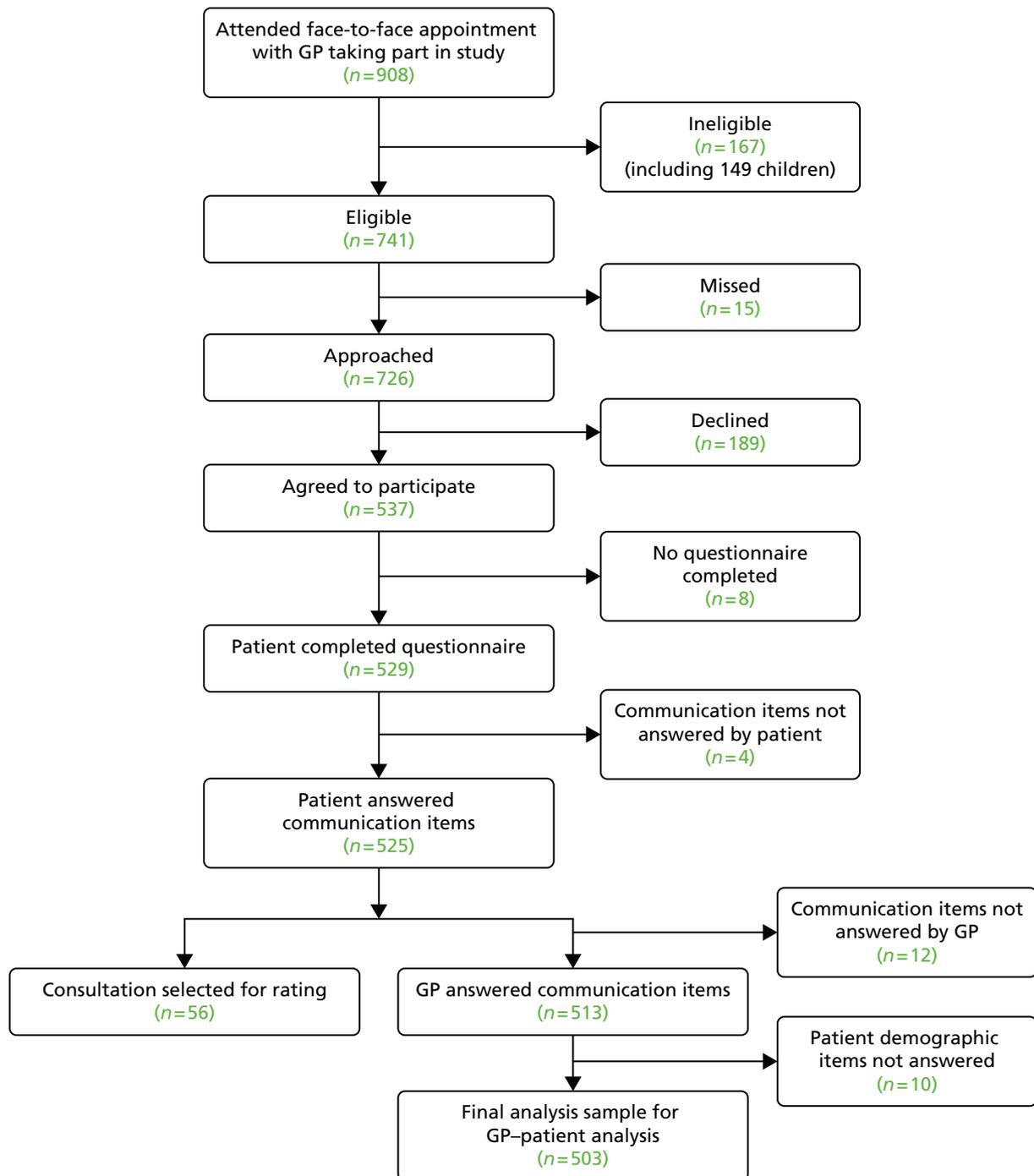
FIGURE 3 Flow chart illustrating the recruitment and participation of patients.

Figure 6 shows the results of our simulation study, which is based on a hypothetical set of consultations with a range of trained rater scores (GCRS). For each GCRS score we defined a range of possible simulated patient scores, shown by the shaded green areas in *Figure 6*. The lower limit of these simulated patient scores increased as GCRS score increased. However, the upper limit of simulated patient scores was set at 100 for all possible GCRS scores in the simulation. For any given GCRS score we allowed patient scores to take any value in this range, with equal probability. The simulation is designed for illustrative purposes only and is not intended to accurately reflect the findings presented here. *Figure 6a*, designed to be reminiscent of *Figure 5*, shows what would be observed with just a single patient score per GP, that is, a weak correlation between patient rating and communication skill. The remaining parts of *Figure 6* illustrate the effect of combining scores (taking the mean) from multiple consultations, rather than using a single rating.

TABLE 4 Self-reported demographics for patients who completed a questionnaire and those selected for their consultation to be rated by trained raters

Characteristic	Completed questionnaire, *n* (%)	Rated consultations, *n* (%)
Gender		
Male	212 (40.15)	26 (46.43)
Female	316 (59.85)	30 (53.57)
Age (years)		
18–24	39 (7.41)	10 (18.18)
25–34	78 (14.83)	7 (12.73)
35–44	64 (12.17)	7 (12.73)
45–54	82 (15.59)	4 (7.27)
55–64	85 (16.16)	8 (14.55)
65–74	103 (19.58)	7 (12.73)
75–84	60 (11.41)	8 (14.55)
≥ 85	15 (2.85)	4 (7.27)
Self-rated health		
Excellent	50 (9.51)	3 (5.36)
Very good	173 (32.89)	14 (25)
Good	182 (34.60)	23 (41.07)
Fair	83 (15.78)	13 (23.21)
Poor	38 (7.22)	3 (5.36)
Ethnicity		
White	474 (90.98)	44 (81.48)
Mixed	5 (0.96)	1 (1.85)
Asian or Asian British	15 (2.88)	6 (11.11)
Black or black British	22 (4.22)	1 (1.85)
Chinese	4 (0.77)	1 (1.85)
Other	1 (0.19)	1 (1.85)
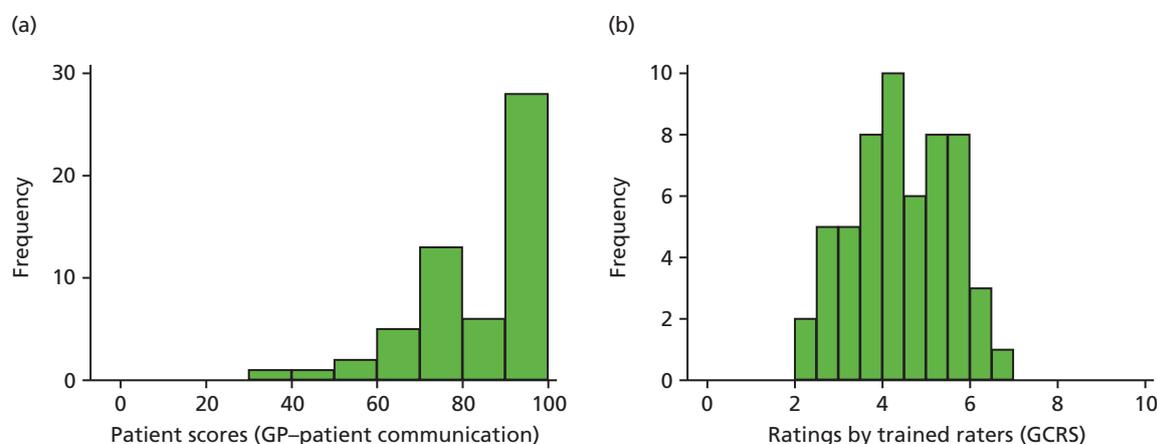
FIGURE 4 Distribution of (a) patient scores based on GP–patient communication survey items; and (b) ratings by trained raters on the GCRS.
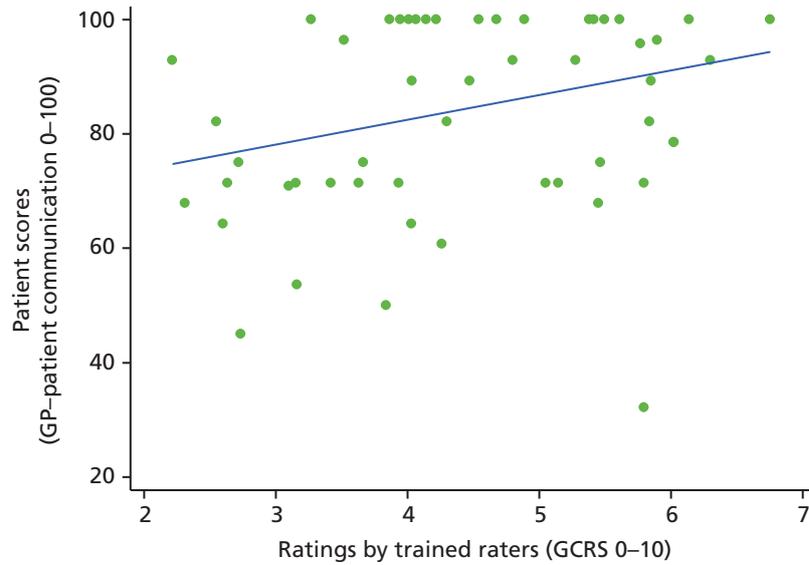
FIGURE 5 Scatterplot comparing patient scores based on GP–patient communication survey items and ratings by trained raters on the GCRS.
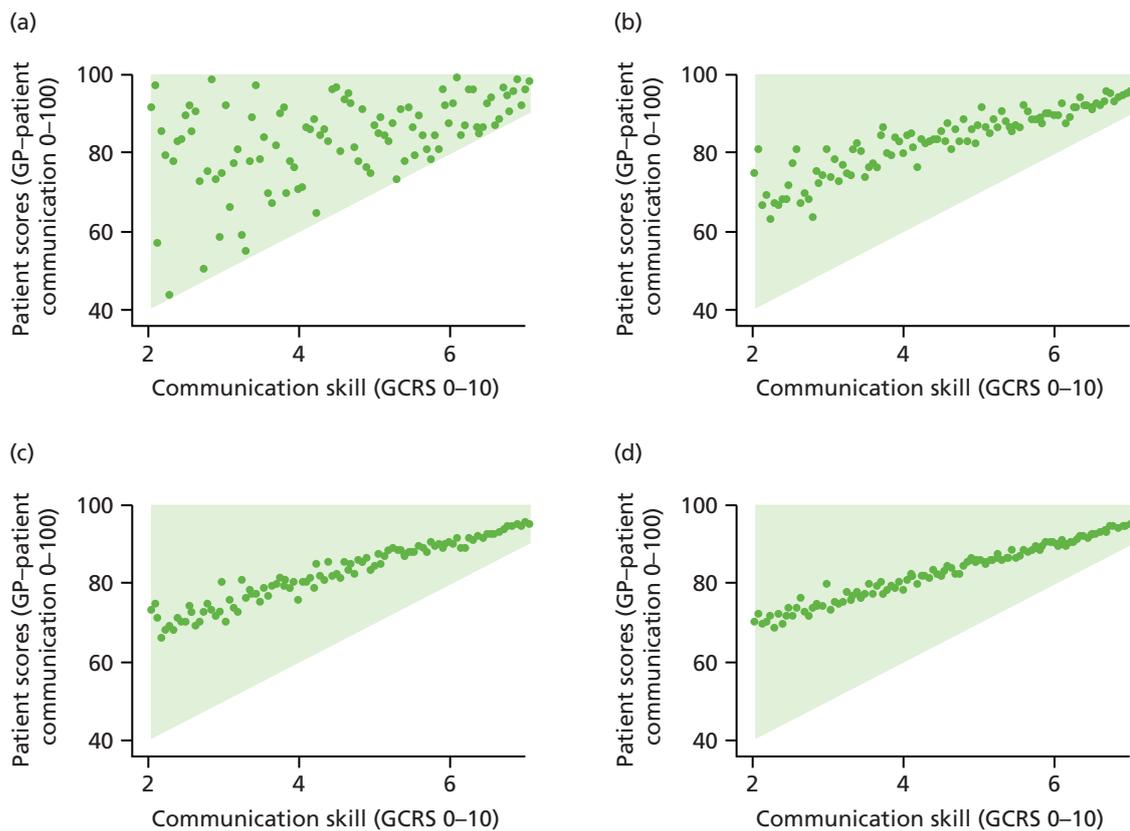
FIGURE 6 Simulated GP–patient communication scores based on different numbers of patient ratings: (a) $n = 1$; (b) $n = 10$; (c) $n = 30$; and (d) $n = 100$. The green areas show the possible individual patient scores that could be given for any particular level of communication competence, as assessed by the GCRS.

As the number of patient ratings taken increases, the correlation between trained rater scores and patient scores gets stronger. When the number of consultations is 30 this correlation becomes very strong ($\rho = 0.97$), becoming stronger still when $n = 100$.

The association between general practitioner scores and trained clinical raters' scores

Histograms showing the distribution of scores given to the 55 consultations are shown in *Figures 7a* and *b* for GP scores and trained rater scores, respectively. Both distributions are reasonably symmetrical. The GCRS scores cover a wide range of the possible values; in contrast, the GP scores for their own performance were all > 50 out of 100, indicating that no GP scored themselves as poor or very poor consistently across the domains for any one consultation. A scatterplot comparing GP scores with the GCRS scores is shown in *Figure 8a*. The wide scatter is reflected in the low correlation coefficients shown in *Table 5*, with no evidence that GP scores are associated with the scores of trained raters using the GCRS ($p = 0.721$). Because only a small number of consultations were rated, confidence intervals (CIs) are wide. However, it is of particular note that the upper CI is < 0.25, indicating that moderate or strong correlations between GP scores and rater scores are highly unlikely to be consistent with these data.
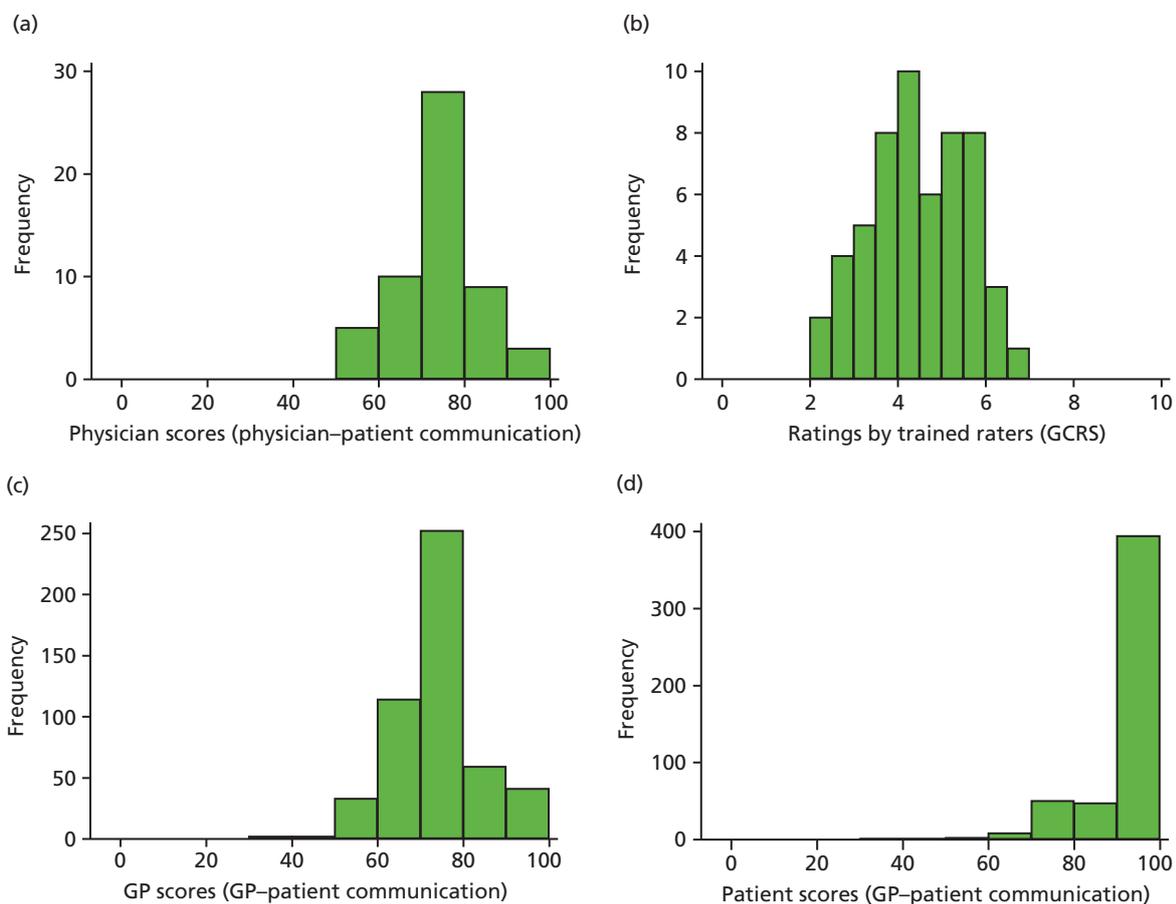
FIGURE 7 Distribution of scores given to consultations by GPs scoring themselves (a) and (c), raters using the GCRS scale (b) and patients (d). Panels (a) and (b) apply only those consultations rated by trained raters ($n = 55$), whereas panels (c) and (d) relate to all consultations for which physician and patient scores were recorded along with patient demographics ($n = 503$).

(a) *n* = 55

(b) *n* = 503
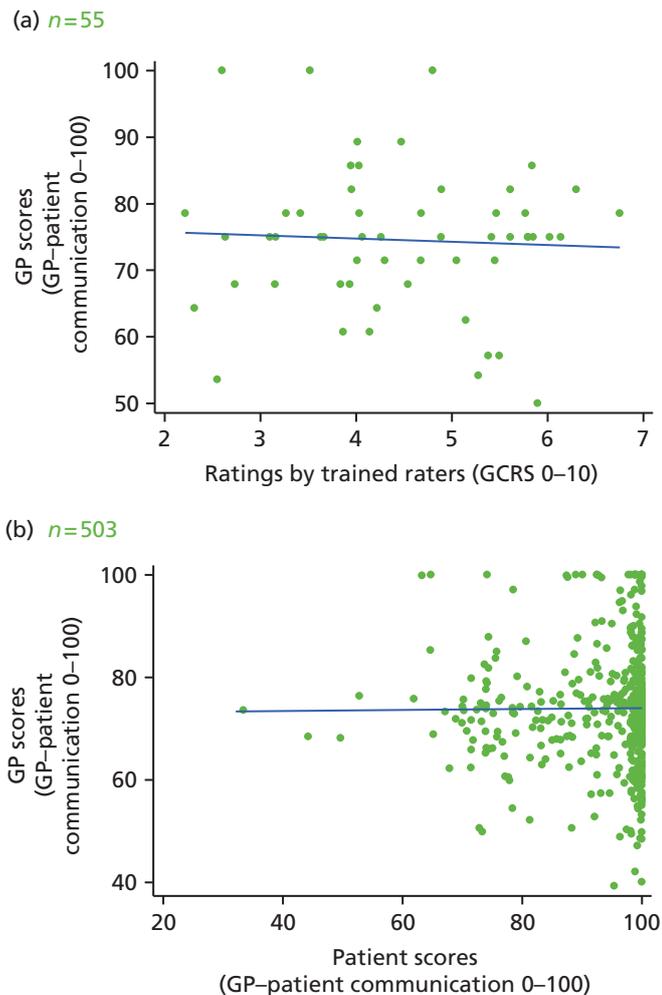
FIGURE 8 Scatterplots illustrating the association between GP scores and (a) trained rater scores using the GCRS scale (*n* = 55); and (b) patient scores (*n* = 503). Note: that in each case the blue line is a line of best fit. Panel (a) applies only to those consultations rated by trained raters, whereas panel (b) relates to all consultations for which physician and patient scores were recorded along with patient demographics.

TABLE 5 Correlation coefficients/standardised regression coefficients used to examine the association between physician scores and the scores given by the trained raters and by patients

| Relationship examined | Trained raters (GCRS) (*n* = 55) | | Patients (*n* = 503) | |
	Correlation coefficient (95% CI)	*p*-value	Correlation coefficient/standardise regression coefficient (95% CI)	*p*-value
Global association	−0.052 (−0.336 to 0.232)	0.721	0.009 (−0.086 to 0.104)	0.854
Within GP association	NA		0.025 (−0.060 to 0.110)	0.565
Within GP association adjusted for patient sociodemographics	NA		0.023 (−0.064 to 0.110)	0.608

NA, not applicable.

The association between general practitioner scores and patient scores

Figures 7c and *d* show the distribution of GP scores and patient scores, respectively, for all consultations for which both are present (along with patient sociodemographic information). The distribution of GP scores is similar to that seen in the selection used for rating. In contrast, the distribution of patient scores is highly skewed, with 63.4% of patients giving the maximum score of 100. A scatterplot comparing GP scores with patient scores for the same consultations in shown in *Figure 8b*. The skewed nature of the patient scores is evident in this figure, which also shows that, although GPs do not often give themselves a score of < 50, on average they give themselves lower scores than patients. The lack of any clear relationship in this figure is reflected in the very low correlation coefficient shown in *Table 5*, again with no evidence of an association ($p = 0.854$). The lack of association persists when considering within-GP associations and when further adjusting for patient sociodemographics. Because of the increased sample size, CIs are tighter than those found when comparing GP scores with rater scores, such that only very weak correlations between GP and patient scores would be consistent with these data.

Discussion

We found a modest correlation between patients' and trained raters' assessments of the quality of communication in GP–patient consultations. This suggests that there is an association between patient ratings of communication and professionally defined standards of care. Importantly, when trained raters identified communication as good, patients tended to agree with this. However, when trained raters identified communication as poor, patients ranged in their assessments of communication from poor to very good. By contrast, we found no evidence of an association between GPs' and trained raters' assessments of communication performance and no evidence of an association between GPs' and patients' assessments of communication quality.

The first aim of this workstream was to explore how far patient ratings reflect accepted professional standards of communication. Our findings suggest that, although trained raters and patients tend to agree what good communication looks like in a consultation, clinical raters are more likely than patients to judge communication as poor. We outline two possible mechanisms driving this divergence; both assume that raters' assessments of communication quality are the 'gold standard' (an issue that we discuss further in *Strengths and limitations*). The first mechanism arises from the well-known phenomenon of skewed patient ratings, with a large proportion of patients rating communication as 'very good'.[130,132,133] By contrast, GCRS ratings tend to cluster around the middle scores available to raters. It is therefore possible that the presence of ceiling effects inherent in the patient question items may artificially constrain the responses that patients would like to give, preventing them from being able to distinguish the very best consultations from those that they judge to be simply good. If our observed pattern is attributable to ceiling effects, this implies a weak correlation between underlying 'true' patient opinion (not the reported opinion expressed using the available survey instruments) and trained rater scores. Thus, this mechanism requires that patients differ from raters in their views of what good or poor communication in a consultation looks like. As a result, the more positive patient opinion is 'held back' by only being able to choose questionnaire options ranging from 'very poor' to 'very good' (and not, for example, 'excellent'), despite extensive instrument development.[134]

However, the second – and we argue more plausible – mechanism is that there are wider factors at play that inhibit some patients from assigning poor scores to consultations that they do perceive as involving poor communication. It is important to note that any such inhibition would have to apply unevenly between patients to explain the range of patient scores seen for consultations rated as poor by the trained raters – whereas some patients *are* able to choose 'poor' as an option, others feel less able to do so. For this mechanism to be driving our observed pattern, the 'true' opinion of patients would be more strongly correlated with the opinion of trained raters, with general agreement between patients and raters about what good or poor communication looks like. Such a phenomenon may lead to an overestimate of doctors' 'true' patient experience scores, whereas the former mechanism (in which patients are constrained in their choice of responses) would lead to an underestimate of doctor performance.

Although we are unable to determine the relative contribution of either mechanism from the methodology of this current workstream, there is existing evidence that patients may be inhibited in their judgements of care. In particular, qualitative research has identified a number of psychological and social factors which suggest that patients struggle to criticise GPs' performance in surveys. For example, an investigation into how patients evaluated community mental health services found that they frequently avoided giving negative scores on experience questionnaires; instead, allowances for poor care were constructed by referencing their perceptions of the duties and culpabilities of health-care providers.[98] Similarly, patients undergoing elective orthopaedic surgery reinterpreted their experiences in a positive light as a result of feelings of dependency on their health-care provider and a perceived need to maintain constructive relationships with their GP.[97] A tendency to excuse rather than report poor care has also been identified in breast cancer patients.[135] These findings were confirmed in the qualitative research that we undertook with our sample, as previously discussed in *Chapter 2*.

The lack of association between GPs' own ratings of their performance and both trained raters' and patients' assessments of the same echoes previous research that has identified gaps in doctors' and others' evaluations.[122–124] The absence of agreement between GPs and trained raters and between GPs and patients suggests that patients' assessments of what constitutes a 'good' consultation may vary. This has potentially important implications for the utility of GP self-reflection in developing their clinical practice. Reflective practice has become a core part of continuing professional development over the years and the identification of learning needs forms an important aspect of this.[136] Indeed, the collection and consideration of patient feedback is a central component of the supporting information required for current medical appraisal and revalidation and appraisers are required to explore 'what [doctors] think the supporting information says about [their] practice and how [they] intend to develop or modify your practice as a result of that reflection' (p. 2).[137] In this study, trained clinical raters (all GPs) were consistently more negative about communication performance than participating GPs were. In seeking to improve communication skills and patient experience, reliance on a doctor's own assessment may not be a robust approach and there may be an important role for external assessment of communication performance.

Strengths and limitations

It was not necessary to seek a representative sample of practices or GPs for the purposes of this study. Instead, we intentionally approached a sample of practices previously found to be receiving lower patient experience scores for communication. Our sampling strategy was informed by the need to locate consultations that patients identified as less than good; the proportion of such consultations is small and so to increase study efficiency we deliberately approached practices that had received lower scores for communication in the national GP Patient Survey. Not all GPs in every practice took part and it is possible that the GPs who did so were more confident in their ability to communicate with patients.

Our patient consent rate was 71.4% of eligible patients. The research team missed only a small number of patients [2.0% (15/741) of those eligible] and so exclusions predominantly reflect those who did not consent to participate. Recorded consultations concerning some medical conditions may be under-represented as participants may have been more likely to decline being video recorded. However, participants' age, gender, self-rated health and ethnicity were broadly representative of the population attending general practices.

We assessed communication using two well-validated instruments: the GP Patient Survey items for patients and GPs and the GCRS for trained raters.[126,134] The GCRS was derived from the Calgary–Cambridge guide, which is used widely for communication skills training and represents agreed professional norms of high-quality communication.[127,128,138] Recently, the question has arisen as to how and whether or not trained raters take account of contextual factors in assessing the communication skills of GPs, for example by allowing variations from 'accepted practice' when scoring performance in particular situations.[139,140] However, the GCRS has been explicitly designed to focus only on the consultation process and contains no task-based items that may be context specific (such as requiring a rating for specific physical examinations). Additionally, it enables raters to choose 'not applicable' when necessary, although, in fact, this was rarely endorsed by raters in this study.

As mentioned earlier, in drawing conclusions about the meaning of patients' and GPs' ratings of communication quality, we have positioned the trained raters as being 'the gold standard'. This is not to suggest raters are more valued or competent assessors of communication than patients or GPs, but simply to use them as representative of professionally agreed norms of behaviour against which to judge patient and participating doctor evaluations of communication. In doing so, we are able to provide evidence that patient assessments tap in to the same underlying construct of communication drawn on by trained raters, but also that patients are less likely to judge consultations as poor. We are also able to provide evidence that GP assessments of their own performance do not appear to be associated with the same ideas of what 'good' communication looks like for trained raters.

Conclusions

Our findings support observations that patients may be inhibited in criticising doctors' performances. If indeed patients are reluctant to give lower ratings that truly reflect their experience, mean survey scores may be overestimates of performance. We therefore suggest that the practice of taking mean survey scores at face value and assuming that they provide a realistic reflection of absolute performance level of either GPs or their practices is inadvisable, as such scores are likely to be biased. However, the use of relative rankings to identify GPs who are better or poorer at communicating with patients may be an acceptable approach to benchmarking performance, as long as statistically reliable figures are obtained. Previous research has demonstrated that the GP Patient Survey communication questions can differentiate between the performance of GPs and practices, as long as an adequate sample size is used to achieve acceptable statistical reliability.[129,141] This was confirmed by our simulation: with sufficient patient scores a strong correlation between patient ratings and competency will be observed. In the use of patient experience scores as quality indicators, our findings suggest that it is, therefore, possible to (1) trust aggregated patient scores that meet traditional standards of reliability as valid measures of comparative performance with respect to communication and (2) trust relatively low mean patient ratings. However, crucially, we cannot necessarily assume that a high mean patient rating means that all is well.

General practitioner assessments of their own standards of communication were poorly associated both with professionally defined norms of communication and with patients' own assessments of what happened in a consultation. Taken together with our findings on the importance of rater feedback for identifying consultations in which communication is less than ideal, our findings suggest that there may be a current gap in the use of external assessments of communication competence.

Chapter 4 Ability of patients to see the clinician of their choice

Abstract

Background

This chapter describes analyses of data from the GP Patient Survey investigating which patients have a preference for seeing a particular GP and how successful they are in seeing that doctor. We report these trends over a 4-year period. In addition, we undertook analyses to examine whether or not patients' expectations of who they wished to see and who they did see (a doctor or a nurse) influenced their assessment of the consultation.

Methods

This study involved analyses of data from the GP Patient Survey.

Results

The majority of patients have a particular GP who they prefer to see. This increased from just over 50% in those aged 18–25 years to 80% in those aged > 75 years. Of those patients who have a preference to see a particular GP, 30% were not able to see that doctor easily in 2010/11. That percentage has been rising year on year, to 39% in 2013/14, indicating substantial problems in terms of patients being able to see the doctor of their choice. Patients who saw a nurse when they wanted to see a GP gave scores for communication with the nurse that were substantially lower (adjusted difference 5.99%, 95% CI 5.71% to 6.28%) than those given by patients who wanted to see a nurse in the first place.

Conclusions

Patients' ability to see a doctor of their choice is seriously compromised, with a high proportion of patients who have a preference for a particular doctor unable to see that doctor on a regular basis. This is a significant quality problem for the NHS.

Introduction and rationale for the study

This chapter relates specifically to the fourth aim of the programme: to understand better patients' responses to questions on communication and seeing a doctor of their choice. In the rest of the programme we have focused on communication between doctors and patients. In this chapter we present our analyses of questions in the GP Patient Survey[11] that relate to patients' ability to see the doctor of their choice.

Continuity of care, specifically relational continuity, is valued by patients and is a core value of general practice. Nevertheless, changes to practice organisation and staffing (including targets relating to improved access) have all combined to make it more difficult for patients to see a regular doctor. There are no routinely collected measures of continuity of care. However, there are two questions that have remained largely unchanged in the GP Patient Survey for several years that are relevant to continuity of care. These are shown in *Table 6*.

The wording of these questions recognise that not all patients want to see a particular doctor and enable the ability to see a particular doctor to be assessed among patients who have that preference. These questions are not a direct measure of continuity of care, but combine elements of continuity with an element of patient choice.

TABLE 6 Questions on choice of doctor as they appear in the GP Patient Survey[a]

Q15. Is there a particular doctor you prefer to see at your GP surgery or health centre?
☐   Yes . . . Please go to Q16
☐   No . . . Please go to Section F
☐   There is usually only one doctor in my GP surgery or health centre . . . Please go to section F
Q16. How often do you see the doctor you prefer to see?
☐   Always or almost always
☐   A lot of the time
☐   Some of the time
☐   Never or almost never
☐   Not tried at this GP surgery or health centre

a Prior to July 2011. From July 2011 onwards the first question was changed to 'Is there a particular GP you usually prefer to see or speak to?' and the second question was changed to 'How often do you see or speak to the GP you prefer?'. Response options remained the same throughout apart from the removal of the words 'or health centre' from the final response option for each question.

The aim of the analysis of these questions was, first, to identify which patients most valued having a particular doctor and, second, to examine the extent to which patients were able to see the doctor of their choice. Because these questions have remained stable for some years, we were also able to examine trends over time.

We also include in this chapter some analyses of patient experience with practice nurses. Although this was not part of our original programme of work, it is of interest in its own right and also gave us the opportunity to examine patients' responses when they wished to see a doctor but were given an appointment with a nurse and when they wished to see a nurse but were given an appointment with a doctor.

Methods

Three sets of analyses are presented in this chapter:

1. determination of which patients express a preference for and manage to see a doctor of their choice
2. examination of trends in the proportion of patients able to see a doctor of their choice
3. the association between patient ratings of communication and the mismatch between the type of appointment wanted and the type of appointment received.

Analysis 1
Data from the 2009/10 GP Patient Survey[11] were used for the analysis of which patients had a preference for, and which succeeded in seeing, a particular doctor. The results presented are a summary of those published in the *British Journal of General Practice*.[142]

Responses to how often patients were able to see their preferred doctor (when they expressed a preference for doing so) were dichotomised into a 'yes' ('always or almost always' or 'a lot of the time')/'no' ('some of the time' or 'never or almost never') measure. Survey weights were developed by Ipsos MORI (the survey provider) and were used in our analysis to account for the complex survey design and non-response in prevalence estimates of preference for, and success in, seeing a preferred doctor. These weights employed rim weighting with two rims: (1) age-by-gender (8 × 2 levels) and (2) practice (8362 levels).

Separate crude and multivariate logistic regression models were used to examine the association between various patient and practice characteristics and preference for, and success in, seeing a preferred doctor. We adjusted for gender, age group, ethnicity, deprivation quintile, self-reported chronic medical or psychological/emotional condition, number of practice doctors and type of appointments requested by the patient in the previous 6 months. Crude models made use of the weights and adjusted standard errors to account for the survey design. Multivariate models did not make use of the weights but did include random intercepts for practice to account for clustering of patients within practices and to better distinguish the experiences and preferences of patient subgroups from general variation in continuity at practice level.

Although patient registration with a given practice is largely determined by geographical proximity, some patients might choose to register with a smaller practice specifically to receive better continuity of care, in which case it would not have been appropriate to adjust sociodemographic associations for practice size. For this reason we performed a sensitivity analysis excluding the number of practice doctors. The results were very similar, for which reason data are not shown. Stata 11 was used for the descriptive analyses and SAS 9.2 (SAS Institute Inc., Cary, NC, USA) for the regression analyses.

Analysis 2

In this analysis we used data from 4 years of the GP Patient Survey (2010/11 to 2013/14),[11] in which the questions addressing the ability to see a preferred GP have remained unchanged. We present annual national figures after applying the survey design and non-response weights such that percentages are representative of the national population rather than respondents to the survey.

Analysis 3

For this analysis we used data from the 2013/14 GP Patient Survey.[11] This included more detailed questions on appointments than previous surveys and, in particular, we were able to analyse the responses of patients who saw a nurse on their last visit, comparing those who contacted the practice wanting to see a nurse with those whose original request had been to see a doctor. Similarly, we were able to analyse the responses of patients who saw a doctor on their last visit, comparing those who wanted to see a doctor with those whose original request had been to see a nurse.

We first present a descriptive analysis to examine the extent to which the type of appointment that patients obtained was the same as or different from the type of appointment that they wanted. This was done by comparing responses to the question 'Last time you wanted to see or speak to a GP or nurse from your GP surgery: what did you want to do?' with responses to the question 'What type of appointment did you get? I got an appointment . . .'. For both questions response options allowed patients to indicate that they wanted to/got to see a GP at the surgery, see a nurse at the surgery, speak to a GP on the telephone, speak to a nurse on the telephone or have a home visit. Additionally, when asking about what they wanted, there was an option to state 'I didn't mind/wasn't sure what I wanted'. Because patients often endorsed more than one response we reduced responses to the first question into five categories:

1. those who wanted to either see or speak to a GP (or both)
2. those who wanted to either see or speak to a nurse (or both)
3. those who wanted a home visit
4. those who weren't sure or didn't mind
5. those who wanted more than one of the previous four categories.

For the second question the same categories were used, excluding the 'didn't mind/wasn't sure' category as this was not an option for this question. We then cross-tabulated what people wanted with what they got, again using the design and non-response weights.

Finally, we considered whether or not reported nurse–patient communication and GP–patient communication varied according to any mismatch between what people wanted and what they got in terms of who the appointment was with and what type of appointment it was. Two separate analyses were performed, one for nurse communication and one for GP communication. Each analysis was restricted to those reporting that they had had an appointment with the appropriate clinician on their last visit to their GP surgery. For relative simplicity this analysis was further restricted to those who endorsed only one box for both the question on what type of appointment they wanted and the question on what they got. Eight categories were created (for each analysis) covering the various combinations of seeing or speaking to someone and whether the person they wanted to see or speak to was a GP. Composite nurse–patient communication and GP–patient communication scores (between 0 and 100) were created in an identical way to that described earlier in this report, except using responses to the equivalent question about nurses when appropriate. Crude differences between the categories were estimated using linear regression (restricted to those who had complete information for age, gender, ethnicity, confidence in managing their own health, the presence of a long-standing heath condition and deprivation). Mixed-effects linear regression was then used for an adjusted analysis including age, gender, ethnicity, confidence in managing their own health, the presence of a long-standing heath condition and deprivation. Practice was included as a random effect (intercept).

Results

The overall response rate to the 2009/10 GP Patient Survey was 39%, with 2,169,718 completed responses from patients in 8362 practices.

Analysis 1a: preference for seeing a particular doctor

In total, 2% of patients reported that there was only one GP in their practice. After excluding those patients from further analysis, 62% of patients reported having a preference for seeing a particular doctor (*Table 7*). Such a preference varied across patient groups and was higher for women (68% vs. 56% in men), older patients (52% for age group 18–24 years increasing to 81% for age group 75–84 years), those with chronic medical or psychological/emotional conditions (75% and 78%, respectively, vs. 52% and 61%, respectively, for those without) and those living in more affluent areas (from 60% to 64% for most to least deprived patients). Preference for seeing a particular doctor ranged from 47% to 65% of respondents across the 16 ethnic groups and increased with the number of practice GPs (58% for practices with two GPs increasing to 63% for practices with six to nine GPs). Preference for seeing a particular doctor was higher in patients who had recently requested only non-urgent appointments in the previous 6 months (68%) than in patients who had requested only urgent appointments (58%). The crude odds ratios (ORs) (see *Table 7*) reflect the associations described above. All associations are stronger than would be expected by chance ($p < 0.001$).

In multivariate analysis there was strong evidence that differences exist in the preference for seeing a particular doctor across all sociodemographic groups after adjusting for other factors ($p < 0.001$ for all variables) (see *Table 7*). This preference was more common among women (OR 1.50), older people (OR 1.71 for age group 74–85 years vs. age group 55–64 years), respondents suffering from a chronic medical (OR 1.87) or psychological/emotional (OR 1.59) condition and those from more affluent areas (OR 0.84 for most deprived vs. most affluent areas). Patients from South Asian ethnic groups (Bangladeshi, Indian, Pakistani and 'any other Asian' groups) had a substantially higher preference for seeing a particular doctor (OR 1.74, 1.49, 1.49 and 1.28, respectively, vs. white British patients). Patients were more likely to express such a preference if they were registered with a practice with a greater number of GPs (OR 1.3 for patients registered with practices with six to nine GPs vs. patients registered with practices with two GPs) and if they had sought non-urgent appointments (OR 1.4 for patients seeking non-urgent appointments only vs. patients seeking urgent appointments only).

TABLE 7 Prevalence and ORs for having a preference for seeing a particular doctor

Patient/practice variables	Weighted prevalence[a] (95% CI)	Crude weighted OR[a] (95% CI)	Adjusted OR[b] (95% CI)
All survey respondents	62.2 (61.9 to 62.4)	NA	NA
Gender			
Male	56.3 (56.1 to 56.6)	Reference	Reference
Female	67.5 (67.2 to 67.7)	1.60 (1.59 to 1.61)	1.50 (1.49 to 1.52)
Age group (years)			
18–24	51.7 (51.1 to 52.2)	0.49 (0.48 to 0.50)	0.65 (0.64 to 0.66)
25–34	51.0 (50.6 to 51.3)	0.48 (0.47 to 0.48)	0.55 (0.54 to 0.56)
35–44	56.0 (55.6 to 56.3)	0.58 (0.58 to 0.59)	0.66 (0.65 to 0.67)
45–54	61.4 (61.1 to 61.7)	0.73 (0.72 to 0.74)	0.79 (0.78 to 0.80)
55–64	68.6 (68.3 to 68.9)	Reference	Reference
65–74	76.0 (75.8 to 76.3)	1.45 (1.44 to 1.47)	1.36 (1.35 to 1.38)
75–84	81.1 (80.8 to 81.4)	1.97 (1.94 to 2.00)	1.71 (1.69 to 1.74)
≥ 85	80.0 (79.5 to 80.4)	1.83 (1.78 to 1.88)	1.54 (1.50 to 1.58)
Ethnic group			
White[c]			
White British[d]	62.9 (62.6 to 63.2)	Reference	Reference
Irish[d]	65.1 (64.2 to 65.9)	1.10 (1.06 to 1.14)	0.97 (0.94 to 1.00)
Any other white[d]	57.5 (56.9 to 58.1)	0.80 (0.78 to 0.82)	1.03 (1.01 to 1.05)
Mixed[c]			
White and black Caribbean[d]	56.8 (54.8 to 58.9)	0.78 (0.72 to 0.84)	1.05 (0.97 to 1.14)
White and black African[d]	52.2 (49.6 to 54.7)	0.64 (0.58 to 0.71)	0.92 (0.84 to 1.02)
White and Asian[d]	56.7 (53.8 to 59.6)	0.77 (0.69 to 0.87)	1.07 (0.99 to 1.16)
Any other mixed[d]	59.7 (57.7 to 61.7)	0.88 (0.81 to 0.95)	1.09 (1.02 to 1.18)
South Asian[c]			
Indian[d]	63.0 (62.2 to 63.9)	1.01 (0.97 to 1.04)	1.49 (1.45 to 1.53)
Pakistani[d]	61.4 (60.4 to 62.4)	0.94 (0.90 to 0.98)	1.49 (1.43 to 1.54)
Bangladeshi[d]	61.7 (60.2 to 63.2)	0.95 (0.89 to 1.01)	1.74 (1.64 to 1.84)
Any other Asian[d]	59.0 (57.9 to 60.1)	0.85 (0.81 to 0.89)	1.28 (1.23 to 1.33)
Black[c]			
Black Caribbean[d]	61.9 (60.9 to 62.8)	0.96 (0.92 to 1.00)	1.14 (1.10 to 1.18)
Black African[d]	47.3 (46.4 to 48.2)	0.53 (0.51 to 0.55)	0.81 (0.78 to 0.83)
Any other black[d]	59.1 (57.2 to 61.1)	0.86 (0.79 to 0.93)	1.08 (0.99 to 1.17)
Chinese[c]			
Chinese[d]	48.5 (47.0 to 50.0)	0.56 (0.52 to 0.59)	0.86 (0.81 to 0.90)
Other[c]			
Other ethnic group[d]	58.5 (57.9 to 59.1)	0.83 (0.81 to 0.85)	1.14 (1.12 to 1.17)

TABLE 7 Prevalence and ORs for having a preference for seeing a particular doctor (*continued*)

Patient/practice variables	Weighted prevalence[a] (95% CI)	Crude weighted OR[a] (95% CI)	Adjusted OR[b] (95% CI)
Deprivation quintile			
1 (affluent)	64.1 (63.7 to 64.5)	Reference	Reference
2	63.3 (62.9 to 63.6)	0.96 (0.95 to 0.98)	0.96 (0.95 to 0.97)
3	62.2 (61.8 to 62.6)	0.92 (0.90 to 0.94)	0.92 (0.91 to 0.93)
4	61.0 (60.6 to 61.3)	0.87 (0.86 to 0.89)	0.89 (0.88 to 0.90)
5 (deprived)	59.5 (59.1 to 60.0)	0.82 (0.81 to 0.84)	0.84 (0.83 to 0.85)
Presence of self-reported chronic medical condition			
No	52.1 (51.7 to 52.4)	Reference	Reference
Yes	74.8 (74.5 to 75.0)	2.73 (2.70 to 2.76)	1.87 (1.86 to 1.89)
Presence of self-reported long-standing psychological or emotional condition			
No	61.3 (61.1 to 61.6)	Reference	Reference
Yes	78.3 (77.9 to 78.7)	2.28 (2.23 to 2.33)	1.59 (1.57 to 1.62)
Number of practice GPs			
1	56.4 (55.6 to 57.2)	0.94 (0.90 to 0.97)	1.01 (0.97 to 1.05)
2	58.0 (57.4 to 58.6)	Reference	Reference
3	61.9 (61.3 to 62.5)	1.18 (1.13 to 1.22)	1.20 (1.15 to 1.25)
4	63.5 (62.9 to 64.1)	1.26 (1.22 to 1.30)	1.29 (1.24 to 1.35)
5	63.6 (63.0 to 64.2)	1.26 (1.22 to 1.31)	1.31 (1.26 to 1.37)
6–9	63.0 (62.6 to 63.4)	1.23 (1.19 to 1.27)	1.30 (1.25 to 1.34)
10+	62.2 (60.7 to 63.6)	1.19 (1.11 to 1.27)	1.28 (1.19 to 1.37)
Type of appointments sought in previous 6 months[e]			
No appointment requested	47.5 (47.2 to 47.8)	0.65 (0.64 to 0.66)	0.67 (0.66 to 0.68)
Urgent only	58.3 (58.0 to 58.6)	Reference	Reference
Non-urgent only	67.5 (67.1 to 67.9)	1.49 (1.46 to 1.51)	1.40 (1.39 to 1.42)
Both urgent and non-urgent	73.5 (73.2 to 73.7)	1.98 (1.96 to 2.00)	1.85 (1.83 to 1.87)

NA, not applicable.
a Estimated from the weighted unadjusted analysis; $p < 0.001$ for all associations (joint tests for categorical variables).
b Estimated from a single multivariate logistic regression model including all variables that appear in the table plus a random practice intercept; $p < 0.001$ for all associations (joint tests for categorical variables).
c Office for National Statistics (ONS) 6 classification.[143]
d ONS 16 classification.[143]
e Based on patients' responses to questions 6 and 9 (see *Methods*).

Analysis 1b: ability to see the doctor of the patient's choice

The next analyses are restricted to patients with a preference for seeing a particular doctor. Of these patients, 72% were successful in seeing the doctor who they preferred 'always or almost always' or 'a lot of the time'; we refer to those two response categories using the term 'most of the time' hereafter (*Table 8*). The proportion of patients who were successful in seeing their preferred GP most of the time was higher in men (74% vs. 70% in women), older patients (60% for age group 18–24 years increasing to 87% for age group 75–84 years) and those with chronic medical or psychological/emotional conditions (77% and 75%, respectively, vs. 66% and 72%, respectively, in those without). White patients were more

TABLE 8 Prevalence and adjusted ORs for seeing a preferred doctor most of the time

Patient/practice variables	Weighted prevalence[a] (95% CI)	Crude weighted OR[a] (95% CI)	Adjusted OR[b] (95% CI)
All survey respondents	71.8 (71.4 to 72.1)		
Gender			
Male	73.6 (73.2 to 74.0)	Reference	Reference
Female	70.2 (69.9 to 70.6)	0.85 (0.84 to 0.86)	0.87 (0.86 to 0.88)
Age group (years)			
18–24	59.8 (59.1 to 60.5)	0.43 (0.42 to 0.44)	0.43 (0.42 to 0.44)
25–34	60.2 (59.7 to 60.8)	0.44 (0.43 to 0.44)	0.48 (0.47 to 0.49)
35–44	63.6 (63.1 to 64.0)	0.50 (0.49 to 0.51)	0.54 (0.53 to 0.55)
45–54	69.8 (69.4 to 70.3)	0.67 (0.66 to 0.68)	0.68 (0.67 to 0.69)
55–64	77.7 (77.3 to 78.1)	Reference	Reference
65–74	84.3 (84.0 to 84.7)	1.55 (1.52 to 1.58)	1.53 (1.50 to 1.56)
75–84	86.5 (86.1 to 86.8)	1.84 (1.80 to 1.87)	1.82 (1.79 to 1.86)
≥ 85	85.3 (84.8 to 85.7)	1.66 (1.61 to 1.72)	1.56 (1.51 to 1.61)
Ethnic group			
White[c]			
White British[d]	73.7 (73.4 to 74.1)	Reference	Reference
Irish[d]	74.1 (73.2 to 75.1)	1.02 (0.97 to 1.07)	0.90 (0.86 to 0.94)
Any other white[d]	66.9 (66.2 to 67.5)	0.72 (0.70 to 0.74)	0.85 (0.83 to 0.88)
Mixed[c]			
White and black Caribbean[d]	61.8 (59.1 to 64.4)	0.58 (0.52 to 0.64)	0.90 (0.81 to 1.00)
White and black African[d]	56.6 (53.4 to 59.8)	0.46 (0.41 to 0.53)	0.68 (0.60 to 0.78)
White and Asian[d]	63.4 (60.7 to 66.1)	0.62 (0.55 to 0.69)	0.81 (0.72 to 0.90)
Any other mixed[d]	62.4 (60.1 to 64.7)	0.59 (0.54 to 0.65)	0.74 (0.67 to 0.81)
South Asian[c]			
Indian[d]	60.7 (59.3 to 62.1)	0.55 (0.52 to 0.58)	0.73 (0.71 to 0.76)
Pakistani[d]	54.4 (52.9 to 55.9)	0.43 (0.40 to 0.45)	0.66 (0.63 to 0.69)
Bangladeshi[d]	50.2 (48.1 to 52.3)	0.36 (0.33 to 0.39)	0.57 (0.53 to 0.61)
Any other Asian[d]	56.8 (55.4 to 58.1)	0.47 (0.44 to 0.49)	0.59 (0.56 to 0.62)
Black[c]			
Black Caribbean[d]	65.6 (64.2 to 67.0)	0.68 (0.64 to 0.72)	0.83 (0.79 to 0.87)
Black African[d]	52.3 (50.9 to 53.8)	0.39 (0.37 to 0.42)	0.55 (0.53 to 0.58)
Any other black[d]	58.0 (55.3 to 60.6)	0.49 (0.44 to 0.55)	0.70 (0.62 to 0.78)
Chinese[c]			
Chinese[d]	56.2 (54.1 to 58.4)	0.46 (0.42 to 0.50)	0.55 (0.51 to 0.59)
Other[c]			
Other ethnic group[d]	60.6 (59.9 to 61.4)	0.55 (0.53 to 0.57)	0.66 (0.64 to 0.68)

TABLE 8 Prevalence and adjusted ORs for seeing a preferred doctor most of the time (*continued*)

Patient/practice variables	Weighted prevalence[a] (95% CI)	Crude weighted OR[a] (95% CI)	Adjusted OR[b] (95% CI)
Deprivation quintile			
1 (affluent)	74.3 (73.7 to 74.8)	Reference	Reference
2	74.1 (73.6 to 74.6)	0.99 (0.97 to 1.02)	0.99 (0.97 to 1.01)
3	72.3 (71.8 to 72.8)	0.90 (0.88 to 0.93)	0.95 (0.94 to 0.97)
4	69.6 (69.1 to 70.1)	0.79 (0.77 to 0.82)	0.91 (0.89 to 0.93)
5 (deprived)	67.0 (66.4 to 67.6)	0.70 (0.68 to 0.73)	0.86 (0.84 to 0.88)
Presence of self-reported chronic medical condition			
No	66.3 (65.8 to 66.7)	Reference	Reference
Yes	76.8 (76.4 to 77.1)	1.68 (1.66 to 1.70)	1.29 (1.27 to 1.30)
Presence of self-reported long-standing psychological or emotional condition			
No	71.9 (71.5 to 72.2)	Reference	Reference
Yes	75.3 (74.8 to 75.8)	1.19 (1.17 to 1.22)	1.25 (1.22 to 1.27)
Number of practice GPs			
1	78.5 (77.3 to 79.6)	1.10 (1.01 to 1.19)	1.42 (1.33 to 1.52)
2	76.9 (76.0 to 77.7)	Reference	Reference
3	74.5 (73.6 to 75.4)	0.88 (0.82 to 0.94)	0.76 (0.71 to 0.81)
4	73.4 (72.6 to 74.3)	0.83 (0.78 to 0.89)	0.66 (0.61 to 0.70)
5	72.0 (71.1 to 72.9)	0.77 (0.73 to 0.83)	0.57 (0.53 to 0.61)
6–9	69.7 (69.2 to 70.3)	0.69 (0.66 to 0.73)	0.48 (0.45 to 0.51)
10+	68.8 (67.0 to 70.7)	0.67 (0.60 to 0.74)	0.44 (0.40 to 0.49)
Type of appointments sought in previous 6 months[e]			
No appointments requested	73.6 (73.2 to 74.0)	1.23 (1.21 to 1.25)	1.17 (1.15 to 1.19)
Urgent only	69.4 (68.9 to 69.8)	Reference	Reference
Non-urgent only	78.8 (78.4 to 79.2)	1.64 (1.60 to 1.68)	1.59 (1.57 to 1.62)
Both urgent and non-urgent	70.3 (69.9 to 70.7)	1.05 (1.03 to 1.06)	1.12 (1.10 to 1.13)

a Estimated from the weighted unadjusted analysis; $p < 0.001$ for all associations (joint tests for categorical variables).
b Estimated from a single multivariate logistic regression model including all variables that appear in the table plus a random practice intercept; $p < 0.001$ for all associations (joint tests for categorical variables).
c Office for National Statistics (ONS) 6 classification.[143]
d ONS 16 classification.[143]
e Based on patients' responses to questions 6 and 9 (see *Methods*).

likely to be able to see the doctor of their choice than patients in most other ethnic groups. More deprived patients were less successful in seeing the doctor who they preferred most of the time (67% for the most deprived patients rising to 74% for the least deprived patients). Success in seeing a particular doctor decreased as the number of practice GPs increased (79% for practices with one GP vs. 69% for practices with ≥ 10 GPs). Success in seeing a particular doctor was lowest among patients requesting urgent appointments only (69%), with it being greatest for patients requesting only non-urgent appointments (79%). The crude ORs (see *Table 8*) reflect the associations described above. All associations are stronger than would be expected by chance ($p < 0.001$).

In multivariate analysis there was strong evidence that differences relating to the success of seeing a preferred doctor persist after adjusting for other factors ($p < 0.001$ for all variables) (see *Table 8*). Women were less likely to be successful than men in seeing the doctor of their choice (OR 0.87). This contrasts with older patients (OR 1.82 for age group 74–85 years vs. age group 55–64 years), those with a chronic medical (OR 1.29) or psychological/emotional (OR 1.25) condition and white patients, all of whom were more likely to be successful than their respective reference groups. Success in seeing a preferred doctor was also less common in deprived areas (OR 0.86 for most deprived vs. most affluent). Patients registered with larger practices were less likely to report that they could see a doctor of their choice most of the time (OR 0.48 for patients registered with practices with six to nine doctors vs. patients registered with practices with two doctors). Patients who requested only non-urgent appointments were more likely to be successful in seeing the doctor who they preferred (OR 1.59 vs. patients requesting only urgent appointments).

Analysis 2: seeing the clinician of the patient's choice – changes over time

Figure 9 shows the percentage of patients who have a preference for seeing a particular doctor who were actually able to do so last time they had a consultation. The percentage of patients able to see the GP of their choice has declined year on year for the 4 years from 2010/11 to 2013/14, from 70% to 61%. Note that percentages presented have been weighted for survey design and non-response such that they represent the national population rather than respondents.

Analysis 3: seeing the clinician of the patient's choice – association with subsequent rating

Of the 903,357 people who responded to the 2013/14 GP Patient Survey, 870,085 answered the question regarding what they wanted to do last time they contacted the GP surgery. *Table 9* shows how that question was answered. Accounting for non-response and design weighting suggests that over three-quarters of patients wanted only to see or speak to a GP, whereas just under 15% wanted only to see or speak to a nurse.

We then compared the type of appointment that patients wanted and the type of appointment that they actually received (*Table 10*). By and large the vast majority of patients got what they wanted, with 96% of people who wanted to see or speak to a GP achieving this compared with 92% of people who wanted to see or speak to a nurse. The percentage wanting a home visit who received one was lower at 80%.
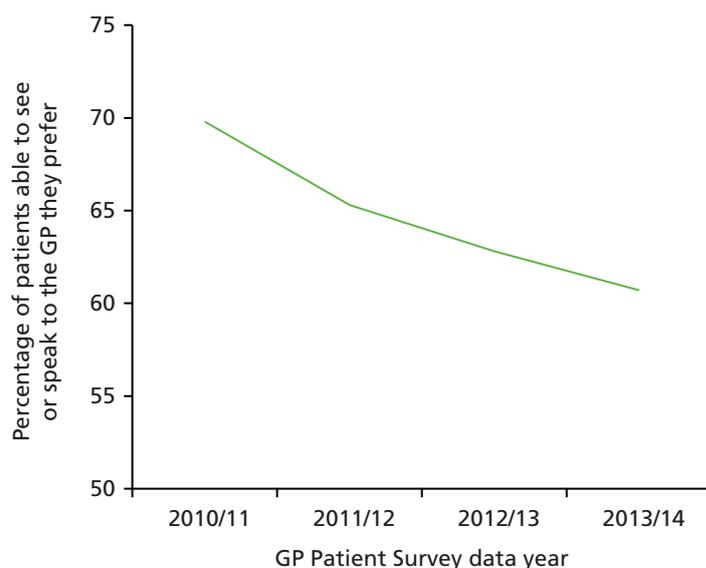
FIGURE 9 Percentage of patients able to see or speak to the GP they prefer 'a lot of the time', 'almost always' or 'always' (of those who say that they have a particular GP who they prefer to see – data from the GP Patient Survey).

TABLE 9 Descriptive statistics showing what patients wanted to do last time they contacted the GP surgery

Last time you wanted to see or speak to a GP or nurse from your GP surgery, what did you want to do?	n	Weighted %
Wanted to see and/or speak to a GP	653,526	77.7
Wanted to see and/or speak to a nurse	139,300	14.5
Wanted a home visit	12,873	1.2
Didn't mind/wasn't sure	15,404	2.4
One or more of the above	48,982	4.3
Total	870,085	100.0

TABLE 10 Association between the type of appointment that patients wanted and the type of appointment that they actually received[a]

Last time you wanted to see or speak to a GP or nurse from your GP surgery, what did you want to do?	What type of appointment did you get?				
	To see and/or speak to a GP	To see and/or speak to a nurse	A home visit	One or more of the above	Total
Wanted to see and/or speak to a GP	95.9	2.9	0.1	1.1	100.0
Wanted to see and/or speak to a nurse	6.3	92.2	0.1	1.4	100.0
Wanted a home visit	15.7	2.2	79.6	2.5	100.0
Didn't mind/wasn't sure	67.1	29.1	1.1	2.7	100.0
One or more of the above	29.7	8.6	0.7	61.1	100.0
Overall	77.6	17.5	1.1	3.8	100.0

a The table shows weighted (for design and non-response) percentages of what people received for each category of what they wanted.

The results of the analysis investigating the association between reported nurse–patient communication scores and the mismatch between what people wanted and what they received in terms of appointment is shown in *Table 11*. This analysis was restricted to the 121,086 patients who reported seeing or speaking to a nurse on their last visit to the GP surgery who also had complete information on the covariates used in the adjusted model. The mean communication score for those who wanted to speak to a nurse and did the same was 90.0 out of 100.0. For all other combinations nurse–patient communication scores were, on average, lower ($p < 0.001$). This difference was largest for those wanting to see or speak to a GP who then saw or spoke to a nurse, with the lowest scores for those who wanted to see a GP but spoke to a nurse (adjusted difference vs. those who wanted to see a nurse and did see a nurse –10.5, 95% CI –11.7 to –9.2).

The parallel analysis for those patients who saw or spoke to a GP is shown in *Table 12*. This analysis is restricted to the 497,302 patients who reported seeing or speaking to a doctor on their last visit to the GP surgery and also have complete information to the covariates used in the adjusted model. The mean communication score for those who wanted to speak to a doctor and did so was 85.4 out of 100. For the majority of the remaining categories, doctor–patient communication scores were, on average, lower ($p < 0.001$). The differences were small in most cases (1 to 2 points), although they were greatest when the patient wanted to see a GP and ended up speaking to either a GP or a nurse on the telephone.

TABLE 11 Results of the regression analysis examining the association between nurse–patient communication scores and what patients wanted to do and what they did do among those who saw a nurse at their last visit to the GP surgery

Wanted to happen	Actually happened	n (%)	Mean communication Score	Crude difference[a] (95% CI)	Adjusted difference[b] (95% CI)
See a nurse	Saw a nurse	105,140 (86.8)	90.0	Reference	Reference
See a nurse	Spoke to a nurse	517 (0.4)	88.3	−1.70 (−2.97 to −0.44)	−1.40 (−2.63 to −0.18)
Speak to a nurse	Saw a nurse	1170 (1.0)	87.6	−2.37 (−3.21 to −1.53)	−2.05 (−2.87 to −1.23)
Speak to a nurse	Spoke to a nurse	1697 (1.4)	88.9	−1.09 (−1.79 to −0.38)	−0.93 (−1.61 to −0.24)
See a GP	Saw a nurse	10,916 (9.0)	82.7	−7.31 (−7.60 to −7.02)	−5.99 (−6.28 to −5.71)
See a GP	Spoke to a nurse	538 (0.4)	77.8	−12.16 (−13.40 to −10.92)	−10.47 (−11.68 to −9.27)
Speak to a GP	Saw a nurse	819 (0.7)	85.7	−4.25 (−5.26 to −3.25)	−3.35 (−4.33 to −2.38)
Speak to a GP	Spoke to a nurse	289 (0.2)	80.2	−9.80 (−11.49 to −8.11)	−8.66 (−10.30 to −7.03)

a $p < 0.001$ (joint test).
b Also adjusted for age, gender, ethnicity, confidence in managing their own health, the presence of a long-standing heath condition, deprivation (fixed effect) and practice (random effect); $p < 0.001$ (joint test).

TABLE 12 Results of the regression analysis examining the association between doctor-patient communication scores and what patients wanted to do and what they did do among those who saw a doctor at their last visit to the GP surgery

Wanted to happen	Actually happened	n (%)	Mean communication score	Crude difference[a] (95% CI)	Adjusted difference[b] (95% CI)
See a GP	Saw a GP	450,555 (90.6)	85.4	Reference	Reference
See a GP	Spoke to a GP	9127 (1.8)	80.0	−5.41 (−5.77 to −5.05)	−4.49 (−4.84 to −4.14)
Speak to a GP	Saw a GP	8281 (1.7)	85.2	−0.21 (−0.59 to 0.17)	−0.23 (−0.59 to 0.13)
Speak to a GP	Spoke to a GP	22,039 (4.4)	86.9	1.54 (1.30 to 1.77)	0.96 (0.73 to 1.19)
See a nurse	Saw a GP	5831 (1.2)	84.5	−0.85 (−1.30 to −0.40)	−1.22 (−1.65 to −0.80)
See a nurse	Spoke to a GP	378 (0.1)	82.0	−3.41 (−5.17 to −1.64)	−3.76 (−5.43 to −2.10)
Speak to a nurse	Saw a GP	913 (0.2)	84.3	−1.07 (−2.21 to 0.07)	−0.94 (−2.01 to 0.13)
Speak to a nurse	Spoke to a GP	178 (0.0)	83.7	−1.64 (−4.21 to 0.93)	−2.16 (−4.59 to 0.26)

a $p < 0.001$ (joint test).
b Also adjusted for age, gender, ethnicity, confidence in managing their own health, the presence of a long standing heath condition, deprivation (fixed effects) and practice (random effect); $p < 0.001$ (joint test).

Conclusions

Our analyses show that most patients have a particular GP who they prefer to see. It is sometimes suggested that this is important for only some population groups (e.g. not for young people) but we found that this is not the case. Even among those aged 18–24 years, > 50% of respondents to the GP Patient Survey have a particular doctor who they prefer to see, which rises to > 80% in those aged > 75 years. Disturbingly, a large percentage of people who have such a preference are unable to see the doctor of their choice. This percentage has risen from 30% to 39% between 2010 and 2015. We can only speculate on the reasons for this, with the rise likely to be the result of a range of factors including the pressure on GPs to increase access by offering same-day appointments and by opening for longer hours or on more days. In addition, the increasing proportion of GPs working part-time may make it more difficult for patients to see the GP of their choice.

One of the criticisms of patient surveys is the very positive scores that patients give, scores that may not represent the totality of their experience (as we have shown in *Chapters 2* and *3*). However, we do see less positive scores for ratings of being able to see a doctor of your choice, with 40% of patients responding to the GP Patient Survey now saying that they are regularly unable to see the doctor of their choice. This is clearly an important quality issue for the NHS that has received scant attention from governments, which remain focused on access. Providing good continuity is difficult in the context of contemporary general practice, but there are ways of organising practice to increase patients' ability to choose the doctor who they see. The Royal College of General Practitioners has published a toolkit on the subject[144] and we have also published guidelines on how practices can improve the continuity of care that they provide.[145] This is certainly an area that deserves more priority in the NHS.

We are able to get some insight into the impact of this on the patient experience from our analysis of data from patients who have seen a nurse when they had originally wanted to see a doctor. These patients report a substantially worse experience with their subsequent consultation with a nurse and we have no reason to think that the nurses were behaving differently towards these patients compared with any other patients (and nurses generally get very high scores for their communication with patients).

Section B Understanding patient experience in minority ethnic groups

Chapter 5 Analyses of GP Patient Survey data to explore variations in patient experience by ethnic group and practice

Abstract

Background

In the UK there is particular concern over South Asian patients' experience of care, with consistently more negative ratings across a wide range of measures. The nature and potential drivers of the reported variations in care in South Asian groups have yet to be fully explored. In this workstream we aimed to investigate a number of potentially contributory factors to variations in communication with primary care professionals related to ethnicity and practice.

Methods

This study involved analyses of data from the GP Patient Survey.

Results

South Asian respondents report more negative experiences of GP–patient communication than their white British counterparts. Around half of this variation may be attributed to the concentration of these patients in low-performing practices. However, the effect of ethnicity on reported GP–patient communication varies by age and gender, with poorer experience scores being particularly marked in older, female Asian patients. There was no evidence of differential item functioning (DIF) of the communication items for white British and South Asian patients. These findings increase the likelihood that there are true differences in the quality of care received by South Asian groups and the white British majority. A substantial proportion of the variability in practice scores for GP–patient communication can be explained by practice factors.

Conclusions

Reports of communication with primary care professionals are more negative for South Asian respondents. Although practice factors are an important driver of this, even within the same practice, South Asian patients (particularly those who are older and female) are likely to experience a lower quality of communication.

Introduction and rationale for the study

Systematic variations in experience of health care in relation to ethnicity, age, gender, health and socioeconomic status have long been documented in the UK.[146–148] In 2014, NHS England[149] reiterated concerns about variations in the quality of primary care for disadvantaged groups, stating that 'People have a right to high quality services, irrespective of who they are, their social status, where they live, or what needs they have' (p. 9) (contains public sector information licensed under the Open Government Licence v3.0). A particular focus has been the experience of some minority ethnic groups, who have reported consistently lower patient experience scores than the majority population in both the UK and the USA.[75,150–153] Previous analyses of patient experience data conducted by the authors highlighted that South Asian patients reported particularly negative experiences, including for waiting times for GP appointments, time spent waiting in surgeries for consultations to start and continuity of care.[75]

Several potential explanations have been proposed for the lower patient experience ratings given by South Asian patients in response to surveys. Broadly, these relate to whether or not South Asian patients receive lower-quality care or whether or not they receive similar care but rate this more negatively.[75,80,154]

For example, differences in the use of questionnaire response scales[80] may lead to South Asian groups being less likely to endorse the most positive options when asked to evaluate a doctor's communication skills. Alternatively, there may be systematic variations in evaluations of consultations because South Asian respondents vary in their expectations of, or preferences for, care. Finally, of course, it is possible that reported poorer experiences of care do reflect actual differences in the care received by these patient groups. In this workstream, we set out to explore in more detail the nature and potential drivers of the reported variations in care in South Asian groups, using existing GP Patient Survey data. Experimental work to explore how South Asian and white British participants rate simulated consultations is detailed in *Chapter 6*.

Structure of the work package

We undertook a series of analyses of GP Patient Survey data to investigate variations in patient experience for South Asian groups. This work was undertaken across four workstreams:

1. an exploration of whether or not the low scores of minority ethnic and other sociodemographic groups reflect their concentration in poorly performing primary care practices
2. building on the above, further analyses to determine how reported GP–patient communication varies between patients from different ethnic groups, stratified by age and gender
3. an analysis, using item response theory, to test for evidence of whether or not the GP Patient Survey communication items perform differently for South Asian and white British respondents
4. finally, in addition to the above patient-level analyses, we explored how differences between practices influence GP–patient communication scores.

Changes to study methods from the original protocol

The aim of this workstream, as stated in the original protocol, was to understand the reasons why minority ethnic groups, especially South Asians, give lower scores on patient surveys than the white British population (aim 5).

We conducted all analyses outlined in the original protocol. However, workstream 2, an exploration of how reported GP–patient communication varies by ethnicity stratified by age and gender, was an additional analysis undertaken to gain better insight into the particular combinations of patient characteristics associated with the most negative reported experiences of care.

Background to the GP Patient Survey

The GP Patient Survey was started in 2007 as a national postal survey of primary care patients. Each year it takes a random sample of patients registered at all NHS primary care practices and sends out a questionnaire covering key aspects of patient experience, including access, waiting times and communication with doctors and nurses. Findings from the survey are disseminated widely and are available to practitioners and patients through the dedicated GP Patient Survey website.[11] In 2014/15, a questionnaire was sent to 2.6 million patients, of whom 858,381 responded (a 32.5% response rate). Respondents may complete the survey by post or online, including in British Sign Language, and in 13 languages other than English, either online or by telephone.

The original GP Patient Survey questionnaire was developed iteratively, with guidance from stakeholders and experts, cognitive testing of items and extensive piloting.[130] It has been further developed over the years, with changes to the content and technical aspects including survey weighting.

Workstream 1: do poor patient experience scores of minority ethnic groups reflect their concentration in poorly performing primary care practices?

Aims and objectives

The aim of this workstream was to investigate the causes of sociodemographic variations in patient experience. There were two specific objectives:

1. Do minority ethnic group differences in reported GP–patient and nurse–patient communication arise from the concentration of minority ethnic patients in practices with lower than average performance?
2. Do minority ethnic group differences in reported GP–patient and nurse–patient communication vary substantially across practices?

Methods

We analysed data from the 2009/10 GP Patient Survey.[11] Drawing on our previous principal components analysis of survey data, we constructed a measure of reported GP–patient and nurse–patient communication from seven communication items (*Table 13*).[130] From these, we created a composite score for all responders who provided three or more informative responses; this was derived by linear rescaling of the responses between 0 and 100 and taking the mean of all subitems answered.

Patient-reported age group, gender, ethnicity, self-rated health and presence of a long-standing psychological or emotional condition were taken directly from survey responses. Socioeconomic status was measured using an area-based approach, the Index of Multiple Deprivation (IMD),[155] based on the patients' residential postcode. For analysis, we split the IMD into five groups, based on national quintiles.

To examine our first objective (to distinguish the effects of the concentration of some minority ethnic groups in low-scoring practices from the variation in scores of different population groups within practices), we combined two analytical strategies:

1. Fixed-effects multivariable linear regression models to predict patient experience measures only from patient sociodemographic characteristics. These models estimate overall sociodemographic differences in patient experience that arise both because some patient groups are concentrated in low-performing practices and because the scores of patients of different groups vary within the same practices.
2. Mixed-effects models that included patient sociodemographic variables as fixed effects plus a random effect (intercept) for practice. These models estimate only the sociodemographic differences that arise because the scores of patients from different groups vary within the same practices.

TABLE 13 General practitioner and nurse communication items for the 2009 GP Patient Survey

Last time you saw or spoke to a GP/nurse from your GP surgery, how good was that GP/nurse at each of the following? Please put a ✗ in one box for *each* row	Very good	Good	Neither good nor poor	Poor	Very poor	Doesn't apply[a]
Giving you enough time	☐	☐	☐	☐	☐	☐
Asking about your symptoms	☐	☐	☐	☐	☐	☐
Listening to you	☐	☐	☐	☐	☐	☐
Explaining tests and treatments	☐	☐	☐	☐	☐	☐
Involving you in decisions about your care	☐	☐	☐	☐	☐	☐
Treating you with care and concern	☐	☐	☐	☐	☐	☐
Taking your problems seriously	☐	☐	☐	☐	☐	☐

a Considered to be uninformative for the purposes of our analysis.

We used the difference between the coefficients of the first and the second models to indicate the amount of overall difference arising from the concentration of any given population group in practices with low scores.

To examine our second objective (to assess whether or not sociodemographic differences are consistent among practices) we added random effects (slopes) to the above models corresponding to the interaction of each patient characteristic variable with the 'practice' random effect (random slope random intercept models). From those models, using a normal approximation, we derived the '95% mid range of practice-level coefficients' for each sociodemographic group, which indicates the range of practice-level sociodemographic differences within which 95% of all practices lie.

SAS 9.2 was used for random slope random intercept models and Stata 11 was used for all other analyses.

Results

There were 2,163,456 responses to the GP Patient Survey in 2009, representing an overall response rate of 38%. *Table 14* shows the response by ethnic group.

The reported experiences of GP–patient communication by Bangladeshi, Pakistani, Indian and Chinese respondents were 9, 7, 6 and 8 percentile points more negative, respectively, than those by white British patients (*Table 15*).

TABLE 14 Ethnicity of respondents to the 2009 GP Patient Survey

Ethnic group	Survey respondents, *n*	Percentage of survey respondents
White		
White British	1,718,133	82.0
Irish	29,930	1.4
Any other white	61,087	2.9
Mixed		
White and black Caribbean	4549	0.2
White and black African	2825	0.1
White and Asian	4142	0.2
Any other mixed	3564	0.2
South Asian		
Indian	53,484	2.6
Pakistani	33,517	1.6
Bangladeshi	10,974	0.5
Any other Asian	14,930	0.7
Black		
Black Caribbean	25,231	1.2
Black African	28,349	1.4
Any other black	4174	0.2
Chinese	9759	0.5
Other ethnic group	90,644	4.3

Note
Subtotals sum to 2,095,292 rather than 2,163,456 because of missing data.

TABLE 15 Sociodemographic differences in reports of GP–patient communication (scale 0–100)

Ethnic group	Overall difference (SE)[a]	Difference (SE) attributable to different evaluations of care within the same practice[a]	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores
White				
White British	Reference			
Irish	–0.2 (0.141)	0.6 (0.138)	–0.8	353[b]
Any other white	–4.1 (0.096)	–3.2 (0.094)	–0.9	22
Mixed				
White and black Caribbean	–1.9 (0.355)	–0.8* (0.346)	–1.1	56
White and black African	–3.5 (0.447)	–1.9 (0.435)	–1.6	46
White and Asian	–3.4 (0.358)	–2.2 (0.348)	–1.1	33
Any other mixed	–4.7 (0.405)	–3.3 (0.394)	–1.4	31
South Asian				
Indian	–6.1 (0.101)	–3.2 (0.109)	–3.0	48
Pakistani	–7.2 (0.132)	–3.8 (0.145)	–3.4	48
Bangladeshi	–8.6 (0.233)	–5.3 (0.242)	–3.4	39
Any other Asian	–4.3 (0.194)	–2.1 (0.192)	–2.2	51
Black				
Black Caribbean	–2.7 (0.155)	–0.5 (0.156)	–2.2	82
Black African	–2.6 (0.143)	–0.2** (0.144)	–2.4	94
Any other black	–2.0 (0.405)	–0.2*** (0.394)	–1.8	89
Chinese	–8.3 (0.230)	–7.2 (0.225)	–1.1	14
Other ethnic group	–4.7 (0.081)	–3.2 (0.081)	–1.5	32

*$p = 0.015$; **$p = 0.269$; ***$p = 0.579$.
SE, standard error.
a All coefficients are significant at the < 0.001 level except as annotated.
b Proportions > 100% reflect situations in which differences attributable to different evaluations of care within the same practice, and differences attributable to the concentration of different patient groups in practices with different mean scores are opposite in direction. Here, for example, white Irish patients are concentrated in low-scoring practices but report better care than white British patients looked after by the same practices.

There were similar findings for nurse–patient communication (*Table 16*).

Our first objective in this strand of work was to examine whether or not such overall minority ethnic differences in experiences of care arise from the concentration of these patients in practices with lower than average performance. By comparing the coefficients obtained from the fixed- and mixed-effects model for GP–patient communication, we identified that the concentration of minority ethnic groups in low-scoring practices was responsible for about 50% of the difference between South Asian and white British patients. However, even after accounting for the effect of the concentration of these groups in practices with lower scores, South Asian patients reported more negative experiences of care than their white British counterparts within the same practice.

TABLE 16 Sociodemographic differences in reports of nurse–patient communication (scale 0–100)

Ethnic group	Overall difference (SE)	Difference (SE) attributable to different evaluations of care within the same practice	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores
White				
White British	Reference			
Irish	–0.5 (0.168)	0.4 (0.166)	–0.9	> ±100[a]
Any other white	–3.2 (0.118)	–2.4 (0.117)	–0.8	25
Mixed				
White and black Caribbean	–1.7 (0.446)	–0.8 (0.439)	–0.9	51
White and black African	–4.0 (0.570)	–2.5 (0.561)	–1.5	38
White and Asian	–4.2 (0.459)	–3.3 (0.452)	–0.9	22
Any other mixed	–4.1 (0.507)	–2.6 (0.499)	–1.5	37
South Asian				
Indian	–7.2 (0.123)	–5.1 (0.134)	–2.1	29
Pakistani	–7.8 (0.165)	–5.9 (0.179)	–1.9	24
Bangladeshi	–9.6 (0.309)	–7.3 (0.319)	–2.3	24
Any other Asian	–6.2 (0.244)	–4.3 (0.244)	–1.9	30
Black				
Black Caribbean	–3.4 (0.192)	–1.4 (0.195)	–2.0	60
Black African	–4.0 (0.1481)	–1.4 (0.184)	–2.2	55
Any other black	–3.6 (0.492)	–1.9 (0.485)	–1.7	47
Chinese	–9.4 (0.314)	–8.3 (0.311)	–1.2	12
Other ethnic group	–4.7 (0.101)	–3.3 (0.102)	–1.4	29

SE, standard error.
a Proportions > 100% reflect situations in which differences attributable to different evaluation of care within the same practice, and differences attributable to the concentration of different patient groups in practices with different mean scores are opposite in direction.

Our second objective was to examine whether or not minority ethnic differences varied between as well as within practices. *Table 17* shows that within-practice ethnic group differences in reported GP–patient communication varied substantially across practices, alongside other key measures of patient experience. On average, South Asian patients evaluated doctor communication more negatively than white British patients (–4 percentile points); however, in some practices South Asian patients reported more positive experiences of GP–patient communication than their white British counterparts (95% practice mid range for differences in doctor communication: –13 to +4 percentile points; positive values indicate a better patient experience than in the majority white British group). Again, we found a similar picture for nurse–patient communication (*Table 18*).

Summary

This analysis of GP Patient Survey data confirmed that South Asian respondents report substantially more negative experiences of patient communication than their white British counterparts. Around half of this was due to the concentration of these patients in low-performing practices. However, differences in

TABLE 17 Mean ethnic group difference (percentile points) and degree of consistency in ethnic group differences across practices (indicated by the respective 95% mid range) for GP–patient communication ratings

Ethnic group	Mean difference in GP–patient communication scores[a]	95% mid range of practice differences
South Asian[b]	–4.3	–12.6 to 4.0
Black[b]	–1.4	–7.9 to 5.0
Chinese[b]	–8.5	–18.3 to 1.3
Mixed[b]	–3.9	–16.1 to 8.2
Other[b]	–4.3	–11.7 to 3.1

a All differences significant at $p < 0.0001$.
b All interaction (case-mix adjuster*practice) variance components were significant at < 0.0001.

TABLE 18 Mean ethnic group difference (percentile points) and degree of consistency in ethnic group differences across practices (indicated by the respective 95% mid range) for nurse–patient communication ratings

Ethnic group	Mean difference in nurse–patient communication scores[a]	95% mid range of practice differences
South Asian[b]	–5.9	–14.0 to 2.1
Black[b]	–2.2	–8.3 to 3.8
Chinese[b]	–9.2	–23.6 to 5.2
Mixed[b]	–3.4	–18.2 to 11.5
Other[b]	–3.9	–12.0 to 4.3

a All differences significant at $p < 0.0001$.
b All interaction (case-mix adjuster*practice) variance components were significant at < 0.0001.

reported experiences also varied substantially between practices: as well as more negative reports of care, in some practices South Asian patients evaluated their experience similarly or more positively than their white British counterparts.

These findings suggest that there may be a number of drivers behind the more negative reports of GP–patient communication seen in national patient experience surveys. However, the experimental vignette work that we conducted (see *Chapter 6*) enabled us to determine more clearly where the most plausible explanations lie.

Workstream 2: how does reported general practitioner–patient communication vary between patients from different ethnic groups, stratified by age and gender?

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Aims

Although our earlier analyses confirmed the variation in reported experience between minority ethnic groups within the GP Patient Survey, the question remained whether or not more negative experiences of care are consistent across respondents within a particular ethnic group. Recently, interactions between age and ethnicity have been identified for patient reports of the number of GP consultations that take place before hospital referral for cancer.[157] To explore whether or not such interactions exist for our focus area of patient experience, GP–patient communication, we undertook further analysis of GP Patient Survey data to determine how reported GP–patient communication varies between patients from different ethnic groups by age and gender.

Methods

We analysed data from the 2012/13 and 2013/14 GP Patient Survey.[11] By combining data from 2 years of the survey, we were able to increase the number of responses available for analysis from small ethnic groups. No patient receives the survey in 2 consecutive years so there was no risk of double counting respondents.

Following the same approach outlined earlier in this chapter, we constructed a measure of reported GP–patient communication from five of the communication items used in the most recent GP Patient Surveys; these were reduced from the seven used in earlier questionnaires (*Table 19*).[130]

We created a composite score for all responders who provided three or more informative responses. This was derived by linear rescaling of the responses between 0 and 100 and taking the mean of all sub-items answered. Patient-reported age group, gender and ethnicity were taken directly from survey responses. Health-related quality of life was measured using responses to five questions that make up the EuroQol-5 Dimensions three-level version (EQ-5D-3L) descriptive system.[158] Socioeconomic status was measured using an area-based approach, the IMD, based on patients' residential postcode.[155] For analysis, we split the IMD into five groups, based on national quintiles.

We used a mixed-effect linear regression model with GP–patient communication score as the outcome. The model included age, gender, ethnicity, EQ-5D score and deprivation as fixed effects, as well as a random effect (intercept) for practice to account for the fact that certain patient groups cluster in practices that may perform better or worse overall. We included in the model all possible two-way interactions between age, gender and ethnicity, as well as the three-way interaction between them, to allow the effect of ethnicity to vary between different age and gender groups. We used Wald tests of the interaction terms to assess evidence supporting this variation. We then used the models to estimate age- and gender-specific differences between white British patients and patients of the same age and gender from each of the other ethnic groups. All analyses were carried out using Stata 13.1.

TABLE 19 General practitioner and nurse communication items for the 2012/13 and 2013/14 GP Patient Surveys

Last time you saw or spoke to a GP/nurse from your GP surgery, how good was that GP/nurse at each of the following? Please put a *x* in one box for *each* row	Very good	Good	Neither good nor poor	Poor	Very poor	Doesn't apply[a]
Giving you enough time	☐	☐	☐	☐	☐	☐
Listening to you	☐	☐	☐	☐	☐	☐
Explaining tests and treatments	☐	☐	☐	☐	☐	☐
Involving you in decisions about your care	☐	☐	☐	☐	☐	☐
Treating you with care and concern	☐	☐	☐	☐	☐	☐
a Considered to be uninformative for the purposes of our analysis.						

Results

There were 1,874,589 responses to the GP Patient Survey across 2012/13 and 2013/14, representing an overall response rate of 35%. Of these responses, 1,599,801 (85%) had complete data for all items included in our analysis. *Table 20* shows the numbers of respondents in each ethnicity group. The largest group of responders were white British (*n* = 1,323,621, 82%), although there were at least 1800 responders in all but one group (that of gypsy or Irish traveller). *Figure 10* shows the age composition of each ethnic group. White British and white Irish responders tended to be older than those from other ethnic groups and are dominated by those aged ≥ 55 years. In contrast, for nearly all other ethnicities the majority of responders were aged < 45 years. We therefore had very few responses in the oldest age groups (particularly those aged ≥ 85 years) for a number of ethnicities (see *Table 20* for details).

From the regression model (adjusting for deprivation, EQ-5D score and practice) there was strong evidence (*p* < 0.001 for age*gender*ethnicity three-way interaction term) that the effect of ethnicity on reported

TABLE 20 Ethnicity make-up of the sample for all ages and those aged ≥ 85 years

Ethnicity	All ages, *n* (%)	Aged ≥ 85 years, *n* (%)
White		
British	1,323,621 (82.7)	49,891 (93.1)
Irish	16,330 (1.0)	662 (1.2)
Gypsy or Irish traveller	401 (0.0)	6 (0.0)
Any other white	71,105 (4.4)	1386 (2.6)
Mixed/multiple ethnic groups		
White and black Caribbean	3413 (0.2)	26 (0.0)
White and black African	1865 (0.1)	4 (0.0)
White and Asian	3171 (0.2)	18 (0.0)
Any other mixed	3340 (0.2)	15 (0.0)
Asian/Asian British		
Indian	38,705 (2.4)	425 (0.8)
Pakistani	20,729 (1.3)	143 (0.3)
Bangladeshi	6699 (0.4)	23 (0.0)
Chinese	7986 (0.5)	66 (0.1)
Any other Asian	19,812 (1.2)	105 (0.2)
Black/African/Caribbean/black British		
African	21,131 (1.3)	24 (0.0)
Caribbean	13,715 (0.9)	275 (0.5)
Any other black	6061 (0.4)	52 (0.1)
Other ethnic group		
Arab	2786 (0.2)	16 (0.0)
Other	38,931 (2.4)	458 (0.9)
Total	1,599,801 (100.0)	53,595 (100.0)
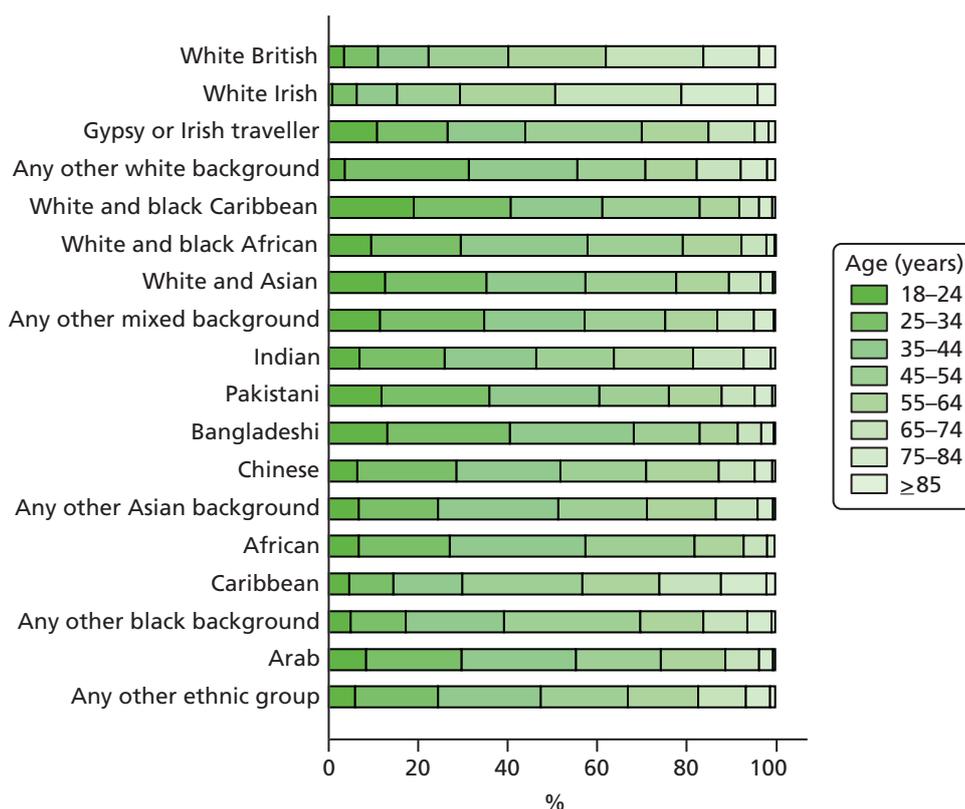
FIGURE 10 Age composition of responders according to self-reported ethnicity. Reproduced from Burt J, Lloyd C, Campbell J, Roland M, Abel G. Variations in GP–patient communication by ethnicity, age, and gender: evidence from a national primary care patient survey. *Br J Gen Pract* 2016;**66**:e47–52[156] under the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0/), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

GP–patient communication varied by both age and gender.[156] *Figure 11* shows the age- and gender-specific adjusted differences between white British responders and responders of the same age and gender from all Asian subgroups and white (non-British) ethnic groups. Negative differences indicate that responders reported a worse experience than their white British counterparts (i.e. of the same age and gender). Again, as with our previous analyses, the largest differences were seen in Asian ethnic groups, followed by white (non-British) ethnic groups.

Differences in reported experiences of GP–patient communication between Asian groups and the white British group were particularly large for older responders (those aged ≥ 55 years). This differential effect of ethnicity was particularly marked in Bangladeshi responders and in women (see *Figure 11* for details). For example, the difference in reported experience scores between a white British women aged from 75 to 84 years and a Bangladeshi woman of the same age range was –8.23 points on the 0–100 scale (95% CI –12.76 to –3.69 points). However, the differences between Indian, Pakistani and Bangladeshi groups and white British responders among younger age groups were fairly small. For example, the difference in reported experience scores between a white British women aged from 35 to 44 years and a Pakistani woman of the same age range was –2.72 points (95% CI –3.42 to –2.02 points). For Chinese responders, substantial negative differences compared with white British counterparts were seen across all age groups.

In contrast to Asian responders, for those responders identified as 'any other white', ethnic variations in reported communication were largest for younger responders (those aged < 55 years). We found few differences in reported experience over all ages for African, Caribbean and other black responders. Because of the smaller sample sizes, our ability to detect differences for mixed ethnic groups was limited. However, we note that there were more substantial (and statistically significant) negative differences for other Asian women (at all ages) and for white and Asian women (particularly at older ages).
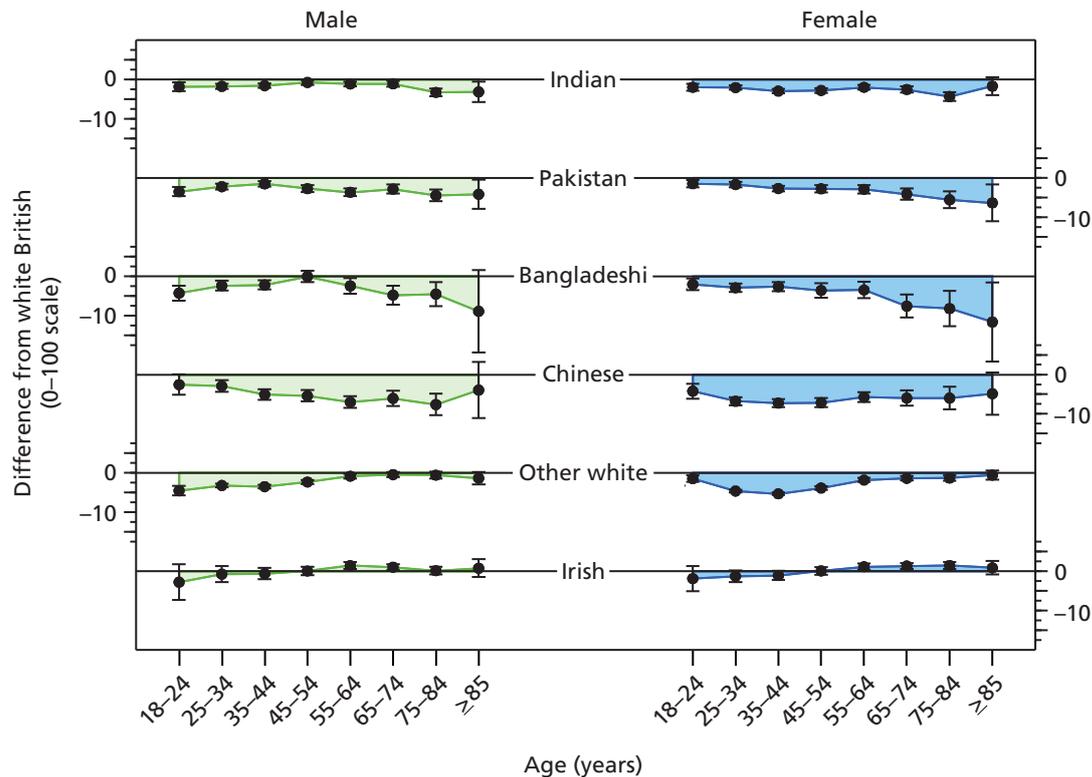
FIGURE 11 Age- and gender-specific differences with 95% CIs in reported GP–patient communication scores (0–100 scale) between white British patients and responders in Asian and white (non-British) ethnic groups. Burt J, Lloyd C, Campbell J, Roland M, Abel G. Variations in GP–patient communication by ethnicity, age, and gender: evidence from a national primary care patient survey. *Br J Gen Pract* 2016;**66**:e47–52[156] under the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0/), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

Summary

This analysis of GP Patient Survey data has shown that the effect of ethnicity on reported GP–patient communication varies by age and gender. In comparison to white British responders of the same age and gender, poorer experience scores for GP–patient communication are particularly marked in older, female Asian patients and in younger 'any other white' patients. This highlights the need to focus not just on ethnic background but on how this interacts with other patient characteristics such as age and gender in its association with more negative reported experiences of care.

Workstream 3: is there evidence that the GP Patient Survey communication items perform differently for South Asian and white British respondents?

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Aims and objectives

As already outlined, observations of poorer reported experience for certain minority ethnic groups may be attributed either to variations in the way in which they rate their care or to variations in the care actually received. Item response theory is one approach to exploring whether observed differences in survey responses may be attributable to true differences in health care or to differences in responses.[160,161] The aim of this strand of work was to use item response theory modelling to test for evidence that the GP

Patient Survey communication items perform differently for South Asian and white British respondents, after controlling for other sociodemographic characteristics.

Methods

We analysed data from the 2011/12 GP Patient Survey.[11] We restricted the analysis to patients who responded to items about experience with GP and nurse care and who self-reported white British ($n = 818,219$) or South Asian ethnicity ($n = 54,832$). As before, we used the five GP–nurse–patient communication items (giving enough time, listening, explaining tests and treatments, involving in decisions about care and treating with care and concern).

Item response theory approaches were used to test for DIF for white British and South Asian responses (i.e. whether or not white British and South Asian patients have different understandings and scaling of the survey items). We conducted separate analyses for the GP and nurse communication items. In item response theory models, items vary in 'difficulty' (the extent to which they are easy for providers to 'pass') and patients differ in 'ability' (true health-care experiences). Item response theory models also allow subgroups, such as ethnic subgroups, to differ in true experiences or scale use in a way that is *uniform* across all items that attempt to measure a single construct (such as patient experience). Differences between groups, also known as DIF,[161–163] provide evidence that items are not equivalent in meaning across subgroups and an unmeasured dimension other than the intended construct may be influencing item responses. Ideally, item response theory models can rely on an unimpeachable anchor item[164] that measures the same construct as the other items but which is known to be completely unaffected by factors other than true care. This is quite rare in practice and so the all-items method, also known as the Wald-2 equating method,[165,166] is more commonly used, in which designated anchors are not required. This approach links the metric of the construct of interest (patient experience) across South Asian and white British patients simultaneously and then all item parameters (item difficulty and ability) are estimated using the linked construct but they are free to vary between groups, effectively allowing the assessment of whether or not the differences between the groups that are being compared are consistent across items. In this approach, inconsistent differences across items are taken as evidence of DIF.

The absence of evidence of DIF is not *conclusive* evidence of equivalence, as it may reflect lack of power or it may reflect differences in scale use or expectations that are uniform across items in a scale. Because it is often considered unlikely that scale use and expectations would have the same effects on different items, lack of evidence of DIF in a well-powered study such as the present study is often seen as suggestive that true differences play a non-negligible role in observed differences in mean scores.

Unidimensionality and differential item functioning analysis

Because of the large sample sizes (white British, $n = 818,219$; South Asian, $n = 54,832$), power to detect statistical significance for even very small differences with a classic chi-squared or Wald test was very high, even after a Benjamini–Hochberg adjustment for multiple comparisons.[166] Consequently, the root-mean-square error of approximation (RMSEA), a transformed Wald chi-squared statistic that measures the degree of misfit independently of sample size, was used for DIF inference.[167] The item response theory DIF analyses were conducted in flexMIRT version 2.0.[166] To assess the possibility that our inferences of white British/South Asian differences were biased by potential confounders such as age, gender, chronic conditions and quality of life we conducted an additional sensitivity analysis with a matched sample of 54,484 South Asian and 54,484 white British patients with exactly the same characteristics on these potential confounders. The few South Asian patients with no match (0.63%) were dropped from the analysis.

Results

Using the DIF all-other anchor selection method with the Wald-2 equating algorithm, we found no items with DIF. These results are shown in *Table 21* for both the full and the matched sample of patients. The RMSEA fit statistic was < 0.0085 for all GP items and < 0.0140 for all nurse items, suggesting the absence of DIF. In general, discrimination parameters typically range from 0.5 to 2, with higher values indicating items that better discriminate between levels of the latent construct,[169] in this case patient experience.

TABLE 21 Estimated item parameters from the graded response model in the full ($n = 873,051$) and the matched ($n = 108,968$) sample

Items	Ethnicity	GP items Difficulty parameters b_2	b_3	b_4	b_5	a	RMSEA	Nurse items Difficulty parameters b_2	b_3	b_4	b_5	a	RMSEA
Full sample													
1. Provider giving you enough time	South Asian	−2.44	−2.03	−1.39	−0.18	4.82	0.0077	−2.65	−2.24	−1.57	−0.28	5.90	0.0084
	White British	−2.62	−2.11	−1.40	−0.21	4.50		−2.80	−2.33	−1.62	−0.36	5.47	
2. Provider listening to you	South Asian	−2.43	−1.99	−1.43	−0.25	6.25	0.0068	−2.62	−2.20	−1.56	−0.30	7.86	0.0082
	White British	−2.44	−1.96	−1.38	−0.26	6.82		−2.66	−2.19	−1.48	−0.30	8.11	
3. Provider explaining tests and treatments	South Asian	−2.44	−2.02	−1.33	−0.15	5.39	0.0083	−2.63	−2.26	−1.50	−0.26	6.36	0.0098
	White British	−2.57	−2.08	−1.29	−0.15	5.00		−2.76	−2.30	−1.44	−0.26	5.71	
4. Provider involving you in decisions about your care	South Asian	−2.34	−1.88	−1.16	0.02	5.15	0.0094	−2.58	−2.15	−1.33	−0.11	5.84	0.0147
	White British	−2.46	−1.94	−1.11	0.02	4.85		−2.69	−2.20	−1.22	−0.07	5.12	
5. Provider treating you with care and concern	South Asian	−2.32	−1.91	−1.27	−0.11	5.93	0.0068	−2.56	−2.17	−1.47	−0.22	6.52	0.0069
	White British	−2.39	−1.93	−1.24	−0.15	6.07		−2.59	−2.18	−1.49	−0.28	6.15	
Matched sample for sensitivity analysis													
1. Provider giving you enough time	South Asian	−2.28	−1.87	−1.24	−0.04	4.86	0.0153	−2.54	−2.13	−1.47	−0.20	6.02	0.0184
	White British	−2.44	−1.94	−1.25	−0.07	4.44		−2.68	−2.20	−1.53	−0.25	5.28	
2. Provider listening to you	South Asian	−2.27	−1.83	−1.28	−0.12	6.36	0.0083	−2.50	−2.09	−1.45	−0.21	8.04	0.0121
	White British	−2.28	−1.79	−1.24	−0.12	6.70		−2.54	−2.07	−1.39	−0.22	7.99	
3. Provider explaining tests and treatments	South Asian	−2.27	−1.86	−1.18	−0.02	5.46	0.0187	−2.52	−2.15	−1.40	−0.17	6.42	0.0207
	White British	−2.41	−1.91	−1.15	−0.01	4.89		−2.66	−2.18	−1.37	−0.18	5.63	

continued

TABLE 21 Estimated item parameters from the graded response model in the full ($n = 873,051$) and the matched ($n = 108,968$) sample (*continued*)

Items	Ethnicity	GP items						Nurse items					
		Difficulty parameters						Difficulty parameters					
		b_2	b_3	b_4	b_5	a	RMSEA	b_2	b_3	b_4	b_5	a	RMSEA
4. Provider involving you in decisions about your care	South Asian	−2.18	−1.73	−1.01	0.15	5.15	0.0203	−2.47	−2.04	−1.22	−0.02	5.90	0.0318
	White British	−2.31	−1.78	−0.97	0.13	4.75		−2.60	−2.10	−1.14	−0.01	5.05	
5. Provider treating you with care and concern	South Asian	−2.16	−1.75	−1.11	0.03	5.98	0.0108	−2.44	−2.06	−1.37	−0.14	6.63	0.0147
	White British	−2.21	−1.76	−1.10	−0.01	6.16		−2.44	−2.05	−1.40	−0.20	6.32	

Notes
Only observations with at least one non-missing item were used in each analysis, so sample sizes were 866,460 and 94,002 for the full and matched sample analysis, respectively, for GP items and 783,904 and 82,162 for the full and matched sample analysis, respectively, for nurse items. 'a' indicates item discrimination parameters and 'b2', 'b3', 'b4' and 'b5' indicate item location or difficulty parameters from the Samejima's graded response model.[168]
Reproduced with permission from Setodji CM, Elliott MN, Abel G, Burt J, Roland M, Campbell J. Evaluating differential item functioning in the English general practice patient survey. Comparison of South Asian and white British subgroups. *Med Care* 2015;**53**:809–17.[159]

In this study, all item discrimination parameters ('a' in *Table 21*) exceeded 4.4, showing that all items are highly related to the overall score within the GP or nurse item set. The item difficulty parameters, which indicate the level of patient experience, θ, at which an item has a 50% chance of endorsement, would typically fall between –2 (2.5th percentile) and +2 (97.5th percentile).[170] In this study, they ranged from –2.62 to 0.03 for GP items and from –2.80 to –0.01 for nurse items (columns b_2–b_5 in *Table 21*), indicating that the scales best measure average and below-average experiences. They also indicate that a merely average patient experience (θ) results in a 50% chance of endorsing the highest response of 'very good,' consistent with the high numbers of patients endorsing the 'very good' response options.

Figure 12 illustrates the response curves for the parameters in *Table 21*. For each item, five response curves, each representing the probability of endorsing a specific category over the range of the underlying patient experience, showed no visual difference between South Asian and white patients, which is consistent with there being no meaningful DIF. The test characteristic curves depicting the expected scale scores of the GP and nurse items as a function of patient experience on the item response theory scale for the two groups also show no difference between the two groups (*Figure 13*).

Summary

These analyses found no evidence of meaningful DIF for white British and South Asian patients on GP–patient and nurse–patient communication items. These findings remained even after matching patients on a variety of sociodemographic characteristics. We suggest that the lack of evidence of DIF may be consistent with either (1) there being no differences in expectations or scale use between white British and South Asian respondents or (2) there being differences in expectations and/or scale use between groups that were the same across all items. It is possible that similar differences in scale use may occur across all items, as the response scale and labels remain the same. It is somewhat less likely that there are differences in expectations which remain constant across items that vary in content. Although we cannot exclude other possibilities, these findings do increase the likelihood that there is a role for true differences in the quality of care received by South Asian groups in comparison with the white British majority.

Workstream 4: how do practice factors influence general practitioner–patient communication scores?

Aims and objectives

The previous work described in this chapter focused on patient-level factors that may influence reported patient experience to try and gain insight into what is driving differences between different patient groups. In workstream 1 we explored to what extent clustering of certain patient groups in practices with better or worse patient experience scores overall explained differences between groups. Here, we take this one step further and investigate the factors describing a practice that are associated with GP–patient communication scores. We considered three different categories of practice factors: (1) practice geography, (2) practice professional team and (3) practice population. In each case we looked at the differences in communication scores that are associated with these factors and how much of the between-practice variance is explained by them.

Methods

We analysed data from the 2009/10 GP Patient Survey.[11] We used the same composite outcome measure for GP–patient communication, using the seven communication items (see *Table 13*) and taking values between 0 and 100. Identical patient-level exposure variables were used. In addition, we made use of practice-level variables from a number of sources.

Practice geography factors

As a proxy for geographical region, we used the former strategic health authority (SHA) to which a practice belonged, of which there are 10. We defined a rurality classification [based on the Office for
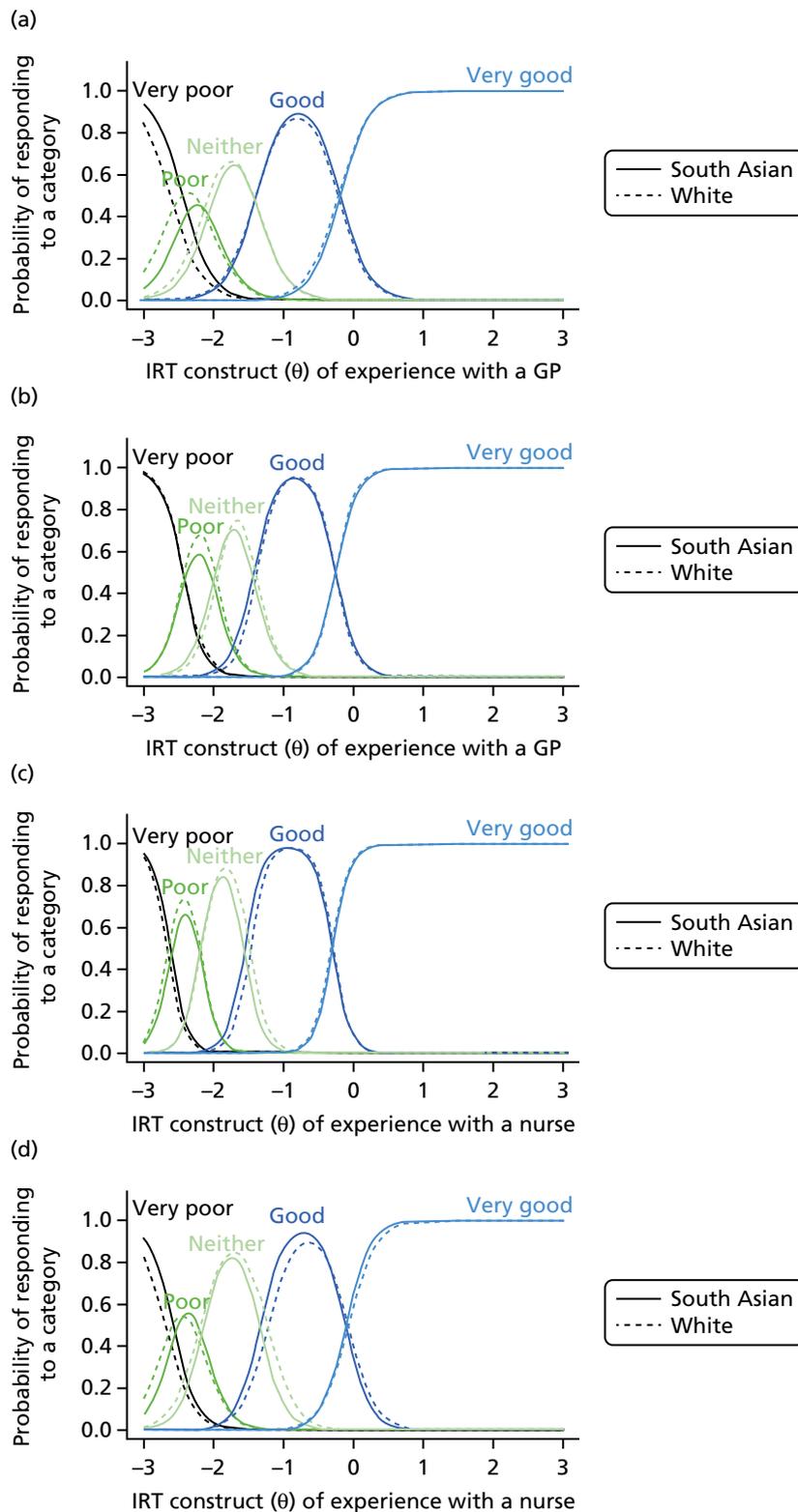
FIGURE 12 Full sample response curves for patient experience: (a) GP item 1: giving you enough time; (b) GP item 2: listening to you; (c) nurse item 2: listening to you; and (d) nurse item 4: involving you in care decisions. Plots for only two items each are reported, but all of the other GP/nurse items had similar response curves. Note: the x-axis is the item response theory parameter estimate (θ) for the construct (patient experience) on a z-score metric. The y-axis is the probability of endorsing each response option at given estimates of patient experience–quality level for South Asian and white British patients. Samples of 866,460 and 783,904 were used for the GP and the nurse survey items, respectively. IRT, item response theory. Reproduced with permission from Setodji CM, Elliott MN, Abel G, Burt J, Roland M, Campbell J. Evaluating differential item functioning in the English general practice patient survey. Comparison of South Asian and white British subgroups. *Med Care* 2015;**53**:809–17.[159]
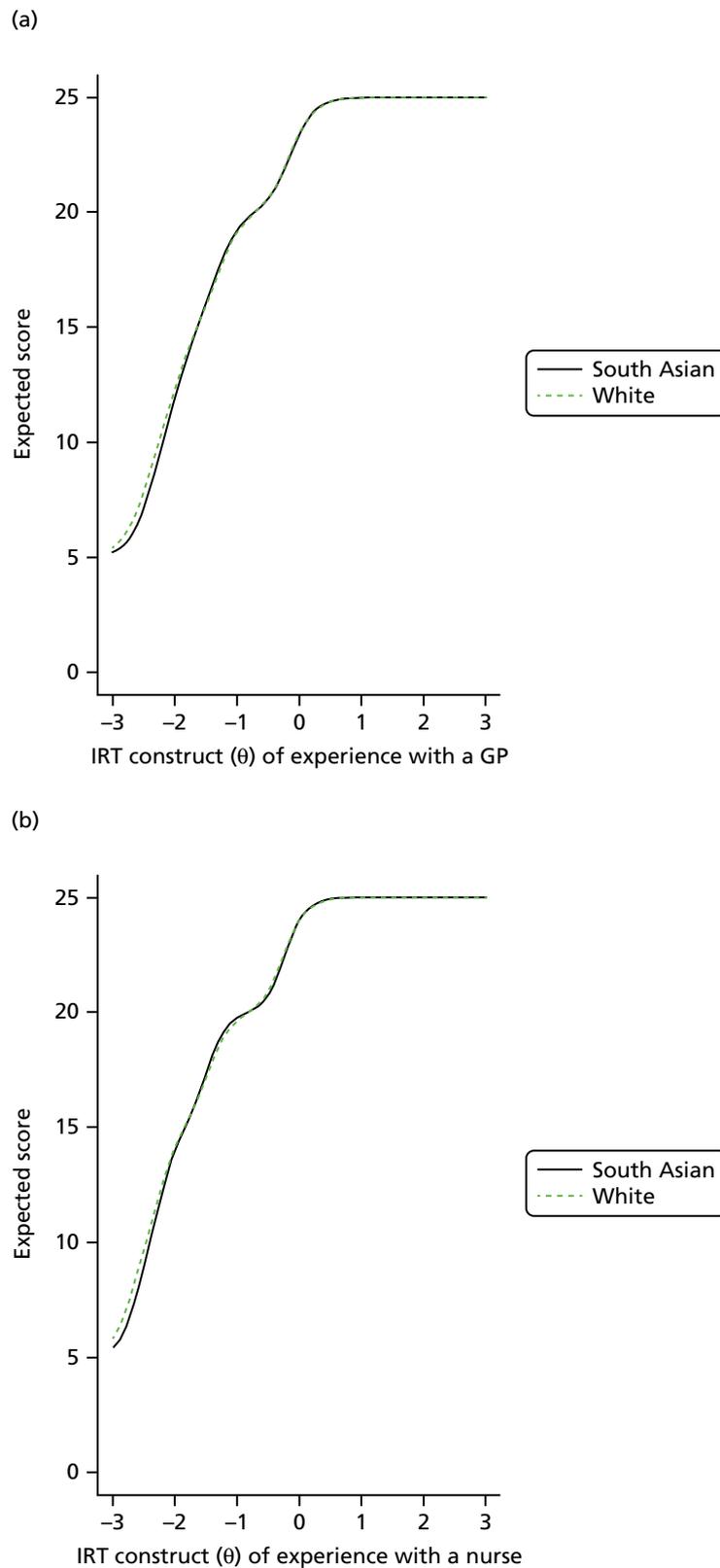
FIGURE 13 Full sample test characteristic curves (TCCs): (a) TCC for GP questions; and (b) TCC for nurse questions. IRT, item response theory. Reproduced with permission from Setodji CM, Elliott MN, Abel G, Burt J, Roland M, Campbell J. Evaluating differential item functioning in the English general practice patient survey. Comparison of South Asian and white British subgroups. *Med Care* 2015;**53**:809–17.[159]

National Statistics (ONS) definitions[171]] according to the postcode of the practice. Both SHA and rurality were included with the GP Patient Survey data set.

Practice professional team factors

Here, we used data from the GP census 2009 to calculate for each practice (data provided directly by the Department of Health):

(a) the number of GPs excluding trainees
(b) the number of patients per full-time equivalent GP
(c) the mean number of years since qualification of the GPs
(d) the proportion of male GPs
(e) the proportion of GPs who trained in the UK for their primary medical qualification.

Practice population factors

We calculated a score for socioeconomic deprivation for each practice by applying the 2007 lower super output area IMD proportionately to the practice population.[170] We used GP Patient Survey results to estimate the proportion of black, Asian, Chinese, mixed race and other non-white patients in each practice. Registered patient numbers, broken down by gender and age group, were provided by the NHS Information Centre and used to calculate the proportion of patients in each practice who were children (aged < 15 years) and the proportion of adult patients in the following age groups: 15–44, 45–64, 65–74, 75–84 and ≥ 85 years.

Starting from the random intercept model used in workstream 1 (including fixed effects for patient age, gender, deprivation, ethnicity and self-rated health and a random intercept for practice), we added practice-level variables for the factors described above. To facilitate comparison between different variables with different distributions and units we scaled all continuous variables (including proportions) such that a difference of 1 corresponded to the difference between the 95th and 5th percentile of the distribution for that variable. The corresponding coefficients from the regression model can be interpreted as the adjusted differences between practices at either end of the distribution, ignoring outliers. We estimated the amount of variance in practice scores attributable to single or multiple variables by comparing the variance of the random effect in a model containing no practice-level variables with the variance of the random effect in a second model containing a single or multiple practice-level variables. We subsequently estimated the amount of variance in practice scores *uniquely* attributable to single or multiple variables by comparing the variance of the random effect in a model containing all practice-level variables with the variance of the random effect in a second model with one or more practice-level variables omitted.

Results

Table 22 shows the results of the regression model for practice-level variables (patient-level variables are not shown but are consistent with those shown in workstream 1). In relation to practice team factors, practices with a large number of GPs, a high number of patients per full-time equivalent GP and doctors who, on average, completed training a longer time ago tended to have worse GP–patient communication scores. In comparison, those with a high proportion of GPs trained in the UK had better GP–patient communication scores. For geographical factors, practices in London and urban areas received the worst scores. Finally, in relation to practice population factors, those practices that served populations with relatively more men and Asian and black patients and patients aged < 85 years tended to have worse scores for GP–patient communication. It is worth noting that these population coefficients have been controlled for individual characteristics and so do not represent the fact that these patient groups score worse, but rather that practices who have more of these patient groups tend to have worse scores for all patients.

In total, this model explained 35.4% of the between-practice variance in GP–patient communication scores. Practice team factors explained 25.9% of the total practice-level variance and 11.5% was explained uniquely by practice team factors (i.e. could not be explained by other factors). The corresponding

TABLE 22 Regression coefficients for practice predictors[a]

Practice-level variables	Regression coefficient (95% CI)
Practice professional team	
GP team (95th vs. 5th percentile)	
Mean years since qualification	−1.5 (−1.9 to −1.1)
Proportion male GPs	0.3 (0.0 to 0.6)
Proportion UK qualified	4.0 (3.6 to 4.3)
Patients per FTE	−1.9 (−2.2 to −1.7)
Number of GPs	
1	Reference
2	−0.6 (−1.0 to −0.3)
3	−0.8 (−1.2 to −0.4)
4	−1.0 (−1.5 to −0.6)
5	−1.1 (−1.5 to −0.6)
6–9	−1.1 (−1.6 to −0.7)
≥ 10	−1.4 (−2.0 to −0.7)
Practice geography	
SHA (surrogate for region)	
North East	3.1 (2.5 to 3.7)
North West	2.9 (2.4 to 3.3)
Yorkshire and the Humber	2.3 (1.8 to 2.7)
East Midlands	1.5 (1.0 to 2.0)
West Midlands	1.6 (1.1 to 2.0)
East of England	1.2 (0.8 to 1.7)
London	Reference
South East Coast	1.2 (0.7 to 1.6)
South Central	2.0 (1.5 to 2.5)
South West	2.4 (1.9 to 2.8)
Rurality of practice	
Urban > 10,000 – less sparse	Reference
Urban > 10,000 – sparse	−0.2 (−2.3 to 1.8)
Town and fringe	0.1 (−0.3 to 0.4)
Village	2.1 (1.5 to 2.6)
Hamlet and isolated dwellings	1.0 (−0.2 to 2.3)

TABLE 22 Regression coefficients for practice predictors[a] (*continued*)

Practice-level variables	Regression coefficient (95% CI)
Practice population	
Proportion of patients who are (95th vs. 5th percentile)	
Female	Reference
Male	−1.5 (−1.9 to −1.2)
White	Reference
Mixed	−0.1 (−0.4 to 0.3)
Asian	−1.3 (−1.7 to −0.9)
Black	−0.7 (−1.0 to −0.3)
Chinese	0.0 (−0.1 to 0.1)
Other	0.8 (0.1 to 1.4)
Children aged < 15 years	−0.7 (−1.1 to −0.3)
Proportion of adult (age ≥ 15 years) patients who are aged (years) (95th vs. 5th percentile)	
15–44	−2.8 (−3.8 to −1.7)
45–64	Reference
65–74	−0.7 (−1.6 to 0.3)
75–84	−2.4 (−3.3 to −1.6)
≥ 85	0.3 (−0.3 to 0.9)
Mean deprivation quintile	
1 (least deprived)	0.2 (−0.2 to 0.6)
2	0.2 (−0.2 to 0.6)
3	−0.1 (−0.5 to 0.2)
4	−0.1 (−0.4 to 0.3)
5 (most deprived)	Reference

FTE, full-time equivalent.
Note
Models also include individual case mix variables (not shown).

percentages for practice geography were 13.8% and 2.7%, respectively, and those for practice population were 18.3% and 3.3%, respectively. Practice team factors are therefore the most important in explaining GP–patient communication scores. Of the practice team factors, the proportion of GPs trained in the UK was the most important factor, with 5.4% of the total variance uniquely attributable to that variable.

Summary

This analysis demonstrates that a substantial proportion of the variability in practice scores for GP–patient communication can be explained by practice factors. Factors related to the practice professional team were most important, particularly how many of the GPs were trained in the UK. When a large proportion of GPs were trained outside of the UK, GP–patient communication scores were substantially lower. Although this association might represent the quality of training received in the UK, it is more likely to be a marker of a GP being of non-British ethnicity. Thus, factors that may drive the observed association could plausibly include language and cultural barriers or discrimination on behalf of the patients. In workstream 1 we demonstrated that around half of the difference between white British and Asian patients resulted from

the clustering of Asian patients in practices with worse scores overall. This is consistent with our finding that practices in London and other urban areas (where minority ethnic patients would be expected to cluster) and those practices in which doctors trained overseas are focused have lower scores. Even so, after controlling for these factors, we still found that practices with high proportions of Asian patients had lower GP–patient communication scores. Interestingly, in other work we have found that, when South Asian patients attend a practice where consultations in a concordant South Asian language are offered, the difference between white British and South Asian patients in terms of GP–patient communication scores decreases.[172]

Overall conclusions

Our analyses of recent GP Patient Survey data have confirmed the presence of substantially more negative experiences of communication in minority ethnic groups, including South Asian groups. A consideration of the interactions between ethnicity, age and gender highlighted that older, female Asian patients are particularly likely to report negative experiences of communication. Although a substantial proportion of these differences may reflect the concentration of such patients in low-performing practices, even within the same practices patients report substantial variations in communication. Our analyses further found no evidence that South Asian and white British groups exhibit differential response tendencies to communication items. Although experimental work is required to understand whether or not variations are indeed attributable to poorer quality of care, these findings point to this as the most plausible explanation of the identified differences.

South Asian patients may face a number of barriers to high-quality care, including poor language proficiency, lack of acculturation and provider-side discrimination. Our analysis of the association of practice factors, particularly the proportion of GPs trained outside of the UK, with reported experience of communication confirms, from a different perspective, the importance of language and cultural factors in determining the quality of communication.

Language is only one part of communication, but an important one. 'Language discordance' occurs when a doctor and patient do not share the same language. The inability to speak English well or at all varies widely between and within ethnic groups: 16.2% of Bangladeshi, 15.2% of Chinese, 12.2% of 'any other white' and 11.1% of Pakistani 2011 census respondents fell into this category.[173] Older Bangladeshi and Pakistani women may be prevented from acquiring English proficiency through family obligations or cultural and community expectations.[174] A number of studies have suggested that language discordance in clinical encounters may negatively impact on quality of care.[172,175–177] Challenges in communicating in language-discordant consultations can lead to particularly strong tensions between 'ideal' standards of communication and what is 'good enough'.[178]

Acculturation is concerned with the modification of attitudes or behaviours as people come into contact with a culture other than their own. Although its definition and scope are contested, it is frequently used to explain inequalities in health care.[179] Levels of acculturation may lead to variations in perceptions and expectations of providers and care, and ability to navigate the health-care system, impacting on reported experience.[180] Previous analysis of patient experience in a US primary care setting with Hispanic patients found no relationship between acculturation levels and patient reports of provider communication, although there was an association with other aspects of patient experience.[180] However, the measurement of acculturation through commonly used language proficiency scales has been criticised for failing to capture its multidimensional nature.[181] Further, a focus on lack of acculturation as a driver of disparities may mask other causal factors, including poverty, the social construction of ethnic identities and inequities in treatment.[182] Nevertheless, the broad concept of acculturation may be a useful reminder that age, gender and ethnicity groupings could vary in their understanding and navigation of primary care for reasons that are additional to those involving language barriers.

Concerns about institutionally ingrained variations in attitudes to patients on the basis of ethnicity have led to a rise in cultural competency training.[183,184] These approaches have been criticised for placing emphasis on patient characteristics as the drivers of variations in care, rather than on provider- and system-level factors including the potential for stereotyping of or bias towards particular groups.[185] However, our analysis shows that provider- or system-side factors do not occur in reaction to ethnicity alone, but in response to the inter-relationship between ethnicity, gender and age. It is the combination of these factors that may identify groups with particular needs, such as those patients with the lowest levels of English proficiency. We therefore need to focus not only on differences between groups but also on differences within them, considering how ethnicity, gender, age and other categories of social identity interact with each other to create different experiences and outcomes. The study of such interactions has been termed 'intersectionality'.[186]

Strengths and limitations

The GP Patient Survey data are derived from a large, randomly selected sample designed to be representative of patients registered with a practice in England or Wales.[113] However, response rates to the GP Patient Survey are low: for the years that we analysed, the response rate ranged from 34% to 38%, although recent reviews suggest that response rates are not a strong indicator of non-response bias in surveys that use probability sampling.[187] Unfortunately, because ethnicity is not extracted from medical records for those sent a questionnaire it is impossible to determine the response rates in different ethnic groups. However, it is known that respondents from output areas with increasing proportions of non-white people are less likely to respond. There remains the possibility that any differential response rates may introduce some bias that we are not able to allow for. If survey responders are more proficient in English, this may underestimate the communication difficulties experienced by certain minority ethnic groups.

Finally, as no objective measure of GP–patient communication exists for these data, our analyses are not able to provide insight into whether reported experience varies as a result of differences in actual experience or as a result of variations in expectations or survey response tendencies. For this, experimental approaches are required, as described in *Chapter 6*.

Implications for practice

The existence of marked differences in the experience of GP–patient communication underlines the need for a renewed focus on those groups at risk of poorer quality of care. For practitioners, an awareness of the particular difficulties and frustrations encountered on both sides in cross-cultural consultations is an important first step. For patients with limited English-language proficiency effective support for communication in the form of professional interpreters is important.[188] System-level as well as patient-targeted initiatives to improve health literacy are also likely to be important in reducing variations in care, although these inevitably require greater investment.[189]

Chapter 6 How do white British and Pakistani patients rate communication during simulated general practitioner–patient consultations? Experimental vignette study

Abstract

Background

Although minority ethnic groups have consistently reported poorer care in patient surveys, it is not known whether this is because they receive worse care or because they respond differently to such surveys.

Methods

We conducted an experimental vignette study to investigate whether or not South Asian people rate simulated GP consultations differently from white British people. In total, 564 white British and 564 Pakistani adults were recruited using an in-home face-to-face approach. Trained fieldworkers completed computer-assisted personal interviews during which participants rated the communication within three video recordings of simulated GP–patient consultations. Consultations were shown in a random order, selected from a pool of 16. Mean differences in communication scores (on a scale of 0–100) between white British and Pakistani patients were estimated from linear regression.

Results

Pakistani participants, on average, scored consultations 9.8 points higher than white British participants (95% CI 8.0 to 11.7 points; $p < 0.001$) when viewing the same consultations. When adjusted for age, gender, deprivation, self-rated health and video, the difference increased to 11.0 points (95% CI 8.5 to 13.6 points; $p < 0.001$). The largest differences were seen in older participants (≥ 55 years) and when communication was scripted to be poor.

Conclusions

Substantial differences in ratings were found, with Pakistani respondents giving higher scores to videos showing the same care. If we take these findings at face value, they would suggest that the lower scores reported by Pakistani patients in national surveys such as the GP Patient Survey represent genuinely worse care.

Introduction and rationale for the study

As outlined in *Chapter 5*, some minority ethnic groups have reported consistently lower patient experience scores than the majority population in both the UK and the USA.[75,150–153] Of particular concern within the UK, and confirmed by the analyses undertaken for this programme grant, South Asian groups report significantly more negative experiences of GP–patient communication than their white British counterparts.[131,156] Potential explanations for these lower ratings focus on whether South Asian patients (1) receive lower quality care or (2) receive similar care but rate this more negatively.[75]

A number of potential drivers of more negative ratings of similar standards of care exist. For example, it has been suggested that differences in the use of questionnaire response scales (e.g. Elliott *et al.*[80]) may lead to South Asian groups being less likely to endorse the most positive options when asked to evaluate a doctor's communication skills. Our analysis of GP Patient Survey data, drawing on item response theory to explore whether or not items receive systematically different responses from South Asian and white British groups, suggested that this was unlikely to be the case.[159] Yet there are also other, alternative drivers of poorer ratings of similar care, most notably that the evaluation of consultations by South Asian respondents is influenced by systematic variations in their expectations of, or preferences for, care.

Fundamentally, these concerns centre on a well-recognised and long-standing problem with surveys: that individuals may interpret and respond to the 'same' question in many different ways.[191] Potential solutions to this problem arose first within the field of political science, where the use of standardised scenarios, or vignettes, was proposed to evaluate the disparity in responses to survey items.[82] Such approaches are particularly relevant to understanding minority ethnic experiences: as already described, alongside potential variations in scale use by individuals from various ethnic backgrounds, we also need to consider systematic cultural variations in expectations of or preferences for care, as well as the potential for systematic variations in actual experience. A recent US study[81] adopted King *et al.*'s vignette methodology to examine the extent of cross-cultural incomparability in survey responses, using predominantly written vignettes. This online survey concluded that score variations observed on national surveys among African American, Latino and white respondents were likely to reflect true differences in real-life experiences, at least for items in the survey that used an 'always to never' response scale.[81]

The aim of this strand of work was to build on previous vignette approaches to examine whether or not people from a Pakistani background rate the communication within simulated GP consultations differently from white British people. If these groups rate simulated consultations similarly when viewing identical video vignettes, then we would be able to conclude that it is more likely that the lower scores previously reported by South Asian respondents in national patient experience surveys reflect real differences in quality of communication within consultations.

Changes to study methods from the original protocol

This strand of work, as stated in the original protocol, formed part of our wider aim of exploring in more detail the experiences of minority ethnic groups, together with the GP Patient Survey analyses reported in *Chapter 5*: to understand the reasons why minority ethnic groups, especially South Asians, give lower scores on patient surveys than the white British population (aim 5).

In our original protocol, to undertake this study we envisaged developing a DVD containing short clips (3–4 minutes) of four simulated patient consultations and asking respondents to rate these using the GP–patient communication items of the GP Patient Survey. These DVDs would be sent out, with questionnaires and instructions, to patients registered with practices with a high proportion of South Asian patients. We suggested using SANGRA (South Asian names and group recognition algorithm)[192] to identify South Asian patients. In practice, we first devised a more robust and efficient approach to recruiting participants, using targeted face-to-face recruitment in partnership with the market research agency, Ipsos MORI. This enabled us to effectively reach a rigorously sampled set of participants of known Pakistani ethnicity. Second, participants rated simulated consultations during face-to-face computer-assisted interviews conducted by trained fieldworkers. This enabled us to collect high-quality and consistent ratings of consultations. Our recruitment and rating approach is detailed in full in *Methods*.

As we acknowledged in our original protocol, the requirement of the vignettes approach to show identical consultations to all participants meant that all videos had to be in English. However, we had stated that, although we would therefore have to exclude patients who could not understand English, we would make study questionnaires and documentation available in four Asian languages. As we employed face-to-face

computer-assisted interviews in the study, this requirement was no longer necessary once we had screened for those who were confident in their ability in spoken English. This therefore represents a further improvement on our original study design.

Methods

In this experimental vignette study we showed videos of simulated GP–patient consultations to white British and Pakistani respondents, who were asked to rate the quality of the communication within each consultation that they viewed. The study advisory group was particularly involved in consideration of the nature of the vignettes to be shown and the study materials.

Simulated consultations

To ensure generalisability and to avoid the chance inclusion of a characteristic or event that, unknown to us, might systematically be rated differently by the two participating ethnic groups, we produced a series of 16 vignettes. We set out to manipulate the vignettes on three key domains:

1. the presenting complaint depicted within each consultation
2. the quality of the communication within each consultation (poor or good)
3. the ethnic background of the actors playing the doctor and patient (South Asian or white British).

Published recommendations for the production of vignettes emphasise the importance of developing a valid script and considering how best to manipulate this on the domains of interest.[193] We therefore based our vignettes on real-life consultations that were video recorded as part of another workstream (the association between patients', raters' and GPs' assessments of communication in a consultation, for which we recorded > 500 real-life consultations). We undertook an extensive process of script development, role playing and rating prior to filming the vignettes with professional actors (*Figure 14*).

The vignettes that we produced covered four different clinical scenarios: persistent cough, perforated ear drum, painful elbow and generalised numbness. We developed two different scripts for each clinical scenario: one designed to illustrate poor communication by the doctor and one designed to illustrate good communication. We formulated 'poor' and 'good' standards of communication according to the GCRS.[126] This observer-rated measure of communication competence (derived from the widely used Calgary–Cambridge guide to the medical interview[127,128]) was developed as part of our workstream on patients' and raters' assessments of communication competence within a consultation. The GCRS instrument covers 12 domains including initiating the session, gathering information, building the relationship and achieving a shared understanding (see *Appendix 1* for the full instrument). We then used both the 'poor' and the 'good' version of the four clinical scenarios to film two sets of vignettes. The first set of vignettes had white British actors playing the GP and the patient, whereas the second repeated the same scripts but with South Asian actors playing the GP and the patient. The GP role was acted throughout by either one white British or one South Asian actor; eight different actors (four white British and four South Asian) role-played patients, each participating in one clinical scenario. The final 16 videos were each scored by three trained clinical raters using the GCRS to assess communication quality in relation to professionally defined norms.[126] Mean GCRS scores for the 'poor' communication vignettes ranged from 0.6 to 2.4 (out of 10), whereas mean GCRS scores for the 'good' communication vignettes ranged from 5.1 to 8.4.

Data collection

Ipsos MORI fieldworkers conducted data collection in collaboration with our team. As per the original protocol, we aimed to recruit 1120 respondents, each of whom was asked to rate three simulated GP–patient consultations. Our original sample size calculation was based on data from the General Practice Assessment Questionnaire (which includes some identical items to those in the GP Patient Survey); we repeated this using more recent GP Patient Survey data. This confirmed that the inclusion of 560 Pakistani respondents and 560 white British respondents would give > 80% power to detect a 3.1-point difference

Vignette development

Rationale
To vary vignettes on three domains:
1. the presenting complaint
2. the quality of GP–patient communication (poor or good)
3. the ethnic backgrounds of the doctor and patient (South Asian or white British)

Clinical content
- Derived from existing bank of >500 video-recorded GP–patient consultations
- Identified consultations with unisex presenting complaints lasting <7.5 minutes ($n=29$)
- Four consultations selected by the research team: tennis elbow, persistent cough, numbness and perforated ear drum

Script development
- Each of the four clinical scenarios summarised for simulated patients on a pro forma covering patient sociodemographics, clinical details, patients' perspectives, past medical history and social history
- Each scenario role played with a GP (JBe) and simulated patient in two versions – 'good' and 'poor' for communication. All role plays video recorded
- Communication quality of each role-played consultation scored using the GCRS by one rater (JS) to confirm the difference between 'good' and 'poor' communication role plays at this stage
- Role-played scenarios transcribed in full to act as scripts for the vignettes. Minor changes to the content and stage directions were made by the research team in consultation with the simulated patient

Vignette filming
- Vignette actors were recruited via an acting agency specialising in simulated patient role play
- Briefing packs were prepared for all actors, to include scripts, background summaries of vignettes and verbal and non-verbal behaviour guides
- Vignettes were filmed with a professional film crew over 2 days, involving 10 actors and one acting supervisor. At least one GP was present at all times to ensure clinical consistency
- Following filming, vignettes were professionally edited to create the final 16 films

Final vignettes
- 16 films ranging from 2 to 8 minutes
- Eight films involving a South Asian GP–patient actor pairing: four different clinical scenarios, each filmed in two versions, poor communication and good communication
- Eight films involving a white British GP–patient actor pairing: four different clinical scenarios, each filmed in two versions, poor communication and good communication

Rating vignettes
- Each vignette rated by three trained GCRS raters (all GPs) to determine its score for the quality of communication in relation to professionally defined norms

FIGURE 14 Development of the vignettes. Reproduced from Burt *et al.*[190] under the terms of the Creative Commons Attribution license (CC BY 4.0), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited (http://creativecommons.org/licenses/by/4.0/).

(on a 0–100 scale) seen between these two groups after controlling for age, gender, deprivation, self-rated health and practice. As our analyses of GP Patient Survey data had identified that ethnic disparities were largest among older age groups, we set out to recruit equal numbers above and below the age of 55 years within each ethnic group.[156]

Following consultation with Ipsos MORI, we used different recruitment strategies for the different ethnic groups. To recruit Pakistani respondents, we selected output areas (geographically confined areas of approximately 130 households) in which at least 35% of the population was identified as Pakistani in 2011 census data.[173] These were then ranked according to the proportion of the population aged > 50 years (the cut-off point of 50 years of age used for sampling reflects available census categories; for our recruitment we specifically used a cut-off point of 55 years of age). Trained fieldworkers then recruited participants within these areas using an in-home face-to-face approach, starting in the output areas with the highest proportion of residents aged > 50 years. Fieldworkers were also provided with one or two output areas neighbouring the area sampled and were able to recruit from these if necessary. Snowball recruitment (e.g. known neighbours suggested to fieldworkers) and additional household interviews were allowed.

To recruit white British participants, we first excluded output areas with low proportions of white British residents (< 90%) and residents aged > 50 years. The remaining output areas were ranked by social grade (the percentage of people who were social grade A/B according to 2011 census data[194]) and geography. Ipsos MORI then selected output areas to approach using proportional systematic sampling.

Fieldworkers screened potential participants for ethnicity (using the ONS 18-group categorisation[143]) and for English-language competency (using a screening question regarding self-reported confidence in understanding short videos in English). Eligible respondents who consented then completed a computer-administered personal interview during which the fieldworker used a standardised script. Each participant viewed three of the sixteen simulated consultation videos that we had produced. Following each video, the participant was asked to rate the consultation using five GP–patient communication items taken from the most recent national GP Patient Survey (*Table 23*). We assigned videos so that each participant saw three different presenting conditions (and, therefore, videos), with two of the videos featuring South Asian–South Asian and white British–white British ethnic GP–patient pairs and at least one of the videos for each condition featuring either the 'good' or 'poor' communication script. The selection of videos shown to each participant was such that approximately equal numbers of all possible combinations were used, given the restrictions that we have described. Participants also completed basic sociodemographic questions (age, self-rated health, whether or not born in the UK, language spoken most often at home). An area-based measure of socioeconomic deprivation (IMD) was recorded based on the participants' postcode.

Analysis

As in our previous analyses of GP Patient Survey data, we scored each participant's rating of each consultation by linearly scaling the response options between 0 (very poor) and 100 (very good) and averaging all informative answers when at least three of the five items were completed. We used linear regression to model the mean difference between white British and Pakistani participants' ratings of GP–patient communication. We estimated the unadjusted difference in ratings as well as the difference adjusting for patient age, gender, self-rated health, deprivation and a set of 15 indicator variables for the video. We did not originally plan to conduct any analysis of interaction terms. However, the effect size

TABLE 23 General practitioner communication items used to rate vignettes

Thinking about the doctor you have just seen in the video, how good was the doctor at each of the following? Please put a ✗ in one box for *each* row	Very good	Good	Neither good nor poor	Poor	Very poor	Doesn't apply[a]
Giving enough time	☐	☐	☐	☐	☐	☐
Listening to the patient	☐	☐	☐	☐	☐	☐
Explaining tests and treatments	☐	☐	☐	☐	☐	☐
Involving the patient in decisions about his or her care	☐	☐	☐	☐	☐	☐
Treating the patient with care and concern	☐	☐	☐	☐	☐	☐
a Considered to be uninformative for the purposes of our analysis.						

found was much larger than that anticipated in our original power calculations and so we investigated interactions between participant ethnicity and the following variables:

(a) relating to the video: ethnicity of GP/patient and quality of GP–patient communication
(b) relating to the participant: age, gender and deprivation.

When modelling interactions, we used only variables for the video attributes, rather than using indicator variables for all videos. For interactions involving age, the oldest two age groups were combined and a continuous version of the age groups was used in the interaction term only. CIs and *p*-values were estimated using bootstrapping with 500 replications (given non-normal data), clustered by participant (with each participant supplying three communication scores). We conducted a sensitivity analysis that clustered the bootstrap resampling by output area rather than by participant to account for multiple sampling in households and small geographical areas; however, this made only trivial changes to standard errors and we consequently do not report this here.

Results

Participants
We recruited a total of 1128 participants: 564 (50%) self-identified as white British and 564 (50%) self-identified as Pakistani. The sociodemographic profile of the participants is shown in *Table 24*. Although the sampling restriction that half of participants in each group be aged ≥ 55 years increased the similarity of the groups' age distribution, Pakistani participants were younger than the white British participants within the sampled age strata. Pakistani participants were also more likely to be male (58% vs. 45%), to be in fair or poor health (38% vs. 26%) and to live in the most deprived areas (82% vs. 14%). *Figure 15* shows the geographical locations from where participants were recruited. White British participants were recruited from a wide range of geographical locations, whereas, as a result of our sampling approach, Pakistani participants were located from a small number of geographically confined locations. Between 202 and 222 participants scored each of the video vignettes for GP–patient communication (*Table 25*).

Main results
The distribution of communication scores for white British and Pakistani participants was skewed in both groups; however, the communication scores from Pakistani participants were typically higher than those from white British participants (*Figure 16*). The mean communication score from Pakistani participants was 67.3 out of 100, 9.9 points higher (95% CI 8.0 to 11.7 points; $p < 0.001$) than the mean score from white British participants (57.4 out of 100). In a regression model (full output shown in *Table 26*) adjusting for participant age, gender, self-rated health, deprivation and video there was a slightly larger difference between the two ethnicities of 11.0 points (95% CI 8.5 to 13.5 points; $p < 0.001$).

Analysis of interactions
As the difference in scores between Pakistani and white British participants was considerably larger than that expected at the design stage, we were able to explore interactions between ethnicity and other variables. We found no evidence that the difference in scores between Pakistani and white British participants varied by patient gender ($p = 0.92$), deprivation ($p = 0.68$) or ethnicity of the doctor/patient actor pairing in the videos ($p = 0.53$). There was, however, strong evidence that the difference in scores between Pakistani and white British participants was larger for older participants ($p = 0.001$) and for consultations scripted to contain poorer levels of GP–patient communication ($p < 0.001$). *Table 27* shows the mean difference in age by good/poor scripted communication strata, estimated from a model containing all of the main effects plus (1) ethnicity and age interactions, (2) ethnicity and good/poor communication interactions and (3) the three-way interaction between those variables ($p < 0.001$ for the three-way interaction).

TABLE 24 Sociodemographic profile of vignette study participants

Characteristic	All, n (%)	White British, n (%)	Pakistani, n (%)
Age (years)			
18–24	88 (7.8)	40 (7.1)	48 (8.5)
25–34	154 (13.7)	56 (9.9)	98 (17.4)
35–44	151 (13.4)	70 (12.4)	81 (14.4)
45–54	175 (15.5)	118 (20.9)	57 (10.1)
55–64	267 (23.7)	94 (16.7)	173 (30.7)
65–74	179 (15.9)	109 (19.3)	70 (12.4)
75–84	95 (8.4)	63 (11.2)	32 (5.7)
≥ 85	19 (1.7)	14 (2.5)	5 (0.9)
Gender			
Male	583 (51.7)	255 (45.2)	328 (58.2)
Female	545 (48.3)	309 (54.8)	236 (41.8)
Self-rated health			
Excellent	132 (11.7)	82 (14.5)	50 (8.9)
Very good	289 (25.6)	181 (32.1)	108 (19.1)
Good	348 (30.9)	157 (27.8)	191 (33.9)
Fair	207 (18.4)	86 (15.2)	121 (21.5)
Poor	152 (13.5)	58 (10.3)	94 (16.7)
Mean deprivation quintile			
1 (least deprived)	108 (9.6)	100 (17.7)	8 (1.4)
2	137 (12.1)	137 (24.3)	0 (0.0)
3	122 (10.8)	111 (19.7)	11 (2.0)
4	221 (19.6)	138 (24.5)	83 (14.7)
5 (most deprived)	540 (47.9)	78 (13.8)	462 (81.9)

The difference between scores given by younger (< 55 years of age) white British and Pakistani participants to consultations containing 'good' levels of communication was small and not statistically significant. However, larger and statistically significant differences were seen for older patients and for consultations portraying 'poor' communication at all ages. In these 'poor' consultations, the difference in scores increased with rising age of participants. For example, ratings of consultations portraying poor communication were 10.29 points higher (95% CI 5.00 to 15.57 points) for Pakistani participants aged 18–24 years than for white British participants of the same age. This difference increased to 28.45 points (95% CI 23.11 to 33.79 points) for those aged ≥ 75 years.

Discussion

This experimental study found that respondents from a Pakistani background rated simulated GP consultations substantially more positively than their white British counterparts. These differences were largest for consultations depicting poor GP–patient communication and for older respondents. The differences that we observed were in the opposite direction to those in the national GP Patient Survey,

(a)　　　　　　　　　　　　　　　　　　　　(b)

White British　　　　　　　　　　　　　　Pakistani
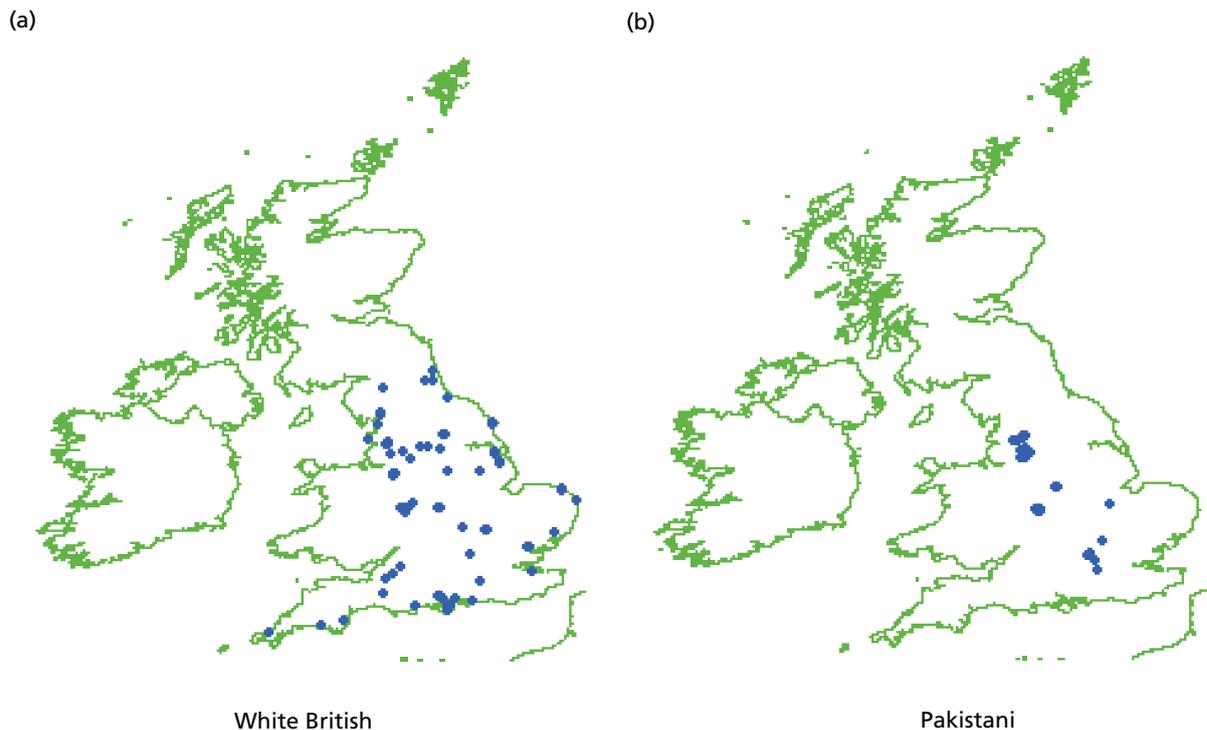
FIGURE 15 Geographical locations of the census-based output areas from where participants were recruited:
(a) white British participants; and (b) Pakistani participants. Reproduced from Burt *et al.*[190] under the terms of the
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in any medium, provided the original work is properly cited (http://creativecommons.org/licenses/by/4.0/).

which relates to a patients' most recent consultation with a GP, for which Pakistani respondents give
significantly lower scores for communication than their white British counterparts.

Strengths and limitations

We used an in-home face-to-face recruitment approach to ensure access to a wide range of respondents,
independent of the GP practice that they were registered with. However, it is possible that respondents
who agreed to participate in this research may differ in a number of unidentified ways from the population
as a whole. For example, to ensure efficient recruitment to the study, we focused our efforts on areas with
a high density of Pakistani people, which also have high levels of deprivation (82% of our Pakistani
participants were living in areas in the most deprived quintile, whereas only 51% of Pakistani patients
nationally live in the most deprived quintile). The sampled population may therefore differ from the
Pakistani population as a whole; for example, recent research suggests that minority ethnic populations in
lower ethnic density areas may report higher satisfaction with health care.[195] Ratings of consultations by
'analogue patients' (members of the public asked to rate care received by a third party), such as our
participants, are commonly more critical than patients commenting on their own care.[196] In our study,
negative response options were used more often than in the national GP Patient Survey; for example, only
2.6% of responses to the GP communication questions in the most recent GP Patient Survey were given as
poor or very poor,[197] compared with 26.6% of responses in this study. We deliberately set out to create a
wider than typical range of communication quality within our vignettes to enable us to test the hypothesis
that differential response tendencies between groups may exist only at one end of the communication
range, for example that South Asian respondents tend to be more negative about the best care but rate
the poorest care in the same way. In fact, we found that there were differences in ratings (with Pakistani
respondents more positive) at both ends of the communication spectrum, reinforcing our interpretation
that the disparities in real-life surveys are not to do with differential response tendencies. To enable the

TABLE 25 Description of all video vignettes used showing the number of times each video was scored

Video number	Clinical scenario	Scripted communication quality	Ethnicity of GP and patient	Number of times video scored
1	Persistent cough	Bad	White	220
2			Asian	202
3		Good	White	202
4			Asian	212
5	Perforated ear drum	Bad	White	210
6			Asian	206
7		Good	White	217
8			Asian	207
9	Painful elbow	Bad	White	206
10			Asian	210
11		Good	White	210
12			Asian	215
13	Generalised numbness	Bad	White	216
14			Asian	222
15		Good	White	212
16			Asian	214

same vignettes to be viewed by all participants, the study was conducted in English, limiting our ability to understand evaluations by those with low levels of English language proficiency (and who might, for example, respond to the GP Patient Survey in other languages). In the USA, minority ethnic groups preferring languages other than English generally show response tendencies that are in the same direction as English-preferring members of the same minority ethnic groups, but to a greater extent, perhaps reflecting a continuum of acculturation.[150] However, it was not possible to produce vignettes that would remain equivalent in other languages and, as 99.8% of respondents to the GP Patient Survey respond in English, our ability to extrapolate to the wider population remains high.

Previous examinations of inequalities in patient experience between ethnic groups (including our own) have commonly relied on real-world data, in which it is difficult to distinguish whether differences are attributable to variations in care or variations in the reporting of that care.[75,131,150–153,156] The experimental design that we used in this workstream enabled us to control the content of the consultations being rated by respondents to explore how differences in reporting may explain the disparities in minority ethnic experience in real-life surveys. It builds on previous vignette research by using multiple video vignettes manipulating several key attributes.[81,82] Video vignettes have so far been little employed in this field, in spite of evidence of viewers perceiving them as realistic and enabling immersion in the situation at hand.[193] In the USA, Weinick et al.[81] reported no evidence of differences among white, African American and Latino evaluations of doctor–patient communication in vignettes when using an 'always to never' response scale; they concluded that variations within national surveys on such items for these groups were likely to reflect differences in real-life experiences. In this study, however, we found substantially more positive ratings by Pakistani respondents than by white British respondents.
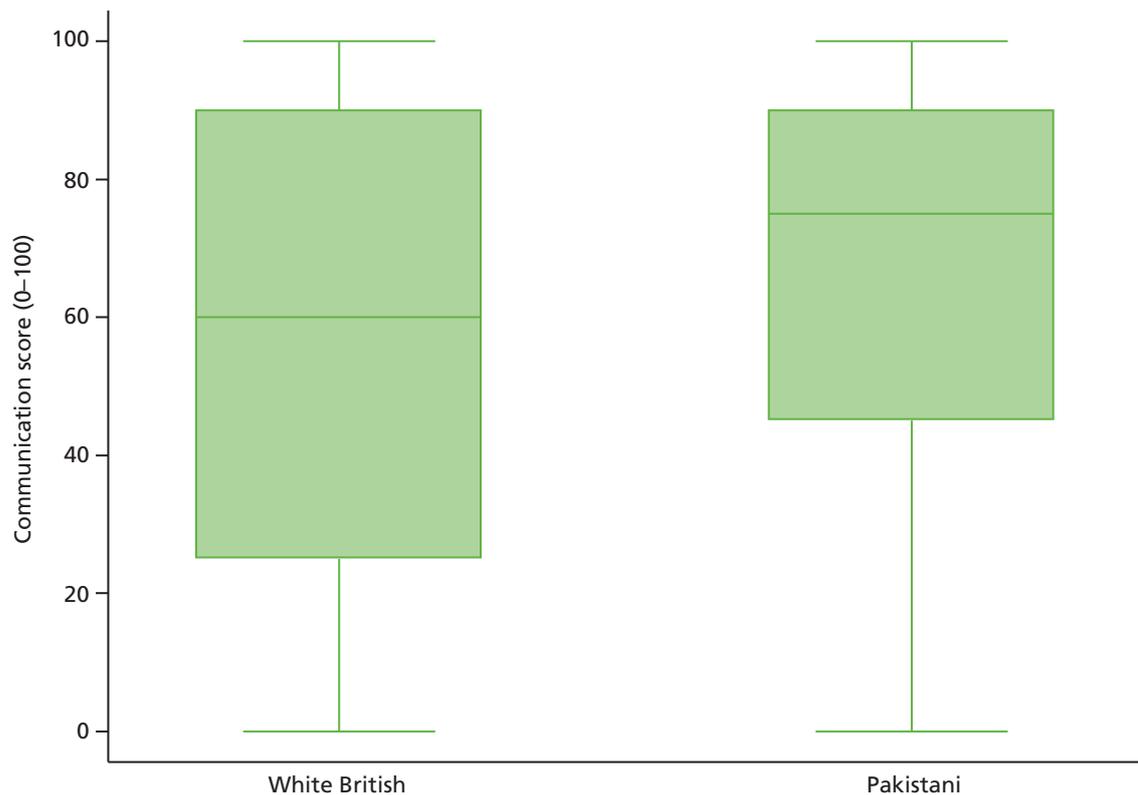
FIGURE 16 Box plots showing the distribution of GP–patient communication scores recorded by white British and Pakistani participants. Reproduced from Burt et al.[190] under the terms of the Creative Commons Attribution license (CC BY 4.0), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited (http://creativecommons.org/licenses/by/4.0/).

TABLE 26 Output from the main regression model adjusting for sociodemographic characteristics but with no interactions

Characteristic	Adjusted difference (95% CI)	p-value
Ethnicity		
White British	Reference	< 0.001
Pakistani	11.01 (8.53 to 13.49)	
Age (years)		
18–24	−5.55 (−8.94 to −2.16)	< 0.001
25–34	−4.96 (−7.99 to −1.93)	
35–44	−1.67 (−4.67 to 1.33)	
45–54	−1.86 (−4.60 to 0.87)	
55–64	Reference	
65–74	4.01 (1.20 to 6.83)	
75–84	6.70 (3.26 to 10.13)	
≥ 85	3.66 (−3.66 to 10.97)	
Gender		
Male	Reference	0.115
Female	1.41 (−0.34 to 3.16)	

TABLE 26 Output from the main regression model adjusting for sociodemographic characteristics but with no interactions (*continued*)

Characteristic	Adjusted difference (95% CI)	*p*-value
Self-rated health		
Excellent	Reference	0.866
Very good	−1.15 (−4.05 to 1.74)	
Good	−1.65 (−4.71 to 1.41)	
Fair	−1.77 (−5.12 to 1.58)	
Poor	−1.41 (−5.21 to 2.38)	
Mean deprivation quintile		
1 (least deprived)	Reference	0.505
2	−0.92 (−4.10 to 2.27)	
3	1.08 (−2.26 to 4.42)	
4	−1.45 (−4.57 to 1.68)	
5 (most deprived)	0.13 (−3.32 to 3.58)	
Video number		
1	Reference	< 0.001
2	−3.90 (−6.79 to −1.01)	
3	−56.51 (−60.51 to −52.50)	
4	−49.57 (−53.77 to −45.37)	
5	−4.09 (−7.06 to −1.12)	
6	−7.45 (−10.58 to −4.33)	
7	−48.08 (−51.81 to −44.34)	
8	−49.70 (−53.53 to −45.87)	
9	−3.24 (−6.33 to −0.14)	
10	−7.40 (−10.48 to −4.33)	
11	−52.19 (−56.03 to −48.34)	
12	−48.94 (−52.80 to −45.08)	
13	−9.59 (−12.89 to −6.29)	
14	−9.36 (−12.45 to −6.27)	
15	−54.23 (−58.07 to −50.38)	
16	−46.63 (−50.52 to −42.73)	

Implications for practice

We designed this workstream to explore whether or not people from a Pakistani background rate the communication within simulated GP consultations differently from white British people. Similar ratings of simulated consultations from both ethnic groups would have suggested that the low scores observed in national surveys for Pakistani and other South Asian respondents reflect real differences in the quality of

TABLE 27 Adjusted difference in communication scores between white British and Pakistani participants by age group and good/poor scripted communication[a]

Age (years)	Scripted communication: adjusted difference (95% CI)	
	Good	Poor
18–24	−1.31 (−5.38 to 2.76)	10.29 (5.00 to 15.57)
25–34	−0.15 (−3.58 to 3.27)	13.32 (9.10 to 17.54)
35–44	1.01 (−1.96 to 3.97)	16.34 (12.91 to 19.77)
45–54	2.17 (−0.62 to 4.95)	19.37 (16.24 to 22.50)
55–64	3.33 (0.39 to 6.27)	22.40 (18.94 to 25.86)
65–74	4.49 (1.11 to 7.87)	25.42 (21.16 to 29.69)
≥ 75	5.65 (1.64 to 9.66)	28.45 (23.11 to 33.79)

a A positive difference implies that Pakistani patients gave, on average, higher (more favourable) scores. Reproduced from Burt *et al*.[190] under the terms of the Creative Commons Attribution license (CC BY 4.0), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited (http://creativecommons.org/licenses/by/4.0/).

communication experienced by these patients in comparison to the quality of communication experienced by white British patients. The substantially more positive ratings from Pakistani respondents that we observed in our experimental study suggest that not only are there differences in the quality of communication in real-life consultations, but also that these differences are even greater than those identified in real-life surveys. We suggest that Pakistani patients receive genuinely worse standards of communication within a consultation. However, although we can be confident that differences in experience exist, it is difficult to extrapolate our vignette-derived data to estimate the magnitude of the difference in real life. Poor communication for these groups may arise from system-level, provider-level and/or patient-level factors.[198] For example, language barriers within consultations may lead to more negative experiences of care for both doctors and patients.[178] Levels of acculturation may be linked with a patient's ability to navigate the health-care system, with consequent impacts on patient experiences of care.[180] System- and provider-level issues, including discrimination and bias, are sensitive and challenging topics, but ones to which more recent dialogue has looked to as likely key contributors to inequalities in care.[185]

Our findings add substantial weight to the likelihood that inequalities affecting South Asian people in national surveys reflect systematic variations in the quality of communication within consultations. Although there is a body of research into the drivers of inequalities in care, we suggest that further research in this area now needs to focus on how factors including language barriers, health literacy, provider-side discrimination and system-level failures combine to inhibit good communication within individual consultations.

Section C Using data on patient experience for quality improvement

Chapter 7 Attitudes to receiving feedback from patient experience surveys: focus groups with practice staff

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Abstract

Background

Despite widespread adoption of patient feedback surveys in the NHS, evidence of a demonstrable impact of surveys on service improvement is sparse. The objective of this study was to explore the views of primary care practice staff regarding the utility of patient experience surveys.

Methods

We conducted focus groups with staff from 14 practices following the receipt of feedback from a recent patient experience survey.

Results

Although participants engaged with feedback from patient experience surveys, they routinely questioned its validity and reliability. Participants identified surveys as having a number of useful functions: for patients, as a potentially therapeutic way of getting their voice heard; for practice staff, as a way of identifying areas of improvement; and for GPs, as a source of evidence for professional development and appraisal. Areas of potential change stimulated by survey feedback included redesigning front-line services, managing patient expectations and managing the performance of GPs. Despite this, practice staff struggled to identify and action changes based on survey feedback alone.

Conclusions

Although surveys may be used to endorse existing high-quality service delivery, their use in informing changes in service delivery is more challenging for practice staff. Drawing on the Utility Index framework, we identified concerns relating to reliability and validity, cost and feasibility, acceptability and educational impact that combine to limit the utility of patient survey feedback. Feedback from patient experience surveys has great potential; however, without a specific and renewed focus on how to translate feedback into action, this potential will remain incompletely realised.

Introduction and rationale

As outlined in the introduction to this report (see *Chapter 1*), feedback from patients is intended to inform quality improvements by increasing the responsiveness of the health-care system to the needs of service users and by identifying areas of poor performance or organisation that might be susceptible to change.[85,86,137] Although policy initiatives such as the introduction of the QOF or revalidation highlight feedback on patient experience as a key driver of quality improvement, evidence suggests that patient experience has had only a limited impact on service delivery[45] and GPs and other health-care professionals may experience difficulties in making sense of survey-generated information.[119,200]

In this strand of work, we drew on qualitative data to examine how primary health-care practitioners and their teams view and act on feedback from patient experience surveys. We examined the role that patient

feedback plays in both assessing and improving standards of care. To assist our consideration, we adopted van der Vleuten's[201] Utility Index model as the basis for considering potential drivers of the gap between receiving and acting on patient feedback in primary care practices. Originally developed as a framework for assessment design and evaluation in educational settings, reports of the use of the Utility Index model have been extensive, although such reports have nearly always emanated from educational settings. We felt that the six domains of the model (educational impact, validity, reliability, cost, acceptability and feasibility) also had potential relevance when considering issues relating to the introduction and use of surveys of patients' experience of care in routine clinical settings.[202]

Changes to study methods from the original protocol

The aim of this strand of work, as stated in the original protocol, was to understand how general practices respond to low patient survey scores, testing a range of approaches that could be used to improve patients' experience of care (aim 1).

In our application, we envisaged drawing on GP Patient Survey scores to facilitate a discussion with participating practices on their most recent results, their responses to their scores and any intention to change as a result. However, as part of our overall programme of work we conducted an individual GP-level postal survey with 25 practices (aim 2; see *Chapter 9*). This gave us the opportunity to feed back results to practices and individual GPs from our own, very recent survey and subsequently explore their responses to both practice-level feedback and the potential for individual feedback within focus groups (reported in this chapter) and interviews (reported in *Chapter 8*).

Methods

We conducted a postal survey of patients who had recently seen a doctor at one of a stratified random sample of 25 practices in Cornwall, Devon, Bristol, Bedfordshire, Cambridgeshire and North London (see *Chapter 9* for details of sampling, recruitment and survey conduct). The patient experience survey used was based on items from the national GP Patient Survey[11] and asked patients about access, waiting times, opening hours and continuity and interpersonal aspects of care. We reported the results back to practice staff at aggregate practice level (reported to all staff) and at individual GP level (confidential reports to each participating GP).

We purposively approached practices that had participated in the survey to take part in focus groups, aiming to reflect a diversity of practice size, geographical location and practice-level survey scores for communication. We undertook focus groups in 14 practices. Groups (with between four and 15 participants in each) were conducted following the completion of practice surveys and feedback of the findings to staff. Overall, 127 professionals from a range of backgrounds (38 GPs, 19 practice managers, 18 nurses, 21 receptionists, 13 administrators and secretaries and 18 other staff members including dispensers and health-care assistants) took part. In reporting, all practices were assigned a practice pseudonym; real practice names were not used (*Table 28*).

Focus groups, lasting around 1 hour, were held on practice premises and were facilitated by experienced qualitative researchers. A second researcher was present at each group to take notes. We piloted a topic guide (*Box 2*) at two non-study practices before beginning fieldwork. Key areas of discussion included attitudes to patient surveys, past experiences of surveys and practice procedures for dealing with survey feedback. All group discussions were transcribed verbatim. To maintain anonymity, participants were assigned pseudonyms.

We drew upon framework approaches to organise and analyse our data, which allowed for themes to be assigned both from a priori research questions and from the narratives of focus group participants.

TABLE 28 Participating practices and focus group participants

Practice pseudonym	2009/10 national GP Patient Survey scores for communication	Location	Number of practising GPs	Number of focus group participants
Highfields	High	Rural	4	5
Church Road	High	Urban	8	15
Fieldview	High	Rural	5	9
Town Road	Medium	City	3	11
Meadow	Medium	Rural	5	13
Pilkington	Medium	Urban	3	9
The Towers	Low	Urban	2	4
Brentwell	Low	City	5	4
Crossways	Low	City	7	6
White Road	Low	Urban	2	7
Torch Street	Low	City	6	10
The Maples	Low	Urban	5	13
Fallowfield	Low	City	4	6
Beeches	Low	Urban	5	15

BOX 2 Sample focus group questions

- What do you think of patient surveys in general? What do you think the survey results are saying to your practice?
- Are the results of patient surveys circulated within your practice and if so, to whom? Have the scores encouraged you or your colleagues in wanting to change anything?
- Do you think that individual GP scores following a patient experience survey could have an impact on the practice as a whole?
- Do you think that over time, surveys of patient experience that focus on individual doctors' skills, might affect the attitude of doctors towards their patients – or the attitude of patients towards their doctors?
- To further explore the impact of individual GP performance on practice functioning, focus group participants were also invited to comment on two hypothetical situations where some doctors within the practice received less favourable scores from patient surveys than other doctors.

NVivo 10 software was used for organising and examining the data. Analysis was undertaken by two researchers (OB and JB) and broadly took place over five stages: familiarisation (reading transcripts and listening to recordings in detail to gain an overview of content), thematic analysis (developing a coding scheme), indexing (applying the codes systematically to the data), charting (re-arranging the data according to the thematic content to allow comparative analysis), and mapping and interpretation (defining key concepts, delineating the range and nature of phenomena, creating typologies, findings, associations, providing explanations and developing strategies).[203]

Guided by this approach, we drew on transcripts from the first focus groups to develop an initial coding framework, which included 48 codes grouped loosely into headings including validity of surveys, interpretation of survey feedback, organisational changes and performance comparison. Our coding framework went through a process of application, discussion and revision until all transcripts were coded using the final agreed version. Codes were subsequently grouped into four overarching analytical themes: survey validity and interpretation, practice dynamics, leadership and interprofessional decision making, and improvement strategies. The coding of each theme and subtheme was further triangulated by two researchers against a selected number of transcripts and discussed within the wider research team. The study was guided by our advisory panel including four PPI members, who provided input into the study design and conduct and interpretation of findings.

Findings

We focus in our findings on the organisational response of practice staff towards patient surveys. First, we consider how practice staff understand and engage with surveys and survey feedback. Then, we consider three dimensions of potential and actual change that appear to have been driven, in full or part, by surveys: redesigning front-line services, managing patient expectations and managing the performance of GPs. In the discussion, we place our findings within the context of the Utility Index model to consider how the utility of surveys to practice staff might influence their uptake as either quality assurance or quality improvement mechanisms.[201]

Understanding of, and engagement with, surveys

All practice teams had extensive, first-hand involvement in surveying their patients and in receiving feedback from the GP Patient Survey. Attitudes to patient surveys were markedly contradictory. Recent experiences of payments linked to survey results under the QOF had caused resentment for many, particularly those who had lost out financially. Overall, practice staff found it difficult to trust surveys to reflect 'reality'. Yet their expressed ambivalence about surveys was often mixed with an interest in, and engagement with, the findings. We explore these ideas in more detail below.

Credibility of surveys

Practice teams spoke broadly about the perceived weaknesses of survey methods, singling out issues around their design, administration, representativeness, reliability, sample size, bias and the political ends which they were intended to serve:

> *The surveys only take a snapshot.*
>
> *Nurse, Torch Street*

> *Only people with strong views complete them.*
>
> *Receptionist, Crossways*

> *You need to have sufficient sample size and a meaningful way of comparing across different GPs in order for someone to get some useful knowledge out of it.*
>
> *GP, Fallowfield*

Practice staff sometimes struggled with the concept of quantifying patient experience, voicing concerns that the complex reality of health-care interactions could not be measured using such rigid methods:

> *And a lot of this data that's collected in a measurable kind of way doesn't really represent reality. There's kind of a fixation on measurable outcomes, but they don't really tell us what's going on, they're just measuring that thing.*
>
> *GP, The Maples*

Discussions often distinguished between the utility and the relevance of different types of surveys, from in-house surveys conducted by receptionists handing out questionnaires, to the national survey programme. Local surveys were highlighted as enabling practice staff and patients to have greater control over the perceived relevance of the questions, but teams were often cynical about their robustness:

And some practices can manipulate their patients that they survey, so they will only hand out the questionnaire to nice patients and patients they know, they won't do it on duty day when doctor is maybe running behind or very busy.

GP, Church Road

Criticisms levelled at the current national GP Patient Survey included its distribution to a sample of all patients registered with a practice regardless of whether or not they have consulted recently, the focus on feedback at practice rather than individual practitioner level, and the lack of inclusion of free text comments. Surveys that encompassed these elements were frequently regarded more positively:

We want to see data tailored to individual practitioner, because we all practice differently.

GP, Town Road

Other sources of patient feedback, such as complaints, were often framed as a more useful source of information to understand where the problems lie:

And I think we learn a lot more from patients that write to us individually with complaints.

Administrator, Town Road

Engaging with surveys

Despite these concerns, the importance attached to patient feedback via surveys in today's health-care system was well recognised and broadly accepted:

I think we must not be too negative about surveys because they are part of the way we do things nowadays . . . I think if you look at how general practice changed particularly over the last 20 years, it has become a lot more patient focused and those things did not happen by accident, they have happened by design, and patient surveys have been a tool to drive that.

GP, Highfields

However, although participants (in particular GPs and practice managers) paid attention to and positively engaged with survey findings from year to year, contradictions and tensions were still evident, for example in relation to the validity of patient's reports:

I think it is the only way to find out exactly what's going on is to do a survey. The only way you really find out what the patients think. They are not always honest. Well, they are not always honest on the survey either.

Nurse, Beeches

I think it is useful for the extremes, but personally, I don't think it is particularly useful for any middle ground. [Later in focus group] I think it's very useful, when it compares against national average. I find that really, really helpful.

GP, Beeches

For practices that scored below national benchmarks, engaging with survey findings was often an emotional experience for staff:

It can be a bit disheartening at times though, if you feel that you're really doing your best and then you get negative feedback.

Receptionist, Torch Street

The functions of surveys

In general, practice staff valued feedback from surveys as a source of information about their performance. Participants suggested that patients, individual GPs, and the practice as a whole could all benefit from surveys: for patients, for example there may be a therapeutic function, 'the chance to get something off their chest and . . . to then move on' (GP, Highfields). For GPs, the function of surveys was often to fulfil the requirements for appraisal. For practice staff, surveys could have a clear 'improvement' message, including the potential to highlight under-performing GPs:

> *It helps to highlight areas of improvement, to make sure that we're continuing to do as well as we think we're doing and it prevents us becoming complacent and assuming that you're doing well. I mean if we are doing well, then it confirms that we are doing well, if we're not doing well then it identifies areas that hopefully we can change. But not always.*
>
> *GP, Highfields*

> *You can argue over the validity of surveys but if over 3/4 years someone is consistently scoring low in certain areas, you can start making assumptions about the doctor performing not very well in the practice.*
>
> *GP, Brentwell*

Changes driven by survey feedback

The processing of survey feedback by practice staff was the essential first step in making any changes, which could encompass redesigning frontline services, managing patient expectations, and managing the performance of GPs. However, variation was evident in how transparent practice staff were in sharing survey information within the team, and in whether practice-level feedback was circulated between GP partners, to just a few practice decision-makers, or to all of the staff. In a small number of practices, results had been fed back promptly by staff to their patient participation groups (comprised usually of patients, the practice manager, and one or more GPs, such groups are convened by practices to discuss and review the services offered and how improvements may be made to these). Inevitably, the level of transparency impacted on the understanding of and engagement with patient feedback by practice staff.

Redesigning front-line services

Practice staff often described changes they had made to front-line services and systems as a result of patient preferences, including modifications to their facilities, appointment systems, and to staffing issues such as staff training. For example, car parks had been extended, GP triage had been introduced and new call management programmes had been installed. Staff in three practices clearly articulated the incorporation of suggestions from patient surveys into an annual action plan. However, in most practices changes were rarely attributable directly to survey feedback, the survey having provided a 'nudge' to action in areas practice staff had already been considering:

> Nurse: *We did a change to open extended hours Thursdays, so that is a good thing – a benefit from last year's I think, or was it the year before?'*

> Receptionist: *Yeah, a year now.*

> GP: *Although it wasn't really a response to a survey, that, it was a response to an initiative from . . . It was a response to the fact that there was funding available from the PCT for extended hours.*
>
> *Torch Street*

Managing patient expectations

For staff in some practices, survey feedback raised issues about how to communicate change to patients, how to shape expectations, and how to raise patient responsibility. Practice staff often felt they struggled

to respond to patient demands and to increase understanding among their patients about how the system worked:

Facilitator: *Was there anything in the feedback where you kind of, you thought maybe you wouldn't respond?*

GP1: *Opening Sundays.*

[Laughter]

GP2: *I think another thing that was highlighted, for instance, is the question of marketing. I think we probably haven't, in spite of having additional extended hours on Saturdays, and I think that was, was one of the things we had a big conversation about the MORI survey. At that point, we were offering all sorts of extended hours, but patients didn't seem aware of it.*

The Maples

Practice staff often felt that a perceived lack of understanding of systems and services was evident in 'demanding' patients, whatever effort was made. Furthermore, issues that suited one group of patients (music in the waiting room, telephone consultations) ran the risk of provoking dissatisfaction in others. As for relationships with GPs, individual patient preferences for doctors were not always fulfilled because many GPs worked part-time.

Practice staff felt that patients had a role to play in smooth and efficient functioning of primary care services. Staff spoke about increasing patient accountability and engaging patients in the feedback process through patient participation groups.

Managing the performance of general practitioners

Individual GP performance was regarded as an important factor in determining overall practice scores. Several managers in low-scoring practices admitted that, practically, it is very hard to tackle individual doctor's (poor) performance:

Manager: *If the survey results are between [the survey providers] and the doctor, and he knows that or she knows it, there's absolutely no reason for them to change their ways, is there? What is the motivation to change, what is the driver to change when they have been rude or pretty lazy? Nobody knows that, let's get on and continue as before. It is only when this information becomes available to, perhaps, the practice, that things could start to change. And when I say practice, who in that practice I don't know, it could be the executive partner. But I think somebody ought to know and somebody ought to discuss these issues.*

Nurse: *What's the point in doing the survey anyway? If nothing is going to happen, is no point in doing that if doctor . . .*

Manager: *Nothing is going to change.*

Nurse: *. . . got the bad score and they keep it to themselves.*

Brentwell

The idea of having an 'outlier' doctor, whether it was a high or a low performer, was familiar to practice staff. Both scenarios could have an effect on the running of the practice, for example when patients found it difficult to obtain an appointment with a particularly popular doctor. In addition, the complexity and interlinking of factors influencing patients' responses was highlighted: patients' overall impression of the

surgery and of the appointment system was perceived to influence their reports regarding consultations, and possibly the performance of the doctor too:

> *Looking at the way people have access, the way the practice is organised, that they have access to facilities within the practice, the hours that the practice is open, the stage of the practice, the receptionist, how the admin is done, virtually how the sort of machinery of the practice works . . . I would not be surprised that where you had a poorly organised practice, poor machinery, if you like, you also had poor doctors, because I think doctors are influenced by the machinery in which they work, as well as influencing the machinery themselves.*
>
> *GP, Pilkington*

The majority of teams stressed that they would support a doctor who consistently received negative patient feedback, although they did raise concerns about the difficulty of having an 'unmanageable' GP in the practice. Suggested internal mechanisms of support ranged from mentoring from a team member, role-plays and peer support sessions, to interventions by a partner and/or manager. Creating a supportive environment was described as an important enabler, although it was not always clear what the concept of 'supportive environment' actually meant for the participants. There were no doubts that doctors who were put 'at the bottom of the pile' by survey results could perceive any intervention as threatening. In three low-scoring urban practices, staff were supportive of making the doctors' scores publicly available, identifying a responsibility to maintain patient safety.

Barriers to improvement

Discussions on potential improvements most commonly focused on changes to the practice premises and organisational aspects of the delivery of care. Even for such changes, which may have been at least in part precipitated by patient survey feedback, staff in most practices felt there was little long-term impact on patient opinion:

> *We've done a number of things and the MORI poll results have been remarkably stubborn in terms of the change in perception by patients. That's been quite slow.*
>
> *Manager, Beeches*

As one respondent highlighted, survey fatigue and the feasibility of being able to make relevant, meaningful changes was a persistent problem:

> *The cynicism that [Dr Ahmed], has quite rightly identified as being the problem with the surveys, is the fact that we have been surveying, and patients have been surveyed, for several years, the questionnaires are inevitably similar, the responses are inevitably similar, but the consequences of the survey are depressingly zero. So there may be a request from patients, for example, that old chestnut, the Saturday morning surgery, but that has never been, and never will be, as far as I'm aware . . . funded to take place. So, you then question the validity, the point of actually having the survey.*
>
> *GP, Church Road*

Staff highlighted a wide range of barriers to implementing changes which may have been requested by patients, most particularly expressing concerns around funding and staff capacity. A distinction was made between patient 'needs' and patient 'wants', with identification of an on-going struggle to meet unrealistic expectations:

> *It is a bit like opening on Saturday issue. Would you like the surgery to be open on Saturday? Yeah. Would you like us to go 24 hours? Yeah. Are you going to pay more taxes to have it open on Saturday? No. Are you going to use appointments during the week when you are able to make it? Mmm, not sure. But if the question is would you like to have it open on Saturday? Yeah. Consumerist.*
>
> *GP, Church Road*

There was far less discussion and agreement on how to effect changes to interpersonal aspects of care, if survey feedback highlighted issues relating to a particular GP. Issues included confidentiality and the 'unlikely' situation of GP feedback being shared with other practice staff ['self-learning and training, then I think that's more of a personal issue rather than being shared with the practice' (Practice Manager, Highfields)], and the idea that practice staff may need to recognise a balance in a GP's interpersonal abilities and other aspects of their professional practice ['maybe that doctor is not a great communicator but they are great at doing something else, you know' (GP, Church Road)].

Ultimately, staff in many practices felt there was little external support for making changes in response to patient feedback:

> . . . we need more support in this area . . . one of my concerns up until now is that sometimes services have come out and there has been very little support from anyone to say, right this is how you can improve things that might help, or we understand why you might be having problems, which ways we can help you with that. It has always been: here is your survey results, it is up to you how you sort it.
>
> GP, Highfields

Discussion

We suggest there are two primary purposes of large scale surveys of patient experience. First, surveys may be used to endorse and affirm good clinical practice or service organisation. Second, in line with the aspirations of policy-makers, surveys may provide evidence to inform improvements in health-care provision.[85] Our findings suggest that staff in general practice broadly view the role of patient feedback as one of quality assurance, providing evidence of whether or not they are offering an acceptable level of care to their patients. However, the role of surveys in quality improvement appeared less certain among participants. Although we identified *potential* dimensions of change (including front-line service improvements, management of patient expectations and management of GPs' performance) which could be informed by survey feedback, actual changes were usually confined to 'easy targets' for modification such as décor or playing music. Practice staff frequently oscillated between questioning the credibility of survey findings and taking them at face value; as we observed, respondents could be critical of survey methods while being pleased that their practice had 'done well'. For those who had performed less well, pathways to change were not often clear. These organisational responses to patient experience surveys were, inevitably, dominated by GPs and practice managers; within our focus groups, receptionists and administrative staff were far less vocal. Although not reported within this paper, our analyses suggest important variations in the extent of the influence of practice managers, and the dynamics between practice managers and GPs, on how practice staff as a whole reflect and act upon patient feedback.

Strengths and limitations and implications for future research

This study benefits from drawing on a large sample of primary care practitioners providing care in a range of practice settings in England. Participants represented a range of primary health-care professionals. Fourteen focus groups, of varying size, acted, we believe, as an effective means of capturing a range of participant views. The topic appeared of interest to participants. Participants were drawn from socio-demographically and geographically diverse areas, although all in England. Future similar research might usefully explore approaches to the impact of more immediate feedback, determining the extent of bias in response associated with varying response rates, and exploring motivations associated with changing (or not changing) practice in response to patient survey feedback.

The Utility Index

Van der Vleuten's[201] Utility Index was originally developed to consider assessments within an educational context (for example, the provision of feedback on progress to medical trainees or the conduct of examinations for specialist training), yet this model also has value in exploring the utility of patient surveys in service contexts. Any expectation of quality improvement from patient surveys is framing feedback from

such undertakings as an intervention aimed at stimulating action. Examining our emerging findings through the utility lens, which we undertook as a post hoc exercise, suggested that the overall value of patient feedback from surveys (and thus its potential to drive significant quality improvements) is undermined by a combination of variable attitudes to its credibility, and challenges for practice staff in identifying and bringing about meaningful changes (*Figure 17*).

Drawing on both our work and others' work, we suggest that the notion that survey feedback alone will stimulate major changes in care is an unrealistic expectation.[83,204] Although we saw evidence of changes to minor modifications such as car parking, décor and (slightly more challengingly) appointments systems, issues such as the management of GPs with evidence of poor communication skills, or responding to other 'interpersonal' aspects of professional practice, were much harder to tackle. Although patient experience will no doubt be improved by making general practices more accessible and more pleasant, significant aspects of experience linked to better clinical outcomes, including the quality of nurse- and GP-patient communication and trust and confidence in clinical staff, risk being left outside the focus of improvement work undertaken by practice staff.

There are six dimensions of the Utility Index (reliability, validity, cost, feasibility, educational impact and acceptability) which may determine the potential utility of an intervention, including patient experience survey feedback. All have relevance for how general practice staff view the current role of patient surveys.

Our identification of issues over the credibility of surveys, and difficulties in the interpretation of feedback, clearly echoes previous work in both primary and secondary care, which suggests widespread scepticism about the robustness of patient surveys.[119,200,205,206] Practice staff were more likely to view results positively if their scores were stable over time, were above average, and corroborated other sources of feedback such as complaints and compliments.

Although respondents felt that national patient surveys were perfectly feasible, there were concerns about the challenges of undertaking local practice surveys. Issues included the time taken to undertake such work and how best to ensure that in-house surveys were conducted robustly. There were also mixed attitudes about the cost-effectiveness of national survey programmes, in part due to the perceived difficulties in acting on feedback. We are not aware of any studies that have explored the cost-effectiveness of large-scale patient feedback surveys. This reflects recent discussions among GP leaders calling on national surveys to be banned on account of generating irrelevant and overly expensive data.

We found a consistent lack of impact of surveys at practice level, driven by factors including an absence of coordinated action and difficulties in making sense of survey feedback.[207,208] Benchmarking data were seen to be useful, although it was not always easy to make sense of.[67] Likewise, practice staff welcomed free text comments from patients as providing more specific information about their opinions.[209,210] Most commonly, when change did happen, survey findings were only one of the spurs to action to address an already-acknowledged problem. Changes, however, usually focused on service organisation or facilities and not on individual practitioner behaviour. There remains little evidence that patient feedback alone has any impact on the behaviour or skills of medical practitioners, with a number of controlled trials of the impact of patient feedback having little demonstrable influence on subsequent patient feedback.[83,204,211] The provision of facilitated feedback of results may be more effective in engendering engagement and action, as recent evidence in the secondary care setting demonstrates.[212] However, the emotional toll of negative patient feedback on staff is also relevant here: staff reported how disheartening it could be to receive consistently poor comments. The potential to see patient feedback as threatening and harmful, both at individual clinician level and at practice level, is an additional barrier to acting on such data, and further suggests the potential for facilitated reflection in assimilating feedback.

Practice staff worried that an endless cycle of surveys was inconvenient and burdensome for their patients. Nevertheless, surveys appeared to be broadly accepted as part of the new paradigm of patient-centred care, and welcomed in that role. However, lingering concerns over the linking of patient feedback to

Reliability and validity

- Do not represent reality
- Only certain patients complete them
- Sample sizes are insufficient
- Response rates are insufficient
- Do not measure what is important
- Usually exclude important groups (e.g. children, patients with learning disabilities)
- Only representative of one time period; unfair snapshot
- Use/cherry-pick results regardless

×

Cost and feasibility

- Surveys perfectly feasible, practice-level conducted when incentivised vs. conducted for own interest (rare)
- National surveys – worth doing vs. 'complete waste of money'
- Local surveys – challenging, difficult to conduct, hard to interest patients

×

Educational impact

- Surveys provide evidence of patient concerns – useful source of evidence (although only one of many sources)
- Struggle to engage with format of survey feedback
- Benchmarking helpful
- Triangulate survey results with complaints
- Free text vs. quantitative feedback – free text often easier to understand/action
- No clear procedures for acting on feedback
- Sharing of feedback variable
- Nothing ever changes as a result of surveys
- Emotional reactions

×

Acceptability

Patients
- Inconvenient
- 'Over surveyed'
- Surveys too long
- Not completed properly
- Concerns (e.g. language barriers)

GPs/practice staff
- Surveys part of patient-centred care
- Politically driven
- May have perverse impacts if used for performance management
- Leading questions
- Forced to do it (e.g. revalidation)

=

Utility?

- Mixed attitudes towards surveys
- YET practice staff engage with and do not dismiss feedback
- Practice staff rarely able to co-ordinate effective and sustained changes as a result of feedback, particularly around more challenging areas such as clinician–patient communication
- Sustained research and practice effort required to support translation of feedback into changes BUT feedback alone unlikely to support/stimulate change

FIGURE 17 The 'Utility Index' of patient experience surveys in primary care: perspectives of practice staff. Reproduced from Boiko *et al.*[199] under the terms of the Creative Commons Attribution Non-Commercial No Derivatives License CC BY-NC-ND and permits non-commercial use, distribution and reproduction in any medium, without alteration.

pay-for-performance and the external imposition of surveys on general practice (along with a long list of other activities) tempered the acceptance of current surveying practices, particularly for GPs.

Drawing these components together, we suggest that key drivers of the gap between conducting surveys and implementing changes relate to the difficulties of practice staff in trusting and making sense of survey findings, coupled with a lack of support for identifying and making changes to practice.

Implications for practice

Although practice staff predominantly view feedback from patient experience surveys as a mechanism for affirming good or detecting poor service delivery (i.e. as a quality assurance mechanism), the current direction of policy targets a higher aspiration of providing evidence to inform changes in practice (a quality improvement mechanism). The question remains as to how patient experience survey data can become a key driver of service improvement. Evidence suggests that securing feedback alone is insufficient to stimulate change,[204] and our findings point to primary care practices being left to be responsible for developing their own implementation mechanisms. GP contractual arrangements prior to 2009 offered incentives to primary care practices to discuss the findings of patient feedback surveys with patient representatives, for example through the use of patient participation groups. Although now withdrawn, such an approach may have substantial merits in facilitating change, as well as acting as a means of responding to the need for active patient and public participation in informing the design and configuration of services.

Recent work in secondary care highlights the potentially important role of facilitators in enabling staff to review survey results and, most importantly, act on them.[212] Within primary care, such initiatives are lacking. Practice staff need to be supported to reflect on patient feedback; this will need dedicated resources on top of those committed to collecting patient experience data. Quality assurance of survey development, data collection and reporting of results is of vital importance if the findings of surveys are not to be dismissed out-of-hand on the grounds of credibility, or to become the subject of discussion aimed at diverting rather than promoting action and change.

Where surveys highlight the need for change, formal processes for planning and delivering change are required, covering both minor modifications and more challenging problems such as reported problems with the quality of clinician–patient communication. In the current climate of scarce resources, a commitment to developing patient experience surveys as quality improvement mechanisms would therefore displace other competing priorities, and policy-makers and practitioners must be realistic about what can be achieved. However, until then, it is our view that the full potential of patient feedback will not be achieved.

Conclusions

We have identified a number of key reasons for the gap between the receipt of patient feedback and acting on that feedback. Addressing the concerns of primary care providers across all aspects of patient surveys – reliability, validity, cost, feasibility, impact and acceptability – and supporting them to reflect on the meaning of such data will be important if we are to draw on such evidence in quality improvement programmes. Alongside this, however, we need to develop a realistic understanding of where surveys may be expected to drive change, and where they may not.

Chapter 8 Attitudes to receiving feedback from patient experience surveys: interviews with general practitioners

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Abstract

Background

To date, little research has focused on doctors' attitudes to patient experience surveys that give them personalised feedback. Although national surveys, such as the GP Patient Survey, report results at a practice level, GPs are additionally required to reflect on individual-level patient feedback for the purposes of appraisal and revalidation. This chapter examines doctors' perceptions of patient experience surveys, and the receipt of personal feedback from these, in primary care settings.

Methods

We analysed data from 21 interviews conducted with GPs across 14 practices. Participants were sampled from doctors who had participated in our patient experience survey (reported in *Chapter 9*) and had recently received individual-level survey feedback.

Results

General practitioners expressed commitment to incorporating patient feedback in quality improvement efforts. However, they also expressed negative views about the credibility of survey findings and patients' motivations and competence in terms of providing feedback. As a result, they found it challenging to make sense of and take action as a result of the feedback that they received from patient experience surveys.

Conclusions

General practitioners' ambivalence towards patient experience surveys is likely to limit their impact on the success of quality improvement initiatives. In response, this chapter highlights the need for initiatives to address doctors' concerns about the credibility of surveys.

Introduction and rationale

A number of recent policy initiatives have emphasised the utility of patient feedback for quality improvement.[38] In the UK, a series of initiatives has established and expanded the role of patient experience surveys in the NHS, leading to the recent NHS Outcomes Framework,[214] which features patient experience as one of five key domains on which NHS performance is judged. In addition to national surveys, such as the GP Patient Survey, numerous surveys of various kinds are undertaken at the local level by health-care providers.[215] In 2012, the General Medical Council (GMC) introduced a revalidation programme requiring individual doctors to collect patient feedback on the care that they provide.[216] Such feedback is subsequently used as supporting information in a 5-yearly procedure through which doctors 'revalidate', that is, retain their licence to practise, and is also intended to facilitate reflective improvements in the quality of individual doctors' practice.[137] Nevertheless, most national survey programmes continue to be conducted and reported at the organisational level. Likewise, existing research has tended to focus on doctors' engagement with reports of patient experience at the level of the hospital ward, primary care practice or similar organisational units within primary or secondary care.

Existing research highlights the importance that doctors place on patient experience in principle and the potential for positive improvements based on patient feedback.[119] This body of work has also explored challenges surrounding the incorporation of patient feedback into medical practice. Doctors commonly express a range of negative views about the plausibility of survey findings, including concerns about sample size and representativeness; respondent bias and subjectivity; reliability and validity of survey instruments; lack of clarity on the purpose of surveys; contextual sensitivity; and the challenges of interpreting patient feedback when lacking contextual information, with numerical scores viewed by many doctors as 'a simplistic reduction from a complex range of factors' (p. e160)[200] (see also Coulter et al.[45] and Asprey et al.[119]). These challenges relate to long-standing critiques of quantitative surveys that highlight issues such as the lack of self-evident meaning in numerical findings (see, for example, Williams[217]) in a range of contexts including special educational services and health-care provider performance.[218,219] These and other concerns have tended to limit the impact of patient feedback in terms of quality improvement.[215]

Many of the challenges associated with patient experience surveys relate to standard features of survey administration and so are also likely to be relevant to surveys administered at the individual doctor level. With some exceptions (e.g. Hill et al.[67]), few researchers have focused directly on doctors' engagement with patient experience surveys at the individual doctor level. Although such engagement is largely unexplored, it is of considerable significance given the well-established role of patient experience surveys in contemporary health care (and the NHS in particular) and the recent introduction of mandatory individual doctor-level surveys.

This chapter draws on qualitative data to explore attitudes towards patient survey feedback on the part of individual GPs. By exploring attitudes towards the plausibility of surveys, this chapter demonstrates the generally contested, problematic and inconsistent nature of doctors' current engagement with patient experience surveys and points towards the need for additional investment in training and relevant resources.

Changes to study methods from the original protocol

The aim of this strand of work, as stated in the original protocol, was to understand how general practices respond to low patient survey scores, testing a range of approaches that could be used to improve patients' experience of care (aim 1).

The interviews reported here took place alongside the focus groups with practice staff, reported in *Chapter 7*. In our original application, we set out plans to interview each doctor in between five and eight low-scoring practices. These interviews would cover their accounts of what contributed to their practice score, considering their recent GP Patient Survey feedback. However, as with the focus groups, the conduct of our own patient experience survey (reported in *Chapter 9*) at individual doctor level meant that we were able to feed back to GPs their own patient experience scores. Interviews thus considered attitudes to both practice- and individual-level feedback. We also altered our sampling strategy, deciding instead to incorporate a wider range of practices (14 practices) to reflect a greater diversity of practice cultures within which the GPs were working.

Methods

Data collection
We conducted 40 semistructured face-to-face interviews with GPs in practices across Cornwall, Devon, Bristol, North London, Bedfordshire and Cambridgeshire. These practices were part of a larger group of 25 practices participating in our patient experience survey (see *Chapter 9* for details of sampling, recruitment and survey conduct). From the sample of 25 practices, two doctors were interviewed from practices with low GP Patient Survey scores and one doctor was interviewed from each medium- and high-scoring

practice. Individual GPs were identified randomly within each practice and approached one by one for consent to participate. Each GP had received an individual report from our patient experience survey, focused on patient responses to communication items and including summary statistics and free-text comments. An interview topic guide was developed in light of existing literature to focus on individual-level patient experience surveys and was revised in relation to policy changes on revalidation that occurred during the conduct of the study. Interviews lasted between 20 and 60 minutes.

For the purposes of this report we excluded 19 interviews conducted with GPs prior to the introduction of revalidation in December 2012, as this changed the nature of the topic guide and issues covered in the interviews in relation to the conduct and implications of individual doctor-level patient surveys. We thus include data from 21 GP interviews conducted across 14 practices.

Data analysis

The interviews were digitally recorded with written consent and transcribed verbatim. NVivo 10 software was used to organise and categorise the data. Transcripts from four GP interviews (not included in the final analysis) were used to develop an initial coding framework, which included 44 codes grouped into headings including survey experience and survey-related change. A thematic analysis approach was used[220] involving six distinct stages: familiarisation with the data; generating initial codes; searching for themes; reviewing themes; defining and naming themes; and producing a final analysis, which was discussed among the research team before being revised and finalised.

Results

Dimensions of ambivalence

Our analysis found that GPs demonstrated profound ambivalence regarding the purpose and plausibility of patient surveys, leading to complex, varied and problematic engagement with patient feedback. The Oxford English Dictionary[221] defines ambivalence as 'having mixed feelings or contradictory ideas about something', a definition that was interpreted in this study as a spectrum from mixed feelings about something to holding ideas that directly contradict each other. Two main dimensions of ambivalence were identified. The first relates to doctors' views of patients' motivations and competence as responders in surveys. The second relates to doctors' views of surveys from the perspective of enabling quality improvement (or otherwise) – views that may diverge from what is intended by the managers responsible for introducing and administering surveys.

Interviewees rarely situated themselves consistently with regard to these two dimensions of ambivalence; indeed, it was common for GPs to express inconsistent and contradictory views on both dimensions of ambivalence, often within the same interview (see following sections). Consequently, although some themes (e.g. a greater emphasis on negative rather than positive views of patients) were more to the fore than others, ambivalence is the dominant and unifying feature of the findings in this area.

Patients and surveys

General practitioners emphasised the centrality of the doctor–patient relationship and the utility of receiving feedback from their patients. For example, one interviewee described the doctor–patient relationship as an 'adult to adult' relationship in which patients know more about some things than doctors and in which doctors need to listen to patient feedback:

> [T]he only way you're going to know whether you're doing your job properly . . . it's listening to what the patients are telling you [in their feedback].
>
> GP4

Against this backdrop, many GPs discussed patients' motivation and competence to provide feedback in more detail. One GP discussed how patients' feedback showed that they were reflecting in depth on their experience before communicating it through free-text comments:

> They're . . . thinking 'Well, actually, what do we think of the [practice]?'. . . rather than just at the time when they're desperate for an appointment and frustrated, you know, to think actually . . . what things at the [practice] do they actually value.
>
> GP9

More widely, several doctors noted that patients were used to responding to surveys in other spheres of their lives, potentially (although not inevitably) increasing their willingness to provide feedback on their health-care experiences. As such, many doctors saw patients as motivated to reflect on and communicate their experiences (although this was also raised as a concern in terms of raising patient expectations; see following section).

Similarly, some doctors expressed the view that patients are competent to judge their care. Patients' ability to evaluate doctors was sometimes endorsed because it aligned with the doctors' pre-existing positive views of their own professional skill. However, despite this, many interviewees expounded fundamentally ambiguous views of patients considered as survey respondents, often combining in the same interview seemingly positive views of patients' motivation and competence with more negative views. For example, one GP emphasised the utility of patient surveys in terms of patients' capacity to identify specific problems:

> I think the patient feedback is really important . . . You've got to actually listen to what are patients saying, [e.g.] they are telling us through this [feedback] that the system currently in place for booking appointments . . . is not working for them.
>
> GP2

The same GP also stressed, however, the ways in which patients' comments were often of little use for improving care quality, especially at the individual doctor level:

> When I read the comments it was just a diatribe of accusations against the practice as a whole . . . [I]n terms of my individual practice it gives me no feedback at all . . . [The] majority of the comments on the appointment system and on lack of [relational] continuity [were] all on the issues that we are totally aware of.
>
> GP2

Doctors often questioned patients' motivations, first, by viewing patients who provided negative feedback as doing so because they had specific grievances to express ['if they've got an axe to grind' (GP10)] and, second, by suggesting that patients participate in surveys to gain leverage over doctors. Many interviewees also questioned patient competence or patients' ability to provide accurate and relevant feedback. Overall, GPs advanced six principal characteristics of patients that singly and/or collectively undermined their ability to provide accurate feedback:

1. Positive bias – the tendency of patients to give strongly positive feedback regarding doctors, linked to patients' well-documented reluctance to criticise doctors in general and their own GPs in particular. In this context, one GP described the patients as 'quite reluctant to talk the doctor down, because we've got a good ongoing relationship' (GP10).
2. Negative halo effects – patients ascribe negative characteristics to consultations because of other negative experiences during their visit to the practice. As one GP described, patients may carry an 'initial bad experience' with the practice reception 'all the way through . . . into the consulting room as well . . . it affects all of your feedback' (GP6).

3. Failure to understand surveys – for example one GP noted that 'because [patients] don't understand the questionnaire, they might tick whatever box they think; and that's the reason we don't get true results' (GP19).
4. Subjectivity – several doctors emphasised that different individual patients could give different feedback despite having experienced similar consultations concerning similar medical problems. More widely, one GP highlighted patient subjectivity by suggesting that strongly negative patient feedback could 'reflect more on the person [patient] than it does on you [the doctor]' (GP6).
5. Inability to evaluate clinical competence – GPs highlighted patients' inability to judge doctors' clinical competence. As one noted, patients 'don't know about my clinical ability . . . [or] how much I know' (GP8).
6. 'Good doctors, bad feedback' – doctors felt that good care may result in negative feedback because it differs from patients' preferences. Common examples included doctors refusing to prescribe antibiotics or write 'sick notes' for patients with depression. GPs referred to situations in which patients were unhappy with treatments recommended (or withheld) by doctors and often saw themselves as having a responsibility to protect NHS resources rather than pleasing patients: 'pleasing a patient isn't the same thing as being a good doctor . . . I see part of my role as a GP [as] gatekeeping NHS resources, including my own time' (GP8).

Thus, although doctors' views often combined positive and negative views of patient feedback, negative views tended to dominate, resulting in a sceptical attitude that questioned patients' motivations and competence vis-à-vis the provision of feedback (*Table 29*).

Patient experience surveys and quality improvement
This section focuses on a second dimension of ambivalence, relating to GPs' perceptions of the potential for patient experience surveys to drive quality improvement. Doctors identified benefits in reflecting on patient feedback and encouraging competition between doctors through comparison of patient feedback scores. However, they also presented a number of concerns that undermined the potential of surveys to facilitate quality improvement. As with doctors' attitudes towards patient feedback, the overall impression was more negative than positive.

TABLE 29 General practitioners' attitudes to patients' motivation and competence

	Doctors' attitude	
Category	**Positive**	**Negative**
Patient motivation	Willing to take time to provide feedback	Axe grinding
	Used to providing feedback in other spheres	Desire to influence doctors
Patient competence	Able to recognise good-quality care/improvements	Positive bias
		Negative halo effects of clinic/survey experiences
		Unable to understand survey instruments
		Subjective judgements
		Lack of clinical knowledge
		Good doctor/bad feedback

Positive attitudes

Doctors emphasised the potential for patient experience surveys to facilitate quality improvement in a variety of ways. One GP, for instance, emphasised that they 'actually took on board things which people were saying', as 'there's no point doing a survey . . . unless you're actually going to take notice of what the results say' (GP1). Numerous participants described negative feedback as having more utility for change than positive feedback. Furthermore, a number of doctors discussed the potential for quality improvement to be driven by doctors' competitiveness with regard to colleagues' performance and/or benchmarked data (i.e. data supplied alongside comparative figures for comparable surveys undertaken in the past or elsewhere). One GP, for example, noted that surveys are:

> [A]ll about comparing yourself with other GPs who do the same job . . . Because, I think, you want to know that you're in the best group, compared with other people.
>
> *GP5*

Overall, interviewees saw the potential for survey-based quality improvement in three main areas:

1. Reminders of core proficiencies, especially communication skills and basic tasks such as introducing themselves to patients and ensuring that patients are satisfied with the consultation before they leave. Several doctors remarked on the utility of repeated surveys for highlighting the importance of such issues, with one GP saying, 'I think it flags up . . . the initial consultation tips that you think you do that perhaps you don't always' (GP5).
2. Reinforcements of known problems (and providing evidence to support change), often at the practice level: 'the [survey] was useful because [it] really reinforced the impressions that we were beginning to form as . . . colleagues, and it was a bit more evidence that we could actually say, "Well, look, this isn't personal, because look at this, and this is random and anonymised data coming in" ' (GP15).
3. Unexpected issues documented in free-text comments. These were often seen as providing more useful material for reflection and change than numerical feedback, which was seen as overly positive about the care that patients had received. Thus, one GP stated that 'I actually took more from the free-text comments . . . because I think the figures were . . . all pretty good really . . . [R]eading through the comments I think is really quite helpful . . . just having it there makes you think about it and think "Well, why do I do that?" ' (GP1).

Negative attitudes

Doctors' positive attitudes towards the potential of patient experience surveys in facilitating quality improvement, noted in the previous section, were paralleled and undermined by a plethora of sceptical views. For interviewees, this led to an ambiguous but overall decidedly negative picture in which the value of surveys for quality improvement purposes was placed in severe doubt, in line with previous research in other fields that emphasises the challenges involved in interpreting survey data.[218,219] As well as negative views of patient motivations and competence, outlined above, GPs added several more reasons for discounting surveys as quality improvement tools. Broadly, these concerns fell into five categories:

1. Concerns about the validity and reliability of surveys on the basis of factors including low response numbers, biased samples and problematic administration methods. GPs expressed concerns about response numbers despite having high numbers of respondents for their individual feedback (with a mean of 71, double the usual number required for adequate reliability). One GP linked what they saw as low response rates to patients' fatigue regarding surveys: 'There is a little bit of questionnaire overload . . . And I think it's reflected in a very poor response rate' (GP2).
2. Difficulties surrounding interpretation, including the separation of statistics from free-text comments and thus the difficulty of interpreting patients' rationale for specific responses in a given survey. As one GP remarked, 'if there was a problem there [in the numbers] I'd look towards addressing that, but I couldn't really find a comment which was associated with that . . . so I found it quite difficult' (GP1). As research has found in other contexts,[212] feedback presented to health-care professionals without expert facilitation can be difficult to interpret and act on.

3. Issues of context. Doctors raised concerns about specific features of clinical encounters or patient characteristics that could influence patient feedback and thus undermine the value of patient feedback as a foundation for quality improvement. For example, some GPs who worked in deprived areas felt that surveys did not take sufficient account of the possibility of some population groups giving systematically more negative feedback than other groups: 'sometimes I think you have a survey and I don't think it's a true reflection of where you are, your demographics. And I think that can be a problem' (GP11).

4. Anxiety about negative feedback. A number of GPs discussed actual or potential anxiety arising as a result of negative feedback. This could problematise doctors' engagement with survey findings, impact on their confidence and make them less likely to adopt a positive and constructive attitude towards improving their care. One GP, for instance, described feeling upset and worried following negative feedback – feelings that were shared by many other GP interviewees: 'I find it quite difficult, because I'll always take it quite personally' (GP3).

5. The risk of raising patient expectations. The fifth and final area of concern relates to the risk of raising patient expectations through surveys by introducing a consumerist element previously more associated with customer relations than medicine. As one GP noted, 'it's like TripAdvisor, everything, everybody's being rated' (GP8). As several doctors noted, it is not always possible to meet these rising expectations, especially with regard to resource-related issues such as out-of-hours appointments; consequently, surveys may encourage patients to expect changes that are impossible to implement in practice, leading in turn to negative patient feedback. Thus, if quality improvement is evaluated at least in part on the basis of patient experience surveys, then surveys themselves may render evidence of improvement less likely.

Overall, negative views of the potential contribution of patient surveys to quality improvement agendas dominated the findings (*Box 3*).

BOX 3 Doctors' attitudes to patient experience surveys as quality improvement tools

---

Positive

- Value of reflecting on patient feedback.
- Value of competition between doctors on the basis of survey feedback.
- Reminders of core proficiencies.
- Reinforcements of known problems (and providing evidence to support change).
- Unexpected issues documented in free-text comments.

Negative

- Discounting of patient motivations and competence.
- Concerns about the validity and reliability of surveys.
- Difficulties surrounding interpretation.
- Issues of context.
- Anxiety about negative feedback.
- Risk of raising patient expectations.

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Discussion

This study explored GPs' engagement with patient experience surveys and our findings show that they express mixed and contradictory opinions, despite long-standing experience of such surveys. We have discussed doctors' views with regard to two key dimensions of ambivalence: patients as responders to surveys and the potential of patient feedback to facilitate quality improvement agendas. Interviewees' vacillation between different standpoints problematised attempts to generate a clear impression of engagement with patient experience surveys. Nevertheless, it is possible to draw some important conclusions. Although GPs endorsed patients' motivations for participating in surveys and their competence to provide accurate and relevant feedback, these notions were outweighed by the numerous ways in which doctors emphasised what they saw as patients' questionable motivations and lack of competence vis-à-vis surveys. Consequently, doctors appear to view patients, as survey respondents, in a deeply ambiguous fashion, that is, as being simultaneously competent and incompetent at evaluating doctors, as being both accurate reporters of experience and inevitably biased commentators, as disinterested contributors to quality improvement and axe grinders. Likewise, although participants appeared to emphasise the potential utility of patient feedback for quality improvement, they also presented numerous factors that individually and collectively undermined this agenda. Overall, GPs' engagements with patient experience surveys were highly contested, problematic and inconsistent.

From a GP's perspective, surveys themselves exhibit varied properties and capacities in multiple dimensions, including the different ways that patients are perceived to interact with survey instruments, the different purposes for which surveys can be undertaken and the different conceptualisations that doctors can generate about them, reflecting the wider challenges inherent in interpreting numerical data.[212] Additionally, the varied ways in which survey feedback is disseminated in different settings generates another tier of properties: a feedback report that is e-mailed to a doctor with no benchmarking or interpretative guidance is effectively a different kind of feedback from a benchmarked report discussed with a facilitator. As a result of these varied properties, ambiguity is a strong feature of surveys as currently administered. GPs appeared to make sense of this ambiguity by drawing on their identities and frames to arrive at a widely shared yet 'internal' ambivalence. In this context, we understand 'internal' ambivalence as a kind of ambivalence that takes place not so much *across* different doctors (although this was seen at times) but rather *within* doctors, such that individuals tended to express multiple and mutually contradictory ideas. From this perspective, doctors appeared to consider more than one interpretation of patient experience surveys as plausible at the same time.

Nevertheless, doctors did not see all interpretations as equally plausible. As discussed earlier, they tended to settle on negative views of patients and patient experience surveys, thus undermining the potential for reflective change and quality improvement in response to patient feedback (in line with previous research[119,200]). The numerous specific reasons that doctors gave in support of their standpoints – ranging from patients' lack of clinical expertise to surveys' lack of contextual sensitivity (*Table 30*) – suggest that plausibility in this context is a complex, multilayered and largely 'negative' phenomenon. As such, patient experience surveys can be seen as an important instance of a wider problematic identified by May *et al.*:[222] 'what to do with the patient's subjective experience of illness, and how to connect it with medical knowledge and practice' (p. 1023). Research in other domains, such as teachers' responses to pupils' feedback, illustrates that this problem is not specific to health-care contexts, but rather characterises more universal responses to feedback and criticism.[223]

Implications for practice

A particular aim of this strand of work was to consider what approaches might be used to improve patients' experience of care. Our findings suggest that some basic steps are first required to improve the credibility of survey findings in the minds of GPs and increase their engagement with them. Although the 'internal' ambiguity exhibited by GPs, that is, the coexistence of positive and negative views of patient experience surveys, demonstrates the problematic nature of doctors' engagement with patient experience surveys, it also suggests the possibility of positive change in the future by building on some of the positive

TABLE 30 Plausibility of patient experience surveys: limiting factors and potential solutions

Factors inhibiting plausibility of interpretations favouring quality improvement	Solutions to increase plausibility
Views of patients	
Not dispassionate evaluators	Facilitate doctors' personal engagement with patients; training for doctors regarding psychometric bases of validity
Incompetent evaluators	Facilitate doctors' personal engagement with patients; include clearer instructions to patients on survey instruments
Views of surveys	
Difficulties of interpreting feedback	Provide facilitated feedback for individual doctors/groups of doctors embedded within wider local change programmes; provide additional information on feedback material (e.g. benchmarking data)
Lack of contextual sensitivity	Explore potential for development/validation of tailored survey instruments for different care settings
Anxiety regarding negative feedback	Provide support for individual doctors concerned about negative feedback
Risk of raising patient expectations	Limit frequency of survey administration to minimum necessary, except when raising patient expectations is intended

views that doctors already hold regarding patients and surveys. In the patient survey context, opportunities exist for managers and lead clinicians to engage in processes aimed at strengthening the plausibility of patient feedback surveys. For GPs to see quality improvement on the basis of patient feedback as plausible, these findings suggest that they would need to be persuaded simultaneously of patients' evaluative competence and disinterestedness; the possibility of interpreting feedback meaningfully; the ability of survey instruments to take account of contextual factors; the provision of support for doctors receiving negative feedback; and assurance of measures to limit the risk of raising patient expectations (except when it is intended to raise patient expectations). In each of these arenas, as presented in *Table 30*, potential exists for measures to be taken. By doing so, relevant stakeholders can help to shape GPs' engagements with patient surveys in more positive directions.

Conclusions

This chapter has explored the ambiguities in GPs' attitudes to patient experience surveys and has focused on the plausibility of survey findings. Although policy developments over the past decade have increasingly emphasised the importance of patient experience surveys in terms of quality improvement, these findings suggest that this agenda faces significant challenges in terms of doctors' inconsistent and highly critical engagements with patient feedback. GPs discount patients' motivations and competence at the same time as emphasising patient-centred care, and undermine the potential for survey-based quality improvement while also highlighting the importance of patient feedback. GPs demonstrated complex and ambivalent attitudes towards the plausibility of patient experience – attitudes that are likely to constrain the potential impact of patient experience surveys on care delivery. In response, we highlight the need for initiatives on the part of managers and lead clinicians to address doctors' plausibility concerns.

Chapter 9 Understanding high and low patient experience scores: analysis of patients' survey data for general practices and individual general practitioners

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Abstract

Background

There is increasing interest in collecting and potentially publishing performance data at an individual practitioner level, in part to enable patients to make informed choices about their care provider. However, UK general practice performance data remain at the practice level, potentially masking important differences between individual practitioners. The aim of this strand of work was to determine the extent to which practice-level scores mask variation in individual performance between doctors within a practice. Additionally, we aimed to determine the test–retest reliability of core items derived from the GP Patient Survey.

Methods

Patient experience surveys were sent to patients who had recently had a face-to-face GP consultation in one of a stratified sample of general practices. In addition, a subsample of patients returning questionnaires were sent a retest questionnaire.

Results

For the main survey, 7721 patients consulting one of 105 GPs across 25 practices returned a questionnaire (response rate 50.9%). The proportion of variance in communication scores attributable to differences between doctors (6.4%) was considerably more than that attributable to practices (1.8%). Higher-performing practices usually included only higher-performing doctors, but lower-performing practices may include doctors with a wide range of communication scores. In the test–retest analysis, 348 patients consulting one of 20 GPs from five practices returned a retest questionnaire (response rate 58.3%). The percentage agreement for categorical items between test and retest ranged from 66% to 100% (kappa coefficients ranged from 0.00 to 1.00). The intraclass correlations for ordinal items averaged 0.67 (range 0.44–0.77).

Conclusion

Aggregating doctors' communication scores at practice level can mask considerable variation in individual doctor performance, particularly in lower-performing practices. Most of the items derived from the GP Patient Survey have moderate to almost perfect reliability, with performance-related items achieving substantial reliability.

Introduction and rationale

Public reporting of performance at either provider or individual level is increasingly becoming the norm in health care. The approach is proposed to increase accountability, transparency and public engagement.[85,86] It is proposed that offering users the potential to compare their primary care provider with other similar providers may enable patients to make more informed decisions about their care, although evidence in this area is limited.[224] The major source of compiled and published patient feedback and general practice

performance scores, the English GP Patient Survey,[11] is currently available on websites such as NHS Choices[12] and Compare.[225] Making such data publicly available may provide a comprehensive overview of NHS primary care performance, although it is not without controversy.[5]

The GP Patient Survey collects patients' views on the quality of care that they receive from their local GPs, dentists and out-of-hours doctor services. It includes a series of items on the interpersonal skills of the last GP who they saw at their practice (within the previous 6 months). A significant limitation of GP Patient Survey ratings, however, is that items relating to the doctor–patient relationship are reported at practice level, possibly masking considerable performance variation among individual GPs within that practice. Aggregation of ratings may offer both inaccurate reporting of patient views of individual doctor performance and little scope for reflection on the part of GPs about their personal strengths and weaknesses. Current indicators may consequently fail to provide users, providers or commissioners with an accurate assessment of performance within a practice.

Changes to study methods from the original protocol

The aim of this strand of work, as stated in the original protocol, was to estimate the extent to which aggregation of scores to practice level in the national study masks differences between individual doctors (aim 2).

In this chapter, we address two of the original four main objectives for the study:

1. to provide scores for individual doctors, to allow us to estimate the extent to which aggregation of scores to practice level in the national survey masks differences between individual doctors within practices
2. to explore the extent to which patient responses to items used in the GP Patient Survey show stability over time (7–10 days).

In our original application, we envisaged using this strand of work to additionally (1) identify patients for cognitive interviewing (as reported in *Chapter 2*) and (2) identify patients of South Asian ethnicity for our work on variations in patient experience in minority ethnic groups (as reported in *Chapters 2*, *5* and *6*). In practice, these two objectives were moved to stand-alone studies as a result, in part, of our switch of survey distribution from face-to-face, as originally planned, to postal mode. Pilot work showed that the distribution of a post-consultation survey by our research team in participating practices over a defined data collection period risked a high proportion of 'missed' eligible patients and would place a large burden on research staff to accomplish this for > 7000 respondents. Instead, after further pilot work, we undertook a postal survey, working with practices to identify patients who had undergone a face-to-face consultation within the previous 3 weeks (see *Methods* for full details).

Methods

Twenty-five general practices in Cornwall, Devon, Bristol, Bedfordshire, Cambridgeshire and North London were invited to participate. The aim was to recruit 15 practices from the lowest-scoring 25% of all practices in the 2009/10 GP Patient Survey on a composite case mix adjusted score for the doctor–patient communication items in the questionnaire and five practices scoring in each of the middle and highest quartiles (i.e. 37.5th–62.5th or > 75th percentile). Linear regression models were used to adjust for patient age, gender, ethnicity, deprivation score and self-rated health for case mix. Practices had to have at least two registered GPs and the sample was stratified by practice-level communication score and by GP head count, deprivation index and geographical location. All GPs (working at least four sessions per week and not trainees, short-term locums or currently on extended leave) within each practice were required to be willing to participate. Practices were approached in a randomised order until the quota for each stratum was achieved.

Data collection took place from October 2011 to June 2013. A list of face-to-face GP–patient consultations conducted in the 3 weeks prior to the specified date was extracted from electronic practice records. Practice staff screened lists for recent deaths, terminal illness, those aged < 18 years and mental incapacity. Once the extracted list was screened the remaining patients were sent a patient experience survey accompanied by a letter from the practice, a study information sheet and a prepaid envelope. Repeat consulting patients were sent one questionnaire only, which related to their most recent consultation at the time of extraction. Non-responders were sent one reminder within 3 weeks of the initial mail-out and questionnaires returned up to 100 days after the initial mail-out were accepted.

Fifty completed questionnaires were judged sufficient for obtaining reliable mean communication scores for comparable patient feedback instruments.[226,227] The survey cycle was thus repeated until 50 completed questionnaires for each participating GP were received or until three cycles were complete. Patient consent to take part in the study was inferred by receipt of a questionnaire.

Questionnaire used in the study

The questionnaire used in the study was based on the instrument used in the national GP Patient Survey and asked patients about access, waiting times, opening hours, continuity and interpersonal aspects of care, as well as demographic details, including self-rated health. The advisory group had particular input into the design of the study materials, including the questionnaire. Patients were asked to recall and report on a consultation with a specified GP on a specified date (corresponding to details extracted from practice records) when completing the seven communication items and one confidence and trust item. A mean communication score for the GP from each respondent was calculated from the seven communication items (questions 22a–g; see *Appendix 2* for the full questionnaire) for patients providing four or more informative responses.

Test–retest reliability

General practitioners within the five participating practices with the highest response rates from the initial mail-out were selected to take part in the retest phase. Patients returning the test phase questionnaire within 3 weeks of mail-out were sent a retest pack, containing a differently coloured questionnaire, a covering letter and an information sheet. Only retest questionnaires returned within 4 weeks of their initial mail-out were accepted. The gap between completion of the first (test) questionnaire and completion of the retest questionnaire varied between 3 and 49 days; the gap between the consultation and completion of the retest questionnaire varied between 30 and 76 days.

Analysis

Main analysis

The gender balance, proportion of doctors who trained in the UK and mean time since registration in the practice sample, together with questionnaire response rates and intervals between patient consultations and mail out and receipt of questionnaires were described. A two-sample *t*-test was used to test whether or not intervals between consultation and mail-out were associated with questionnaire responses.

In our study design, groups of individual patient scores are associated with (nested within) individual GPs and groups of GPs are associated with individual practices. Although some variance in patient scores could be attributed to individual experiences, some of the variance was likely to be attributed to GPs, as well as to other aspects of the practices (e.g. reception staff, opening hours). Three-level mixed-effects hierarchical linear models were used to estimate the extent to which variance for each outcome measure was attributable to the differences between practices, between doctors within each practice and between the patients and other residual scores.

The models were adjusted for four self-reported patient attributes shown to be important predictors of reported patient experience: gender, age, ethnicity and self-reported health status.[131] The practice-,

doctor- and patient-related variance components from each model were expressed as percentages of the total variance. The 'best linear unbiased predictors' of the practice and doctor effects were used to provide estimates of the mean score for each doctor on each of the outcome measures.[228] Corresponding estimates of the mean scores for each practice were elicited from additional models, omitting random effects for doctors. The variation in GP and practice mean scores were described and simple correlation analysis investigated the association between the practices' mean score and the within-practice standard deviation (SD) of the GPs' mean scores. The variance components from each model were used to estimate the number of patient scores per doctor needed to achieve a reliability of at least 0.7 or 0.8 for the doctor's mean score (see *Appendix 3* for the formula). Whereas a reliability of ≥ 0.8 is desirable for moderate- to high-stakes assessments,[229] a threshold of 0.7 is regarded as acceptable in patients' assessments of doctors' performance in some contexts.[230] Stata 10.1 was used for data analysis.

Analysis of test–retest reliability

The response rate and response timings for both test and retest phases were described and the demographic profiles of three groups of patients were compared: those who were sent but did not return a test questionnaire within 3 weeks of mail-out (not eligible for retest), those who were sent but did not return a retest questionnaire within 4 weeks of mail-out and those who returned both test and retest questionnaires within the deadlines. The proportions of non-response by patients eligible to answer each of the 54 separate items were compared between the test and the retest phases using chi-squared tests with a Holm–Bonferroni correction for multiple comparisons.[231] For the 33 categorical response items, the test–retest reliability was measured using raw agreement rates and Cohen's kappa statistic.[232] Integer scores were assigned to meaningful response options (ignoring 'don't know' or 'not applicable' options) for the 21 ordinal response items and intraclass correlation coefficients (ICCs) were calculated. Both ICCs and kappa statistics were interpreted as follows: < 0.00 was judged as 'poor', 0.00–0.20 as 'slight', 0.21–0.40 as 'fair', 0.41–0.60 as 'moderate', 0.61–0.8 as 'substantial' and 0.81–1.00 as 'almost perfect'. The mean score on each item in the test and retest phases was calculated and paired sample *t*-tests using the Holm–Bonferroni correction were used to test possible changes in the mean scores. Data analysis was conducted using SPSS (Statistical Product and Service Solutions) version 18 (SPSS Inc., Chicago, IL, USA).

Results

Of 59 practices initially approached, six were ineligible, nine declined participation and 19 did not respond by the time that the quota ($n = 25$) was achieved. In total, 105 doctors participated [mean 4.2 (range 2–8) doctors per practice] (*Table 31*), of whom 46% were female and 80% trained in the UK. The doctors had an average of 19.5 (range 4–38) years' experience since registration with the GMC. *Table 32* provides an overview of responders' demographics. The mean interval between the patients' consultation date and questionnaire mail-out was 16.6 (SD 6.0) days and there was no evidence that the interval length was related to the likelihood of a completed questionnaire being returned (two sample *t*-test, $p = 0.157$). The overall questionnaire response rate was 50.9% (7721/15,172), with a range of 23.6–80.7% for individual GPs and 24.1–75.5% for practices. In total, 92 out of 105 (87.6%) GPs achieved 50 returned questionnaires. The mean interval between a patient's consultation and receipt of the completed questionnaire was 35.3 (SD 15.5) days. Questionnaires with fewer than four informative responses to the seven communication items were excluded and scores for the 7429 (96.2%) remaining patients were calculated, with a mean communication score of 87.5 (SD 17.8) on a 0–100 scale.

Twenty doctors from five practices took part in the test–retest substudy. In the test phase 2877 patients who had recently consulted one of the participating GPs from the five practices were sent questionnaires. Retest questionnaires were sent to 597 patients who had returned a completed test questionnaire within 3 weeks of mail-out and 58% ($n = 348/597$) returned a completed retest questionnaire within 4 weeks. The mean time from mail-out to receipt of a completed questionnaire was 8.7 days in the test phase and 10.1 days in the retest phase. There were no gender differences between test and retest respondents,

TABLE 31 Practice profiles and questionnaire response rates

Setting	Banding on 2009/10 GP Patient Survey communication score[a]	GP head count	Participating doctors	List size (×1000)	Deprivation index[b]	Overall response rate (%)
Inner city	Low	2	2	6.9	26.6	37.9
Inner city	Low	3	3	5.1	48.5	36.8
Inner city	Low	4	4	5.1	36.6	37.8
Inner city	Low	5	4	7.8	26.1	50.5
Inner city	Low	8	6	8.7	32.4	43.5
Inner city	Middle	2	2	2.5	30.1	47.0
Inner city	Middle	3	3	5.4	13.7	67.7
Inner city	Middle	6	6	8.0	39.4	32.0
Urban	Low	2	2	3.5	15.2	71.0
Urban	Low	2	2	2.9	22.2	58.9
Urban	Low	2	2	3.2	29.6	24.1
Urban	Low	3	3	6.6	15.1	55.8
Urban	Low	4	4	4.1	18.3	59.3
Urban	Low	5	5	12.0	27.6	58.9
Urban	Low	5	5	6.0	19.3	52.6
Urban	Low	7	6	9.7	20.0	53.8
Urban	Low	8	7	16.5	14.4	45.1
Urban	Low	9	8	11.8	16.4	48.1
Urban	Middle	3	3	5.3	20.8	67.8
Urban	High	6	5	8.5	22.1	47.2
Urban	High	8	8	14.2	18.9	64.4
Rural	Middle	5	4	5.1	23.1	60.5
Rural	High	3	2	2.4	18.9	49.8
Rural	High	4	4	5.4	11.5	75.5
Rural	High	5	5	9.1	4.8	71.7
All		114	105			50.9

a Low ≤ 25th percentile; middle = between the 37.5th and 62.5th percentiles; high ≥ 75th percentile.
b These scores are averages taken across the practice population and underlie the figures reported by Public Health England at http://fingertips.phe.org.uk/profile/general-practice (accessed 8 December 2016).
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TABLE 32 Demographic profile of patient respondents

Characteristic	*n* (% non-missing)
Gender	
Female	4785 (62.4)
Male	2882 (37.6)
Missing	54

TABLE 32 Demographic profile of patient respondents (*continued*)

Characteristic	*n* (% non-missing)
Age (years)	
< 18	5 (0.1)
18–24	249 (3.2)
25–34	786 (10.3)
35–44	983 (12.8)
45–54	1150 (15.0)
55–64	1474 (19.2)
65–74	1550 (20.2)
75–84	1171 (15.3)
≥ 85	299 (3.9)
Missing	54
Ethnicity	
White British	6138 (81.5)
White Irish	132 (1.8)
Any other white background	459 (6.1)
Mixed white and black Caribbean	23 (0.3)
Mixed white and black African	10 (0.1)
Mixed white and Asian	18 (0.2)
Any other mixed background	19 (0.3)
Asian or Asian British – Indian	169 (2.2)
Asian or Asian British – Pakistani	55 (0.7)
Asian or Asian British – Bangladeshi	71 (0.9)
Any other Asian background	72 (1.0)
Black or black British – Caribbean	95 (1.3)
Black or black British – African	161 (2.1)
Any other black background	9 (0.1)
Chinese	45 (0.6)
Any other ethnic group	57 (0.8)
Missing	188
Health	
Poor	714 (9.5)
Fair	1827 (24.3)
Good	2502 (33.2)
Very good	1961 (26.1)
Excellent	523 (6.9)
Missing	194
All	7721

but retest responders tended to be older and white British (*Table 33*). No significant differences in item non-response rates between the test phase and the retest phase were found for any of the 54 items.

Main results

For the six outcome measures of interest, most of the variance in patient-level scores resulted from differences in ratings of the same doctor by different patients (*Table 34*). For both GP communication and trust and confidence in the doctor, the variance resulting from differences between doctors was greater than that attributable to differences between practices; however, the reverse was true for the other four non-doctor-specific measures. *Table 35* shows the number of patient ratings required to achieve the 0.7 and 0.8 reliability thresholds for each outcome measure, judged by authorities to represent minimum acceptable thresholds in postgraduate assessment settings. A substantial majority of doctors received sufficient scores to achieve reliable estimates of performance in communication – 103 out of the 105 GPs received at least 27 patients' communication scores and 95 GPs received ≥ 46 (overall mean 71 scores per doctor).

TABLE 33 Demographic characteristics of the test–retest patient sample by level of study participation with *p*-values for tests of variation across the three groups

Characteristic	Patients sent but not returning a test questionnaire within 3 weeks of mail-out	Patients sent but not returning a retest questionnaire within 4 weeks of mail-out	Patients returning both a test and a retest questionnaire within the deadlines	*p*-value
n	2009	249	348	NA
n (%) male	807 (40.2)	89 (35.7)	138 (39.7)	0.404
n (%) white British[a]	404 (85.4)	204 (89.1)	326 (95.6)	0.001
Age (years), mean (SD)	46.2 (18.5)	59.4 (18.8)	65.3 (15.1)	< 0.001

NA, not applicable.
a Ethnicity data were available only for those who returned a completed test questionnaire and responded to the ethnicity item: for patients sent but not returning a test questionnaire within 3 weeks of mail-out, *n* = 473; for patients sent but not returning a retest questionnaire within 4 weeks of mail-out, *n* = 229; and for patients returning both a test and a retest questionnaire within the deadlines, *n* = 341.

TABLE 34 Percentages of variance in adjusted mean outcome scores that are attributable to practices, doctors and patients

Outcome measure	Source of variance (%)		
	Practice	Doctor	Patients and residual error
Communication score	1.8	6.4	91.9
Confidence and trust	0.8	5.2	94.0
Overall satisfaction with surgery	6.0	1.1	92.9
Helpfulness of receptionists	7.3	0.5	92.2
Cleanliness of health centre	10.6	0.3	89.1
Ease of getting into building	1.9	0.4	97.6

TABLE 35 Number of patient ratings needed to achieve reliability of 0.7 or 0.8 for a doctor's raw and adjusted mean scores

Level of reliability	Communication score	Confidence and trust	Overall satisfaction with surgery	Helpfulness of receptionists	Cleanliness of health centre	Ease of getting into building
Reliability of raw mean score						
0.7	21	30	23	25	15	78
0.8	36	51	38	42	26	133
Reliability of adjusted mean score[a]						
0.7	27	37	31	28	20	97
0.8	46	63	53	48	33	167

a Adjusted for patient gender, age, ethnicity and self-reported health status.
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The estimated mean communication scores for individual doctors and for practices as a whole are shown in *Figure 18*. This shows the extent to which the variation in mean communication scores between individual doctors (within practices) was greater than the variation between practices and suggests that within-practice variability in doctors' scores was greater in the lower-scoring practices. We conducted further analysis to confirm this: the within-practice SD of GPs' mean communication score was negatively correlated with the practices' mean communication score (Pearson's $r = -0.505$; $p = 0.010$).
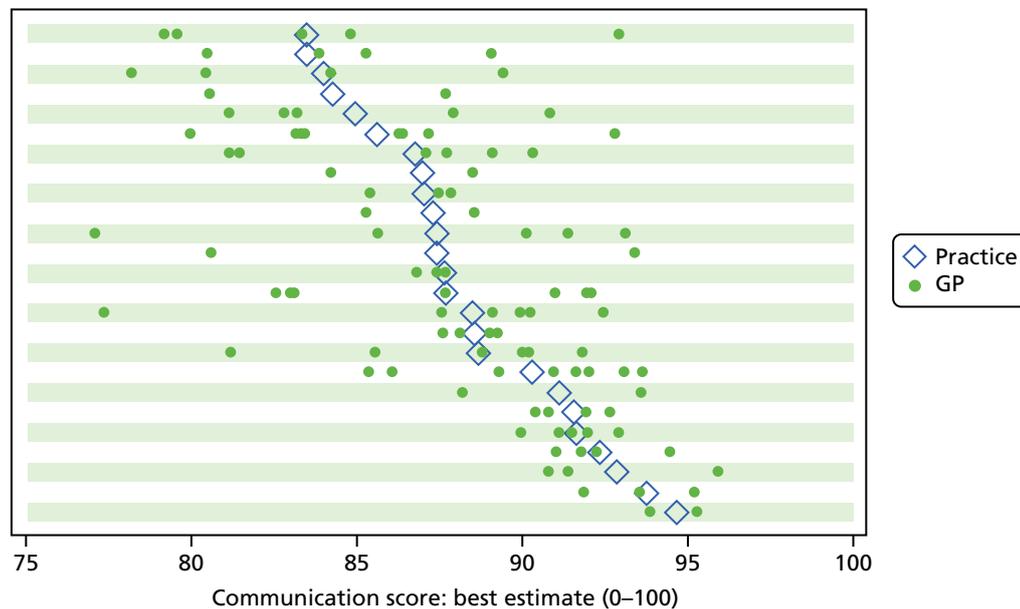
FIGURE 18 Mean communication score (best estimate) by practice and doctor. Note: practices ($n = 25$) are sorted by their mean communication score. Horizontal shading serves only as a visual separation of the results for different practices. Reliability calculations using variance components showed that achieving acceptable reliability (> 0.7) for GPs' adjusted mean communication scores with 27 patients' scores and good reliability (> 0.8) with 46 patients' scores per doctor is feasible (see *Appendix 3* for formula). All but 10 of the 105 participating doctors had > 46 scores; two received < 27 scores (mean 71 scores per doctor). Data for these doctors were retained in the subsequent modelling, as use of best linear unbiased predictors to estimate doctors' mean scores has a 'conservative' effect. When sample sizes are smaller, estimated mean scores are drawn closer to the practice mean. Reproduced from Roberts *et al.*[129] under the terms of the Creative Commons Attribution license (CC BY 4.0), which permits others to distribute, remix, adapt and build upon this work, for commercial use, provided the original work is properly cited. (http://creativecommons.org/licenses/by/4.0/).

In contrast to *Figure 18*, *Figure 19* highlights the adjusted doctor-level and practice-level mean scores for 'cleanliness of the practice buildings', demonstrating the minimal within-practice variability between GPs for this non-doctor-specific measure.

Results of the test–retest reliability analysis

The percentage agreement in response to the 33 categorical items ranged from 66% to 100% (mean 88%), whereas the kappa coefficients ranged from 0.00 to 1.00 (mean 0.53). Only one item, relating to booking an appointment by fax, achieved a perfect agreement ($\kappa = 1.00$) (*Table 36*). The raw agreement rates were $\geq 80\%$ for 27 of these items. ICCs for the 21 ordinal items averaged 0.67 and ranged from 0.44 for question 9 ('How easy do you find it to get into the building at this GP surgery or health centre?') to 0.77 for question 25 ('Would you recommend this GP surgery or health centre to someone who has just moved to your local area?'). The ICCs for 20 of these items (all items except question 9) were > 0.6, representing substantial test–retest reliability. Mean scores in the retest phase were higher for eight and lower for 12 of the 21 items (*Table 37*). After applying the Holm–Bonferroni procedure, question 9 was the only item for which a significant difference was found between the mean scores in the test and retest phases ($p = 0.001$).
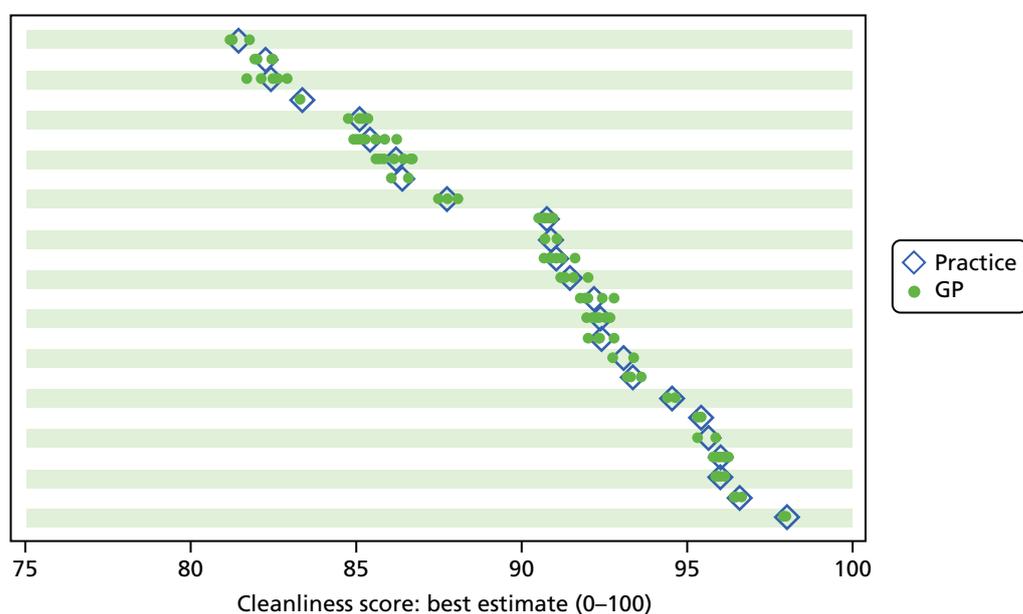
FIGURE 19 Mean score for cleanliness of practice building (best estimate) by practice and doctor. Note: practices ($n = 25$) are sorted by their mean score for cleanliness. Horizontal shading serves only as a visual separation of the results for different practices. Reproduced from Roberts *et al.*[129] under the terms of the Creative Commons Attribution license (CC BY 4.0), which permits others to distribute, remix, adapt and build upon this work, for commercial use, provided the original work is properly cited. (http://creativecommons.org/licenses/by/4.0/).

TABLE 36 Sample size, raw agreement (%) and Cohen's kappa statistic for the 33 categorical items

Topic/item	n	Raw agreement (%)	κ
Making an appointment			
Q1a Normally book an appointment in person	348	82	0.63
Q1b Normally book an appointment by telephone	348	95	0.69
Q1c Normally book an appointment by fax	348	100	1.00
Q1d Normally book an appointment online	348	99	0.93
			continued

TABLE 36 Sample size, raw agreement (%) and Cohen's kappa statistic for the 33 categorical items (*continued*)

Topic/item	*n*	Raw agreement (%)	κ
Q1e Normally book an appointment by digital TV	348	100	a
Q1f Booking doesn't apply	348	99	0.00
Q2a Prefer to book in person	348	81	0.62
Q2b Prefer to book by telephone	348	85	0.44
Q2c Prefer to book by fax	348	99	0.50
Q2d Prefer to book online	348	93	0.79
Q2e Prefer to book by digital TV	348	100	a
Q2f No preference in booking an appointment	348	98	0.39
Access to a doctor			
Q4 In the past 6 months, have you tried to see the doctor quickly?	334	82	0.49
Q5 Were you able to see the doctor quickly?	234	83	0.46
Q6a If you couldn't be seen quickly was this because there were no appointments?	348	83	0.39
Q6b If you couldn't be seen quickly was this because the times did not suit you?	348	97	0.46
Q6c If you couldn't be seen quickly was this because the appointment was with a doctor you didn't want to see?	348	94	0.44
Q6d If you couldn't be seen quickly was this because the appointment offered was with a nurse and you wanted to see a doctor?	348	99	0.46
Q6e If you couldn't be seen quickly was this because you were offered an appointment at a different branch?	348	98	0.44
Q6f If you couldn't be seen quickly was this because there was a different reason?	347	98	0.43
Q6g Can't remember why you were unable to be seen quickly	348	97	0.43
Q7 In the past 6 months, have you tried to book ahead for an appointment with a doctor?	339	79	0.44
Q8 Were you able to get an appointment with a doctor more than 2 weekdays ahead?	239	73	0.40
Arriving at the appointment			
Q11 In the reception area, can other patients overhear what you say to the receptionist?	339	80	0.59
Continuity of care			
Q15 Is there a particular doctor you prefer to see?	338	91	0.68
Q17 Was your consultation with your preferred doctor?	254	89	0.55
Opening hours			
Q19a As far as you know is the surgery open before 08.00?	330	75	0.46
Q19b As far as you know is the surgery open at lunchtime?	309	71	0.49
Q19c As far as you know is the surgery open after 18.30?	307	66	0.47
Q19d As far as you know is the surgery open on Saturdays?	309	80	0.42
Q19e As far as you know is the surgery open on Sundays?	308	85	0.38
Q20 Would you like the surgery to be open at additional times?	313	83	0.57
Q21 Which additional time would you most like your surgery to be open?	111	77	0.49

a Left unticked by 100% of respondents in both phases. Kappa statistic cannot be calculated.

TABLE 37 Sample size, ICC (95% CI), mean test–retest difference (95% CI) and associated *p*-value for the 21 ordinal response items

Topic/item	*n*	ICC (95% CI)	Mean difference (95% CI)	*p*-value[a]
Telephone access				
Q3a How easy have you found getting through on the telephone?	333	0.73 (0.67 to 0.78)	–2.40 (–4.91 to 0.11)	0.061
Q3b How easy have you found speaking to a doctor on the telephone?	191	0.68 (0.59 to 0.75)	–4.01 (–7.64 to –0.39)	0.030
Q3c How easy have you found speaking to a nurse on the telephone?	82	0.63 (0.48 to 0.75)	–2.85 (–8.62 to 2.93)	0.330
Q3d How easy have you found getting test results on the telephone?	131	0.62 (0.51 to 0.72)	0.25 (–3.88 to 4.39)	0.903
Arriving at the appointment				
Q9 How easy do you find it to get into the building at this GP surgery or health centre?	345	0.44 (0.35 to 0.52)	2.32 (0.94 to 3.70)	0.001
Q10 How clean is this GP surgery or health centre?	344	0.60 (0.53 to 0.66)	1.16 (–0.10 to 2.42)	0.070
Q12 How helpful do you find the receptionists at this GP surgery or health centre?	335	0.69 (0.63 to 0.74)	–0.60 (–2.39 to 1.20)	0.514
Q13 How long after your appointment time do you normally wait to be seen?	315	0.67 (0.60 to 0.73)	–0.95 (–2.60 to 0.70)	0.257
Q14 How do you feel about how long you normally have to wait?	308	0.70 (0.64 to 0.75)	–2.11 (–4.43 to 0.21)	0.074
Continuity of care				
Q16 How often do you see the doctor you prefer?	255	0.71 (0.64 to 0.77)	–0.78 (–3.49 to 1.92)	0.568
Opening hours				
Q18 How satisfied are you with the hours that this GP surgery or health centre is open?	325	0.65 (0.59 to, 0.71)	2.23 (0.40 to 4.06)	0.017
Doctor–patient communication and trust				
Q22a How good was the doctor at giving you enough time?	337	0.62 (0.55 to 0.68)	0.45 (–0.96 to 1.85)	0.532
Q22b How good was the doctor at asking about your symptoms?	317	0.70 (0.64 to 0.75)	–0.47 (–1.84 to 0.90)	0.498
Q22c How good was the doctor at listening to you?	331	0.72 (0.66 to 0.77)	0.38 (–0.88 to 1.63)	0.554
Q22d How good was the doctor at explaining tests and treatments?	275	0.72 (0.65 to 0.77)	–1.27 (–2.81 to 0.26)	0.104
Q22e How good was the doctor at involving you in decisions about your care?	275	0.68 (0.61 to 0.73)	–1.00 (–2.65 to 0.65)	0.233
Q22f How good was the doctor at treating you with care and concern?	326	0.67 (0.61 to 0.73)	0.23 (–1.16 to 1.62)	0.745
Q22g How good was the doctor at taking your problems seriously?	324	0.72 (0.67 to 0.77)	–0.08 (–1.46 to 1.31)	0.913
Q23 Did you have confidence and trust in the doctor you saw?	340	0.70 (0.64 to 0.75)	–0.15 (–1.86 to 1.57)	0.866

continued

TABLE 37 Sample size, ICC (95% CI), mean test–retest difference (95% CI) and associated *p*-value for the 21 ordinal response items (*continued*)

Topic/item	*n*	ICC (95% CI)	Mean difference (95% CI)	*p*-value[a]
Overall satisfaction				
Q24 In general, how satisfied are you with the care you get at this surgery or health centre?	344	0.74 (0.69 to 0.78)	–0.58 (–1.81 to 0.65)	0.353
Q25 Would you recommend this GP surgery or health centre to someone who has just moved to your local area?	333	0.77 (0.73 to 0.81)	0.00 (–1.51 to 1.51)	1.000

a After applying the Holm–Bonferroni procedure with a family-wise type I error rate of 5%, only the *p*-value for Q9 remained significant.

Discussion

Our findings show that the measurement of patient experience at the practice level may mask considerable variation between doctors within the same practice. These findings are in line with other studies showing that the proportion of variance due to doctors is greater than that due to practices in the case of doctor-specific measures and is less than that due to practices in the case of non-doctor-specific measures.[22,233,234] For indicators that are more likely to be under the control of the doctor (e.g. doctor–patient communication), more variance is explained by doctors than by practices; this may be taken as a validation of the use of these indicators to measure individual GP performance. Our findings additionally demonstrate that higher-performing practices usually include higher-performing doctors, but lower-performing practices may include doctors with a range of communication scores. This has important implications for evaluating practice performance, as GPs requiring support to improve their communication skills are unlikely to be identified using current practice-level approaches. As such, the current practice-based performance indicators may not provide meaningful information to commissioners, providers or users for key domains such as communication skills. However, other indicators observed to have more variance at practice level (e.g. cleanliness of a practice) are more suitable for evaluating performance at an organisational level.

Our test–retest reliability results demonstrated good to almost perfect agreement on a number of items used in the GP Patient Survey and included within our patient experience questionnaire. Patients' willingness to recommend their practice to a friend or family member showed substantial reliability and items orientated to staff performance also had substantial stability. Items regarding the physical environment of the practice, such as ease of access and cleanliness, demonstrated moderate to substantial reliability.

The results suggested that, despite the high proportion of patient-level variance in communication scores, a reliable (> 0.8) adjusted mean score for individual doctors can be obtained with 46 patient scores per GP using this instrument, so little variance in reported doctor-level scores was attributable to patients and residual sources, which is in line with other published work.[226] With sample sizes smaller than this, a trade-off must be made between reliability and the utility of conducting individual- rather than group-level evaluations.

Communication is a key driver of overall patient satisfaction[102] and ensuring patients' ability to access accurate information on performance is important if they are expected to make informed choices among providers, as current policy aspires to. In compiling performance indicators to inform patients' choice of provider, it would therefore be preferable to report communication scores at the individual practitioner level or to reliably report the range of individual practitioner scores within an organisation. If the aspiration is to use quality indicators to identify poor performance, rather than to inform patient choice, an alternative to the potentially costly option of obtaining communication scores for all individual practitioners could be to use organisation-level assessments (such as the current GP Patient Survey) to screen for

lower-performing practices. Individual-level assessments could then be targeted only to organisations in which performance concerns were identified. Further research to explore users', providers' and commissioners' perceptions about the feasibility of alternative approaches to generating performance data on doctor–patient communication would be useful. Furthermore, clarity about the association between the publication of performance data and quality improvement, including the mechanisms underpinning the instigation of any personal or organisational changes, is needed.

Strengths and limitations

This was a large study, including responses from 7721 patients relating to 105 doctors across 25 practices and resulting in the production of a first report on the stability of patient responses on items used within the GP Patient Survey over time. The stratified sampling strategy ensured participation from doctors with a range of summary scores for interpersonal skills, after adjusting for case mix, which improves generalisability to wider primary care contexts. The use of the postal survey resulted in an average delay of just over 2 weeks between patients' consultation and receipt of their questionnaire, which is substantially less than for the national GP Patient Survey. The 2-week delay is unlikely to produce significant recall bias and would be expected to affect all participating doctors equally.

The response rate for the main study was considerably higher (51%) than response rates achieved in the national GP Patient Survey (which have ranged in recent years from 38% in 2009/10 to 35% in 2012/13), although there was substantial variation in response rates between participating GPs. The response rate for the test–retest substudy was similar to that observed in other primary care test–retest exit surveys.[118,226] Non-response tends to inflate doctors' and practices' scores, but this inflation is largest when non-response is highest.[235] As the lowest response rates were inclined to occur for lower-scoring practices, any non-response bias tended to attenuate the extent of variance between both doctors and practices, rather than inflate it. The estimated magnitudes of such effects were small and it was not expected that the resulting variance at the practice and doctor levels, or the conclusions regarding the comparison of doctor- and practice-level variances, would alter.

Sampling practices from different quartiles of the GP Patient Survey practice-level communications scores may mean that the estimate of the total practice-level variance could differ slightly from that of the full population. However, this is not expected to affect the conclusions regarding the relationship between practice-level scores and the extent of within-practice variation. The analysis was not adjusted for neighbourhood-level deprivation, as the research team was blinded to patients' postcodes. This limitation is unlikely to have biased the results as deprivation has only a very small association with patients' experience after controlling for gender, age, ethnicity and health status.[131] Although the sample size of this study was considerably larger than that used for the General Practice Assessment Survey,[236] responding patients were not fully representative of the general patient population of England and Wales.

Conclusions

Currently, evaluations of GPs' communication performance most commonly report indicators at a practice level, rather than enabling patients and stakeholders to evaluate individual practitioners directly. Reporting communication-related performance indicators at practice level may mask large variation between individual practitioners. Practice-level surveys could potentially act as an initial screen for concerns about performance, with subsequent data gathering focusing on individual doctor-level surveys in lower-performing practices.

Chapter 10 Exploratory trial of a real-time feedback intervention to improve patient experience in general practice

Parts of this chapter are based on Wright et al.[237] and Carter et al.[238]

Abstract

Background

Our early findings and the published research evidence suggested that an intervention seeking to improve patient experience in general practice should consider the level at which feedback from patients might be provided to practice teams, whether or not such feedback should be facilitated and the need for timeliness of feedback. The aim of this project was to conduct a feasibility study and an exploratory trial of an intervention that might inform change and improve patient experience in general practice.

Methods

We designed a feasibility and pilot clinical trial. RTF touch screens were installed in practice waiting areas for 12 weeks. Practices or individual doctors received fortnightly patient feedback summaries. Some teams attended a facilitated reflection session. We undertook a multimethod evaluation of the intervention.

Results

In total, 2.5% of consulting patients provided RTF (range 0.7%–8.0% across eight practices). Men and patients aged > 65 years were under-represented among responders. Reception staff often interacted with patients but rarely encouraged touch screen use. When staff did encourage patients to use the touch screen, 36 out of 60 (60%) patients attempted to start the survey. Most patients were positive about RTF but identified a range of barriers. Staff views of and engagement with RTF varied. Within-team communication influenced perceptions, and the successful implementation and use, of RTF. Costs ranged from £1125 (unfacilitated/team-level feedback) to £1887 (facilitated/team- + practitioner-level feedback).

Conclusions

The successful implementation of RTF requires team engagement, shared responsibility and careful communication. Future studies need to make RTF accessible to a wider range of patients and ensure that questions presented to support RTF are relevant to practices. Shorter, repeated episodes of RTF collection may be of greater utility to practices and to researchers seeking to evaluate the approach than sustained and ongoing RTF.

Introduction and rationale

In the original outline of this programme of research we planned to undertake initial feasibility testing and piloting of an intervention seeking ultimately to improve patient experience of care. We anticipated that we would draw on our earlier research findings to inform the design and implementation of this project, conducted towards the end of the programme of work. In exploring what might constitute a suitable intervention, we prioritised the area of doctor communication as being one of vital importance to patients. Cheraghi-Sohi et al.[57] had previously highlighted communication between doctors and their patients as being a central priority for patients in their assessment of what high-quality care might look like.

Furthermore, our preliminary research had identified that communication, rather than access, was a key driver of patients' overall satisfaction with care.[102] Given these observations, we undertook a review of the literature seeking to identify potentially promising interventions that had targeted doctor communication as a primary consideration and that might inform the design of an intervention study that would also incorporate findings arising from our early research in this programme.

Review of the evidence on interventions to improve communication skills in primary care

In 2008, a systematic review assessed the efficacy of feedback of real patient assessments of interpersonal care skills or brief training focused on the improvement of interpersonal care.[83] Of the nine RCTs found (two patient-based feedback studies and seven brief training studies), only one feedback study (involving trainee GPs) and one training study (conducted in 1987) reported a significant positive effect. The review concluded that:

> [T]he interventions to be tested in future research should consider using insights from the wider literature on communication outside primary care, might benefit from a clearer theoretical basis, and should examine the use of combined brief training and feedback to improve physicians' interpersonal skills.
>
> *Cheraghi-Sohi and Bower, p. 179[83]*

We updated this review by repeating the search strategy in the Cochrane Central Register of Controlled Trials (CENTRAL) from 2007 onwards (see *Appendix 4*). We searched for studies that fit the following criteria:

- RCTs involving primary care practitioners and their patients
- involving one or both of the following interventions:

  - feedback of assessments of patients on the interpersonal skills of clinicians
  - 'brief' (up to 1 working week) training focused on interpersonal care

- with a patient-based assessment of change in interpersonal skills as an outcome.

Of 1610 studies returned in the search, only one met all of the criteria (*Table 38*).[239] Haskard *et al.*[239] assessed the effect of a communication skills training programme for both patients and doctors. The study involved 156 doctors from three primary care specialties (obstetrics/gynaecology, family medicine and internal medicine) in the USA. Data were collected between 1996 and 1998. The clinical training programme involved three 6-hour interactive workshops conducted on a monthly basis, covering core communication skills and concepts including recognising interpersonal difficulties and tensions in doctor–patient relationships. Additionally, clinicians received three 30- to 45-minute coaching sessions involving the review of videotaped consultations. The patient training programme was a 20-minute preconsultation intervention involving an audio CD and booklet concerning planning and organising concerns and questions to ask the doctor. There were four experimental groups:

1. neither doctors nor patients trained (doctors, $n = 39$, control group)
2. doctors only trained (doctors, $n = 41$)
3. patients only trained (doctors, $n = 38$)
4. doctors and patients trained (doctors, $n = 38$).

Overall, doctor training improved doctors' information giving and lifestyle health behaviour counselling, and increased patients' quality of care ratings and their willingness to recommend the physician. However, doctors' satisfaction with the interpersonal aspects of their professional life decreased significantly more among trained than among untrained physicians. Training both doctors and patients had complex effects

TABLE 38 Overview of relevant studies assessing the impact of interpersonal skills training

Study and setting	Target population and n	Intervention	Patient satisfaction measure and other outcomes	Summary of findings
Haskard 2008[239] USA; West Coast University medical centre (n = 93); Veterans Affairs clinic (n = 5); staff model health maintenance organisation (n = 58)	Physicians from three primary care specialities (obstetrics/gynaecology, family medicine, internal medicine) Physicians, n = 156; patients in interaction, n = 2196	3 months of physician workshops and coaching with assessments (6 hours at each time point), with previsit intervention at preceding time 2	Patient satisfaction and perceptions of choice, decision-making, information and lifestyle counselling; physicians' satisfaction and stress; global ratings of the communication process (all composite measures) No other secondary measures reported	Physician training significantly improved patients' satisfaction with information and overall care; increased willingness to recommend the physician; increased physicians' counselling (as reported by patients) about weight loss, exercise and quitting smoking and alcohol consumption; increased physician satisfaction with physical examination detail; increased independent ratings of physicians' sensitive, connected communication with their patients; and decreased physician satisfaction with interpersonal aspects of professional life. Patient training improved physicians' satisfaction with data collection. If only physician or patient was trained, physician stress increased and physician satisfaction decreased
Reinders 2010[211] Vrije Universiteit University Medical Centre, Amsterdam, the Netherlands	First-year general practice trainees (GPTs) n = 53: intervention, n = 23; control, n = 30	Patient feedback training programme (how to acquire relevant patient feedback to improve communication skills). Instructions to staff delivered in a 2-hour meeting followed by half a day's instruction meeting, and then 3 months to obtain feedback from 20 patients	Patient feedback questionnaire on consultation skills (PFC) Primary outcome measure MAAS-Global assessment used by trained assessors (five behavioural scientists and three GPs) to assess video-taped consultations with three SPs (standardised patients) in six consultation scenarios Process outcomes: intensity of GPT participation in the programme based on the number of PFCs that the GPT collected; number of learning points formulated, etc. In addition, GPTs completed an evaluative questionnaire and National Knowledge Test in General Practice Medicine	Consultation skills in the entire cohort of participants improved, with a small to moderate effect size within the 3-month observation period. Consultation skills in the intervention group did not improve any more than those in the control group. A subgroup of GPTs who participated 'actively' (i.e. high intensity) in the programme showed a greater improvement in consultation skills than those who did not actively participate

on doctors' satisfaction and stress: interaction effects reflected a relative increase in stress and decrease in doctor satisfaction when only one (either doctor or patient) was trained. The authors noted that the intervention was intensive and may have placed additional stress on doctors, some of whom were also experiencing organisational changes at the time.[239]

One other study assessed the effect of patient feedback on communication competencies, but used expert raters' (rather than patients') assessments of skills as the outcome[211] (see *Table 38*). This was a trial of a patient feedback training programme in first-year GP trainees in the Netherlands. The intervention group ($n = 23$) received instruction in how to obtain patient feedback in daily practice using the patient feedback questionnaire on consultation skills (PFC), which focuses on GP–patient communication. Following training, GP trainees in the intervention group were asked to obtain feedback using the PFC from 20 patients over a period of 3 months; they also completed a self-assessment version and compared this with the patient version and 'formulated learning points which they discussed with their GP trainers' (p. 158). The control group attended the regular doctor–patient communication skills training. For the purposes of this study, simulated patients, trained to enact six consultations of moderate complexity, visited the 53 GP trainees' practices and video-taped consultations with the GP trainees. Video-taped consultations were then assessed by eight raters (five behavioural scientists; three GPs) using the MAAS-Global instrument. Data on 50 GP trainees were available for analysis. Both the control group and the intervention group improved their consultation skills between baseline (when scores were already high) and the post-intervention assessments, but there were no significant differences in improvement between the control group and the intervention group. However, there was a trend for intensity of participation in the patient feedback programme to predict greater improvement in MAAS-Global scores.

One of the above studies[211] was included in a systematic review of the effect of patient feedback on physicians' consultations skills.[204] This searched for all empirical studies involving practising doctors (including postgraduate trainees) that incorporated feedback from real patients; assessed physicians' general consultation skills; incorporated feedback on communicative aspects in general health care; and evaluated physicians who received formal, individually directed feedback from patients (e.g. by means of aggregated patient reports or educator-mediated coaching sessions).

Of 15 studies included in the review (from 1980 to 2010), 10 were in primary care and five in other specialties. A variety of study designs were included (RCTs, quasi-experimental studies, cross-sectional studies and qualitative studies). Twelve studies observed a positive effect of patient feedback on physicians' consultation skills. In an assessment of the outcomes of studies against the Kirkpatrick hierarchy[240–243] (four levels at which educational interventions can have an effect), they found that:

1. All nine studies that evaluated level 1 effects (valuation or views of the learning experience) reported positive effects.
2. All four studies that evaluated level 2 effects (change in knowledge or skills) reported positive effects.
3. All three studies that evaluated level 3 effects (change in intended behaviour) reported positive effects.
4. Four of seven studies that evaluated level 4 effects (change in actual performance or outcomes) reported positive results.

Despite the apparently positive results, the authors argued that 'consulting skills' need to be much better defined in studies of this type. Additionally, observed effects cluster at the lower end of Kirkpatrick's hierarchy, mostly in qualitative, non-randomised studies. Actual change in performance was rarely observed. Three possible reasons were offered for the observed heterogeneity of findings:

1. Assessing actual change in general consultation skills or clinical performance may be difficult because of the lack of precision in defining 'consulting skills' and the lack of responsiveness of the assessment instruments.

2. Patients who have poor experiences might not report a poor outcome, limiting the effect of patient-reported outcome measures (witness the ceiling effects in many patient feedback questionnaires).
3. There may be a true absence of effect – interventions were not sufficient to drive behavioural change or doctors were not susceptible to change.

They concluded that there is a dearth of evidence showing that patient feedback has any effect on actual behaviour.

Modelling the intervention

One of the striking conclusions of our review of the previous empirical work in this area was the inconsistency in the findings of the major studies in primary care. Two of the biggest trials report opposite results, with Greco et al.[118] reporting positive effects of feedback on GP registrars and Vingerhoets et al.[207] reporting no benefits in established doctors. In considering these contradictory findings, we identified two potentially important contextual factors that may moderate the relationship between intervention and outcome: (1) the training and experience of the doctors receiving the intervention and (2) motivators to change (Figure 20). There is an assumption that GP communication skills can be developed at some point in the medical career, but that change becomes less likely as doctors develop a routine way of consulting, as reflected in our conceptualisation.[244]

Discussions within the team highlighted other potential moderators, particularly the context within which any intervention might be introduced. Notably, at the time of the original programme grant application, the major contextual factor was the priority being afforded to survey results by the then PCTs, with the expectation that they would be engaged in project management of practices against GP Patient Survey scores. With the reorganisation of commissioning and care, this was no longer the case, and our experience with practices during the previous phases of work suggested that, in the absence of external drivers, there was little support or capacity for the kind of intensive communication interventions that had been previously trialled.
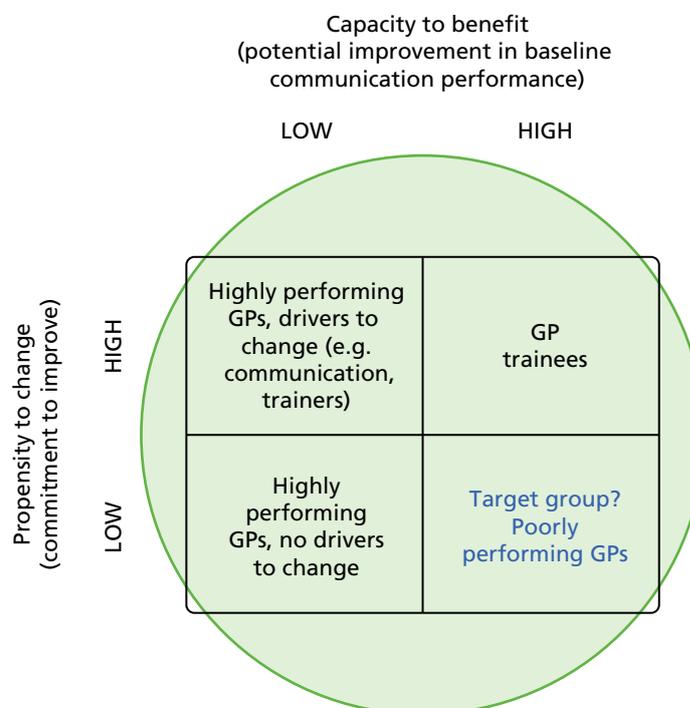
FIGURE 20 Typology of GPs' potential responses to communication training.

We identified a number of other contextual factors that might impact on response:

1. case mix (practices serving certain patient populations or in certain areas may respond differently)
2. incentivisation of communication training and patient feedback
3. previous experience and engagement with patient feedback at a practice level
4. length of consultations and the organisation of practices in response to the QOF may facilitate or hinder change
5. the priority placed on access as opposed to continuity
6. practice culture and communication.

Additionally, a further issue might be that educational interventions often assume that the individual practitioner is the correct 'unit of intervention', but it is possible that the practice may be a more important unit. However, little is known about how practices understand variation in communication quality between practitioners or how they respond. Response may relate to complex issues around 'sense making', identity and the perception of legitimate work and to clinical etiquette around acceptable topics for discussion and learning among practitioners.[245,246]

The impact of any intervention linked to communication also needed to be seen in the context of the large number of other QOF and non-QOF issues that provide competing priorities for GP time and attention.

In reflecting on the evidence to date and our own emerging findings from previous phases of work, we identified three key questions that would shape our intervention:

1. the level at which patient feedback takes place: for practices or for individual doctors
2. the requirement for feedback to be facilitated or not
3. the timeliness of feedback.

We explore these in more detail in the following sections.

The level of feedback: practices or individuals?

Findings from the patient survey at the practice and individual GP level (see *Chapter 9*) identified the importance of the issue of whether any suitable potential intervention should be targeted at the practice level or at the level of the individual doctor. Through our survey, we had identified that patient feedback aggregated to practice level may mask a range of individual levels of doctor performance within practices, especially in those practices that scored at the lower end of overall practice scores (e.g. in respect of patients' experiences of communication). In addition, it was unclear to us whether summarised patient feedback for clinicians was most effectively given in group or individual doctor settings. Given our developing interest in whether doctors or their teams were the important units for any potential intervention, we drew on our knowledge of the research literature relating to the effective functioning of teams.

One team-level attribute that can be measured and potentially manipulated to change behaviour and bring about improvements in an organisation's effectiveness is 'team climate'.[247,248] Anderson and West[249] define team climate as 'a team's shared perceptions of organisational policies, practices and procedures' (from Schneider[250]). Four group processes (or facets) of team climate have been proposed to be important prerequisites for improved quality of health care:[249,251] (1) team vision and objectives – team members' views on the clarity, sharedness and attainability and value of the team's objectives; (2) participatory safety – team members' participation in information sharing and decision making and psychological safety and support (e.g. in trying out new ideas); (3) task orientation –team members' emphasis on reflection on appraisal, feedback and performance monitoring of their work; and (4) support for innovation – perceptions of articulated and enacted support in applying new ideas and change. Studies in general practice in the UK[252,253] and Australia[254] have reported that a favourable team climate is associated with improved standards of care for a range of long-term conditions, better access, higher patient satisfaction, higher staff satisfaction and greater perceived team effectiveness. A Finnish study of team climate in hospital settings reported that a

favourable team climate was associated with a lower turnover of health-care staff,[255] although two more recent UK studies in general practice[256,257] questioned the previously observed relationship between team climate and quality of care, with the authors arguing that further research focusing on the associations between team functioning and quality of care is needed.

Supported feedback to practices: facilitated or unfacilitated?

Findings from our earlier qualitative research (see *Chapter 7*) identified a further important consideration – the perceived lack of support for doctors or practice teams in making sense of findings emanating from patient feedback, suggesting the potential benefit of facilitation in respect of the process of reviewing patient feedback.

Timely feedback: the potential of real-time data acquisition and reporting

Collecting patient feedback is insufficient on its own to improve services and best practice guidance[47,92,258] suggests that organisations need to reflect and act appropriately on the feedback while it is still 'fresh'. Such guidance also suggests that (1) by implementing change based on continuous real-time data, organisations can monitor whether or not the changes that they implement have an effect on patients' experience; (2) organisations should be prepared to show patients how their RTF has been used to change services; and (3) sharing this information suggests that the organisation is willing to listen and respond to patient views and that this, in turn, may mean that patients will be more willing to give their views in the future. Quite apart from the published guidance, some doctors in our early qualitative research (see *Chapter 7*) had identified concerns regarding the timeliness of data capture and reporting as being a potential impediment to doctors and their teams in taking action in response to patient feedback.

Recent years have seen a substantial move towards the incorporation of real-time technologies to support the acquisition of patient feedback data. RTF involves the systematic collection, analysis and reporting of information from patients who have recently used a health-care service. The approach typically uses kiosks or hand-held electronic devices (e.g. tablets) at the point of care to capture patients' feedback about their experiences on a continuous basis. The information collected is regularly collated and reported back to service providers to inform and support service improvement. RTF offers organisations an opportunity to improve their services by designing and delivering services to meet patients' preferences in terms of quality and content; it also enables patients to shape the services that they use.

According to best practice guidance,[47,92,258] the collection of RTF requires careful planning, co-ordination and monitoring to ensure that response rates are maximised, assess whether or not the patients who provide feedback are representative of the practice population as a whole and ensure that patients are kept informed of the purpose of RTF and receive adequate practical support with the process of feeding back. One US study[259] used electronic touch screen kiosks to obtain feedback, with primary care clinic staff directing patients to the kiosk after their consultation. This approach achieved a 50% response rate and did not adversely affect waiting times or other aspects of the practice routine. Male patients were as likely as female patients to use the kiosk, but older people and ethnic minority groups were less likely to use the facility. In 2009–10, a 6-month pilot study[47] was carried out across 22 general practices in England to determine whether or not real-time patient feedback could be used to help practices to understand their patients' views on services, identify opportunities to improve services and evaluate whether or not any changes that the practices made were effective. Three devices were piloted to collect patient feedback (tablet PC, kiosk and desktop device) and participating practices varied in size, patient list, staffing levels, geography and demography. The key findings were that RTF could be implemented successfully in most general practices, that RTF could drive performance improvement in this setting and that RTF has the potential to complement findings from the national GP Patient Survey but needs to be actively promoted to fully engage patients and staff.

Step-by-step guidance informed by the pilot study[47] has since been produced to provide practical advice to general practices that wish to gather and use real-time patient feedback effectively. A number of experienced

real-time technology suppliers exist in the UK, including Dr Foster's (London, UK; Patient Experience Tracker or PET), the Picker Institute (Oxford, UK; Frequent Feedback service) and Customer Research Technology (CRT) Limited (Coventry, UK; ViewPoint system). Previous work highlights the need to monitor response rates and the representativeness of patients who provide RTF. For example, if hand-held devices are being handed out, some patients may be intentionally excluded, including those who are perceived as being likely to provide negative feedback or those who need extra help to feed back because of language barriers or disability. Some patient groups may find kiosks or hand-held devices less user-friendly and, therefore, decline to provide feedback if there is no assistance readily available. Others may be in a rush to leave the practice and/or reluctant to queue to leave their feedback.

Towards a clinical trial

Our early work therefore suggested testing an intervention focusing on practices in the first instance, as these were the unit of reporting for GP Patient Survey scores. But within that ambition, there appeared to be a clear need to examine issues relating to the level at which to target feedback discussions (group or individual) and to consider whether such feedback should be facilitated or unfacilitated. As we had originally been commissioned on the basis of undertaking a trial, internal discussions within the team identified a further important consideration – the need to consider incorporating a control group – in this case, practices who would not, as part of our trial, receive any intervention that we were testing.

Taken together, these observations suggested the potential of undertaking an intervention at practice level, using real-time data collection as the means of capturing patient feedback, and exploring within the same study the potential for group or individual feedback of results, using facilitated or unfacilitated modes of feedback delivery. Given the timing of the research – coming at the end of seven projects – we were pragmatic in our consideration of the number of practices with which we could reasonably work. We felt that a reasonable target was to undertake feasibility and pilot testing using a randomised design in a total of 10 practices, as outlined in *Practice sampling and recruitment*.

Changes to study methods from the original protocol

The aim of this strand of work, as stated in the original protocol, was to carry out an exploratory RCT of an intervention to improve patient experience, using tools developed in earlier parts of the programme (aim 6).

Within the original protocol, the exact nature of the exploratory trial was therefore undefined, although we outlined three key objectives of this workstream:

1. to develop a model based on theory and published empirical evidence that relates patient assessments of interpersonal care to professional behaviours and outcomes
2. to use that model and the views of key stakeholders from earlier workstreams to develop an intervention to improve interpersonal behaviour that is feasible and acceptable in UK primary care
3. to conduct an exploratory trial of that intervention to:

    i. test methods for the recruitment of practices and patients
    ii. test the implementation of the combined feedback and training in practice
    iii. provide estimates of the effect of the intervention for sample size calculations.

The exact nature of the exploratory trial that we devised as a result has been broadly outlined already in this chapter and is detailed in the following sections.

Aims and objectives

The aim of this workstream was to conduct, in a small number of general practices, a feasibility study and an exploratory trial of a RTF based intervention that might inform change and improve patient experience in general practice. Although neither phase of this work was sufficiently powered to investigate the *effectiveness* of the RTF based intervention or its various components, the workstream sought to:

1. pilot a RTF intervention for general practices
2. evaluate, within the context of a pragmatic survey embedded in routine practice, and from the perspective of practice teams, the feasibility and acceptability of collecting and receiving RTF with/ without a facilitated reflection session
3. evaluate, from the perspective of patients, the feasibility and acceptability of providing RTF, including (a) estimating the number and proportion of patients using RTF touch screens when these are available in practice waiting areas; (b) describing the characteristics of consulting patients who use RTF touch screens and contrasting these with the characteristics of all consulting patients during the same time period; and (c) obtaining the views of patients who used/did not use RTF touch screens
4. estimate the costs associated with the RTF intervention from the perspectives of the NHS (cost of touch screen equipment, training and staff time).

The workstream had two phases:

1. feasibility study (January to June 2014) involving two general practices and designed to develop the RTF intervention and research methods
2. exploratory trial (July 2014 to February 2015) involving 10 general practices to address the above objectives.

Methods

Practice sampling and recruitment

A similar approach for sampling practices was used in both phases of the study. Practices that fell in the lowest 50% of scores on the national GP Patient Survey communication items (year 7 data[11]) were eligible to participate. To facilitate fieldwork, practices within reasonable travelling distance of the research centres were prioritised in the initial sampling frame. In the feasibility study, two practices were purposively recruited from the South West of England to represent contrasting geographical contexts (urban/rural).

In the exploratory trial, invitations were posted to 16 practices in the South West and 11 practices in Cambridgeshire and were followed up by telephone calls from the local researcher. Detailed briefing sessions were organised with staff at practices that expressed an interest. The practice manager or lead GP provided written consent on behalf of the practice team and a practice profile questionnaire was completed (providing background information about the practice).

Staff surveys

All practice staff were invited to complete a postal survey at two time points: (1) before RTF touch screens were installed ('baseline') and (2) after the 12-week RTF implementation period ('follow-up'). Each team member was allocated a unique study ID number so that his or her completed questionnaires could be matched. Reminder packs were sent to non-responders approximately 2 weeks after delivery of the initial survey pack.

The baseline and follow-up questionnaires included demographic and contextual information (age, gender, ethnic origin, role within the practice) and the Value of Patient Feedback (VOP) scale. The VOP scale was developed within the IMPROVE programme specifically to measure staff attitudes towards patient feedback within this exploratory trial. The availability of a robust approach to evaluating perceptions of the utility and impact of patient feedback was central to our assessment of the engagement of health-care

professionals with patient experience data and the likely impact of such information on professional practice. However, a search of the literature found no suitable approach to achieving this. We therefore drew on standard scale development processes to derive and test a new instrument. We give a brief overview of this process below but for full details of the development of the instrument see *Appendix 5*.

First, we derived key constructs using qualitative data that we had previously collected, both within the programme and prior to the programme in other patient experience research. This gave us a body of data to draw on consisting of interviews with 40 GPs and 14 focus groups with primary care practice staff concerning the impact and utility of patient experience surveys, which we supplemented with a review of relevant literature in the area. From this, we developed a pool of 56 potential items. Following expert panel review ($n = 6$), 52 items were retained for further consideration. We undertook cognitive testing through interviews with clinicians ($n = 7$) and items were further reduced to 43, with textual amendments. Pretesting of all 43 items took place using an online survey of doctors and nurses ($n = 215$). Item reduction was undertaken on the basis of participant feedback and performance of the items in polychoric correlation matrices. We also undertook exploratory factor analysis resulting in further item reduction. A proposed 16-item version of the VOP scale was pilot tested in a survey of hospital doctors ($n = 108$) and GPs and practice nurses ($n = 78$) to inform confirmatory factor analysis. The final version of the scale used within the exploratory trial described here consisted of 16 items with five-point Likert-type rating scales ('strongly agree' to 'strongly disagree') (*Table 39*). Possible scores on the VOP range from 0 to 80.

Practice allocation to intervention groups

In the feasibility study, both practices piloted an intervention involving facilitated feedback and feedback reports provided at team and individual practitioner levels.

In the exploratory trial, participating practices were randomised to one of four intervention groups (eight practices) or to a control group (two practices). The level of RTF reporting and the provision of a facilitated team reflection session varied among intervention groups (A–D) (*Table 40*). Control group practices did not collect RTF during the implementation phase but could do so at the end of the project. RTF was reported at team and individual practitioner levels for control practices but no facilitated session was offered.

After completion of the baseline staff survey, practices were randomised by a University of Exeter Medical School statistician (otherwise unconnected to the project). Randomisation occurred in two blocks of five practices using a simple randomisation approach based on random number generation. Given the small number of practices involved, stratification by variables such as practice size or GP Patient Survey score was not attempted.

After randomisation, the trial allocation was confirmed with the practice and a timeline for data collection agreed. RTF collection began at both feasibility practices in February 2014. In the exploratory trial, intervention group practices began RTF collection between July and August 2014. For the two control group practices, RTF collection began in November 2014.

Figure 21 shows the schedule of study activities at exploratory trial practices.

Description of the real-time feedback intervention

Installation of touch screens

In each practice, touch screens were installed in the surgery waiting area after completion of the baseline staff survey. The installation of hardware was supported by CRT Limited. A short training session for practice staff was provided, explaining the purpose and day-to-day management of the touch screens and the need to encourage patients to provide feedback as well as giving a practical, interactive demonstration of the touch screens. A 'run-in' period of up to 5 days allowed for any set-up issues (such as the positioning of the touch screen) to be resolved before 'live' RTF collection began.

TABLE 39 The VOP scale

1. Have you ever received structured patient feedback (such as through patient surveys)?

☐ At an individual level (e.g. through a report of patient feedback specific to the care you have provided)

☐ At an organisational level (e.g. through a report of patient feedback aggregated for your practice or clinic)

☐ I have never received structured patient feedback (such as through a patient survey)

2. Please put an ✗ in one box for *each* row to indicate your attitude towards each statement:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. Patient feedback is an important mechanism of quality improvement	☐	☐	☐	☐	☐
2. Making patient feedback publicly available is beneficial to other patients	☐	☐	☐	☐	☐
3. I have reservations about patient feedback received via complaints	☐	☐	☐	☐	☐
4. I have reservations about patient feedback currently received via patient forums or participant groups	☐	☐	☐	☐	☐
5. I have reservations about patient feedback currently received via surveys	☐	☐	☐	☐	☐
6. Patient surveys help identify areas for service improvement	☐	☐	☐	☐	☐
7. I can make good use of patient feedback	☐	☐	☐	☐	☐
8. Responders to patient surveys are representative of my patient population	☐	☐	☐	☐	☐
9. Feedback from current patient surveys is usually reliable	☐	☐	☐	☐	☐
10. It is beneficial to receive patient feedback via complaints	☐	☐	☐	☐	☐
11. It is beneficial to receive patient feedback via patient forums or participant groups	☐	☐	☐	☐	☐
12. It is beneficial to receive patient feedback via surveys	☐	☐	☐	☐	☐
13. I am likely to make changes to my individual practice as a result of patient feedback	☐	☐	☐	☐	☐
14. Patients are able to provide useful feedback on organisational issues, such as appointment systems	☐	☐	☐	☐	☐
15. I am concerned about my individual reputation as a result of patient feedback being made public	☐	☐	☐	☐	☐
16. Patient feedback can improve the clinical quality of care I provide	☐	☐	☐	☐	☐

TABLE 40 Intervention groups in the exploratory trial phase

	Level of feedback reporting	
Facilitated reflection?	Practice level only	Practice level plus practitioner level
Yes	Group A (two practices)	Group B (two practices)
No	Group C (two practices)	Group D (two practices)

Eligible practices identified and approached
(scoring in lowest 50% on national GP Patient Survey)

Set-up

Practice confirms willingness to take part:
sign consent form and complete practice profile questionnaire

4 weeks

Individual team members complete baseline staff survey:
including VOP scale

PRACTICE RANDOMISATION

Practice randomised to one of
four intervention groups
(group A, B, C or D)

Practice randomised
to control group

1 week

Set up RTF touch screens and
train practice staff, allowing
1 week run-in
(all practices)

(12 weeks – six RTF cycles)

RTF collection and reporting:
collect RTF from attending
patients. Feedback reports issued
every 2 weeks

No RTF collection or
reporting

Facilitated reflection session
(groups A and B only)

RTF collection and reporting:
collect RTF from attending
patients. Feedback reports issued
every 2 weeks

4–6 weeks

Individual team members complete follow-up staff survey:
(including VOP scale)
Focus group or interviews with practice team
(representation from staff in clinical and administrative roles)

END OF PRACTICE INVOLVEMENT IN EXPLORATORY TRIAL

(At the end of the study, control group practices collected RTF
from attending patients over a 12-week period, with feedback
reports issued every 2 weeks, but were not offered a facilitated
team reflection session)

FIGURE 21 Overview of the practice pathway (exploratory trial).

Practices were provided with leaflets and posters advertising the touch screen to patients and were encouraged to use other means (such as the practice website or newsletter) to promote the RTF devices. Exploratory trial practices were provided with a large banner and a supply of postcards for clinical staff to hand to consulting patients.

Collection of real-time feedback from attending patients

Patients visiting the surgery over the 12-week implementation period were eligible to provide feedback using the touch screens, including those attending for consultations or for other reasons (e.g. to book an appointment). Patients activated and navigated the survey by touching the screen.

The core survey items and response options are summarised in *Table 41*. In line with NHS guidance, the Friends and Family Test appeared first, followed by items selected from the national GP Patient Survey. Practices could add up to two questions of their own choice. Because of limited funding, survey items were presented in English only. A parent/guardian or carer ('proxy') could complete the survey on behalf of the patient if necessary.

To reduce the survey length, and following discussions with our advisory group, only four of the seven GP Patient Survey communication skills items were included. Three items loading most strongly plus one item loading least strongly onto overall communication scores for GPs and nurses were selected.[130] Filter questions were included to ensure that respondents were presented with items relevant to their visit. For example, patients who had not had a consultation were not asked to rate the communication skills of a health professional.

Practice feedback reports

All practices received a fortnightly summary of team-level feedback (six reports per practice in total). Patient feedback was transmitted from the touch screens to CRT Limited by Wi-Fi or 3G connection. When no reliable signal was available, data were manually downloaded (approximately fortnightly) by the researcher.

Data were 'quarantined' if, for example, the respondent had not answered a minimum number of survey items, if response options appeared to be randomly selected or if a response had been provided in a time frame that suggested that the question could not have been read. Otherwise, data were considered to be 'valid'.

Cumulative feedback reports were generated by CRT Limited including all valid feedback collected since touch screen installation. Reports contained frequency tables and graphs and patients' free-text comments. Free-text comments were screened by the local researcher and details that might identify individual patients were removed. Negative comments about a clinician's practice or standards of care were discussed on an individual basis with the chief investigator and a course of action proportionate to the risk to patients was agreed.

General practitioners, nurses and health-care assistants from the two feasibility and six exploratory trial practices (intervention groups B and D and the control group) were provided with personalised reports if they accumulated valid feedback from ≥ 20 respondents. These were similar in format to the team-level reports but summarised feedback only from patients who reported consulting a particular practitioner.

Team-level reports were e-mailed to the practice manager every fortnight for dissemination to the wider practice team. Personalised reports were e-mailed or posted directly to the individual practitioner.

Facilitated team reflection session

Two feasibility and four exploratory trial practices (intervention groups A and B) were offered a facilitated team reflection session. Facilitated reflection sessions took place at the surgery approximately half-way through RTF implementation (weeks 6–7) and lasted 45–60 minutes. Clinical and administrative staff were invited to attend and participants were provided with a printed copy of the practice's most recent team-level feedback report.

TABLE 41 Core RTF survey items and response options

Question source/type	Wording of item	Response options presented
NHS Friends and Family Test	How likely are you to recommend our GP surgery to friends and family?	Extremely likely/likely/neither likely nor unlikely/unlikely/extremely unlikely/don't know
GPPS – telephone access	How easy is it to get through on the telephone to this practice?	Very easy/fairly easy/not very easy/not at all easy/have not tried or don't know
GPPS – access to appointments	How easy is it to get an appointment for a time that suits you?	Very easy/fairly easy/not very easy/not at all easy/have not tried or don't know
GPPS – receptionists	How helpful do you find the receptionists at this GP surgery or health centre?	Very helpful/fairly helpful/not very helpful/not at all helpful/don't know
GPPS – overall experience and satisfaction	Overall, how satisfied are you with the care you get at this GP surgery or health centre?	Very satisfied/fairly satisfied/neither satisfied nor dissatisfied/fairly dissatisfied/very dissatisfied
Filter question	Have you had an appointment with a health professional at the practice today?	Yes/no
Filter question	If 'yes', which of the following health professionals did you see?	Doctor/nurse/health-care assistant/phlebotomist (for a blood test)/practice counsellor/other health professional
Filter question	If doctor or nurse, which doctor or nurse did you see today?	List and photographs of individual staff at the practice plus another doctor/another nurse/don't know
GPPS – confidence and trust	If seen doctor or nurse, do you have confidence and trust in the doctor or nurse you saw today?	Yes, definitely/yes, to some extent/no, not at all/don't know or can't say
GPPS – clinician communication skills	How good was the health professional at each of the following: ● giving you enough time ● listening to you ● treating you with care and concern ● taking your problems seriously	Very good/good/neither good nor poor/poor/very poor/doesn't apply
Practice-specific items	Up to two items (with relevant response options) on topics selected by the practice team were included after the clinician communication skills items or after the overall experience/satisfaction item (for patients who had not consulted a health professional)	
Respondent information	Are you . . .?	The patient/parent or guardian of the patient/spouse or partner of the patient/another relative or friend of the patient/other
Patient's gender	Are you/is the patient . . .?	Male/female
Patient's age group	How old are you/how old is the patient?	< 18 years/18–25 years/26–45 years/46–65 years/> 65 years
Patient's ethnic group	What is your ethnic group/what is the patient's ethnic group?	White/mixed/Asian or Asian British/black or black British/Chinese or other
Free-text comments	If you would like to leave any further comments, please type below	–

GPPS, GP Patient Survey.

The session was led by one of four experienced GP appraisers/trainers based in Exeter or Cambridge. Facilitators were briefed in advance about the study and the aims of the session and were provided with information about the practice and their most recent RTF report.

The facilitator and practice team explored the feedback and identified aspects of service that were well received by patients, as well as areas with potential for improvement.

Following experience in the two feasibility study practices, structured action-planning paperwork was used in the facilitated session for the exploratory trial. One member of staff was nominated to complete an action plan sheet during the session, summarising the team's reflections, discussions and agreed action points. With the practice team's permission, the session was observed by a researcher who took brief field notes.

Details of data collection

A multimethod approach (*Figure 22*) was adopted to investigate the feasibility and acceptability of the RTF intervention. This included focused ethnographic methods to explore how the new technology could be introduced into a complex system with 'multiple human actors'.[260]

Practice visits

During the 12-week implementation period, researchers visited participating practices every fortnight to observe patients' interactions with practice staff and RTF devices. The visits took place on varying weekdays and at a range of times, to ensure that different staff were on duty and to capture workload variations and a range of activities at the practice. All data were recorded in anonymised form to protect patient and staff confidentiality. The practice visits were divided into shorter sessions (approximately 1 hour), each focusing on different types of data collection.

Unstructured observations

Researchers took detailed, contemporaneous field notes describing the practice environment as well as interactions between patients and staff and between patients and RTF devices. These included descriptions of specific events, as well as the researchers' own impressions and interpretations. Observation notes were periodically shared and discussed within the research team to develop the methodology and maximise the richness of data collected.
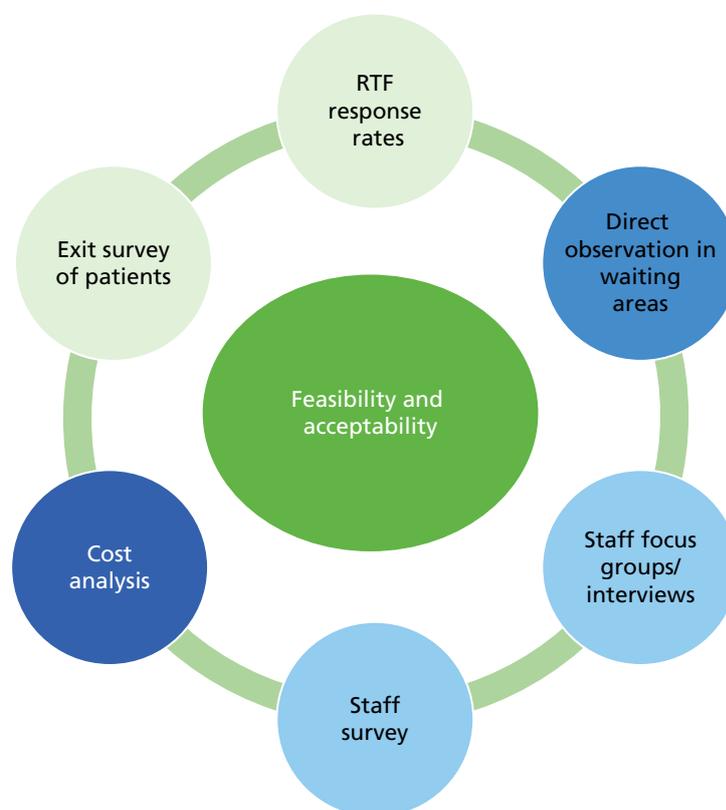
FIGURE 22 Multimethod approach to data collection.

Structured observations

Researchers used checklists, including yes/no tick boxes,[261] to systematically record interactions between patients and practice staff and patients' use of the touch screens and publicity materials (*Box 4*).

During observation sessions, a poster was displayed in the waiting area to explain the researcher's presence in the practice. Individual patient and staff consent was not sought in case this significantly altered behaviour relating to the touch screens.[262]

Patient exit surveys

Researchers conducted brief face-to-face exit surveys with a convenience sample of patients as they left the practice, whether or not they had used the RTF device. The purpose of the survey was explained to

BOX 4 Interactions and events targeted during structured observation sessions

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Patient interacts with a receptionist during his or her visit (for any reason)

When some interaction occurred, did the receptionist:

- tell the patient about the opportunity to leave RTF?
- point to or take the patient to the touch screen?
- offer to demonstrate how to use the touch screen?

Patient interacts with a health professional in the waiting area (for any reason)

When some interaction occurred, did the health professional:

- tell the patient about the opportunity to leave RTF?
- point to or take the patient to the touch screen?
- offer to demonstrate how to use the touch screen?

Patient interacts with RTF publicity materials

During his or her visit, did the patient:

- pick up a RTF leaflet/flyer or look at a RTF poster?
- spend time reading RTF information in detail?

Patient interacts with touch screen equipment

- Was a touch screen free when the patient left the surgery?
- What level of interaction was observed?

  (a) patient looked at or walked up to a touch screen
  (b) patient stopped to read the first screen
  (c) patient touched the first screen to begin the survey
  (d) patient stopped using the touch screen without answering any items
  (e) patient answered some or all RTF items.

Level of assistance required with touch screens

- Patient asked (staff or researcher) what the touch screen was for.
- Patient required help to use the touch screen (from staff or researcher).

---

patients and their verbal consent to participate was sought. Participants responded verbally to a series of structured questions about the touch screens and their views of RTF (*Table 42*). Brief demographic details were also recorded.

Extraction of appointment statistics

Researchers used practice appointment systems to determine the number of appointments attended (with any health professional) during the 12-week RTF implementation period and to collect anonymised age/gender information about the patients who had consulted. This information was used, combined with consultation information from the RTF survey, to calculate the percentage of consulting patients who had used a touch screen and to explore the extent to which those patients were representative of the consulting patient population with respect to age and gender. No records were kept of the number of patients who attended the practice for other reasons so it was not possible to calculate a 'feedback rate' for this group.

Practice team focus groups or interviews

At the end of RTF implementation, researchers conducted either semistructured interviews with a purposive sample recruited from among all practice staff or focus groups to which all practice staff were invited. Interviews and focus groups explored aspects of RTF implementation within the practices, including training and technical support, processes involved in the collection of RTF, reports from the devices, learning from and acting on patient RTF and how much staff valued the feedback that they received. Interviews and focus groups lasted approximately 40–45 minutes and were audio recorded with the participants' permission and transcribed verbatim. Participants provided individual written informed consent prior to the focus group or interview. Lessons from discussions with the feasibility practice teams were used to refine the RTF intervention and wider study processes prior to the exploratory trial phase.

Interviews with facilitators

Semistructured interviews were conducted with facilitators to explore aspects of the team reflection sessions, including the facilitators' general approach to the sessions; perceptions about practice teams' engagement with the facilitation process; views about the practice teams' or individuals' understanding of and reflections about RTF (including individualised feedback) and any plans the teams had for acting on it; and their assessment of the value of facilitated sessions in general. Facilitators provided individual written informed consent and the discussion was audio recorded with their permission and transcribed verbatim.

TABLE 42 Summary of patient exit survey items

	Attending patients who:	
Patient exit survey items	**Had used a touch screen**	**Had not used a touch screen**
Was the patient aware of the opportunity to leave feedback using a touch screen device?	NA	✓
How did the patient find out about the opportunity to leave feedback?	✓	✓
Reasons for not using the touch screen today	NA	✓
How easy did the patient find it to use the touch screen?	✓	NA
Did the patient have any difficulty understanding the RTF questions?	✓	NA
How long did it take to answer the RTF questions?	✓	NA
The patient's overall view of touch screens as a way of collecting patient feedback	✓	✓
Patient's gender	✓	✓
Patient's age group	✓	✓

NA, not applicable.

Data analysis

Quantitative analysis

The proportion of consulting patients who used the touch screens during the RTF implementation period was calculated (overall and for each practice) using the following equation: number of patients who provided valid RTF *and* reported having a consultation with a health professional (ascertained from each practice's final RTF data set) divided by the number of patients who consulted a health professional in the same period (ascertained from each practice's computerised appointments system).

The age, gender and ethnic origin of consulting patients who provided valid feedback were ascertained from each practice's final RTF report, along with the type of health professional (GP/nurse/health-care assistant/other) consulted.

To identify whether or not particular patient groups were more likely to use the touch screens than others, the proportion of patients who provided valid RTF by age group and gender was compared with the respective proportions of all patients who consulted in the same time period (ascertained from the appointments statistics) using z-tests.

Not all patients who provided RTF disclosed their age or gender. To derive more accurate response rates and proportions of responders by gender and age bands, the number of responders in each demographic subgroup per practice was increased in proportion to the number of missing values expected in that subgroup, based on the proportions in the practice's consulting population. For example, if a practice had 10 respondents who had not provided their gender and 60% of appointments at the practice were for female patients, the number of responding female patients for that practice was increased by six and the number of responding male patients was increased by four.

Data derived from completed structured observation checklists were summarised descriptively to determine the frequency of a range of prespecified interactions occurring during the observation periods, for example the number (%) of patients who were encouraged by reception staff to use the touch screen. Patient exit survey responses were also summarised descriptively: the number (%) of patients endorsing each response option.

To determine whether or not the RTF intervention was associated with staff attitudes to patient feedback, mean scores on the VOP scale before and after the study were compared using a paired-samples *t*-test.

We explored whether or not changes over time in VOP scale scores varied across trial arms and health professional groups using analysis of variance (ANOVA). The ANOVA model included change in VOP scale score as the dependent variable, derived by subtracting baseline scores from follow-up scores and, therefore, included responses only from staff who returned baseline and follow-up questionnaires. The model had a 5 (groups A, B, C, D and control) × 2 (clinical, non-clinical) design, with trial arm and practice role as between-subjects factors. To provide more balanced 'practice role' groups, GPs, nurses and other health professionals were categorised as having a clinical role, whereas receptionists, administrators and managers were categorised as having a non-clinical role.

Cost analysis

This analysis sought to estimate the cost of providing a RTF intervention in general practices over a 12-week period. Such costs could potentially be compared with outcomes in a cost–consequences analysis. Cost items are listed in *Box 5*.

Data for the hire of equipment and provision of team- and individual-level reports were provided in aggregate by the RTF provider. Time inputs for practice staff and facilitators were collected from each of the eight intervention practices. Unit costs for staff (*Table 43*) were extracted from standard UK sources.[263] The price year for the analysis was 2014 and costs included value-added tax (VAT) when applicable.

BOX 5 Cost analysis: cost items

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Provision and hire of equipment and feedback

Publicity (leaflets and poster).

Kiosk rental.

Touch screen rental.

Kiosk collection.

Reporting.

Training/set-up

Time for:

- GP
- practice manager
- practice nurse
- receptionist
- health-care assistant
- administrator.

Facilitated reflection

Facilitator fee.

Staff time (categories as per training/set-up).

</div>

TABLE 43 Cost analysis: unit costs

Role	Hourly rate (£)	Source/notes
GP	109.00	PSSRU 2014[a] (p. 195) – per hour of General Medical Services activity, excluding direct care staff costs and qualification costs
Nurse practitioner	51.00	PSSRU 2014[a] (p. 193) – nurse advanced per hour (excluding qualification costs)
Practice nurse	34.00	PSSRU 2014[a] (p. 192) – per hour (excluding qualification costs)
Health-care assistant	10.06	PSSRU 2014[a] (p. 266) – mean pay for health-care assistants: £16,600, assumed 37.5 hours per week and 44 weeks per annum
Physiotherapist	32.00	PSSRU 2014[a] (p. 179) – per hour
Pharmacist	51.00	PSSRU 2014[a] (p. 184) – per hour
Practice manager	21.54	Midpoint (point 30) Agenda for Change band 7.[b] PSSRU 2014[a] (p. 197) states that practice manager for a dentist is typically on Agenda for Change band 7. Assumed same cost for a general practice and 37.5 hours per week, 44 weeks per annum
Administrator	10.78	Assumed Midpoint Agenda for Change band 3 (£17,794), 37.5 hours per week and 44 weeks per annum[b]
Receptionist	9.35	Midpoint Agenda for Change band 2 (£15,432). PSSRU 2014[a] (p. 197) states that receptionist for a dentist is typically on Agenda for Change band 2. Assumed same cost for a general practice and 37.5 hours per week, 44 weeks per annum

a Curtis.[263]
b Royal College of Nursing.

The cost in the two control practices was assumed to be zero. Given the pilot nature of the study and the small sample size, summary costs only were reported and no attempt was made to draw comparisons between trial arms.

Qualitative analysis

NVivo 10 software was used to facilitate the organisation, coding, linking and retrieval of the qualitative data from the sources described above. After initial independent reading of a sample of the transcripts, two qualitative researchers (MC and AD) discussed preliminary themes, eliminated any duplication and resolved any differences. MC developed a coding framework, underpinned by normalisation process theory (NPT) constructs,[264] into which the refined themes were organised. Using this framework, the remaining transcripts were each analysed and coded by MC and a subset of transcripts was analysed and coded by AD. Both researchers ensured that data that did not appear to fit within the NPT constructs were also included in their analysis. The progress of the analysis was discussed in regular group sessions with a third researcher (CW), whose role as academic lead afforded a comprehensive view of qualitative and quantitative aspects of the RTF research.

Normalisation process theory provided an analytical tool with which the RTF implementation was explored. NPT is a theory of implementation originally developed to understand the embedding of new technologies into health systems,[264] so was judged to be particularly appropriate to the processes involved in RTF implementation. The theoretical framework includes four constructs: coherence/sense making, cognitive participation/relationships, collective action/enacting and reflexive monitoring/appraisal (*Figure 23*). Although presented as discrete, linear categories, in reality the NPT constructs often operate and are experienced simultaneously.

Results: feasibility study

Summary of findings

The characteristics of the two practices recruited for the feasibility study are summarised in *Table 44*. Across the two practices, 607 out of 14,372 (4.2%) consulting patients provided valid feedback, with a similar rate of touch screen use in each practice [178/4355 (4.1%) in practice A and 429/10,017 (4.3%) in practice B].

Observation of interactions in the reception/waiting areas revealed that, although staff interacted with patients (100/185; 54% observations), they were rarely encouraged to leave feedback or directed to the
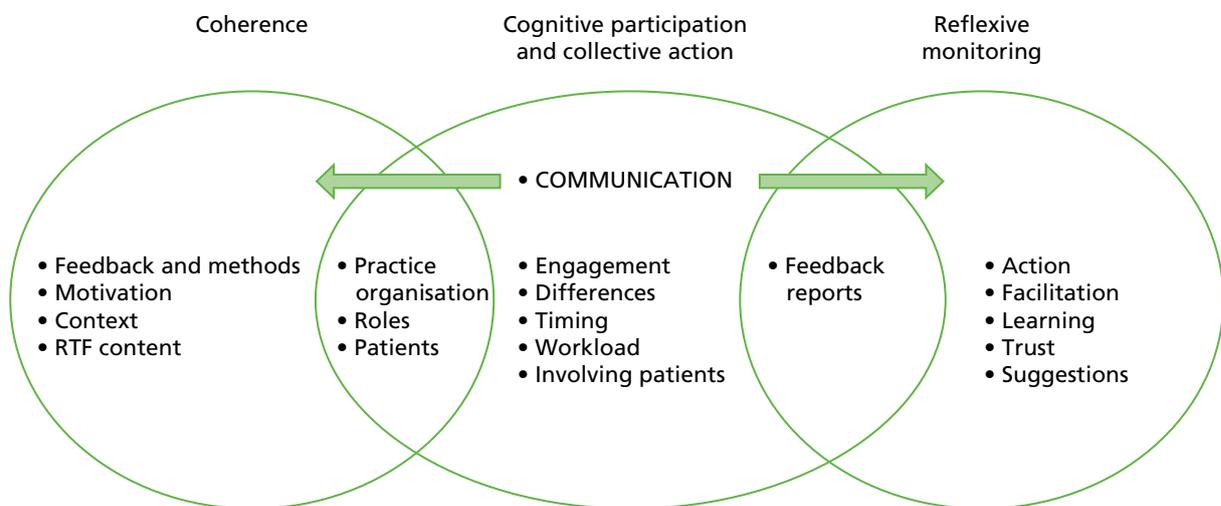
FIGURE 23 Normalisation process theory framework: qualitative analysis.

TABLE 44 Characteristics of participating practices (feasibility phase)

Characteristic	Practice A	Practice B
List size[a]	4122	6555
Number of practice staff		
GPs	5	9
Nurses	1	1
Health-care assistants	3	4
Reception/administrative staff	11	22
Managerial staff	1	5
Setting	Urban	Rural
GP Patient Survey centile score (%)	46.7	16.7
Deprivation decile[b]	7	6
Proportion of telephone consultations (%)	76–100	26–50

a Average list size for England is 7041.
b Data from National General Practice Profiles;[265] lower numbers indicate more deprivation.

touch screens (4/87; 5% of interactions with reception staff). RTF publicity materials were rarely noticed by patients (2/185; 1% of observations) but were competing with a large volume of health and social care information displayed in waiting areas. This suggested that more conspicuous publicity materials and a greater emphasis in set-up training on the need to encourage patients to use touch screens were required. Large pull-up banners and postcards for clinicians to hand to consulting patients were therefore introduced for the exploratory trial phase.

Patients were divided in their views of RTF as a way to provide feedback. Many were positive about the touch screens (51/60; 85%), finding their immediacy and anonymity advantageous, and welcomed the opportunity to provide feedback. However, some patients highlighted potential problems for other patients who may not be comfortable with computers, who are rushed or who have consecutive appointments. Patients who did not use the touch screens commented on the positioning of the devices and feeling 'like you are on show'. These comments were taken into consideration when advising practices in the exploratory trial phase.

Staff from both practices were enthusiastic about the touch screens, but confirmed that the publicity materials did not adequately attract patients' attention. Receptionists found juggling their normal workload with encouraging patients to use the touch screens difficult. Although staff found the facilitation sessions useful, circulation of RTF reports to the wider team and identifying an action plan at the end of the session were problematic. It was suggested, for the exploratory trial, that one individual within each practice should be responsible for completing an action plan sheet for circulation to the team after the facilitation session.

Results: exploratory trial

Ten practices were recruited for the exploratory trial: eight from the South West and two from Cambridgeshire. *Table 45* summarises the characteristics of participating practices.

Proportion and characteristics of patients providing real-time feedback

Altogether, 1941 out of 79,145 (2.5%) consulting patients provided valid feedback ('responders'), with a 95% CI of 2.3% to 2.6%. Patient use of the touch screens varied across practices (*Table 46*), with a range

TABLE 45 Characteristics of participating practices (by exploratory trial group)

Characteristic	Intervention A[a]		Intervention B[a]		Intervention C[a]		Intervention D[a]		Control group	
	Practice 1	Practice 2	Practice 3	Practice 4	Practice 5	Practice 6	Practice 7	Practice 8	Practice 9	Practice 10
List size[b]	4114	4568	3618	8005	13,000	15,189	10,998	9500	11,727	6675
Number of practice staff										
GPs	3	4	3	6	11	6	12	6	6	4
Nurses	2	3	1	5	3	7	7	3	8	2
Health-care assistants	2	1	1	1	3	2	2	2	2	1
Reception/administrative staff	6	8	7	12	12	12	17	14	16	8
Managerial staff	1	3	2	2	3	2	3	2	2	1
Setting	Rural	Urban	Urban	Inner city	Rural	Urban	Urban/rural	Inner city	Urban	Urban
GP Patient Survey centile score (%)	33.4	39.5	28.9	14.3	34.0	31.9	21.9	32.7	27.1	14.5
Deprivation decile[c]	8	2	10	2	6	2	9	7	7	7
Consultations per week, mean	441.6	707.0	181.3	620.3	1809.5	474.6	434.0	636.8	1040.2	250.3

a Group A = facilitated reflection, practice-level feedback; group B = facilitated reflection, practice-level and individual practitioner-level feedback; group C = unfacilitated reflection, practice-level feedback; group D = unfacilitated reflection, practice-level and individual practitioner-level feedback.
b Average list size for England is 7041.
c Data from National General Practice Profiles;[265] lower numbers indicate more deprivation.

TABLE 46 Real-time feedback completion rates for consulting patients (exploratory trial)

Demographic variable	RTF responses/appointments	% (95% CI)
Overall	1941/79,145	2.5 (2.3 to 2.6)
Practice (group)[a]		
1 (intervention A)	231/5299	4.4 (3.8 to 4.9)
2 (intervention A)	201/8484	2.4 (2.1 to 2.7)
3 (intervention B)	110/2175	5.1 (4.2 to 6.1)
4 (intervention B)	168/7443	2.3 (1.9 to 2.6)
5 (intervention C)	162/21,764	0.7 (0.6 to 0.9)
6 (intervention C)	64/5695	1.1 (0.9 to 1.4)
7 (intervention D)	416/5208	8.0 (7.0 to 8.8)
8 (intervention D)	102/7642	1.3 (1.1 to 1.6)
9 (control)	386/12,482	3.1 (2.8 to 3.4)
10 (control)	101/3003	3.4 (2.7 to 4.1)
Gender[b]		
Male	531/23,739	2.2 (2.1 to 2.4)
Female	859/34,226	2.5 (2.3 to 2.7)
Age band (years)[b]		
< 18	150/6747	2.2 (1.9 to 2.6)
18–25	78/3998	2.0 (1.5 to 2.4)
26–45	315/12,383	2.5 (2.3 to 2.8)
46–65	469/15,190	3.1 (2.8 to 3.4)
≥ 65	377/19,647	1.9 (1.7 to 2.1)

a Group A = facilitated reflection, practice-level feedback; group B = facilitated reflection, practice-level and individual practitioner-level feedback; group C = unfacilitated reflection, practice-level feedback; group D = unfacilitated reflection, practice-level and individual practitioner-level feedback.
b Appointments data could not be broken down by gender or age for three out of 10 pilot practices. As such, the numbers displayed do not sum to the overall totals given.

of 0.7% (95% CI 0.6% to 0.9%) to 8.0% (95% CI 7.3% to 8.8%). The mean practice-level response rate was 3.2% (SD 2.2%).

Data on patient ethnicity were not available from the appointments system at any of the exploratory trial practices and, at three practices, appointment data could not be broken down by age and gender. *Table 46* shows the response rate broken down by gender and age bands using data from seven of the 10 exploratory trial practices. For these practices, the mean percentage of responders who did not provide their gender was 6.7% (range 1.9–13.7%) and the mean percentage of responders who did not provide their age was 6.7% (range 2.2–13.7%).

The age and gender of consulting patients who provided RTF (at seven of the 10 practices) are summarised in *Table 47*, together with the characteristics of all patients from these practices who consulted during the study period.

There was a higher proportion of female responders (61.8%) than in the consulting population (59.0%) (z = 2.063, p = 0.039). The proportion of responders in the < 18, 18–25 and 26–45 years age bands did

TABLE 47 Representativeness of consulting patients who provided RTF

Characteristic	Responders, n/N (%)	All patients, n/N (%)	p-value[a,b]
Women[b]	859/1390 (61.8)	34,226/57,965 (59.0)	**0.039**
Age band (years)[c]			
< 18	150/1390 (10.8)	6747/57,965 (11.6)	0.329
18–25	78/1390 (5.6)	3998/57,965 (6.9)	0.061
26–45	315/1390 (22.7)	12,383/57,965 (21.4)	0.243
46–65	469/1390 (33.7)	15,190/57,965 (26.2)	**< 0.001**
≥ 65	377/1390 (27.1)	19,647/57,965 (33.9)	**< 0.001**
Ethnicity[d]			
White	1724/1941 (88.8)	NA	–
Mixed	28/1941 (1.4)	NA	–
Asian	52/1941 (2.7)	NA	–
Black	27/1941 (1.4)	NA	–
Chinese	8/1941 (0.4)	NA	–
Missing	102/1941 (5.3)	NA	–

NA, not available.
a Proportions (z-) test.
b Bold indicates that tests were statistically significant to $p < 0.05$.
c Appointment data could not be broken down by gender or age for three out of 10 exploratory trial practices. These proportions are taken from the RTF and appointment data for the seven remaining practices.
d Appointment data could not be broken down by ethnicity for any practice.

not differ significantly from the corresponding proportions in the consulting population. There were significantly more responders aged 46–65 years (33.7% of responders compared with 26.2% of the population; $z = 6.300$, $p < 0.001$) and significantly fewer responders aged ≥ 65 years (27.1% of responders compared with 33.9% of the population; $z = -5.277$, $p < 0.001$).

Observed patient and staff interactions
Researchers conducted structured observation sessions only at the eight intervention group practices in the exploratory trial. Observations were not conducted at the control group practices.

In total, 873 of 1205 (72.5%) attending patients were observed to have some form of verbal interaction with a receptionist, but there were fewer interactions with health professionals in the waiting area (0.8%). Across 1199 observed staff–patient interactions, 60 (5.0%) patients were encouraged to use the touch screens by a receptionist, but never by a health professional. When staff encouraged patients to use the touch screen, 36 out of 60 (60.0%) patients attempted to start the survey. In contrast, only 28 out of 1114 (2.5%) patients attempted the survey without encouragement. Few patients (78/1199, 6.5%) were observed to read the publicity materials in the waiting area.

Patient views of real-time feedback
In total, 375 patients participated in exit surveys at the eight intervention arm practices in the exploratory trial. Of those surveyed, 103 (27.5%) had used the touch screen in the waiting area and 272 (72.5%) had not.

Of the patients who had used a touch screen, 87 out of 101 (86.1%) had positive views of RTF as a way of leaving feedback for the practice. All responders reported that they had found it easy to complete the RTF survey and that they had answered all questions. The majority (79/98, 80.6%) of responders reported completing the survey in ≤ 2 minutes.

Patients who had not used a touch screen gave a range of reasons for this. Over half (149/268, 55.6%) were not aware of the touch screens or the opportunity to leave feedback. Of those who were aware of the touch screens, 29 out of 84 (34.5%) said that they did not have time to use them; 5 out of 84 (6.0%) felt that their feedback would not be relevant (e.g. because it was positive); 4 out of 84 (4.8%) had concerns about anonymity or how the feedback would be used; 15 out of 84 (17.9%) had concerns about technology; and 12 out of 84 (14.3%) reported completing RTF before but were not aware that they could leave feedback on each visit. Despite not using the touch screens during their current visit, 178 out of 260 (68.5%) patients thought that the idea of RTF was good.

Real-time feedback and staff attitudes to patient feedback

Across the 10 exploratory trial practices, 162 out of 247 (65.6%) members of staff returned a baseline questionnaire, 123 out of 247 (49.8%) returned a follow-up questionnaire and 107 out of 247 (43.3%) returned both questionnaires. Of these, 92 out of 107 (86.0%) completed all items on the VOP scale at both time points and were included in the analysis of pre- and post-intervention scores. *Table 48* presents the mean VOP scale scores at the two time points for each intervention group and by staff group. The results suggest that staff perceptions of the value of patient feedback did not change significantly from baseline (mean 42.9, SD 8.44) to follow-up (mean 41.7, SD 8.20; $t_{91} = 1.703$, $p = 0.092$).

TABLE 48 Value of patient feedback scale scores for practice staff: pre and post intervention broken down by trial arm and staff group

Group[a]	n	Pre-intervention mean (SD)	Post-intervention mean (SD)	Difference mean (SD)	95% CI for the difference
Group A					
Clinical	4	45.25 (13.6)	41.00 (14.02)	–4.25 (11.03)	–21.8 to 13.30
Non-clinical	8	40.25 (6.18)	41.63 (5.85)	1.38 (2.88)	–1.03 to 3.78
Overall	12	41.92 (8.99)	41.42 (8.69)	–0.50 (6.79)	–4.81 to 3.81
Group B					
Clinical	6	41.17 (8.28)	44.50 (9.27)	3.33 (10.27)	–7.44 to 14.11
Non-clinical	6	45.17 (3.31)	39.33 (3.98)	–5.83 (6.62)	–12.78 to 1.11
Overall	12	43.17 (6.37)	41.92 (7.32)	–1.25 (9.53)	–7.30 to 4.80
Group C					
Clinical	14	42.29 (10.23)	40.86 (11.44)	–1.43 (4.47)	–4.01 to 1.15
Non-clinical	8	42.63 (6.09)	40.75 (4.37)	–1.88 (4.26)	–5.43 to 1.68
Overall	22	42.41 (8.79)	40.82 (9.35)	–1.59 (4.29)	–3.50 to 0.31
Group D					
Clinical	5	45.80 (8.20)	45.80 (9.04)	0.00 (5.24)	–6.51 to 6.51
Non-clinical	12	43.50 (5.60)	43.50 (7.24)	0.00 (6.4)	–4.06 to 4.06
Overall	17	44.18 (6.29)	44.18 (7.59)	0.00 (5.92)	–3.04 to 3.04
Control					
Clinical	16	40.94 (11.89)	40.63 (9.08)	–0.31 (8.15)	–4.65 to 4.03
Non-clinical	13	45.15 (7.10)	41.62 (6.84)	–3.54 (5.33)	–6.76 to –0.32
Overall	29	42.83 (10.09)	41.07 (8.03)	–1.76 (7.10)	–4.46 to 0.94

a Group A = facilitated reflection, practice-level feedback; group B = facilitated reflection, practice-level and individual practitioner-level feedback; group C = unfacilitated reflection, practice-level feedback; group D = unfacilitated reflection, practice-level and individual practitioner-level feedback. 'Clinical' = grouped GPs, nurses and other health professionals; 'non-clinical' = grouped receptionists, administrators and managers.

The ANOVA examining the difference between follow-up and baseline VOP scale scores assessed change over time between trial arms and staff groups. There was no significant effect of trial arm ($F_{4,77} = 0.301$; $p = 0.877$), indicating that change over time in VOP scores did not vary reliably across the intervention and control groups. Similarly, there was no significant effect of staff role ($F_{2,77} = 2.351$; $p = 0.102$), suggesting that neither the VOP scores of clinical staff nor those of non-clinical staff changed over time. No significant interaction between trial arm and staff group was apparent ($F_{8,77} = 1.549$; $p = 0.154$).

Cost analysis

Costs by RTF intervention groups A–D are shown in *Table 49*. The mean cost per practice of providing RTF was approximately £1117 over the 12-week intervention period. The largest component was rental of the RTF touch screens (total £972 per practice). The practice manager and administrative staff attended the set-up session in most practices. At practices allocated to a facilitated feedback arm (groups A and B), GPs and nurses also attended (*Figure 24*). A nurse was the only attendee at the set-up session in practice 6 and this practice had the lowest feedback response rate by the end of RTF implementation. Training time was assumed to be 15 minutes per staff member, estimated at £27 per practice (SD £22).

The total cost to a practice of the system for the 12-week implementation period was £1144 (including fees paid to the RTF provider). There was no difference in cost between the team-level and individual-level feedback as the processing fee for the report (£75) was assumed to be the same for both.

TABLE 49 Cost analysis: results

Item	Details	Group[a] A	B	C	D	All groups, mean (SD)	Groups
Feedback level		P	P&I	P	P&I		
Facilitated session?		Yes	Yes	No	No		
Number of practices		2	2	2	2	8	
RTF equipment: hire and provision (£)							
Publicity (posters and leaflets)	750 postcards + one poster per practice	107					
Touch screen (kiosk) rental	12-week hire	630					
Touch screen (desktop) rental	12-week hire	342					
Kiosk collection		38					
Reporting		75[b]					
Total						1117	A–D
Practice staff set-up session		43	34	8	22	27 (22)	A–D
Total						1144 (22)	A–D
Facilitated reflection (£)							
Facilitator fees		250	250			250 (58)	A, B
Practice staff to attend facilitation		477	378			428 (180)	A, B
Total		727	628			678 (227)	A, B
Total cost		1887	1779	1125	1139		

P, practice-level reports provided; P&I, practice- and individual-level reports provided.
a Group A = facilitated reflection, practice-level feedback; group B = facilitated reflection, practice-level and individual practitioner-level feedback; group C = unfacilitated reflection, practice-level feedback; group D = unfacilitated reflection, practice-level and individual practitioner-level feedback.
b Cost of reporting was averaged over all eight intervention practices. The marginal cost of individual-level feedback over group level feedback was assumed to be zero.
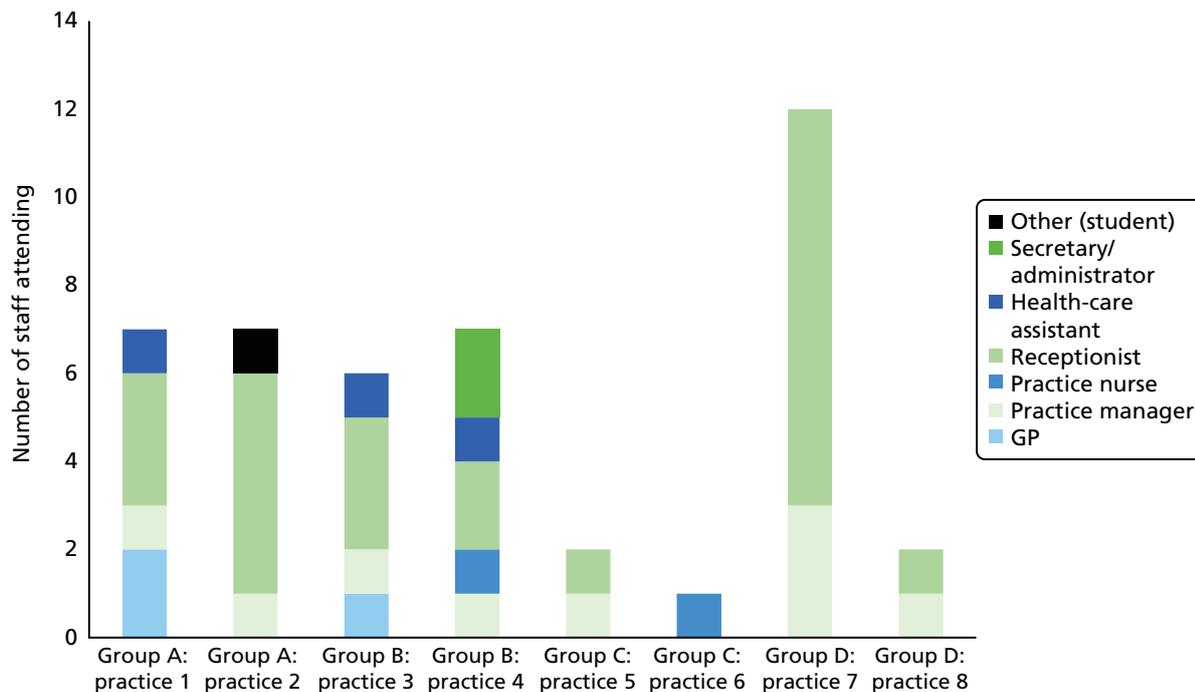
FIGURE 24 Attendance at RTF set-up sessions by intervention arm, practice and staff role.

Facilitated feedback (groups A and B) cost an estimated £678 per practice (SD £227). This consisted of £250 (SD £58) in fees to the facilitator and £428 (SD £180) in practice staff time to attend facilitation.

Qualitative evaluation

Staff from four of the participating 10 practices (intervention, *n* = 21; control, *n* = 7) took part in focus groups and various staff members from the remaining six practices participated in interviews (*n* = 24). *Table 50* summarises the characteristics of participating staff.

Staff from four practices attended facilitated sessions either during or after the data collection phase and three facilitators were interviewed once data collection was complete.

Researchers visited practices 57 times to conduct observations and patient exit interviews. Out of 375 patients approached for an exit interview, 300 (80%) provided additional comments about their experience of providing RTF. Qualitative data extracted from the RTF devices (patient free-text comments) were excluded from the analysis as this information related to patient experience of the practice and not to RTF implementation.

Results from the qualitative study are presented under the headings of the four NPT constructs (coherence, cognitive participation, collective action and reflexive monitoring), subdivided and illustrated by our findings from the RTF implementation.

Conventions

Sources of quotations are denoted as follows:

- practice staff: six-digit numerical code denoting individual participant/FG (focus group) or Int (interview)/staff category (PN, practice nurse; GP; ADM, administrative staff; REC, receptionist; PM, practice manager; DPM, deputy practice manager)
- patients: six-digit numerical code/PAT
- facilitators: three-digit numerical code/FAC.

Editing is indicated by . . . when some words are missing or [. . .] when a larger fragment is missing.

TABLE 50 Characteristics of staff who took part in interviews and focus groups

Practice	Intervention group	Number of interviews by staff type	Number of focus group attendees by staff type
1	Facilitated reflection and practice-level feedback		GPs, $n = 2$; administrative staff including receptionists, $n = 5$; nurses, $n = 2$
2	Facilitated reflection and practice-level feedback		GPs, $n = 1$; administrative staff including receptionists, $n = 6$; nurses, $n = 1$
3	Facilitated reflection and practice-level and individual practitioner-level feedback	Deputy practice managers, $n = 1$; administrative staff including receptionists, $n = 2$	
4	Facilitated reflection and practice-level and individual practitioner-level feedback	GPs, $n = 1$; administrative staff including receptionists, $n = 2$; nurses, $n = 1$	
5	Unfacilitated reflection and practice-level feedback		GPs, $n = 1$; administrative staff including receptionists, $n = 2$; nurses, $n = 1$
6	Unfacilitated reflection and practice-level feedback	GPs, $n = 1$; administrative staff including receptionists, $n = 1$; nurses, $n = 1$	
7	Unfacilitated reflection and practice-level and individual practitioner-level feedback	Practice managers, $n = 1$; deputy practice managers, $n = 1$; administrative staff including receptionists, $n = 2$	
8	Unfacilitated reflection and practice-level and individual practitioner-level feedback	Practice managers, $n = 1$; GPs, $n = 1$; administrative staff including receptionists, $n = 2$; nurses, $n = 1$	
9	Control		GPs, $n = 2$; administrative staff including receptionists, $n = 3$; nurses, $n = 2$
10	Control	Practice managers, $n = 1$; GPs, $n = 2$; administrative staff including receptionists, $n = 1$; GP registrars, $n = 1$	

Making sense of the real-time feedback implementation ('coherence')

Practice staff used a range of ways to make sense of RTF: by comparing it with other feedback methods; by adapting normal routines to absorb RTF into their practice organisation; by seeing it as part of a programme of communication with their patients; by considering how it may be received by their patient population(s). They drew on their own experience of technological initiatives in other contexts and of past participation in research studies. Views about the content of the RTF survey influenced overall attitudes towards the concept of receiving immediate feedback.

Feedback and methods

Many members of staff mentioned that they were well used to receiving feedback from their patients and that their patients were accustomed to giving feedback. Many made sense of RTF by comparing it with other feedback methods with which they were more familiar and some favoured the convenience of RTF to traditional paper-based surveys and mentioned the difficulty of collecting responses:

> I think it's the way you've done it immediately that is much better. Which is if you give them something maybe to take away and bring back or post, they aren't gonna do that . . . and that's the end of it . . . With the touch screen it's . . . much easier.
>
> *007021/Int/ADM*

Others highlighted problems with obtaining feedback from patients who had not had time to reflect before inputting their responses:

> *You're gonna get some hotheaded responses aren't you? I mean people are going to come out and get really cross, there'll be some emotion going on there that if they cooled down for 5 minutes you wouldn't get those responses.*
>
> *015009/FG/PN*

Some staff voiced concern about access for specific groups of patients. Elderly patients were characterised by some as being less willing or able to use technology. Staff also mentioned patients with low literacy levels and patients whose first language is not English.

Motivation

Some practices were motivated to participate in the study by the requirements of other schemes, such as the Friends and Family Test (CQC) and annual Royal College of General Practitioners appraisals.

Context

Many practice staff viewed the RTF implementation purely as part of a research study and, therefore, being limited in its impact on the practice and workloads:

> *I suppose the key is . . . in the nicest possible way . . . having as little impact on sort of patients and staff as possible but gathering enough information for the study to be worthwhile.*
>
> *069027/Int/PM*

For others, RTF was part of an overall strategy for obtaining feedback from patients and staff valued it as an additional means of staying in touch with their patients' concerns.

Many participants mentioned that people in general are asked for feedback about a range of services and were able to place RTF within a familiar context:

> *I think one in four people have got smartphones and . . . I've seen that sort of survey used at airports, it's sort of in . . . people's lives now really.*
>
> *017019/Int/PM*

Real-time feedback content

Staff voiced varying views about the content of the RTF survey. Several were critical about the number of demographic questions. Some were positive about including a couple of their own questions, making the implementation particularly relevant to their practice.

Practice organisation/roles

Practice organisation, including both physical configuration and staff arrangements, affected individual and group perceptions about RTF. Most practices had an electronic check-in system and/or notification screen to call patients to consultations. Sometimes this meant that there was little interaction between receptionists and patients and reduced opportunities to promote the use of the RTF devices. The position of the RTF devices, often dictated by the physical limitations of the practice building, also influenced levels of use and the degree to which RTF became embedded within the normal routines of the surgery:

> *It was a bit difficult where it was placed, because we have a booking-in machine and it was next to that, and I think people thought it was another booking-in machine.*
>
> *015019/FG/REC*

Although practices were given materials for involving all staff in implementation, some viewed it as predominantly a task for the reception team and depended on receptionists to promote the devices to patients:

> *I think we particularly focused on getting reception staff to try and remind patients . . . as they checked in for their appointment rather than to do it afterwards, cos otherwise it is a lot to ask the clinical staff to remember.*
>
> *011017/FG/PM*

The degree to which practices involved clinical staff varied. In some practices, all staff were familiar with the implementation, so efforts to engage patients were coherent and in tune with the general practice ethos:

> *If they [patients] made a comment about the service, I said, 'please can you feed it back' . . . it was really nice that I could give them something definite to do immediately.*
>
> *011001/FG/GP*

An individual member of staff, such as the practice manager, or the research champion often took responsibility for managing the implementation. The effectiveness of this individual influenced how RTF was received by both staff and patients. In some practices, when RTF had been explained and promoted successfully, members of staff adapted their existing roles to embrace the new initiative, but in other practices some individuals voiced discontent and disenfranchisement:

> *As far as I knew it was a kind of if they want to use it, so was it up to me to actually ask them – it wasn't really made that clear.*
>
> *069013/Int/REC*

Practice knowledge of their patients

Many practice staff used their knowledge of their patients to anticipate how RTF may be received by them. Many felt that particular groups would not be comfortable using a touch screen device: most often mentioned were elderly patients, patients with literacy problems and patients whose first language is not English.

Staff also mentioned that patients' use of the devices was influenced by processes and the volume of work within the practice, both generally and at particular times during the day, week or year:

> *If we're running late, then people were often in a hurry to leave as quickly as they could, having been . . . held up by us, so that was also an issue I think, for some of the patients.*
>
> *010003/FG/GP*

In some practices staff concluded that, as their patients were well used to using touch screen devices, they would be happy to leave feedback in this way. Others said that patients were not confident or competent with touch-screen technology:

> *I think . . . giving people access to a computer even if it's a very simple touch-screen computer . . . is sometimes quite challenging. Just like touch-screen check-in, there's a whole group which . . . hasn't checked in because they've missed one of the buttons.*
>
> *021001/Int/GP*

Working together and with patients to establish real-time feedback ('cognitive participation and collective action')

The ways in which individuals and groups of staff worked together, and with patients, with regard to RTF varied among practices. The findings within these two related NPT constructs (cognitive participation and

collective action) are closely linked with some of the sense-making aspects detailed in the previous section. Differences in style and methods of communication both within and between staff groups, and with patients, were more pronounced in some practices.

Communication/differences/engagement

Staff relationships with each other and with patients were a crucial part of RTF implementation. Often an open, inclusive approach to communication between staff members coincided with the way in which they related to their patients:

> *There's nothing that's kept away from us . . . whether it be good or bad . . . if we have to do something to either make it better or keep up what we're doing then they tell us so being told is the only . . . way you're gonna provide a service that the patients actually want.*
>
> *007021/Int/ADM*

By contrast, some administrative staff felt that their knowledge of patients' concerns was ignored and they were not given the opportunity to make suggestions:

> *I mean we can have queues out of the door and it's not noticed by the managers to think, oh right we need more staff there . . . We are always saying about confidentiality, the patients complain to us a lot about it, but we might mention it and nothing is ever done.*
>
> *069013/Int/REC*

There were differences in style between individual team members in the same practice:

> *If you want anything filled in you get [name removed] to give it to the patients because she just goes out and says, would you mind filling it in? [. . .] Whereas the others are not quite so interactive with the patients. They'll say something to them over the desk but they won't actually go out and interact with them.*
>
> *068015/Int/DPM*

Differences between individual patients were often mentioned and several receptionists admitted that they selected patients to encourage to leave RTF on the basis of their perceived abilities or level of sickness.

Some clinicians were used to asking their patients for feedback and felt very comfortable doing so, but others were more reticent:

> *I think it's a bit embarrassing though, to say, well could you give me some feedback, I mean I find it quite embarrassing, so I wouldn't ask them.*
>
> *010003/FG/GP*

One GP suggested that the process of requesting feedback may hint at a hidden agenda during an otherwise positive consultation:

> *It can feel awkward . . . if the conversation has gone really well, it sometimes slightly undermines the goodness of the conversation or the help that you've given.*
>
> *007002/Int/GP*

The way in which RTF had been introduced in practices had a profound effect on how engaged individual members of staff felt with the implementation. In practices in which communication was inclusive, staff felt part of an important initiative and understood their roles. In other practices, often when the research

team had communicated solely with an individual practice contact, some staff felt remote from decision-making and so were not fully engaged with RTF:

> I haven't been involved. I don't know what the plan is from here.
>
> *016021/Int/REC*

Timing and workload

Timing, in many senses, influenced the embedding of RTF in practices, including timing of the request for feedback (after consultation), timing of the implementation itself (in the context of other practice activities) and variations in work volume according to particular times and days of the week:

> It's much easier to get patients to fill things in whilst they're waiting than when they've finished . . . because they're sitting down waiting, they're almost sitting and looking for something to do.
>
> *011017/FG/PM*

Reception staff found fluctuations in workload and demand from patients greatly influenced their ability to play a part in the RTF implementation:

> Especially on a Monday and a Tuesday when the phones are ringing and the queue is long. It's hard to . . . explain to them what it's about.
>
> *068007/Int/REC*

Involving patients

Most practices voiced their intentions to share the results from the RTF devices with their patients through posters or the practice website and several were keen to let their patients know that their responses had led to change.

One practice had involved its Patient Participation Group (PPG) in devising additional, practice-specific questions to include in the RTF survey and another had shared results with the PPG before discussing them as a practice team.

Feedback reports

On the whole, practice staff appreciated the regular feedback reports from the study team and drew favourable comparisons with other surveys, which often entailed in-house data analysis and assembly of results. Many scanned the reports for data that confirmed what they already knew and some were surprised by the volume of positive feedback.

Several practices were concerned about low RTF response rates and suggested possible reasons for this, including feedback 'fatigue' among both patients and practice staff. Some staff believed that patients would not bother to leave feedback unless their experience at the practice was either strongly positive or strongly negative.

Appraising and learning from real-time feedback ('reflexive monitoring')

Practice staff viewed the RTF implementation and results in a variety of ways. Some believed that giving their patients an opportunity to leave immediate feedback was a valuable addition to existing ways of communicating with them. Others viewed RTF responses as confirming what they knew already and possibly could not act on. Many mentioned plans for acting on the RTF and a few had already instigated changes within the practice by the time that they were interviewed or attended focus groups. The degree to which staff trusted the credibility of the results had an inevitable effect on their learning from it and several staff had suggestions for improving the usefulness of the questions and responses.

Trust/learning/suggestions

Some staff believed that the immediacy of a response added strength to it, but, conversely, many felt that a period of reflection was important and could greatly change how a patient viewed his or her consultation:

> *You might have been denied a medication at the time which might deeply upset you but then 2 weeks down the line you kind of realise that that's [the] right thing and the feedback might be different.*
>
> *007002/Int/GP*

Many practice staff noted the low RTF completion rates and felt that the majority of their patients had not been given the chance to participate:

> *I suppose in the back of your mind you know it's only a small percentage of your whole population, the people who are coming through the door.*
>
> *068015/Int/DPM*

Some members of staff felt that the RTF devices were used by patients to record two extremes of response and excluded the middle ground:

> *It attracts two types of people doesn't it, the people who love you and tell you they love you and the people that just had a really bad experience that day and want to take it out on the system, really.*
>
> *015016/FG/PM*

Many staff found the free text left by patients more useful than the quantitative responses, but some staff found these comments frustrating as they could not follow them up with the individuals concerned:

> *It feels a bit like people might leave feedback if they're unhappy, and so there's very little positive and when you read it back certainly I found it difficult to reflect on and learn from it and to improve my practice because it wasn't very specific.*
>
> *0210017/Int/GP*

Some suggested that an optional facility for respondents to provide their name would be helpful.

Some reception staff mentioned that individual feedback would be helpful as a learning tool for their staff group (the devices were not able to provide individual feedback for receptionists):

> *I take offence at that, cos I think, don't tar us all with the same brush.*
>
> *018011/FG/REC*

Many staff expressed surprise about the positive feedback that they received – in both comments and quantifiable data. Negative responses were expected and in many cases confirmed previous feedback from patients.

Action

Several members of staff, predominantly practice managers, mentioned that they had taken or were intending to take action based on RTF. Some were keen to amalgamate the results with data from other initiatives before formulating a plan:

> *What we've historically done is . . . when we've had a survey, we've published the results of that survey, along with our action plan of how we are going to respond to different aspects of it and over what timescale . . . and who would be involved in that . . . we do do that on a sort of an annual basis [. . .] if you do it in dribs and drabs, it sort of doesn't quite have the same impact.*
>
> *017019/Int/PM*

Some mentioned involving their PPG in discussions about the results and action planning, whereas others intended to inform their patients by publicising the results in the practice. Some individuals were not sure about what was planned and did not see it as affecting their own work.

Some staff said that the RTF responses had been expected and covered issues already familiar to the practice, which they had addressed or were addressing.

Many staff welcomed confirmation of previously held views, but some felt that their patients' expectations were unrealistic and it was not possible to satisfy them.

Facilitation

Practice staff had not previously explored patient feedback at sessions guided by an external facilitator. Several factors, occurring before and during the facilitated session, influenced the success of these sessions. These can be summarised as:

1. *prior to the session* – communication of the aims and objectives of the session to the entire practice team; dissemination of patient feedback results so that staff could highlight areas for review; and protected time built into staff schedules for reviewing patient feedback
2. *during the session* – skill of the individual facilitator; provision of a clear agenda at the outset including expected outcomes; time to celebrate positive results; and an agreed action plan for staff to work to.

Action planning Facilitators found it difficult to get staff to agree and commit to a set of actions during the facilitation session. This was partly because of time limitations. Some staff were reluctant to implement changes suggested during the facilitation session, possibly because of previous experience of external pressures:

> *. . . a lot of GPs are fairly conservative and don't want to change much, maybe that's because they've got so much change imposed on them, they're reluctant to change.*
>
> *300/FAC*

The facilitation sessions were flexible to allow staff to explore the results, but facilitators suggested that an action plan may have been compiled had it been explicitly included as an intended outcome within the agenda.

Communication and engagement Some practices were more engaged with the facilitation process than others and this was demonstrated by their willingness to set a time for staff to meet and discuss RTF. Clear communication of the purpose of the session allowed for staff to contribute to the discussion and share ownership of the decisions being made, especially in practices in which facilitation was a novel approach:

> *But I think that was down to ground setting and me being clear from the start what we are doing. Also explaining the rules of the group and giving them ownership really of what was discussed.*
>
> *002/FAC*

In some practices the reception staff were more engaged with the feedback than clinical staff and provided suggestions for changes to their work routines more readily:

> *[T]he reception staff seemed fairly willing to contribute . . ., a lot of the feedback, was very pertinent to them.*
>
> *100/FAC*

> *Yeah, the reception staff are actually better at talking than the GPs because I think they were more enthusiastic [laughter]. They were the ones that came up with the ideas.*
>
> *300/FAC*

Feedback discussion As mentioned above, in some practices reception and administrative staff made a greater contribution to the discussion than their clinical colleagues. The skills of the individual facilitator had an impact on the discussion; staff from one practice felt that 'their' facilitator did not effectively encourage contributions from all staff, but this was not experienced in other practices. Facilitators found it difficult to fully discuss sensitive issues and did not have sufficient time to work through them properly during the session:

> *You have opened up this box of really quite difficult stuff and then gone away again. What the surgery does with it now is really up to them.*
>
> *200/FAC*

Time All facilitators found that the session was not long enough to enable full discussion of the feedback and development of a clear action plan. The timing of the facilitation session was important: the majority took place half-way through the data collection, but some practices commented that it may have been useful at different time intervals during the data collection:

> *. . . maybe if we were running it for 6 or 12 months, you could have them at like quarterly intervals . . . but I think kind of 6 weeks into it, we were only just getting into it.*
>
> *018015/FG/DPM*

Patient perspectives

Although patients acknowledge the important role of technology, and recognise its value for providing feedback, some highlighted technology as a potential barrier. They mentioned other patients who may be intimidated and deterred from leaving feedback by technology, for example the elderly and those with literacy difficulties. Some patients who chose not to use the RTF device said that they would prefer to feed back directly to the GP or receptionist and were sceptical about the possibility of changes being made as a result of feedback if not voiced in person to the practice.

The lack of publicity and information about the purpose of the RTF device was a potential barrier for patients and affected their trust that RTF would result in change within the practice. The location of the touch screen device was an important factor, particularly in terms of privacy. If it was overlooked by reception staff or other patients, individuals often did not use it. Equally, if it was installed in an unobtrusive location, many patients did not notice it.

The timing of the request for feedback was also an important consideration. Some patients said that being asked to stay behind to provide feedback after a consultation was unacceptable, particularly if they had waited a long time for their appointment:

> *If you are ill you just want to go home after.*
>
> *010001/PAT*

Discussion

Real-time feedback is a relatively novel approach to the collection of patient feedback in general practice. In this research, the idea of RTF appeared broadly acceptable to both patients and staff in participating practices. However, communication within the practice team, and between staff and patients, was a key factor that influenced the level of acceptability, and the feasibility, of embedding RTF in practice routine.

Effective communication underpinned the successful implementation of RTF, not only in encouraging patients to use touch screens in the waiting area, but in the organisations' use of collected feedback. Communication within the practice team influenced staff perceptions of RTF as a useful learning tool and the success of a facilitated reflection session as a means of discussing and planning service change.

In the context of this pragmatic, essentially unfacilitated survey, practice staff and patients viewed RTF positively, but engagement with the touch screens was lower than reported in other studies from the USA.[259,266] In absolute terms, the majority of practices in the current study collected feedback from ≥ 100 patients. However, the proportion of consulting patients who used the touch screens varied across practices (range 0.7–8.0%) and, overall, feedback represented the views of a relatively small proportion (mean 3.2%) of consulting patients.

The *absolute* number of patient responses using RTF was comparable to that achieved by the same practices in the most recently published national GP Patient Survey[134] but, overall, practices' response rates in the national GP Patient Survey were much higher (range 27–53%).

The difference in response rates between the current study and the US studies may reflect the greater number of items in our survey. It may also reflect the lower level of direct encouragement and support provided by staff to help patients use the touch screens. At many practices, receptionists were given responsibility for encouraging patients to use touch screens rather than clinicians. Receptionists were observed to interact with a significant proportion of patients who attended the surgery but they were rarely observed to encourage the use of the touch screens. Although a number of reasons were given by patients in the exit surveys for not using the touch screens, over half of these patients had been unaware of the opportunity to leave feedback; others may have provided feedback if clearer information had been provided about the purpose of the touch screens. When staff encouragement to use touch screens did occur, patients were more likely to start the survey. Direct encouragement was more effective than publicity materials displayed in the waiting areas, which went largely unnoticed by patients.

Practices accustomed to collecting and using patient feedback viewed RTF as part of their ongoing dialogue with patients and the immediacy of feedback helped offset the risk of 'feedback fatigue' for both staff and patients. However, practices and patients were concerned about patient groups who might be excluded from feedback processes that involve the use of touch screens, specifically older patients and those for whom English is not a first language. Others felt that the RTF screen was easy to read and acknowledged that people of all ages are well used to using touch screen devices in other areas of life. Our analysis suggested that some age groups (those aged 46–65 years) were over-represented among RTF users, whereas others were under-represented (those aged ≥ 65 years). In our study, female patients were more likely to provide RTF than male patients (62% vs. 38%, respectively), in contrast to the most recently published national GP Patient Survey data in which approximately even proportions of male (49%) and female (51%) patients responded.[134] The observation of lower rates of feedback in older age groups is in line with the study by Dirocco and Day,[259] in which more intensive staff support for RTF had been available. Dirocco and Day[259] also reported lower feedback rates among minority ethnic groups. Our study was unable to investigate this as appointment data could not be broken down by patient ethnicity at any of the participating practices.

Our findings with regard to levels of staff engagement with RTF and effective communication within practices and with patients are broadly in line with an earlier UK 6-month pilot study.[47] Practices' physical configuration and flexible assignment of roles can either help or hinder participation and collective action among staff (and with patients) with regard to a new system or process. Good communication about RTF fosters involvement and buy-in from both clinical and administrative staff, including shared reasons for participation, the roles of different staff groups, ongoing progress with RTF collection and the content of feedback reports. Our findings suggest that information was not always communicated effectively to individuals and some felt remote from the process. Wofford *et al.*[266] suggested that RTF (collected using tablets) had minimal impact on working routines when implemented in a primary care setting. Our findings are more mixed about this: some practices and individuals suspended their involvement with RTF implementation during busy times or with particular patients, whereas others (particularly clinicians) reported that RTF did not impinge on their daily routines.

Practice staff identified potential benefits of using a facilitated session for discussion of patient feedback and having protected time for the celebration of achievements. Effective communication about patient feedback with all members of staff prior to and during a facilitated session encouraged constructive debate and all-practice engagement with any changes agreed at the session. Some practices saw advantages in the immediacy of feedback and the potential for quick action, in line with existing guidance from the Department of Health[92] and the NHS Practice Management Network.[47] However, other practices preferred to combine their RTF results with other information before considering action or even action planning. Many patients commented on the importance of their practice taking account of and acting on feedback, but the degree to which any plans or changes resulting from RTF were communicated to or shared with patients varied greatly.

The costs of RTF need to be compared with outcomes to judge whether RTF represents a good investment for a general practice. Outside the context of a research project, the cost of hiring touch screens may be borne directly by the practice alongside staff time invested in set-up briefings and team meetings to reflect on patient feedback. GPs and nurses tended only to attend set-up briefing sessions in practices allocated to facilitated feedback, suggesting that clinician engagement was higher in those practices. This may be worthy of more detailed investigation in future studies, as it might be a mediator of any observed outcomes. To maximise patient use of touch screens, consistent effort and time from practice staff (particularly receptionists) is required to directly encourage and support feedback from patients. However, this could be seen as time well spent if it leads to the collection of RTF from a sizeable and representative group of the patient population.

The ability to achieve change in practice is a major issue highlighted in this study. Participants in the qualitative research identified an inertia – perhaps even an unwillingness or a resistance to implement change – following patient feedback. Such an observation concurs with findings from Deming[267] (p. 81) who reported on such resistance and inertia:

> Foreman (recorded): *I fill out a report when anything goes wrong. Someone from management, I was told, would come and take a look at the problem. No one has ever come.*

> Production worker (recorded): *What good comes of making a suggestion to your foreman? He just smiles and walks away.*

And the telling comment:

> Comment: *What else could he do? He does not understand the problem, and could get nothing done if he did.*

Strengths and limitations

Our investigation of the acceptability and feasibility of RTF was enhanced by a multimethod approach. A better understanding of the obstacles and drivers associated with embedding RTF in general practices was achieved by organising data from interviews, focus groups and observations according to NPT constructs. Although it is important to note that all four NPT constructs operated and were experienced concurrently, the NPT framework enabled a coherent view of the processes involved in RTF implementation, including the ways in which practice staff and patients understood RTF, teamwork and collective action within practices and reflection, learning and actions arising from the feedback. Focus groups were attended by a range of staff and individuals were encouraged to share their views about RTF. When focus groups were not possible, a range of staff participated in one-to-one interviews.

A range of general practices was recruited to the study, including those in urban, inner-city and rural settings, with varying deprivation scores and list sizes. However, practices were drawn from two broad

geographical areas (South West and Cambridgeshire), which may not be representative of the UK as a whole. Participating practices may also have been those with an interest in research or service improvement.

The implementation of RTF in this strand of work had inherent limitations compared with other means of collecting feedback. For example, the survey items were presented only in English and patients who did not visit the surgery during the implementation period were unable to provide feedback. In some practices, it proved difficult to extract demographic information about consulting patients from the practice system and there was some evidence that appointment data were not consistently recorded within systems, limiting reliable assessment of the response rate and the representativeness of patients who used touch screens compared with the consulting population. It was not possible to calculate response rates for patients who attended the surgery for reasons other than a consultation. The work undertaken was preliminary in nature and not intended to address issues relating to the overall effectiveness of the RTF intervention or the related issues pertaining to the timeliness or mode of feedback to practices. Such research would require both considerable additional time and considerable resources to allow for definitive studies to be undertaken.

The implementation in each practice lasted for one 12-week period. In some cases staff noted that they had felt better able to engage with the process because they knew that it was time limited, whereas others believed that more time was needed for RTF to become part of the normal routine of the practice. Future studies would need to consider the optimum time period for collecting RTF in general practice, perhaps favouring a more intensive effort to collect feedback for a shorter period of time with the process being repeated after a suitable interval to assess the impact of any resulting service changes on patient experience.

Although a key, responsive contact within the practice is an important factor influencing the success of a time-limited research study, spreading information and motivation throughout the practice is crucial. This requires good communication between staff groups and individuals, to foster a sense of involvement at all stages of implementation and thereby achieve 'buy-in' from the whole practice.

Real-time feedback content also needs to be relevant to the concerns of the practice and patients. Some staff were critical of the volume of demographic details required from respondents. Although such information was necessary to address the research objectives, it did not reflect the interests of all practice teams. Greater practice and patient involvement with the design and content of the RTF survey may achieve a greater sense of ownership and involvement.

Many of the challenges involved in successfully implementing RTF within practices revolve around the issues of timing. The issues involved include avoiding 'feedback fatigue' (in staff and patients) and duplication of effort by blending RTF with other feedback initiatives and ensuring that teams make contingency plans that take account of busy times within the practice. Consideration also needs to be given to making the best use of patients' time, for example patients may have more time and be more willing to use touch screens to provide feedback about practice services while they are waiting to see a health professional than after their consultation.

Conclusions

Despite the low RTF response rate observed when touch screens were located in general practice waiting areas, patients and practice staff were broadly positive about the concept of RTF. Enhanced buy-in from practice staff and patients might be achieved in a number of ways. This includes involving practices in the design and content of RTF surveys and addressing language barriers and patient concerns about the use of technology. A shared responsibility within practices to promote and support RTF may result in more proactive encouragement and support of patients to use touch screen equipment in the waiting area. A longer overall implementation period may be required, during which shorter 'bursts' of RTF collection

and reporting occur, thus allowing a more thorough assessment of the degree to which RTF can become embedded into general practice and used to improve the patient experience. Our reflections on how this work might inform a future trial are outlined in *Box 6*.

BOX 6 Planning a future trial of RTF in primary care

Key learning for planning a future trial of real-time feedback in primary care

- Recruiting and randomising practices to take part in such a study is feasible.
- Engaging the whole practice team is of vital importance for the successful implementation of RTF in practice; in particular, this requires ensuring engagement and 'buy-in' from staff involved in supporting the day-to-day delivery of RTF, most commonly reception staff.
- It is possible, over time, to attain an acceptable sample size of participating patients, even when full staff 'buy-in' has not been achieved.
- There is a need to focus effort on securing participation from younger and older patients, patients from ethnic minority groups and those with English-language difficulties.
- Real-time feedback-based interventions may be costly to implement in practice, at approximately £5 per participant recruited.
- Attention needs to be paid to the physical configuration and context of the RTF process.
- There is a need for flexible assignment of roles to support RTF implementation and secure patient participation.
- Facilitated feedback is desirable to support RTF in practice and is welcomed by practice staff.
- Multimethods approaches to evaluation are advantageous.

Chapter 11 The validity and use of patient experience survey data in out-of-hours care

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Abstract

Background

In England, out-of-hours GP services provide urgent medical care to patients when their GP surgeries are closed. National Quality Requirement 5 (NQR5) requires out-of-hours services to routinely audit patient experiences, but provides no guidance on methods. In the absence of comparable data from providers, the out-of-hours items from the national GP Patient Survey have been used to monitor patient experience.

Aims

The aims of this study were to (1) explore whether variation in service users' experiences of care were driven by user or provider characteristics, (2) document the validity of out-of-hours GP Patient Survey items and (3) understand how providers collect/use patient feedback to drive service improvements.

Methods

This was a multimethod study, analysing out-of-hours items from the GP Patient Survey data set (2012/13; 971,232 service users) and a bespoke survey (six providers; 1396 services users) and including a qualitative interview study with staff (11 providers and 31 staff).

Findings

Service users provided less positive ratings of out-of-hours care provided by commercial organisations than for out-of-hours care provided by either NHS or not-for-profit providers. Service users whose ethnic origin was 'non-white' or those finding it difficult to take time off work to attend their general practice also reported poorer experiences. GP Patient Survey data, subject to minor modifications, appeared valid and thus suitable for benchmarking. However, the items need updating to reflect the changes made to accessing out-of-hours services by telephone. Patient feedback (including GP Patient Survey data) has a limited role in driving changes to out-of-hours service provision, in part because of the lack of clarity of NQR5.

Conclusions

Out-of-hours items on the GP Patient Survey require refinement but appear suitable for benchmarking purposes. NQR5 is ambiguous and requires revision to assist providers in collecting and acting on patient feedback.

Introduction and rationale

Defining out-of-hours GP care

In England, out-of-hours GP services provide urgent medical care to patients when their GP surgeries are closed, that is, between 18.30 and 08.00 on weekdays and at weekends and bank holidays. Although medical care is largely provided by GPs, nurses and emergency care practitioners may also provide clinical care. Out-of-hours services are provided to manage health problems that cannot wait until the next working day; these services are not intended as an alternative route to health care for non-urgent problems for those patients who cannot attend during practice opening hours. Recent English national

audit data reported that out-of-hours GP services handled around 5.8 million contacts during 2013–14, of which 3.3 million were face-to-face patient consultations.[269]

The provision of out-of-hours GP care has changed significantly in England over the last decade. In 2004, responsibility for out-of-hours services transferred from local GPs to NHS primary care commissioners. Commissioners are now responsible for purchasing care from provider organisations and, in some regions, very different models of care have emerged. In England there are currently 211 clinical commissioning groups[269] commissioning out-of-hours services, although the number of providers is smaller, as many providers contract with two or more neighbouring commissioners. Out-of-hours services are also provided by different types of organisations, including NHS trusts, not-for-profit providers (e.g. social enterprises) and commercial health-care providers.[65,270] Such services continue to evolve; since the phased introduction of the NHS 111 service, completed in February 2014,[269] different providers may provide different aspects of care, for example call handling and delivery of clinical care, in the same geographical area.

Ensuring quality and safety of out-of-hours care

Although the reorganisation of out-of-hours GP care has the potential to bring about new approaches and increased efficiency of service provision, such reconfiguration may also generate reduced service coverage or quality. To tackle concerns regarding the quality of care provided, national standards were published with which all out-of-hours GP care providers were expected to comply.[66] Providers are required to report their performance to their commissioners across a range of NQR recommendations. Of particular relevance to the IMPROVE programme is recommendation 5 (NQR5), which mandates out-of-hours providers to regularly audit a random sample of patients' experiences and to take appropriate action based on the results.

Despite the introduction of the NQRs, criticism of the quality and safety of out-of-hours care persists.[65,271] Prompted by the death of a patient in 2008, the CQC investigated the case and produced additional recommendations for commissioners and providers of out-of-hours services regarding performance assessment.[270] More widely, urgent care provision in England has been criticised regarding service accessibility, the lack of continuity of care and concerns about patient safety.[272–275] Within this context, the CQC has recently assumed responsibility for regulating and inspecting the quality and safety of out-of-hours primary care services.[276] With CQC inspections commencing in October 2014, the latest CQC overview reported that the majority of service provision was of high quality, but that there were some areas in which improvements could be made.[277]

Role of patient experience surveys in quality assessment

Since 2015, service commissioners are expected to publish annual data on provider performance against the NQRs.[278] Such a requirement is problematic for NQR5, as there is no agreed methodology for conducting patient experience audits. Without reliable and valid methods of assessing patient experience, it is impossible for providers to accurately assess their own performance and to subsequently use this information to guide service improvement. Providers may also use different tools and survey methods and the resultant data cannot be used for the purposes of benchmarking to assess variations in service quality between providers. Although a number of standardised patient questionnaires are available to assess patient experiences of out-of-hours primary care services,[279] these tools have not been widely adopted in routine practice.

Although it is not possible to benchmark out-of-hours providers using the patient experience data collected for NQR5, the 2014 national audit of GP out-of-hours care[269] and the CQC both analysed patient experience data from the English GP Patient Survey. The GP Patient Survey includes six items relating to out-of-hours care (two 'access' and four 'evaluative' items). As the only large-scale population survey of patients' understanding, use and experiences of out-of-hours care, benchmarking of GP Patient Survey data is potentially possible. Establishing the validity of the GP Patient Survey out-of-hours items is, however, an important prerequisite to using this data to document variation in scores between

out-of-hours services and for benchmarking. We have previously published evidence to support the reliability of the GP Patient Survey (including out-of-hours items).[141] Using a range of different methods and analytical approaches, we have also demonstrated the validity of GP Patient Survey items evaluating in-hours primary care services,[131,280] but this has yet to be established for out-of-hours care items.

Once the causes of poor patient experience of out-of-hours care have been understood, interventions to improve care can then be designed. However, the current literature on the effects of feedback of patient assessments is insufficient in scope, quality and consistency to design effective interventions targeting service delivery and organisation or the performance of clinicians.[21,83,281]

Rationale for the out-of-hours research

This research was designed to address these gaps in our knowledge to enable managers, patients and professionals to have confidence in the meaning of patient assessments of out-of-hours primary care services recorded in the national GP Patient Survey. The work package addressed three important areas.

The first workstream built on earlier analysis of the GP Patient Survey, which reported that important sociodemographic variations exist in patient experiences of in-hours primary care services,[131] but did not examine if such variations existed for out-of-hours items. Given that the CQC and National Audit Office have both used the GP Patient Survey to monitor service users' experiences of out-of-hours care, it is important to understand whether or not variation in service users' experiences of care is driven by user characteristics, as opposed to differences in the care provided by different types of providers.

The second workstream sought to explore the validity of the out-of-hours items from the GP Patient Survey. The Out-of-hours Patient Questionnaire (OPQ) is a complementary tool to the GP Patient Survey, which collects more detailed information on patient experience of out-of-hours care and has undergone more extensive testing and validation.[8,90,282] The second workstream tested the performance of GP Patient Survey out-of-hours questions against data derived from the OPQ to examine the validity of GP Patient Survey items.

The third workstream examined how out-of-hours GP services make sense of the information provided by patient questionnaires and, when possible, use this information to design interventions to improve patient experience through service reconfiguration and development.

Structure of the out-of-hours work package

The out-of-hours work package consisted of three workstreams, each of which used different data sets and methods. The remainder of this chapter describes the study aims and objectives, methods, results and discussion arising from each of the three workstreams in turn, before summarising the key conclusions that arose from the work programme.

Stakeholder advisory group

A stakeholder advisory group composed of three representatives from out-of-hours service providers, two primary care academics and a service user was convened to support workstreams 2 and 3. The group met to review study methods and procedures in light of the findings of preliminary piloting and testing of the methods (see *Workstream 2*) and to comment on topic guides supporting interviewing in workstream 3. Because of the logistical challenges of organising face-to-face meetings around staff availability, after an initial face-to-face meeting most advisory group input was secured by e-mail communication and telephone.

The original aim was to recruit two service users through our links with local service providers and using methods recommended by our Exeter University-supported PPI groups [see http://clahrc-peninsula.nihr.ac.uk/patient-and-public-involvement-in-research and www.folkus.org.uk (accessed 13 December 2016)]. Potential service user participants were provided with a brief information sheet regarding what would be involved in advisory group membership and were informed that any costs incurred in preparing for or attending

advisory group meetings would be reimbursed. Despite significant efforts to secure lay stakeholder participation, it proved difficult to recruit service users with relevant, lived experience to the advisory board. Although this was problematic to the research, provider staff members indicated that their services experienced similar problems, probably because of the nature by which patients consulted (i.e. relatively infrequent consulters seeking care for an urgent problem) and the lack of continuity between provider and service user.

Changes to study methods from the original protocol

The overall aim of this strand of work, as stated in the original protocol, was to investigate how the results of the GP Patient Survey can be used to improve patients' experience of out-of-hours care (aim 7).

In our original application we specified four objectives within this work package, three of which were successfully addressed within this programme (objective 1: cognitive testing of GP Patient Survey out-of-hours items; objective 2: establishing GP Patient Survey item validity and reliability; and objective 3: identifying how data from the GP Patient Survey can be effectively used to inform out-of-hours service reconfiguration). Objective 4, undertaking preliminary piloting of an intervention to improve patient experiences of out-of-hours care, was not achieved. The qualitative research undertaken to address aim 3 identified significant heterogeneity in terms of how providers collected and acted on patient feedback and in terms of the perceived utility of the GP Patient Survey as a platform on which to mount quality improvement. It was clear on completion of the qualitative work with service providers that more research was needed to design and then test the feasibility and acceptability of an intervention to embed patient feedback within quality improvement cycles.

For the three objectives that were achieved, some minor modifications to the study methods were implemented as the full protocols were developed. For example, it was initially proposed to interview up to 45 patients to test user responses to out-of-hours GP Patient Survey items. In reality, only 20 service users underwent cognitive interviewing, as this proved sufficient for testing the validity of the items. Similarly, to address objective 3, a more ambitious, qualitative interview study was undertaken with staff members from out-of-hours services. Here, 11 English providers (rather than six) were sampled and interviewed to ensure greater diversity in the types of provider organisation and the populations served.

Workstream 1: exploring variations in national GP Patient Survey out-of-hours items

Study aims and objectives
This workstream investigated:

- potential associations between service users' evaluations of out-of-hours GP care and individual-level sociodemographic factors
- whether or not variations in evaluations were related to 'clustering' of service users reporting poorer experience within providers reporting poorer performance overall
- whether or not there was an association between service users' evaluations and type of provider organisation (NHS, commercial or not-for-profit organisations).

To address these aims, an analysis of service users' ratings of out-of-hours GP care from GP Patient Survey data was undertaken.

Methods

Patient questionnaires

GP Patient Survey data (July–September 2012 and January–March 2013) were analysed [overall response rate of 35% (971,232/2,750,000)].[283] The GP Patient Survey included four evaluative questions on out-of-hours provision, three of which were analysed: 'timeliness' of receiving care ('about right', 'took too long' or 'don't know/doesn't apply'), 'confidence and trust' in the out-of-hours clinician ('yes, definitely', 'yes, to some extent', 'no, not at all' or 'don't know/can't say') and 'overall experience' of the out-of-hours GP service (five-point Likert scale from 'very good' to 'very poor'). These questions were completed only by service users who had attempted to contact an out-of-hours GP service within the preceding 6 months.

Service user characteristics

Five sociodemographic variables derived from GP Patient Survey responses were analysed: gender (male as reference), ethnicity (white as reference vs. five categories derived from ONS data[284]), age in eight categories (18–24 years as reference), parent status (non-parent as reference) and whether the service user was able to take time away from work to attend his or her practice during working hours (individuals 'not in paid work' as reference vs. 'paid work, can take time away' or 'paid work, could not take time away'). A sixth sociodemographic variable, deprivation (national IMD fifths; 'least deprived' as reference), was determined based on the respondents' residential postcode.[285]

Practice and out-of-hours general practitioner service providers

Each service user was mapped to the out-of-hours GP provider responsible for providing clinical care for the service user's practice during the 6-month period prior to sending the questionnaire. Mapping was achieved for 96% (934,931/971,232) of service users in the data set; 7886 practices were mapped to 91 out-of-hours GP providers, of which 86 had an identifiable provider organisation type (not-for-profit as reference vs. NHS or commercial).

Statistical methods

Analyses were performed using Stata 12. Sociodemographic data are described for all service users contacting an out-of-hours GP provider in the previous 6 months (for themselves or on behalf of another person). To facilitate comparison between measures on different scales, outcomes were linearly rescaled from 0 to 100,[131] with a difference of < 3 points considered 'small' in respect of practical significance.[102] Missing data at the level of service users or providers (including 'don't know'/'does not apply') were excluded from the analysis. It was assumed that service user responses would be 'clustered' by out-of-hours provider (not practice), with clustering adjusted for as a random effect.

Three statistical models were employed. Model A was a fixed-effect multivariable linear regression model including individual sociodemographic factors as covariates and generated mean differences in outcome scores for comparator sociodemographic groups compared with reference categories, without accounting for differences in outcome across providers. Model B was a mixed-effects model that extended model A by incorporating a random intercept for provider. Model B therefore adjusted for differences in outcome between providers and estimated the mean difference between the comparator group and the reference group in outcome scores within providers. Comparing models A and B identified the extent to which any overall difference between service users of specific sociodemographic groups was due to clustering of service users within providers achieving a low outcome score.[131]

Model C extended model B by adding 'provider type' as a covariate. This model estimated the effect of provider type, with adjustment for service user characteristics, for each outcome. Comparing the between-provider variance from models B and C quantified the degree of between-provider variation attributable to provider type. The effect of provider type, analogous to an effect size such as Cohen's *d*, was expressed as the standardised mean difference (mean difference between comparator provider type and not-for-profit providers divided by the between-provider SD derived from model C).

Results

The sociodemographic characteristics of 106,513 service users (from 7492 practices) who had contacted an out-of-hours provider and were mapped to a provider of a known organisation type are shown in *Table 51*. Service users' overall evaluations of out-of-hours GP services were generally positive (*Table 52*): 71% (73,983/103,523) of participants reported a 'very good' or 'fairly good' overall experience, although 31% (31,966/104,145) felt that it took too long to receive care.

TABLE 51 Sociodemographic characteristics of service users contacting an out-of-hours GP provider (on their own behalf or for someone else) (*N* = 106,513)[a]

Characteristics	Service users, *n* (%)
Gender	
Male	38,553 (36.6)
Female	66,879 (63.4)
Total	105,432
Age (years)	
18–24	4850 (4.6)
25–34	14,745 (14.0)
35–44	20,066 (19.0)
45–54	18,699 (17.7)
55–64	16,760 (15.9)
65–74	14,704 (13.9)
75–84	11,201 (10.6)
≥ 85	4509 (4.3)
Total	105,534
Ethnic group	
White	90,034 (85.5)
Mixed/multiple ethnic groups	860 (0.8)
Asian/Asian British	7985 (7.6)
Black/African/Caribbean/black British	2471 (2.3)
Other ethnic group	3934 (3.7)
Total	105,284
Mean deprivation quintile	
1 (least deprived)	19,537 (18.4)
2	20,672 (19.4)
3	21,633 (20.3)
4	21,486 (20.2)
5 (most deprived)	23,028 (21.7)
Total	106,356
Parent/guardian of children aged < 16 years?	
No	61,276 (62.8)
Yes	36,277 (37.2)
Total	97,553

TABLE 51 Sociodemographic characteristics of service users contacting an out-of-hours GP provider (on their own behalf or for someone else) (*N* = 106,513)[a] (*continued*)

Characteristics	Service users, *n* (%)
Can you take time away from work to see a GP during your typical working hours?[b]	
Not relevant[c]	51,027 (51.3, NA)
Yes	31,298 (31.5, 64.7)
No	17,057 (17.2, 35.3)
Total	99,382
Total relevant	48,355

NA, not applicable.
a Participants mapped to 86 out-of-hours providers via 7492 practices.
b Data are *n* (% of total; % of total relevant).
c Service users reported that they were not doing paid work (e.g. retired, unemployed, full-time student).
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TABLE 52 Timeliness of care, confidence and trust in out-of-hours clinician and overall experience of care: raw scores

Question	Response frequency,[a] *n* (%)
How do you feel about how quickly you received care from the out-of-hours GP service?	
It was about right	65,298 (62.7)
It took too long	31,966 (30.7)
Don't know/doesn't apply	6881 (6.6)
Total	104,145
Did you have confidence and trust in the out-of-hours clinician you saw or spoke to?	
Yes, definitely	42,264 (40.7)
Yes, to some extent	42,938 (41.3)
No, not at all	12,222 (11.8)
Don't know/can't say	6490 (6.2)
Total	103,914
Overall, how would you describe your experience of out-of-hours GP services?	
Very good	33,662 (32.5)
Fairly good	40,321 (38.9)
Neither good nor poor	15,638 (15.1)
Fairly poor	8140 (7.9)
Very poor	5762 (5.6)
Total	103,523

a Includes all service users mapped to an out-of-hours GP provider with known organisation type even if complete demographic data were not available.
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Data were included for 86 providers: 44 not-for-profit, 21 NHS and 21 commercial providers. Provider type was associated with all three outcomes (global *p*-value < 0.001 for confidence and trust and overall experience, *p*-value = 0.013 for timeliness). No statistically significant differences were observed between NHS and not-for-profit organisations with regard to any of the outcomes, whereas commercial providers scored lower than not-for-profit organisations for all three outcomes (*Table 53*). The magnitude of these differences was approximately 3 points (model C) for all outcomes.

A comparison of the between-provider variance (model B vs. model C) for overall experience of care observed that 18.6% of the between-provider variability was the result of provider type (*Table 54* and see *Table 53*); the equivalent values for timeliness and confidence and trust were 11.3% (*Table 55* and see *Table 53*) and 20.9% (*Table 56* and see *Table 53*). The standardised mean difference for commercial providers compared with not-for profit providers was –0.68 SDs for timeliness, –1.04 SDs for confidence and trust and –0.94 SDs for overall experience (see *Table 53*). This equates to a moderate (timeliness) or large (confidence and trust and overall experience) effect size attributable to commercial provider type.

Service users of mixed ethnicity and Asian ethnicity reported poorer care for all three outcomes than white respondents; a more variable pattern of care was evident for service users of black ethnicity and other ethnicity (see *Tables 54–56)*. In general, the mean differences in scores between white service users and service users from the mixed, black and other ethnic groups tended to be of lower magnitude that those between Asian and white service users.

A comparison of models A and B indicated that, with regard to timeliness, only 17% of the mean difference in scores between Asian and white service users derived from model A (–13.27, 95% CI –14.51 to –12.03; see *Table 55*) was due to clustering of Asian service users within providers that scored lower overall (vs. 28%, 26% and 22% for mixed, black and other ethnicity service users, respectively). For overall

TABLE 53 Associations of out-of-hours GP provider type with timeliness, confidence and trust and overall experience of care

Provider type[a]	Mean difference[b] (95% CI)	*p*-value[c]	Standardised mean difference
Timeliness of out-of-hours GP care			
Model C[d,e] (providers, n = 86; service users, n = 83,176); between-provider SD 5.19			
NHS	1.28 (–1.61 to 4.17)	0.013	0.25
Commercial	–3.52 (–6.40 to –0.64)		–0.68
Confidence and trust in out-of-hours clinician			
Model C[d,e] (providers, n = 86; service users, n = 83,316); between-provider SD 3.14			
NHS	1.00 (–0.79 to 2.79)	< 0.001	0.32
Commercial	–3.25 (–5.03 to –1.46)		–1.04
Overall experience of out-of-hours GP care			
Model C[d,e] (providers, n = 86; service users, n = 88,423); between-provider SD 3.33			
NHS	1.07 (–0.77 to 2.90)	< 0.001	0.32
Commercial	–3.13 (–4.96 to –1.30)		–0.94

a Models included 44 not-for-profit providers (reference group), 21 NHS providers and 21 commercial providers.
b All outcomes linearly rescaled from 0 to 100.
c *p*-value refers to global effect of covariate across all groups vs. the reference category.
d Models adjusted for age, gender, ethnic group, deprivation, parent status and ability to take time away from work during working hours.
e Random effect on provider organisation of out-of-hours GP.
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TABLE 54 Overall experience of out-of-hours GP services: linear regression modelling

Sociodemographic covariate	Model A[a] (*n* = 88,423), overall difference		Model B[a,b] (providers, *n* = 86; service users, *n* = 88,423), within out-of-hours provider difference (between-provider SD 3.69)		Percentage of overall difference (if negative) attributable to clustering of sociodemographic group in lower-scoring providers
	Mean difference[c] (95% CI)	*p*-value[d]	Mean difference[c] (95% CI)	*p*-value[d]	
Ethnic group[e]					
Mixed	−3.44 (−5.47 to −1.41)	< 0.001	−2.01 (−4.03 to 0.01)	< 0.001	42
Asian	−5.61 (−6.32 to −4.90)		−3.62 (−4.36 to −2.89)		35
Black	−2.14 (−3.40 to −0.89)		0.13 (−1.14 to 1.40)		> 100
Other	−0.75 (−1.78 to 0.27)		1.29 (0.25 to 2.32)		> 100
Able to take time away from work during typical working hours[f]					
Yes	1.30 (0.82 to 1.78)	< 0.001	1.29 (0.81 to 1.76)	< 0.001	Not applicable
No	−4.79 (−5.36 to −4.23)		−4.73 (−5.29 to −4.17)		1

a Models also adjusted for age, gender, deprivation and parent status.
b Random effect on provider organisation of out-of-hours GP.
c All outcomes linearly rescaled from 0 to 100.
d *p*-value refers to global effect of covariate across all categories vs. the reference category.
e Mixed: mixed/multiple ethnic groups; Asian: Asian/Asian British; black: black/African/Caribbean/black British. Reference = white.
f Reference group ('not relevant') includes service users who responded to the question 'Which of these best describes what you are doing at present?' with full-time education, unemployed, permanently sick or disabled, fully retired from work, looking after the home or doing something else.

experience of care, 35% of the mean difference between Asian and white service users derived from model A (−5.61, 95% CI −6.32 to −4.90; see *Table 54*) was attributable to clustering of Asian service users within a lower-scoring provider.

Service users who could not take time away from work to attend their practice reported lower mean scores across all three outcomes than those for whom this was not applicable, whereas service users who could take time away from work reported higher mean scores (see *Tables 54–56*).

Other individual-level sociodemographic characteristics (gender, age, deprivation and parent status) were also associated with the three outcomes measures (deprivation was associated only with trust and confidence and overall experience) but the effects were not explored further because of the small magnitude of the mean differences when compared with the relevant reference category or because of more positive scores in the comparator category (i.e. potentially more disadvantaged) than in the reference group.

Discussion

Analysis of GP Patient Survey data identified that commercial provider organisations were associated with poorer reports of care across all three outcome measures when compared with not-for-profit organisations

TABLE 55 Timeliness of care from out-of-hours GP services: linear regression modelling

Sociodemographic covariate	Model A[a] (n = 83,176), overall difference		Model B[a,b] (providers, n = 86; service users, n = 83,176), within out-of-hours provider difference (between-provider SD 5.51)		Percentage of overall difference (if negative) attributable to clustering of sociodemographic group in lower-scoring providers
	Mean difference[c] (95% CI)	p-value[d]	Mean difference[c] (95% CI)	p-value[d]	
Ethnic group[e]					
Mixed	–4.78 (–8.34 to –1.23)	< 0.001	–3.45 (–6.99 to 0.09)	< 0.001	28
Asian	–13.27 (–14.51 to –12.03)		–11.08 (–12.37 to –9.79)		17
Black	–7.64 (–9.86 to –5.42)		–5.67 (–7.92 to –3.42)		26
Other	–8.44 (–10.24 to –6.64)		–6.57 (–8.40 to –4.75)		22
Able to take time away from work during typical working hours[f]					
Yes	3.45 (2.62 to 4.27)	< 0.001	3.48 (2.65 to 4.30)	< 0.001	Not applicable
No	–6.58 (–7.56 to –5.61)		–6.48 (–7.45 to –5.51)		2

a Models also adjusted for age, gender, deprivation and parent status.
b Random effect on provider organisation of out-of-hours GP.
c All outcomes linearly rescaled from 0 to 100.
d p-value refers to global effect of covariate across all categories vs. the reference category.
e Mixed: mixed/multiple ethnic groups; Asian: Asian/Asian British; black: black/African/Caribbean/black British. Reference = white.
f Reference group ('not relevant') includes service users who responded to the question 'Which of these best describes what you are doing at present?' with full-time education, unemployed, permanently sick or disabled, fully retired from work, looking after the home or doing something else.

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after controlling for patient-level sociodemographic characteristics. The lower scores associated with commercial providers is consistent with observations from US data showing that for-profit hospitals were associated with worse patient experiences than non-profit hospitals.[286,287] However, the reasons underlying the lower scores for commercial organisations, even after controlling for individual sociodemographic variables, are unclear. This may reflect a genuinely poorer experience of care provided by commercial providers or the willingness of commercial providers to operate in areas deemed less attractive to NHS or not-for-profit organisations. It may also be that service users' perceptions of provider type influenced their ratings, although it is questionable whether or not service users are aware whether their provider was a commercial organisation as opposed to a NHS or not-for-profit organisation, except perhaps in areas where media attention has focused on their local service.

Service users from minority ethnic groups tended to report less favourable care than white service users, with some variation observed across out-of-hours providers. This finding was in part attributable to clustering of minority ethnic service users in out-of-hours GP services with lower overall scores. Previous analysis of GP Patient Survey data regarding 'in-hours' care has indicated that minority ethnic patients reported generally lower experience scores[131] and that patients of different ethnic backgrounds may differ with regard to drivers of satisfaction.[102] In our analyses, although Asian service users reported lower mean scores than white service users for all three experience outcomes, the greatest difference was in the

TABLE 56 Confidence and trust in out-of-hours clinician: linear regression modelling

Sociodemographic covariate	Model A[a] (n = 83,316), overall difference		Model B[a,b] (providers, n = 86; service users, n = 83,316), within out-of-hours provider difference (between-provider SD 3.53)		Percentage of overall difference (if negative) attributable to clustering of sociodemographic group in lower-scoring providers
	Mean difference[c] (95% CI)	p-value[d]	Mean difference[c] (95% CI)	p-value[d]	
Ethnic group[e]					
Mixed	−3.02 (−5.58 to −0.46)	< 0.001	−1.72 (−4.27 to 0.84)	< 0.001	43
Asian	−5.95 (−6.85 to −5.05)		−3.92 (−4.86 to −2.99)		34
Black	−2.62 (−4.22 to −1.02)		−0.33 (−1.95 to 1.29)		88
Other	−1.18 (−2.48 to 0.13)		0.87 (−0.46 to 2.19)		> 100
Able to take time away from work during typical working hours[f]					
Yes	2.24 (1.64 to 2.84)	< 0.001	2.23 (1.63 to 2.82)	< 0.001	Not applicable
No	−5.35 (−6.05 to −4.64)		−5.27 (−5.97 to −4.57)		1

a Models also adjusted for age, gender, deprivation and parent status.
b Random effect on provider organisation of out-of-hours GP.
c All outcomes linearly rescaled from 0 to 100.
d *p*-value refers to global effect of covariate across all categories vs. the reference category.
e Mixed: mixed/multiple ethnic groups; Asian: Asian/Asian British; black: black/African/Caribbean/black British. Reference = white.
f Reference group ('not relevant') includes service users who responded to the question 'Which of these best describes what you are doing at present?' with full-time education, unemployed, permanently sick or disabled, fully retired from work, looking after the home or doing something else.

timeliness of care. Similar differences were seen for other ethnic groups, but of a lesser magnitude, suggesting that service users from minority ethnic groups, and Asian service users in particular, place substantial value on the timeliness of out-of-hours care. The ability of an out-of-hours GP service to meet service users' expectations has previously been argued to be a strong driver of satisfaction with care,[288] although this cross-sectional analysis cannot definitively answer this question.

Those who were unable to attend their practice because of work commitments were significantly associated with lower scores across all three outcomes than those not in paid work, whereas individuals who reported being able to take time off work reported somewhat better experiences. One explanation is that out-of-hours providers, who do not provide routine 'non-urgent' care, may not meet the expectations of service users who find it difficult to attend their practice during regular hours. However, as no information on the nature or the urgency of the service users' health conditions was available this question cannot be addressed definitively.

Strengths and limitations
Unlike CQC and national audit data, this analysis of GP Patient Survey data was the first to map the majority of practices (and hence service users) to a specified out-of-hours GP provider and to determine the organisational provider type. The large sample available enabled sophisticated modelling to test the

associations between provider and service user sociodemographic characteristics and service user evaluations of care.

Several limitations were evident regarding the data available from the GP Patient Survey. Service users were invited to provide feedback on their experiences of out-of-hours care in the preceding 6 months. Recall bias cannot be discounted, as previous research has found that older patients may not accurately report health service resource use over the short time frame of 3 months.[289] No data were collected regarding the nature/urgency of the service users' complaints, the time/date of the contacts or how the contacts were managed. Although data on ethnicity were collected, the GP Patient Survey did not ask about service users' English language ability, nor about educational attainment, both of which may be related to experience of care.[80] The lack of detailed response options regarding whether or not the service user was able to take time away from work and the timeliness of care also restricted our ability to interpret these data.

The GP Patient Survey response rate of 35% is also problematic. However, no evidence of an adverse association between response rate and non-response bias has been found for the GP Patient Survey and previous research using rigorous probability sampling methods (as used in the GP Patient Survey) has observed only a weak association between non-response rates and non-response bias.[133,187,290] An analysis of data on out-of-hours care in the Netherlands suggested that non-response bias was small in respect of overall satisfaction with out-of-hours care.[291]

Workstream 2: establishing the validity of GP Patient Survey out-of-hours items

Study aims and objectives
The overarching aim of this workstream was to establish the validity of the GP out-of-hours care items within the GP Patient Survey to inform its suitability for benchmarking providers. This was achieved through a multimethod project composed of two stages. In the first stage, preliminary psychometric testing of the out-of-hours items was undertaken through cognitive interviews, combined with a pilot survey of out-of-hours users to test survey methods. The second stage tested the hypothesis that the GP Patient Survey items (modified after piloting) would demonstrate construct validity if together the GP Patient Survey items were correlated with the two known subscales of the OPQ (an established, valid and reliable measure of patient experience[8,282]). Concurrent validity would be established if the thematically relevant OPQ items were found to be associated with each of the GP Patient Survey items in linear regression modelling.

Methods

Settings
Six out-of-hours providers across England were recruited for a cross-sectional survey of service users. Data from year 5, quarter 2 (July to September 2010) of the GP Patient Survey[11] were used to sample providers to ensure that there was variation in respect of performance (high/medium/low scoring) on respondents' overall ratings of care received by GP out-of-hours services, as well as the type of provider (NHS, commercial, social enterprise) and the geographical area covered by the service (inner city/suburban, rural). Two participating service providers were operated by NHS trusts, three were operated by commercial companies and one was a not-for-profit social enterprise.

Survey piloting and cognitive interviews
A pilot study was conducted with two providers, with study questionnaires distributed to 500 service users ($n = 250$ per provider). Cognitive interviews with out-of-hours service users were conducted to explore the cognitive challenges faced by service users when completing the GP Patient Survey out-of-hours items and establish the validity of the item set. Twenty service users (predominantly female and aged ≥ 65 years)

from two out-of-hours providers were interviewed using a think-aloud and four-stage verbal probing approach.[292] Interviews were audio recorded, transcribed verbatim and analysed using protocol analysis.[292]

This preliminary work highlighted issues with the GP Patient Survey questions and with sampling of service users. The GP Patient Survey filters respondents to the out-of-hours items if they report having tried to make contact with a GP out-of-hours service in the previous 6 months, either for themselves or for someone else. As the respondents in this study were sampled from known users of out-of-hours providers, respondents were requested to evaluate their experience of the last time they made contact with a GP out-of-hours service. Minor modifications to the wording of the GP Patient Survey out-of-hours items (one item) and/or response options (*Table 57*) and sampling exclusion criteria were suggested by the study team. These changes were reviewed and approved by the study advisory group prior to commencing data collection.

Description of the questionnaire

The questionnaire had two sections. Section 1 contained the four modified GP Patient Survey evaluative stem items (applicable to all participants). These four items assessed service users' ratings of the 'entry access' to the service, the 'timeliness of care' received, their 'confidence and trust' in the health professional who they consulted with and their 'overall experience' of the out-of-hours service. Section 2 consisted of the OPQ, which is composed of seven sections designed to capture information on the entirety of service users' experience of out-of-hours care. The composition of the OPQ has been detailed elsewhere[8] and was found to be both valid and reliable. Participants' ratings on 14 evaluative items were analysed (*Table 58*); these were not management specific and assessed users' experience of entry to the service, the outcome of their call and the consultation with a health professional.

Sampling

Sampling took place within 2 weeks of the service user contacting the out-of-hours service. The contact and demographic details for a random sample of 2000 service users were extracted from the electronic records at each site. Exclusion criteria were age 12–17 years, because of the risk of breaching patient confidentiality if a questionnaire was sent to a patient's home address and because the GP Patient Survey targets those aged ≥ 18 years; admission to hospital as a result of the contact; palliative care needs; or a

TABLE 57 Changes made to GP Patient Survey items evaluating out-of-hours care following cognitive interviews with service users[a]

GPPS item wording	GPPS response options	Revised item wording	Revised response options
Q38. How easy was it to contact the out-of-hours GP service by telephone?	Very easy; fairly easy; not very easy; not at all easy; don't know/didn't make contact	No changes made	Very easy; fairly easy; not very easy; not at all easy; don't know/didn't make contact *by telephone*
Q39. How do you feel about how quickly you received care from the out-of-hours GP service?	It was about right; it was too long; don't know/doesn't apply	No changes made	*It was quicker than expected*; it was about right; it was too long; don't know/doesn't apply
Q40. Did you have confidence and trust in the out-of-hours clinician you saw or spoke to?	Yes, definitely; yes, to some extent; no, not at all; don't know/can't say	Did you have confidence and trust in the out-of-hours *health-care professional* you *consulted with*?	No changes made
Q41. Overall, how would you describe your experience of the out-of-hours GP service?	Very good; fairly good; neither good nor poor; fairly poor; very poor	No changes made	No changes made

GPPS, GP Patient Survey.
a   Changes made to the wording and response options for the four GPPS items evaluating out-of-hours care are in italics.

TABLE 58 The OPQ: 14 items used in analyses

Questionnaire section	Item	Response scale
Making contact with the service	How do you rate [how long it took your call to be answered, excluding any introductory message]?	Five-point scale: 'very poor' to 'excellent'
	Please rate the helpfulness of the call operator	Five-point scale: 'very poor' to 'excellent'
	Please rate the extent to which you felt the call operator listened to you	Five-point scale: 'very poor' to 'excellent'
Making contact with the service	How do you rate [how long it took for a health professional to call you back]?	Five-point scale: 'very poor' to 'excellent'
	Were you happy with the type of care you received?	Yes/no
	How do you rate [the length of your consultation with the health professional]?	Five-point scale: 'very poor' to 'excellent'
	[Please rate] the thoroughness of the consultation	Five-point scale: 'very poor' to 'excellent', plus NA
Outcome of your call	[Please rate] the accuracy of the diagnosis	Five-point scale: 'very poor' to 'excellent', plus NA
Consultation with the health professional	[Please rate] the treatment you were given	Five-point scale: 'very poor' to 'excellent', plus NA
	[Please rate] the advice and information you were given	Five-point scale: 'very poor' to 'excellent', plus NA
	[Please rate] the warmth of the health professional's manner	Five-point scale: 'very poor' to 'excellent', plus NA
	[Please rate] the extent to which you felt listened to	Five-point scale: 'very poor' to 'excellent', plus NA
	[Please rate] the extent to which you felt things were explained to you	Five-point scale: 'very poor' to 'excellent', plus NA
	[Please rate] the respect you were shown	Five-point scale: 'very poor' to 'excellent', plus NA

NA, not applicable.

temporary/incomplete address. After all exclusions were applied, a questionnaire, accompanied by covering letters from the research team and service provider, an information sheet and a prepaid envelope, was sent to a consecutive sample of the first eligible 850 service users (or a parent or a guardian if the service user was a child) from the sampling frame at each site. In one area, only 818 service users were sampled because of logistical constraints in the screening process. The total sample approached therefore totalled 5068 service users. A reminder was sent 2 weeks after the initial mailing to non-respondents. Implicit consent was assumed if a completed questionnaire was received by the research team; no reminder was sent to service users who returned a blank questionnaire. Data collection took place between September 2013 and July 2014.

Data analysis

Respondents were compared with non-respondents with respect to their age, gender, deprivation quintile (using service users' postcodes to derive their IMD[285]) and management option received as a result of the last recorded contact (from the service provider record: telephone advice, treatment centre attendance, home visit) using a multilevel logistic regression model, clustering respondents by the provider from which they were sampled.

Construct validity

Construct validity of the four modified GP Patient Survey items was assessed by ascertaining how well they summarised the OPQ. First, a confirmatory factor analysis was conducted to establish whether or not the OPQ possessed the same two-factor structure reported in the paper detailing its development.[8] The standardised factor loadings with 95% CIs for this model are reported. As Hu and Bentler[293] suggest, goodness of fit of the model was assessed through a two-index strategy using the standardised root-mean-squared residual supplemented with the comparative fit index (CFI),[294] neither of which are adversely affected by large sample sizes.[295]

A principal component analysis (PCA) of the four modified GP Patient Survey items was then conducted to establish their latent structure, using the polychoric correlation matrix to account for the ordinal nature of these items.[296] Inspection of eigenvalues and component loadings were used to explore the underlying structure of the responses. Based on this PCA, the construction of scales using the modified GP Patient Survey items and their internal consistency (Cronbach's alpha) was explored. Finally, the correlations between the scales constructed above and the factor scores from the confirmatory factor analysis of the OPQ were investigated to assess the extent to which the modified GP Patient Survey item set summarised the OPQ.

Consultation satisfaction scale

The OPQ includes nine items rating service users' satisfaction with their consultation with an out-of-hours clinician (see *Table 58*). These items were combined into a 'consultation satisfaction' scale, as suggested by the paper validating the OPQ,[8] to avoid issues of multicollinearity in the regression models. To achieve this, each item was linearised to a 0–100 scale and respondents' mean scores from the nine items were derived as their consultation satisfaction scale score, provided that they had answered at least four of the items. Finally, the scale was standardised so that the regression modelling would produce standardised coefficients.

Concurrent validity

To investigate the concurrent validity of the modified GP Patient Survey items, four multilevel linear regression models were constructed, with a separate model for each evaluative outcome. The covariates were the management non-specific items from the OPQ (see *Table 58*), including the consultation satisfaction scale. Concurrent validity was considered to be established if each modified GP Patient Survey outcome was found to be significantly associated with thematically related items from the OPQ. Univariate analyses were undertaken first, with covariates being excluded from the final models if they were not associated ($p < 0.10$) with any of the four outcomes. All models controlled for service users' age, gender, deprivation quintile and management option, as well as the type of provider contacted (NHS, commercial, not-for-profit), and were clustered by provider. Missing data were accounted for using multiple imputations. To ensure that the regression coefficients of the covariates were comparable across models, the four modified GP Patient Survey outcomes, which originally had differing response scales (see *Table 57*), were standardised. Sensitivity analyses were conducted to test for a linear trend over the covariate rating length of time taken for a health professional to call back, modelling the data while excluding those who answered 'not applicable' ($n = 192$). All analyses were performed using Stata 13.

Results

Response rate and sample

Completed questionnaires were received from 1396 out of 5068 (27.5%) sampled service users. The multilevel logistic regression assessing response indicated that responders were older and more affluent (lower IMD score), but did not differ with respect to gender. Differences in response rates were also evident across the management options (*Table 59*). The response distributions for all variables of interest are displayed in *Appendix 6* (see *Table 81*).

TABLE 59 Characteristics of responders and non-responders ($N = 5067$)

Characteristic	Responders	Non-responders	p-value[a]
Patients, n (%)	1396 (27.6)	3672 (72.4)	
Age (years), mean (SD)	46.0 (28.2)	32.5 (26.2)	< 0.001
Gender female, n (%)	877 (62.8)	2208 (71.6)	0.081
IMD score, mean (SD)	19.0 (14.0)	23.9 (15.9)	< 0.001
Management option, n (%)			
Telephone advice	492 (35.2)	1143 (31.1)	0.001
Treatment centre	647 (46.3)	1765 (48.1)	
Home visit	172 (12.3)	301 (8.2)	
Other	85 (6.1)	193 (5.3)	

a Reported p-values were obtained from a multilevel logistic regression that compared responders with non-responders. The model clustered individuals by the provider from which they were sampled.

Construct validity

Confirmatory factor analysis of the Out-of-hours Patient Questionnaire
The confirmatory factor analysis revealed that the data fit the proposed entry access and consultation satisfaction two-factor structure reported by Campbell *et al.*[8] moderately well (*Table 60*), with a standardised root-mean-squared residual of 0.06 (values of < 0.08 represent good fit) and a CFI of 0.89, which is just short of the suggested cut-off of 0.90 for good fit.[293] In line with Campbell *et al.*,[8] the two latent variables were moderately correlated ($r = 0.54$, $p < 0.001$).

TABLE 60 Confirmatory factor analysis of the OPQ

OPQ item	Coefficient[a]	95% CI	p-value
Entry access			
How do you rate [how long it took your call to be answered]?	0.65	0.61 to 0.70	< 0.001
Please rate the helpfulness of the call operator	0.91	0.89 to 0.93	< 0.001
Please rate the extent to which you felt the call operator listened to you	0.90	0.88 to 0.92	< 0.001
How do you rate [how long it took for a health professional to call you back]?	0.66	0.62 to 0.70	< 0.001
Consultation satisfaction			
Were you happy with the type of care you received? [no/yes]	0.47	0.41 to 0.52	< 0.001
How do you rate [the length of your consultation with the health professional]?	0.80	0.77 to 0.83	< 0.001
[Please rate] the thoroughness of the consultation	0.88	0.86 to 0.89	< 0.001
[Please rate] the accuracy of the diagnosis	0.84	0.81 to 0.86	< 0.001
[Please rate] the treatment you were given	0.86	0.84 to 0.88	< 0.001
[Please rate] the advice and information you were given	0.90	0.88 to 0.91	< 0.001
[Please rate] the warmth of the health professional's manner	0.87	0.85 to 0.89	< 0.001
[Please rate] the extent to which you felt listened to	0.93	0.92 to 0.94	< 0.001

a Item loading.

Principal component analysis of the modified GP Patient Survey items
In the PCA of the four modified GP Patient Survey items there was a single component with an eigenvalue exceeding 1.0 (eigenvalue of 2.78), which accounted for 69.5% of the variance in the data. Observed component loadings were 0.44 for entry access, 0.47 for timeliness of care, 0.51 for confidence and trust and 0.57 for overall experience. This component can be interpreted as overall satisfaction with out-of-hours care. A rotation was unnecessary, as a simple structure was obtained.

Informed by the PCA, we investigated the construction of an overall satisfaction scale using all four items. This scale was derived by summing the standardised items (to account for differing response scales) if responses were given to all items. The scale had acceptable internal consistency ($\alpha = 0.772$). Excluding the entry access item suggested a very minor improvement in alpha ($\alpha = 0.777$; see *Appendix 6*, *Table 82*).

How well do the modified GP Patient Survey items summarise the Out-of-hours Patient Questionnaire?
The overall satisfaction scale was highly correlated with the factor scores of both OPQ domains for entry access ($r = 0.63$, $p < 0.001$, $r^2 = 0.397$) and consultation satisfaction ($r = 0.66$, $p < 0.001$, $r^2 = 0.440$). These correlations were both stronger than the correlation reported between the two OPQ domains. When combined into a scale, the four modified GP Patient Survey items explained 39.7% of the variation in entry access factor scores and 44.0% of the variation in consultation satisfaction factor scores, summarising both scales moderately well. *Table 60* reveals that the entry access domain of the OPQ was most related to service users' experience of the call operator, for which there is no equivalent GP Patient Survey item, perhaps explaining the lower correlation between the overall satisfaction scale and the entry access factor scores.

Concurrent validity
Multiple imputation of missing data allowed for inclusion of all 1396 respondents in the four mixed-effects multilevel linear regressions. A divergent pattern of associations across the covariates was evident between the models for each of the four GP Patient Survey outcomes (*Table 61*).

Discussion
This study sought to determine the construct and concurrent validity of four items from the GP Patient Survey evaluating service users' experience of out-of-hours care through comparisons with an established, valid and reliable measure, the OPQ.[8,282] Preliminary work highlighted the need to make minor modifications to three of the four GP Patient Survey items to improve comprehension by service users' and response options. The modified GP Patient Survey item set (entry access, timeliness of care, confidence and trust and overall experience) formed a single scale, which summarised the two-domain structure of the OPQ moderately well. Therefore, given minor modifications, these findings indicate that the GP Patient Survey item set evaluating out-of-hours care has potentially acceptable construct validity as a scale of overall satisfaction.

Each of the four outcomes was strongly associated with a distinct set of thematically related items from the OPQ, demonstrating their concurrent validity. Evaluations of entry access were related to ratings of the length of time before service users' calls were answered, the helpfulness of the call operator and the extent to which the operator listened, which is supported by these items loading onto the same construct in PCAs in the present study and elsewhere.[8,130] Similarly, evaluations of timeliness of care were significantly associated with the time taken for the call to be answered, but were not related to ratings of the helpfulness of the call operator. Instead, timeliness was most strongly associated with the length of time taken for a call back from a health professional, an association also observed in a recent study of patient satisfaction with out-of-hours care from the Netherlands.[291]

Croker *et al.*[148] found that patients' confidence and trust in a health professional with whom they consulted in an in-hours primary care setting was highly influenced by interpersonal aspects of the care delivered as reported by patients. Important characteristics included having been given enough time, having felt listened to, having been given explanations about tests and treatments, having been treated

TABLE 61 Linear regression models showing the associations of OPQ items with the four modified GP Patient Survey outcomes

Covariate	Entry access		Timeliness of care		Confidence and trust		Overall experience	
	Coefficient (95% CI)	p-value	Coefficient (95% CI)	p-value	Coefficient (95% CI)	p-value	Coefficient (95% CI)	p-value
Call answer time	0.13 (0.06 to 0.21)	0.001	0.09 (0.03 to 0.15)	0.006	0.00 (−0.06 to 0.05)	0.945	0.01 (−0.05 to 0.07)	0.808
Helpfulness of operator	0.14 (0.04 to 0.24)	0.008	0.06 (−0.03 to 0.15)	0.204	0.04 (−0.04 to 0.12)	0.345	0.12 (0.04 to 0.20)	0.003
How operator listened	0.15 (0.05 to 0.25)	0.003	0.05 (−0.04 to 0.14)	0.268	0.00 (−0.08 to 0.09)	0.954	0.07 (−0.01 to 0.15)	0.068
Health professional call-back time[a]	0.09 (0.03 to 0.16)	0.007	0.45 (0.39 to 0.52)	< 0.001	0.05 (−0.02 to 0.11)	0.140	0.13 (0.08 to 0.19)	< 0.001
Very poor/poor	Reference group		Reference group		Reference group		Reference group	
Acceptable	0.16 (−0.02 to 0.34)	0.089	0.70 (0.54 to 0.86)	< 0.001	0.07 (−0.09 to 0.23)	0.376	0.38 (0.24 to 0.52)	< 0.001
Good	0.34 (0.15 to 0.53)	0.001	1.05 (0.87 to 1.22)	< 0.001	0.18 (0.02 to 0.35)	0.030	0.51 (0.37 to 0.66)	< 0.001
Excellent	0.35 (0.14 to 0.56)	0.001	1.41 (1.22 to 1.60)	< 0.001	0.10 (−0.08 to 0.29)	0.271	0.48 (0.31 to 0.64)	< 0.001
Not applicable	0.29 (0.07 to 0.52)	0.011	0.98 (0.79 to 1.17)	< 0.001	−0.04 (−0.23 to 0.15)	0.706	0.35 (0.17 to 0.53)	< 0.001
Happy with treatment option								
Yes	Reference group		Reference group		Reference group		Reference group	
No	−0.21 (−0.39 to −0.02)	0.030	−0.32 (−0.49 to −0.15)	< 0.001	−0.58 (−0.73 to −0.44)	< 0.001	−0.70 (−0.83 to −0.56)	< 0.001
Consultation satisfaction	0.05 (−0.01 to 0.12)	0.105	0.06 (0.01 to 0.12)	0.025	0.56 (0.51 to 0.61)	< 0.001	0.43 (0.38 to 0.47)	< 0.001

a Sensitivity analyses excluded the 'not applicable' category and entered this covariate as an ordinal variable to assess the global effect on each outcome, which is reported above the effects of the separate dummy variables.

Notes
Models controlled for participants' age, gender, deprivation quintile (IMD), ethnicity (white, other ethnic group) and management option received (telephone advice, treatment centre, home visit/other), as well as the type of provider contacted (NHS, commercial, not-for-profit) and were clustered by provider ($n = 6$). The GP Patient Survey items (dependent variables) were standardised so that regression coefficients were comparable across models. For all models, $n = 1396$.

with care and concern and having been taken seriously. In the present study, analogous items from the OPQ, combined into the consultation satisfaction scale, were strongly associated with service users' ratings of confidence and trust in the out-of-hours health professional they consulted with. Confidence and trust were not related to items evaluating entry access.

Respondents' ratings of their overall experience were strongly related to items from all three included sections of the OPQ: entry access, the result of the user's call and the consultation with a health professional. The consultation satisfaction scale included an item rating the length of the consultation, which has also been shown to be a factor related to confidence and trust.[297] Patients' evaluations of their overall experience of in-hours primary care have been shown to be most associated with doctor communication and the helpfulness of receptionists.[102] In the present study, service users' ratings of their overall experience (the item unmodified from the GP Patient Survey) were strongly associated with their ratings of consultation satisfaction, which included elements of doctor communication as well as the helpfulness of the call operator.

Strengths and limitations

A strength of this study is the large number of service users included, which facilitated reliable statistical analyses using a large number of variables. When using factor analysis, best practice is to have five to 10 participants per measure,[295] with a higher participant-to-measure ratio yielding more reliable results; upwards of 64 participants per measure were used in these analyses.

The overall response rate was low and responders tended to be older and living in less deprived areas; the final respondent sample also had a higher proportion of males than the non-respondent sample. This threat to the representativeness of the study sample is unlikely to have affected the analyses reported here. Specifically, this analysis aimed to determine the structure of users' experience items and associations between them, rather than providing incidence/prevalence rates of conditions or similar outcomes that might be more affected by response bias issues. The methods employed controlled for these factors when possible and the findings are corroborated by the existing literature, as discussed above.

Minor modifications to either the word stems or response categories for three of the four GP Patient Survey items were made after careful piloting with service users that included the use of cognitive testing. Furthermore, the GP Patient Survey asks questions to respondents about making contact with a GP out-of-hours service in the past 6 months, whereas this study's respondents were asked to answer questions relating to the last time that they made contact with a GP out-of-hours service, having been sampled from out-of-hours providers' databases within 2 weeks of having made contact. Although this may limit the degree to which these findings apply to the existing GP Patient Survey items, this piloting was essential as early feedback from service users identified problems interpreting the items and changes to two items were designed to minimise missing data through blank responses (e.g. missing response categories). Implications for practice based on these findings are therefore contingent on the adjustment of current GP Patient Survey items.

Workstream 3: exploring how out-of-hours services use patient feedback

Study aims and objectives

This study aimed to identify how out-of-hours GP providers routinely collect patient experience feedback (including GP Patient Survey data) to inform their practice, with a particular focus on how it can be used to inform service reconfiguration and improve patient experiences of out-of-hours care. This was achieved by undertaking qualitative interviews with staff from out-of-hours service providers.

Methods

Sampling and data collection

The aim was to recruit an additional six out-of-hours providers as six ($n = 12$ total) were already recruited and had taken part in the survey study (see report on the conduct of workstream 2). Provider and staff recruitment ceased when data saturation was achieved. To achieve diversity of high-, medium- and low-scoring services, providers were first sampled on the basis of their scores on the GP Patient Survey item for care received from the service (question 40, April to September 2010 national GP Patient Survey data set). Once categorised into these groupings, information on organisation type and geographical location was considered. The final sample of providers ensured diversity across these three domains (GP Patient Survey score, organisation type and location), although no comparison of different subgroups of providers was planned. Up to three potential interviewees who had some involvement in conducting patient experience surveys were identified and approached to be interviewed at each provider. Participants were provided with an information pack consisting of a covering letter and participant information sheet. A mutually convenient time was organised to conduct the interview.

A week before the interview participants were sent a copy of a 'feedback report' containing patient ratings of their provider organisation based on the July 2012–March 2013 wave of the GP Patient Survey. Benchmarking data (generated by matching general practice postcodes to provider localities) were produced to allow providers to compare their performance with that of the 91 other English out-of-hours services for whom scores were able to be generated. Reports for the six services that had participated in the survey study (workstream 2) also included a summary of the their ratings derived from the research survey.

Face-to-face interviews, conducted at the participants' workplace, took place between April and July 2014, each lasting between 39 and 88 minutes (mean 59 minutes). Topic guides were developed from a literature review, discussion between researchers and providers and previous findings with comments provided by the study advisory group. The topic guide included questions on how providers collected patient experience data and how this was used to make service changes; on awareness and views of the GP Patient Survey and out-of-hours items within it; and on the use of GP Patient Survey benchmarking provided in the feedback report.

Analysis

Interviews were digitally recorded and transcribed verbatim and transcripts were checked against the original recording for accuracy. Transcripts were coded in NVivo 10 software and analysis was independently coded using an iterative approach by one researcher (HB). A sample of five transcripts was independently analysed by a second coder (AA) to ensure that agreement was reached on the coding frame and codes. A deductive, framework approach with preliminary codes reflecting the content of the topic guide was used to construct the coding framework. However, a more inductive approach with additional thematic coding was undertaken using the 'constant comparison' method[297] to capture new themes emerging from the data set. The initial coding frame was discussed within the team and when possible the codes were tested through seeking negative cases and/or divergent data. The data were then reorganised and collapsed into overarching themes. This process took place on two occasions until the main categories were agreed. All participants were sent a summary of the findings with a structured feedback form inviting comments on the veracity of the interpretation of the study findings. Final themes were reviewed and agreed between the research team to enhance reliability.

Results

Study participants

Five of the six providers approached took part (in addition to the six who participated in the survey study). A total of 31 staff from the 11 providers (NHS organisations, $n = 2$; social enterprises, $n = 4$; commercial organisations, $n = 5$) were interviewed, at which point data saturation was judged to have been achieved. Most participants were female ($n = 23$); 18 were service managers, seven were clinicians (GPs) and six were

administrators. Participants who completed the feedback form ($n = 2$) on the findings were satisfied with the accuracy of the summary. Three main themes emerged: using surveys as a method of obtaining patient feedback; the utility of patient feedback; and the value of benchmarking.

Surveys as the most common method of obtaining patient feedback

Most participants focused on survey methods for collecting patient feedback, as 10 of the 11 providers undertook regular surveys to audit their patients' experiences. Participants also discussed the ambiguities of operationalising NQR5, the desire for qualitative feedback to supplement survey data and the role of alternative methods in addition to surveys. It was evident from discussions that each provider interpreted the sampling for NQR5 differently, for example the range of patients being routinely audited varied from 1% to 20%:

> *We send out approximately 250 a week. Our National Quality Requirements require us to survey 1% – we actually do considerably more than that because we have taken our own interpretation on it.*
>
> *11_4001, manager*

Audits were undertaken on either a weekly or a monthly basis, using survey instruments developed by the organisation. Some participants reported that weekly audits were useful in terms of maximising patient response rates:

> *[T]hey've [out-of-hours service] worked out that the sooner the patient gets the questionnaire the more likely it is that they will complete it because it's still fresh in their minds, so they try to do it as quickly as possible.*
>
> *14_4003, GP*

Most participants placed great importance on qualitative feedback from free-text comments provided by patients, which helped to interpret the quantitative findings, identify actions and provide a more personalised response from patients:

> *If they have got a real issue they can put it down, can't they? Just doing the survey itself is just a way you test the water . . . The free text allows someone who has got a very bad experience the opportunity to write to us.*
>
> *10_4001, manager*

> *I'm dealing with people, I'm not dealing with robots. I mean, it's their experiences, their feelings and they need to have a place to feed that back . . . they absolutely need to have a place to express their opinions – that's giving people a voice.*
>
> *14_4003, GP*

Although it was agreed by all but one of the participating providers that patient surveys were a necessity, this was not a sufficient resource to drive change within services. A wide variety of alternative methods used by providers were reported, such as comment cards, 'complaint and compliment systems' and new technologies:

> *At the moment we're thinking of going more electronically, so as soon as you have your consultation in the base, you come out and there's a tablet so you can actually do your surveys straight after . . . that way you can get more accurate feedback of how people are feeling.*
>
> *19_4002, administrator*

Utility of patient feedback

Many participants cited examples of ways in which patients' reported experiences had been used to make changes to service provision, although most changes tended to be 'low level'. Because of the lack of

observed trends within the data, most participants reported that patient survey data were insufficient to instigate service-wide changes:

> In the main the results are stable and pretty good, but there's not enough that's consistent that I think we could use around wholesale service change.
>
> *12_4003, manager*

Participants reported that patients' expectations of the out-of-hours service were often unrealistic and difficult to manage and this made patient feedback difficult to deal with:

> You often get patients who are very unhappy about the service they got and when you drill down into it it's because they didn't get antibiotics for their cold. Its expectations.
>
> *16_4003, GP*

The changing landscape of the urgent care system was also confusing to patients. Some staff participants questioned the validity of patient experience data as the patients might be unaware of the different elements of the care pathway. Another barrier identified was the low-level engagement by commissioners. Despite the fact that patient experience audits are part of NQR5, many participants reported that commissioners treated them as a 'tick-box' exercise:

> They [the commissioners] don't come across to me as particularly engaged in this at all, and never really ask us too many questions around it.
>
> *18_4003, manager*

Although acknowledging the identified barriers, some participants discussed how engaging with patient feedback had subtly changed the culture within their organisation and highlighted the importance of transparency and being responsive to change. In addition, participants reported the benefits of being able to compare patient feedback with other areas of reporting within the NQRs.

Value of benchmarking

Most participants acknowledged the benefits of having access to benchmarking data and felt that these data were a facilitator to enabling change. Notwithstanding this, many staff interviewees placed greater importance on their own surveys over the GP Patient Survey data, largely because their own surveys were more detailed.

Some staff expressed concerns about the reluctance of some providers to share with and learn from other providers, an issue mainly arising from commercialisation taking place within the NHS:

> It's terrible isn't it, when everybody's competing and not collaborating? That's the system we're living with, we've had to get used to it.
>
> *18_4001, GP*

The benchmarking provided using the GP Patient Survey out-of-hours patient ratings was seen as useful, although many identified weaknesses with set items as they felt that the questions did not reflect the current urgent care system and lacked detail:

> It is [GP Patient Survey out-of-hours evaluative items] just four questions, you get asked in McDonalds. It's not detail is it?
>
> *10_4001, manager*

Discussion

In the UK out-of-hours primary care providers are mandated to regularly audit patients' experiences as part of the NQRs and services routinely meet this requirement by conducting patient surveys as well as by

obtaining feedback using a variety of other methods. However, NQR5 is ambiguous and the resultant data cannot be used to compare services as providers are undertaking audits of varying scale, frequency and methodology. Staff reported a strong preference for qualitative patient feedback, which is echoed in other settings, as it yields richer, more detailed feedback than quantitative survey scores. For example, hospital staff have found that qualitative data from patients added a more patient-centred aspect to patient satisfaction measurements.[210,298] Research has shown that health-care leaders place great importance on complaints, comments and compliments as sources of patient feedback,[299] as do general practice staff (see *Chapter 7*).

Patient feedback appeared to have a limited role as a driver for service change and effective change was hindered by modifications taking place in the urgent care landscape, which confused patients with regard to how care was organised. Some staff also reported that commissioners appeared uninterested in patient experience audit findings. In some settings audit and feedback have been shown to have small to moderate effects on health-care professionals' practice,[204,300] although in other settings it can have a wider impact.[301] For change to occur, the organisational culture must be supportive of change and be patient focused.[206,209,302] Most of the changes reported by staff were 'low level' and unlikely to drive system-wide reconfiguration because of the lack of consistent patterns observed in the data. There was a preference for qualitative feedback as patient free-text comments could potentially identify specific areas of actionable change or contribute to wider data-gathering audits, for example critical incident techniques.[303] However, to be useful, patients' attention must be focused to provide qualitative feedback on the out-of-hours service.

Staff valued the GP Patient Survey patient experience benchmarking data and the GP Patient Survey presents an opportunity for benchmarking of all out-of-hours services. NHS England has recently recommended that NHS commissioners use the GP Patient Survey results to monitor patient experiences of out-of-hours providers[278] and the CQC has published GP Patient Survey provider performance at commissioner level.[277] Despite the strengths of the GP Patient Survey (regularly and independently collected data that is publicly available), participants were reluctant to use GP Patient Survey data in its present form because of concerns about the face validity of out-of-hours items and the absence of free-text comments, a limitation found in previous studies.[119,199] In addition, the current out-of-hours items are not reflective of the recent changes that have taken place within the urgent care system (e.g. introduction of the NHS '111' telephone portal). Most staff did not believe that the limited number of GP Patient Survey items would drive change by themselves.

Strengths and limitations

This is the first qualitative study to explore the views of out-of-hours staff who have an in-depth knowledge of patient feedback processes within their organisation. Sampling ensured that staff from a variety of different types of provider (e.g. not-for-profit or commercial enterprises), serving diverse populations across England, were included. Although sampling diversity was achieved, it is acknowledged that participating organisations may be more interested in the patient experience agenda than non-participants and thus findings may not reflect the views of the wider population. The views of commissioners were not sought in this study and thus the widespread perception that some commissioners were apathetic towards patient feedback data must be interpreted cautiously. Because of logistical constraints it was not possible to interview commissioners and obtain their perspective on the perceived role and value of patient feedback data.

Conclusions from the out-of-hours research

Implications for practice and future research

An analysis of national GP Patient Survey data (see *Workstream 1*) identified that commercial providers were associated with poorer patient experiences of out-of-hours GP care than NHS or not-for-profit providers. It is not possible to derive simple explanations regarding the drivers of these lower ratings in this observational data set and further research is required to understand what drives these differences. Although some insight might be gained from an understanding of patient differences (e.g. nature or

urgency of requests for care) at the level of the provider, such data are not routinely collected in the GP Patient Survey for out-of-hours service evaluations. It is unknown whether or not factors such as user awareness of the provider type may also be of importance in interpreting service users' ratings.

Further research, possibly involving qualitative approaches or a vignette study, is required to investigate the reasons for the generally lower scores from service users from minority ethnic backgrounds (see *Chapter 6* for vignette work conducted as part of the wider IMPROVE programme). Similarly, research investigating the reasons why service users who were unable to take time off from work to attend their practice during regular hours reported poorer scores across all three evaluative questions is needed. Finally, as for in-hours GP care,[131] investigation of the extent to which variations between sociodemographic groups in respect of care ratings might be attributable to the clustering of servicer users belonging to sociodemographic groups reporting relatively lower scores within providers with lower overall scores is required. This analysis would help inform the development and targeting of interventions aimed at improving service users' experiences of out-of-hours GP care for specific population subgroups.

National standards (NQR5) require out-of-hours providers to routinely audit patient experiences, although no specific survey tools or methods are recommended to achieve compliance. In the absence of data collected directly by providers, both the National Audit Office and the CQC have recently used the GP Patient Survey as an alternative data source to monitor patient experiences of GP out-of-hours care. However, an important prerequisite to using GP Patient Survey data to benchmark services is that its psychometric properties are established. The reliability of GP Patient Survey out-of-hours items have been previously reported,[141] but there was no evidence regarding their validity. The second workstream demonstrated that, although our survey was composed of only four of the GP Patient Survey evaluative items (after minor but essential modifications identified through cognitive testing and piloting), the GP Patient Survey out-of-hours items that we used had both construct and concurrent validity. These findings provide support for the use of the GP Patient Survey for national benchmarking purposes.

Whereas workstreams 1 and 2 examined the technical performance of the GP Patient Survey out-of-hours items, the third workstream examined how out-of-hours staff use patient feedback and their views on the utility of GP Patient Survey items. This qualitative study found that, although NQRs are intended to promote transparency and allow comparisons between out-of-hours providers, NQR5 was ambiguous and in its current form does not support benchmarking or service improvement. A critical review of the NQRs is required to help providers to engage with patient feedback and drive service improvement effectively.

In the absence of clear NQR guidance, providers were inventive in the ways in which they engage with patients. Qualitative feedback was highly valued as it provided detailed information that could lead to actionable changes. However, services struggled to find ways to use patient feedback to drive anything other than low-level service change. Future research should explore how out-of-hours services managing patients with urgent care needs, and particularly those delivering services to diverse populations, can be assisted in engaging more fully with patient feedback. Evidence is also needed on whether or not comprehensive guidance on how to collect, interpret and act on patient feedback has the potential to drive quality improvement initiatives.[45,206,302]

In the context of the rapidly changing landscape of UK urgent care services, although participating providers could see the potential of using the GP Patient Survey for benchmarking purposes, its out-of-hours items need urgent revision as they do not reflect current telephone access arrangements (NHS 111) for out-of-hours care. This qualitative finding supports our preliminary survey piloting work and cognitive interviews with service users (see *Workstream 2*). Minor but essential amendments to the GP Patient Survey out-of-hours items are required to improve the comprehension of items and improve data quality.

Patient feedback currently has a limited role in driving changes to out-of-hours service provision and the utility of feedback may be hindered, in part, by recent modifications to the urgent care system and the ambiguity of NQR5 in relation to gathering and acting on patient feedback. English GP Patient Survey data

may be used to benchmark and compare service providers. However, the out-of-hours items need to be updated to reflect the changes made to accessing out-of-hours services by telephone, so that providers can be confident that ratings reflect their services' performance. A greater understanding of how variations in patient and provider characteristics drive variations in patient experiences of out-of-hours care is needed to support the development and targeting of quality improvement initiatives.

Chapter 12 Conclusions, implications for practice and recommendations for future research

Conclusions

In *Chapter 1* we outlined how, following the introduction of a wide range of quality improvement strategies as part of an overarching 'clinical governance' strategy in the late 1990s, there had been step changes in the management of major chronic diseases in the NHS. However, the ways in which patients experienced health care had not been given such a priority and the need for a rebalancing was seen by increasing attention to patient experience in policy documents, the routine publication of patient experience data, benchmarking of hospitals in relation to patient experience and even an (ill-fated) attempt to attach payments to patients' assessments of their GP's care.

There has therefore been widespread acceptance that good patient experience is an important outcome of care in its own right and our work[304] and that of others[305] has shown that patient experience is a domain of quality that is distinct from, but complementary to, the quality of clinical care. Although an increasing number of surveys have been developed to measure patient experience, there has been equally widespread acceptance that these measures have not been very effective at actually improving care.[45] This is the background to our programme of work. Entitled IMPROVE, we aimed to find better ways of both measuring and using information on patient experience that would lead to improvements in patient care in both in-hours and out-of-hours primary care settings.

In the introduction, we described a range of ways of obtaining patient feedback on their care, including surveys, focus groups and analysis of complaints. In this programme, we have focused on the use of patient surveys as they are the dominant method currently used in the UK. However, in *Chapter 10* we describe an exploratory trial of RTF, which moves away from the paper-based questionnaires that still dominate the measurement of patient experience in the NHS.

This programme had seven aims, each of which was tied closely to one work package of research. These aims were to:

1. understand how general practices respond to low patient survey scores, testing a range of approaches that could be used to improve patients' experience of care
2. estimate the extent to which aggregation of scores to practice level in the national study masks differences between individual doctors
3. investigate how patients' ratings on questions in the GP Patient Survey relate to actual behaviour by GPs in consultations
4. understand better patients' responses to questions on communication and seeing a doctor of their choice
5. understand the reasons why minority ethnic groups, especially South Asian populations, give lower scores on patient surveys than the white British population
6. carry out an exploratory RCT of an intervention to improve patient experience, using tools developed in earlier parts of the programme
7. investigate how the results of the GP Patient Survey can be used to improve patients' experience of out-of-hours care.

The aims of the programme did not change during the 5 years of our research, although some details of the research were modified as the work progressed (we have summarised any changes in each individual

chapter). We presented the results of our research under three broad headings and also use these headings in this conclusions chapter, namely:

1. understanding patient experience data (aims 3 and 4)
2. understanding patient experience in minority ethnic groups (aim 5)
3. using data on patient experience for quality improvement (aims 1, 2, 6 and 7).

Understanding patient experience data

Patient surveys are now widely used in many countries, yet still comparatively little is known about what experiences lead patients to respond in particular ways in these surveys. What drives them to tick particular boxes and how do those responses relate to the care that they have actually received? We approached this in two main studies, one in which we asked patients directly about how they chose certain items on the questionnaire while showing them a video of their consultation (see *Chapter 2*) and one in which we compared their responses with those of expert raters using two standard instruments for assessing videos of consultations (see *Chapter 3*). The results of these studies have important implications for the interpretation of survey data, particularly data focused on patient evaluations of specific encounters with health-care professionals.

The first study (see *Chapter 2*) showed that, although patients readily criticised their care when reviewing GP consultations on video, they had been reluctant to be critical when completing a questionnaire after the consultation. Reasons for this included the need to maintain a relationship with the GP (including uncertainty about how confidential survey results would be) and their gratitude for the care that they had received from the NHS in the past. In addition, perceived power asymmetries made people reluctant to criticise their doctor. Patients were also disinclined to be critical when completing a questionnaire if they had actually received the treatment that they wanted. Overall, we concluded that patients find that questionnaires administered at the point of care may be limited tools for being able to feed back concerns about primary care consultations.

The second study (see *Chapter 3*) reinforced our conclusion from *Chapter 2* that patient evaluations of consultations in surveys may present an uncritical view of the actual consultations. In this study videotapes of GP–patient consultations were assessed by four independent clinical raters. The results were striking. When trained raters rated communication within a consultation to be of a high standard, patients did the same (with one single exception). However, when trained raters judged the communication during a consultation to be of a poor standard, patients' assessments varied from poor to very good. This finding again points to the reluctance of patients to criticise their doctor in questionnaire surveys. In the previous study the 'gold standard' was the patient's own account of the consultation and in this study the standard was that of a trained external GP rater.

We do not think that these results mean that patient surveys cannot be used to assess the quality of general practice care. However, they do point to clear limitations. One of the concerns that GPs have about surveys (see *Chapters 7* and *8*) is that they are selectively completed by critical or grumpy patients and that survey results will therefore give a negative and biased view of their care. The results of the two studies described here suggest that the opposite is the case. Patients' reluctance to criticise their doctor means that survey responses using evaluative type of questions are likely to give an overly positive view of their doctor's care. This is one reason why there has been a move towards using report items in some survey instruments (though we do not know whether or not these suffer from similar problems). Because of this tendency for patients to choose the most positive response options, we suggest that absolute scores should be treated with some caution, as they may present an overly optimistic view of their care. However, this does not mean that surveys cannot be used to look at relative scores: scores from a GP that are lower than those of his or her colleagues and from GPs in other practices are likely to indicate a problem, even though high scores from other doctors or practices may conceal deficiencies in care in those practices too.

We also looked at how GPs rated their own consultations. GPs completed a form immediately after each consultation, using the same scale as the patients. GPs were certainly more inclined to criticise themselves than the patients were to criticise the care that they had received. This is entirely consistent with the findings from our subsequent interviews with patients. However, we found absolutely no correlation between patient scores and GP scores. Neither did we find any correlation between GPs' own scores and those of expert raters who reviewed the consultations on video. GPs are clearly using different parameters when assessing their own performance, but we were not able to investigate this in more detail in this study.

When we spoke to GPs about their survey results (see *Chapters 7* and *8*), through both focus groups and face-to-face interviews, they reported how, although positive about the concept of patient feedback, they struggled to engage with and make changes under the current approaches to measurement. They also commonly expressed concern that patients would be critical of their care if they did not get what they wanted (e.g. an antibiotic prescription). This concern was borne out to some extent by our results. In our analysis of the assessment of nurses (see *Chapter 4*), a strong predictor of survey scores was whether or not patients wanted to see a nurse when they first contacted the practice. If they had wanted to see a GP but saw a nurse, the scores given to those nurses were much lower. We have no reason to think that the nurses' communication was worse in those consultations and the low scores may therefore indicate a more general dissatisfaction of patients because of not having their original expectations met.

It is important to understand that, in line with the overall aims of the programme, the work in these two chapters focused on the assessment of communication in the primary care consultation (such as giving the patient enough time and explaining tests and treatments). Our conclusion that survey scores have more value in assessing relative performance than absolute performance of doctors may or may not hold true for other aspects of practice performance commonly assessed in surveys, such as difficulty in getting appointments, getting through on the telephone and waiting times. Patients' reasons for not wanting to criticise their doctor may be less important when they assess what they regard as management aspects of the practice.

A second aspect of care that we identified as part of our programme of work relates to patients' ability to see a GP of their choice. Although most of our research focused on communication, the results that we report in *Chapter 4* have some important findings in relation to patient choice.[142] The results show that most patients have a particular GP who they prefer to see. It is sometimes suggested that this matters only for some population groups (e.g. not young people) but we found that this is not the case. Even among those aged 18–24 years, > 50% of respondents to the GP Patient Survey have a particular doctor who they prefer to see, rising to > 80% in those aged > 75 years. Disturbingly, a large percentage of people who have such a preference are unable to see the doctor of their choice. This percentage has risen from 30% to 40% from 2010 to 2015. One possible impact of this change comes from our analysis of data from patients who saw a nurse when they had originally wanted to see a doctor; they expressed considerable dissatisfaction with their subsequent consultation with the nurse. However, these data do not reflect what would have happened if patients had seen another doctor, just not the one of their choice.

Overall, patients express more negative opinions about choice of doctor than in any other part of the GP Patient Survey, something that may in part have got worse as a result of government policies to improve access. There is a clear tension between the ability of practices to provide rapid access and the ability of practices to provide continuity of care and data from our studies suggest that patients' inability to see a doctor of their choice is a significant quality issue for the NHS.

Understanding patient experience in minority ethnic groups

In this part of our research, we focused our main work on survey responses from minority ethnic groups and on South Asian groups in particular. The general interest in minority ethnic groups is because they tend to report worse experiences using surveys in most countries studied, including in the UK. Our research on out-of-hours care in this programme (see *Chapter 11*) replicated this result, with Asian and mixed ethnic groups reporting worse experiences than the white majority.

Our specific focus in the major strand of this research was on South Asian respondents because of the size of this group in England and the consistently low scores generated by this group in English surveys across both primary and secondary care settings. We focused on questionnaires competed in English; although the GP Patient Survey is available in 15 languages, a tiny minority of surveys are completed in languages other than English (typically < 0.2% of returns).

A number of potential explanations have been suggested for the lower ratings given by South Asian and other minority ethnic groups. Broadly, these relate to whether these groups of patients (1) receive lower-quality care or (2) receive the same care but rate this more negatively.[75] For example, such respondents might rate the same care more negatively if they have higher expectations or because they interpret the survey items and response options in different ways (such as being culturally less likely to check extreme options).

The last of these options was potentially the simplest to explore. Taking advantage of the large numbers of respondents available in the GP Patient Survey to examine the responses of South Asian groups using item response theory and allowing for a wide range of other sociodemographic characteristics (see *Chapter 5*, *Workstream 3*), we found no evidence that South Asian respondents used the scales in a different way from white British respondents. Although these results do not provide conclusive evidence of equivalence in the way in which different respondents use the survey scales, they increase the likelihood that the worse experience reported by South Asian respondents reflects either differences in expectations or genuinely worse care. Our previous work[75] suggested that, for one aspect of care (waiting times), South Asian respondents might have higher expectations of care, implying that their lower scores on surveys might not be associated with worse care. We were able to advance our understanding of this complex issue considerably as a result of the research in this programme.

First, we showed that South Asian respondents to the GP Patient Survey tend to be registered in practices with generally low scores. This explained about half of the difference in reported experience between South Asian and white British patients (see *Chapter 5*, *Workstream 1*) and identified that some practice effects were related to the ethnicity of the doctor (with minority ethnic doctors receiving lower scores for doctor–patient communication; see *Chapter 5*, *Workstream 4*). However, these practice effects did not account for the low scores among South Asian patients, even though the differences were reduced when practices offered consultations in a South Asian language[172] (PhD project allied to our programme). Next, we showed that, far from being uniform across all population groups, the lower scores from South Asian patients were much more marked among older female respondents. It was therefore important in our subsequent work to ensure that these patients were represented in our research (see *Chapter 5*, *Workstream 2*).

In video elicitation interviews with South Asian patients (see *Chapter 2*), we identified the same issues driving evaluations of communication in South Asian as in white British patients: their relationship with their GP (and others within the practice), their expectations of the consultation and a reluctance to criticise their doctor's performance. The finding that South Asian patients are assessing broadly similar issues when completing questionnaires therefore still leaves unanswered the question of why scores from South Asian patients are low.

The final and most original part of this work provides insight into this (see *Chapter 6*). Here, we filmed 16 simulated consultations based on transcripts of real consultations using various combinations of white and Asian doctors and patients, with half scripted to be 'good' and half scripted to be 'poor'. We showed three randomly sampled videos to each of 1120 people (half of whom were white British and half of whom were Pakistani, equally split between those aged < 55 years and those aged ≥ 55 years) and asked them to score the consultations using the communication items from the GP Patient Survey.

If the low scores reported by South Asian patients in real-life settings were the result of higher expectations on their part, then we would expect them to give lower scores in the experimental vignette situation. However, quite the reverse happened. When viewing the same consultations, South Asian respondents gave scores that were higher, indeed much higher when adjusted for sociodemographic characteristics, than those of the white British respondents. This suggests that the low scores given by South Asian patients in surveys such as the GP Patient Survey reflect care that is genuinely worse, and possibly much worse, than that experienced by their white British counterparts. This is consistent with the only previous study of this type in which predominantly written consultations were shown to people from different ethnic groups in the USA, with the conclusion being that differences in ratings were more likely to represent differences in care than differences in expectations or scale use.[81]

There is a clear practice implication of this result: low scores from South Asian patients should be investigated as possible indicators of poor care. This is relevant to all settings, not just primary care.

Using data on patient experience for quality improvement

The results that we have discussed so far indicate that the results of patient experience surveys such as the GP Patient Survey can identify areas where there are important gaps in care that the NHS provides, such as patients being able to see a doctor of their choice. However, although patients tend to give very high scores for doctor–patient communication, these conceal significant negative experiences that patients describe when shown, and which independent observers can see in, recorded primary care consultations. These issues extend to minority ethnic patients and our research suggests that the negative scores that South Asian patients record (compared with those of white British patients) do represent genuine problems with care. This therefore brings us to the important issue of how data from patient surveys can be used to improve care.

Current national approaches to measuring patient experience, including communication, rely on practice-level assessments of care. In *Chapter 9*, we outline the results of a patient experience survey that we conducted across 25 general practices, asking patients specifically about their experience of a particular consultation with a named GP. We found that practice-level scores for communication mask considerable variation between GPs within each practice, notably for those practices receiving poorer communication scores overall. Such 'poorly performing' practices, which may be identified as such through the national GP Patient Survey, may in fact contain GPs with communication skills ranging from very poor to very good. This has important implications for the use of national survey data to identify primary care practices and practitioners in need of improvement.

In *Chapters 7* and *8* we describe the two studies in which we sought the views of GPs and practice staff on survey results, seeking to understand how they could better be used as quality improvement tools. *Chapter 7* describes focus groups with practice staff following feedback of practice-level scores for patient experience and *Chapter 8* describes interviews with GPs after we had conducted a survey in which they received individual feedback from surveys returned by patients whom they had seen in the surgery. In *Chapter 11*, we describe how out-of-hours providers use data from patient surveys.

Broadly, staff in different primary care settings neither believed nor trusted patient surveys. Concerns were expressed about the validity and reliability of surveys (some practices have very low rates of response) and about the likely representativeness of those who responded. Some practice groups mentioned recent negative experiences with pay linked to survey scores as part of the QOF (a technicality of the payment schedule meant that payments could be reduced even though practice performance had improved). There was also a view expressed that some patients had unreasonable expectations: staff worked as hard as they could and could not be expected to respond to all patients' 'wants'. Some practices did describe improvements that they had made as a result of survey results. Those that were easiest to engage with related to practices' office functions such as appointment systems and telephone answering systems.

Addressing an individual doctor's performance (e.g. communication skills) was much more difficult. Out-of-hours service staff were also concerned that service users did not understand the complex care pathways within urgent care settings and that this might lead to unrealistic expectations of what individual services were expected to deliver. Staff viewed surveys as necessary, but not sufficient. Clear preferences for more qualitative feedback to supplement survey scores were expressed as this provided more actionable data on which to mount quality improvement initiatives.

The doctors who we interviewed expressed markedly ambivalent views in discussing feedback from surveys. Although they had a number of concerns about individual doctor surveys (credibility, reliability, concerns about patient motivation), they also expressed positive views about the importance of patient feedback in monitoring and improving services.

These results led us to consider how patient feedback might be obtained in a way that would engage doctors more actively with patient survey results to stimulate quality improvement. We conducted a preliminary evaluation of RTF, using touch screens that patients could use to leave feedback following a primary care consultation. RTF was selected to address some of the problems identified by our research, such as providing practice feedback on a much more regular basis (e.g. fortnightly) and allowing practices the opportunity to add questions of their own to the RTF survey to increase the relevance of the results to their service.

As RTF has not been widely used, an exploratory RCT and qualitative study were conducted to answer questions about the feasibility of using RTF in real-world general practice, estimate likely response rates, obtain patient and staff views on providing feedback in this way and estimate the costs to a practice of introducing RTF. We also included facilitated feedback in one arm of the exploratory trial.

In the exploratory trial, only 2.5% of consulting patients left any RFT without prompting; however, if encouraged to leave RTF by staff, as many as 60% of patients did so. Encouragement was rare, with such encouragement provided in only 5% of > 1100 patient–staff interactions that we observed in reception areas. Of patients who used a touch screen to leave RTF, 86% found it easy to use and were positive about it as a feedback method. Lack of awareness of the screens and lack of time were the most common reasons given for not providing feedback.

Staff were broadly positive about using RTF and practices valued the ability to include their own questions in the survey. Practices that had open communication between staff members tended to be more positive about using patient feedback. Practice staff identified clear benefits from having a facilitated session for discussion of patient feedback and having protected time to discuss the results.

Had practices not been taking part in a research study, the cost of RTF to practices would have been substantial at > £1000 for the 12 weeks, with the bulk of the cost relating to provision of the equipment and analysis and feedback of the data collected from the touch screens.

Although the absolute number of patients providing RTF to each practice (> 100) was comparable to the number of respondents per practice in the national GP Patient Survey, we do now know how the considerably lower response rate in our RTF study (2.5%) would have affected the outcome of the patient experience surveys (it was not part of our study design to find this out). We do not know how representative or valuable the views of a small proportion of patients who respond are, just as we do not know how representative are the views of the very small numbers of patients providing the narrative feedback that is recorded on NHS Choices.

Considering these results together, we have been able to identify some clear learning to take forward into a future clinical trial examining the potential utility and effectiveness of RTF in informing service delivery in primary care.

Implications for practice

The work that we have carried out over the 5 years of the programme grant has clear implications for practice. We summarise these here.

The importance of patient experience

Our research supports the continuing emphasis on obtaining patient experience feedback as an important means of informing NHS care. Although continuing effort should be invested in refining the most effective and meaningful mechanism to capture high-quality patient feedback, the key challenge is to provide primary care staff with the support and means to enable them to act on patient feedback.

The need for action on the quality of care for minority ethnic groups

There has been much speculation whether the lower scores reported by minority ethnic groups on numerous patient experience surveys are 'real', reflecting poorer quality of care, or are an artefact of the questionnaires used or higher expectations of care. We have now conducted a series of studies to progressively examine this issue to understand with greater certainty the major drivers of reported variations in care. Examinations of survey responses, interviews with patients and an innovative experimental vignette study combine to strongly suggest that it is the former: patients from South Asian backgrounds experience considerably poorer communication with GPs than their white British counterparts. It is of concern that survey results may be dismissed as artefactual when, in fact, they are likely to point to real areas of concern. Effort should be invested to ensure that lower scores from such groups on patient experience surveys in both primary care and secondary care are investigated as markers of poorer quality of care.

Patients give overly positive responses when rating their care

Our results show the difficulty that patients have in feeding back negative experiences in questionnaire surveys. This suggests that there is more work to be done in improving patient experience than might be suggested by the high scores that are commonly seen in patient surveys. However, patients' reluctance to criticise a doctor or provider with whom they have to maintain an ongoing relationship will not be addressed simply by changing the survey method. Efforts should be made to ensure that providers and managers understand that absolute scores paint an optimistic picture of patients' true views.

Surveys are not sufficient to fully capture patient feedback

Across primary and out-of-hours care settings, staff view patient surveys as necessary, but not sufficient. Alternative methods for gaining more qualitative feedback were commonly used to supplement survey scores, with free text often viewed as providing more actionable data than responses to standard survey questions. Taken alongside our findings on patients' reluctance to criticise doctors through surveys and staff challenges to the credibility of surveys, we suggest that additional approaches are therefore needed to better capture aspects of patient experience that can be used to improve the quality of care.

The need for valid, reliable individual-level feedback for doctors

Despite the comments above, we have shown that there is substantial variation in performance within practices for aspects of care related to individual doctors (e.g. doctor–patient communication). Reporting patient experience at practice level masks this variation and makes it more difficult for doctors to relate to feedback. However, we have also shown that, if a practice has overall high scores for doctor–patient communication, it is very unlikely that such a practice contains a low-scoring doctor. In contrast, when a practice is low scoring, individual doctors may be high or low scoring. Therefore, if there are additional requirements for individual-level surveys, they could be focused on practices with low overall scores. Additionally, robust mechanisms are required to help practices, particularly lower-scoring practices, identify and support individual doctors whose patient feedback identifies areas of potential improvement.

We note that, at present, data are provided at practice level for the GP Patient Survey, scores are produced at practice level for the Friends and Family Test and GPs have to provide individual-level surveys to meet GMC requirements for revalidation. This results in considerable overlap and duplication and adds to the

sense that these are 'boxes to be ticked' rather than sources of information that are valuable for improving care.

Patient surveys need to become more meaningful to staff

Our research shows that primary care staff in different settings are ambivalent about the value of patient surveys. Although believing in general about the importance of issues such as doctor–patient communication, they use every opportunity to challenge the credibility and reliability of scores produced by national surveys. This is not helped by their recent experiences, for example of a poorly conceived attempt to tie financial incentives to patient reports of waiting times to get an appointment[306] and the imposition of the Friends and Family Test, which is even regarded by NHS England as being of limited value for comparing health-care organisations.[60]

On the whole, practices found it easier to engage with items on surveys that related to practice management (e.g. availability of appointments, ability to get through on the telephone) than to items that related to issues around communication between patients and clinical staff. Staff viewed surveys as necessary, but not sufficient, and expressed a clear preference for qualitative feedback to supplement survey scores as this provided more actionable data on which to mount quality improvement initiatives.

Immediacy of feedback, regularity of feedback and having some control over the questions asked were all aspects of our experiment with RTF that were valued by practices and had the potential to make feedback more useful. However, a number of important questions remain before RTF could be recommended as a replacement for postal questionnaires. We outline these in the next section on research recommendations.

The value of surveys in monitoring national trends

Despite some reservations about the value of national surveys as vehicles for stimulating quality improvement in general practices and out-of-hours services, they can be important for monitoring national trends. For example, the GP Patient Survey is the only source of data which demonstrates that, year on year, from 2010 to 2015, patients report that they have had increasing difficulty in seeing a doctor of their choice. Indeed, for out-of-hours services the GP Patient Survey is the only way to monitor such trends as individual services use very different tools and approaches, precluding comparisons. Additionally, patient feedback – particularly in secondary care – is used for organisational risk assessment and regulatory monitoring. However, when national surveys are used to monitor trends in care it is important that the questions stay the same. In contrast to questions in the GP Patient Survey related to whether or not patients are able to see a doctor of their choice, questions in the survey on access have undergone major changes, making it difficult to follow long-term trends. However, it should be noted that much smaller sample sizes are required to monitor national trends and comparable national surveys often include tens of thousands of participants rather than millions. Our work on out-of-hours care suggests some ways in which the current questions in the GP Patient Survey could be improved.

Development of surveys in out-of-hours care

Our work on the use of patient experience surveys in out-of-hours care highlights a number of areas requiring consideration. National quality requirements (NQR5) state that all out-of-hours services must audit patient experience but provide no information on how to do this.[307] In the absence of clear guidance on tools and approaches, many services are taking different tacks to both collect and act on patient feedback. As well as being inefficient in approach, with little consistency or shared learning, this also precludes national comparisons being made between providers. We suggest that NQR5 should be reviewed and tightened to avoid the duplication of effort occurring in different services.

Second, out-of-hours items from the GP Patient Survey are now being used for the purposes of CQC and National Audit Office monitoring of out-of-hours care. Our research in this area commenced prior to the launch of the CQC and providers knew little about the GP Patient Survey and expressed concern about the relevance of the out-of-hours items. Our research suggests that, subject to minor amendments, the GP Patient Survey is suitable for this kind of national monitoring of out-of-hours care; indeed, it is the only

current approach suitable for monitoring, given the variation in approaches to patient feedback currently taken by service providers. However, although the GP Patient Survey enables the use of benchmarking, it is not sufficiently detailed to support quality improvement and as such is unlikely to replace the in-house methods and tools being used by providers. We also note that current presentations of GP Patient Survey data for out-of-hours care are at 'commissioner' level; as providers often cover more than one commissioner level, such analyses may not highlight problems occurring at the larger organisational level. Finally, to look at the performance of different out-of-hours providers on key patient experience measures, it is important that NHS England maintains a list of such providers to ensure oversight, which it currently does not.

Overall, large-scale postal surveys are likely to remain the dominant approach for gathering patient feedback for the time being, although refinements to this approach as well as the development of other modes are required to address the weaknesses that we have identified. We are aware that providers are experimenting with a wide range of other approaches, one of which (RTF) has been part of our research. Other methods include interviews and focus groups, online feedback, analysis of complaints, practice participation groups and social media. In the following section, we outline recommendations for research and identify the criteria that any new methods will need to meet to become useful quality improvement tools.

Recommendations for research

The world of patient feedback is becoming increasingly diverse and complex, with standard patient survey approaches being supplemented by the use of tablets, kiosks, online feedback, including that provided by the NHS and by commercial organisations, analysis of complaints, the use of interviews and focus groups and practice participation groups. In addition, social media may come to play an important part in how patients choose their doctor and how they feed back on their experiences. Some of these new approaches are being evaluated in terms of their ability to provide more detailed information on what is needed to improve services, for example using patient narratives[308] and through the analysis of internet-based feedback.[309,310] However, despite the plethora of approaches to gathering patient feedback, our research demonstrates that there is a major deficit in taking action as a result of such feedback. Enabling and supporting providers to engage with and plan changes may require complex whole-system approaches, and our knowledge of what is most effective in this area is currently sparse.

Research is therefore needed into how gathering and acting on patient feedback may be best supported, across five key areas:

1. How patient experience can be captured so that it more effectively identifies areas of performance that could be improved – this should include investigation of diverse methods of obtaining patient feedback to support patients to highlight poor care when necessary. An additional important area of work is how some of the issues highlighted within this report, such as patients' reluctance to criticise, apply to different approaches to assessing patient experience using either rating-type or report-type questionnaire items.
2. The system, practitioner and patient factors that influence poorer reported experiences of care in South Asian patient groups and how these may be addressed – this should include a particular focus on the impact of cross-cultural consultations.
3. How information from patients can be fed back to clinicians and services in a way that appears credible to them – this should include evaluations of approaches to increase the plausibility of patient surveys, such as greater use of benchmarking and innovative ways of presenting and interpreting findings, as well as assessment of varying, tailored ways of presenting feedback to the different health-care professionals who might receive feedback on their care. Of additional relevance here is how clinicians are encouraged to reflect on their own performance and others' assessments of this, with the aim of understanding where and how gaps in evaluations may occur.
4. How services can be organised and managed in such a way that patient feedback is seen as a positive opportunity for improving services.

5. What interventions are most effective in improving care when deficiencies in care are identified – the area where there is the greatest gap here is in doctor–patient communication, with our results showing that clinicians have great difficulty in even discussing deficiencies among their colleagues and that few effective interventions exist.

Our finding in the research on out-of-hours care that commercial providers had lower ratings for patient experience than services provided by the NHS is consistent with previous work suggesting that practices working under Alternative Provider Medical Services contracts, which are sometimes provided by the private sector, may provide worse care.[311] However, the circumstances in which commercial providers gain contracts for primary care services may be very different from those in other areas. The way in which the primary care workforce is configured is changing rapidly, with an increase in the proportion of salaried GPs, the development of GP federations and super-practices and an increase in the number of large-scale provider groups (owned both by commercial companies and by GPs). It is important that these changes should be monitored so that we understand their impact on quality of care.

Acknowledgements

We would like to express our particular thanks to the lay members of the IMPROVE advisory group for their commitment over the 5 years of the programme and for sharing their experiences and views and providing guidance throughout this time. Thanks, too, to Dr Sahadev Swain for his contribution to the group and, in particular, his expertise on the issues facing patients from minority ethnic backgrounds.

Contributions of authors

The report authors' contributions are listed for each workstream in the tables below, alongside the contributions from the many others who made this programme of work possible. *Chapters 1* and *12* were drafted by **John Campbell** and **Martin Roland**, with additional input from **Jenni Burt**. The practice recommendations outlined by **Martin Roland**, **John Campbell** and **Jenni Burt** were discussed at a full IMPROVE team meeting, with particular contributions from **Georgios Lyratzopoulos**, **Gary Abel**, **Suzanne Richards**, **Marc N Elliott**, **Charlotte Paddison** and **Jenny Newbould**. **Julia Beckwith** conducted a review of the literature that supported *Chapter 1*. Details of the overall contributions of the authors are listed in *Table 62*.

TABLE 62 Overall contribution to the programme of research

Name and role	Chapters contributed to	Nature of contribution
Contributions of authors		
Jenni Burt (Senior Research Associate, University of Cambridge)	All	Programme manager: contributed to the design and oversaw the conduct of the programme, reviewing of the literature and analysis and interpretation of the data and writing of individual project reports. Drafted and edited the final report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	All	Co-chief investigator: contributed to the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Gary Abel (Senior Research Associate, University of Cambridge)	*Chapters 2–6* and *9*	Lead statistician: contributed to the design of the study, conceived and conducted data analysis and interpretation and drafted and edited the report as necessary
Ahmed Aboulghate (PhD student, University of Cambridge)	*Chapter 4*	Statistical analysis and interpretation of the data
Faraz Ahmed (PhD student, University of Cambridge)	*Chapter 2*	Study researcher: contributed to study set-up (ethics and research management and governance), participant recruitment, data collection and analysis of the data for the South Asian workstream
Anthea Asprey (Associate Research Fellow, University of Exeter)	*Chapters 7* and *9*	Study researcher: conducted focus groups and analysed the data
Heather Barry (Associate Research Fellow, University of Exeter)	*Chapter 11*	Study researcher: contributed to study design, organisation, data collection, analysis and interpretation of the findings and drafting of the report

TABLE 62 Overall contribution to the programme of research (*continued*)

Name and role	Chapters contributed to	Nature of contribution
Julia Beckwith (Research Assistant, University of Cambridge)	*Chapters 2* and *6*	Study researcher: contributed to reviewing the literature and analysis of the data and drafting of the report
John Benson (Senior Lecturer, University of Cambridge)	*Chapters 3* and *6*	Study advisor: contributed to the design of the study, the development of the GCRS and data interpretation
Olga Boiko (Associate Research Fellow, University of Exeter)	*Chapters 7* and *8*	Study researcher: contributed to the design of the study and study set-up, conducted focus groups, analysed the data and edited the report as necessary (*Chapter 7* only)
Pete Bower (Professor, University of Manchester)	*Chapter 10*	Study advisor: contributed to study design and reviewing the literature
Raff Calitri (Research Fellow, University of Exeter)	*Chapter 11*	Study researcher: assisted with organisation, data collection and data analysis and interpretation
Mary Carter (Associate Research Fellow, University of Exeter)	*Chapters 9* and *10*	Study researcher: collected qualitative and quantitative data, conducted the majority of the qualitative analysis and contributed to the interpretation of the results and drafted the qualitative section of the report
Antoinette Davey (Research Fellow, University of Exeter)	*Chapters 2*, *3* and *7–10*	Study researcher: responsible for reviewing the literature, contributed to study organisation (*Chapter 9*), participant recruitment and data collection and analysis and interpretation of the data and commented on the report
Marc N Elliott (Distinguished Chair in Statistics, RAND Corporation)	*Chapters 3–6* and *9*	Statistical advisor: contributed to the design of the study, data analysis and interpretation and drafting of the report
Natasha Elmore (Research Assistant, University of Cambridge)	*Chapters 2*, *3* and *6–10*	Study researcher: contributed to the design of the study, study set-up (ethics and research management and governance) and reviewing the literature and assisted with participant recruitment and analysis of the data. Contributed to drafting of individual project reports and editing of the final report
Conor Farrington (Research Associate, University of Cambridge)	*Chapters 7* and *8*	Study researcher: contributed to the design of the study, study set-up, data collection, analysed and interpreted the data and wrote the project report (*Chapter 8* only)
Hena Wali Haque (Research Assistant, University of Cambridge)	*Chapter 2*	Study researcher: contributed to participant recruitment and data collection
William Henley (Professor of Medical Statistics, University of Exeter)	*Chapter 11*	Study contributor: assisted with data analysis and interpretation
Val Lattimer (Professor of Health Services Research and Dean of Health Sciences, University of East Anglia)	*Chapter 4*	Study advisor: formulated aspects of the research question, contributed to the design of the analysis and interpretation of the data and commented on the report
Nadia Llanwarne (Academic Clinical Fellow/GP, University of Cambridge)	*Chapters 2* and *6*	Study researcher: responsible for reviewing the literature, participant recruitment and data collection, analysis and interpretation of the data and drafting of the report
Cathy Lloyd (Professor of Health Studies, The Open University)	*Chapters 5* and *6*	Study advisor: contributed to the interpretation of the ethnicity interaction analysis
Georgios Lyratzopoulos (Reader in Cancer Epidemiology, University College London)	*Chapter 5*	Lead for the first ethnicity analysis: designed and oversaw the analysis, interpreted the data and contributed to drafting of the report

TABLE 62 Overall contribution to the programme of research (*continued*)

Name and role	Chapters contributed to	Nature of contribution
Inocencio Maramba (Associate Research Fellow, University of Exeter)	*Chapters 2, 3* and *7–9*	Study researcher: assisted with study setup and practice and participant recruitment and was responsible for local data entry systems and storage (*Chapter 3* only)
Luke Mounce (Associate Research Fellow, University of Exeter)	*Chapter 10*	Study statistician: conducted quantitative analysis and contributed to the drafting of the project report
Jenny Newbould (Honorary Research Fellow, University of Cambridge)	*Chapters 2* and *7–10*	Contributed to the design of the study, reviewing the literature, participant recruitment and data collection, analysis and interpretation of the data and drafting the report. Contributed to qualitative data collection (*Chapter 10*)
Charlotte Paddison (Senior Lecturer, Anglia Ruskin University)	*Chapters 3* and *9*	Study advisor: contributed to the design of the study, study set-up (*Chapter 9* only) and data interpretation
Richard Parker (Research Assistant, University of Cambridge)	*Chapter 4*	Statistical analysis and interpretation of the data
Suzanne Richards (Senior Lecturer in Primary Care, University of Exeter)	*Chapter 11*	Workstream lead: responsible for protocol design, study organisation, data collection, analysis and interpretation of the findings, drafting the report and critiquing all outputs for important intellectual content
Martin Roberts (Senior Psychometrician, University of Plymouth)	*Chapter 9*	Statistician: conducted data analysis and contributed to the drafting of the report
Claude Setodji (Senior Statistician, RAND Corporation)	*Chapter 5*	Study statistician: designed and conducted the DIF analysis, interpreted the data and contributed to the drafting of the report
Jonathan Silverman (Associate Dean, School of Clinical Medicine, University of Cambridge)	*Chapter 3*	Study advisor: contributed to the design of the study, the development of the GCRS and data interpretation
Fiona Warren (Lecturer in Medical Statistics, University of Exeter)	*Chapter 11*	Study contributor: assisted with data analysis and interpretation
Ed Wilson (Senior Research Associate, University of Cambridge)	*Chapter 10*	Study researcher: responsible for the economic analysis
Christine Wright (Research Fellow, University of Exeter Medical School)	*Chapter 10*	Workstream lead: contributed to the study design (development of the protocol), study organisation and set-up (recruitment of practices, ethics and research management and governance), reviewing the literature, supervision of data collection and collation of cost analysis data and contributed to the draft quantitative analysis plan and interpretation and drafting of the project report
Martin Roland (Professor of Health Services Research, University of Cambridge)	All	Co-chief investigator and principal investigator: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Contributions of others		
Emily Taylor (Research Associate, University of Cambridge)	*Chapters 2, 3* and *7–9*	Study researcher: assisted with study set-up, participant recruitment and data collection

Chapter 2

We would like to thank the 13 general practices that participated in the project, particularly the 45 GPs who so kindly agreed for their consultations with patients to be video recorded. We would particularly like to thank the 52 patients who so generously gave up their time to take part in a video elicitation interview, without which this study would not have been possible. We also give our thanks to the three practices and eight GPs who took part in the additional interviews with South Asian respondents and the 23 patients from these three practices who so generously gave up their time to take part in a video elicitation interview, without which this study would not have been possible.

Finally, we would like to thank the IMPROVE advisory group who gave their advice on study design and interpretation of the data.

TABLE 63 *Chapter 2* acknowledgements: contributions to the video elicitation interview workstream

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator and principal investigator for this work stream: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator: contributed to the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager: contributed to the design and oversaw the conduct of the study, reviewing of the literature and analysis and interpretation of the data. Drafted and edited the report as necessary
Faraz Ahmed (PhD student, University of Cambridge)	Study researcher: contributed to study set-up (ethics and research management and governance), participant recruitment, data collection and analysis of the data for the South Asian workstream
Julia Beckwith (Research Assistant, University of Cambridge)	Study researcher: contributed to reviewing the literature and analysis of the data
Antoinette Davey (Research Fellow, University of Exeter)	Study researcher: responsible for reviewing the literature, participant recruitment and data collection and analysis and interpretation of the data and commented on the report
Natasha Elmore (Research Assistant, University of Cambridge)	Study researcher: contributed to the design of the study, study set-up (ethics and research management and governance) and reviewing of the literature and assisted with participant recruitment and analysis of the data
Hena Wali Haque (Research Assistant, University of Cambridge)	Study researcher: contributed to participant recruitment and data collection
Nadia Llanwarne (Academic Clinical Fellow/GP, University of Cambridge)	Study researcher: responsible for reviewing the literature, participant recruitment and data collection, analysis and interpretation of the data and drafting of the report
Inocencio Maramba (Associate Research Fellow, University of Exeter)	Study researcher: assisted with participant recruitment
Jenny Newbould (Honorary Research Fellow, University of Cambridge)	Workstream lead: contributed to the design of the study, reviewing the literature, participant recruitment and data collection, analysis and interpretation of the data and drafting the report
Contributions of others	
Emily Taylor (Research Associate, University of Cambridge)	Study researcher: assisted with participant recruitment and data collection

Chapter 3

We would like to thank the 13 general practices that participated in the project, particularly the 45 GPs who so kindly agreed for their consultations with patients to be video recorded and the receptionists and administrative staff who assisted with patient identification and recruitment. We would also like to thank the 529 patients who completed a study questionnaire following their consultation with a GP. The rating of the consultations would not have been possible without our trained GCRS raters, to whom we extend our thanks for their expertise. **Pete Bower** gave important advice on study design. Finally, we would like to thank the IMPROVE advisory group who gave advice on study design and interpretation of the data.

TABLE 64 *Chapter 3* acknowledgements: contributions to the consultation rating workstream

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator: contributed to the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager and workstream lead: contributed to the design of the study, oversaw the conduct of the study, assisted with the analysis, interpreted the data and drafted the report
Gary Abel (Senior Research Associate, University of Cambridge)	Lead study statistician: contributed to the design of the study, conducted data analysis, interpreted the data and contributed to the drafting of the report
John Benson (Senior Lecturer, University of Cambridge)	Study advisor: contributed to the design of the study, the development of the GCRS and data interpretation
Antoinette Davey (Research Fellow, University of Exeter)	Study researcher: responsible for participant recruitment and data collection and assisted with data entry, storage and management
Marc N Elliott (Distinguished Chair in Statistics, RAND Corporation)	Statistical advisor: contributed to the design of the study, data analysis and interpretation and drafting of the report
Natasha Elmore (Research Assistant, University of Cambridge)	Study researcher: contributed to the design of the study and study set-up (ethics and research management and governance), assisted with participant recruitment, co-ordinated the rating of videos and responsible for local data entry systems and storage
Nadia Llanwarne (Academic Clinical Fellow/GP, University of Cambridge)	Study researcher: responsible for participant recruitment and data collection, assisted with data entry, storage and management and contributed to data interpretation
Inocencio Maramba (Associate Research Fellow, University of Exeter)	Study researcher: assisted with participant recruitment and responsible for local data entry systems and storage
Jenny Newbould (Honorary Research Fellow, University of Cambridge)	Study researcher: responsible for participant recruitment and data collection, assisted with data entry, storage and management and contributed to data interpretation
Charlotte Paddison (Senior Lecturer, Anglia Ruskin University)	Study advisor: contributed to the design of the study and data interpretation
Jonathan Silverman (Associate Dean, School of Clinical Medicine, University of Cambridge)	Study advisor: contributed to the design of the study, the development of the GCRS and data interpretation
Contributions of others	
James Brimicombe (Data Manager, University of Cambridge)	Data manager: designed data entry systems and storage
Emily Taylor (Research Associate, University of Cambridge)	Study researcher: assisted with participant recruitment and data collection

Chapter 4

This chapter represents a series of analyses of GP Patient Survey data conducted by members of the IMPROVE team during the course of the programme. We would like to thank Ipsos MORI for assisting with various enquiries during this time, as well as NHS England for their continued support for our analytical work in this area.

TABLE 65 *Chapter 4* acknowledgements: contributions to the GP Patient Survey analyses

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the analyses and the interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator: contributed to the design and conduct of the analysis and interpretation of the data and edited the report as necessary
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager: contributed to the design and conduct of the analysis and the interpretation of the data and edited the report as necessary
Gary Abel (Senior Research Associate, University of Cambridge)	Lead study statistician: conceived and conducted data analyses, interpreted the data and drafted the report
Ahmed Aboulghate (PhD student, University of Cambridge)	Statistical analysis and interpretation of data
Marc N Elliott (Distinguished Chair in Statistics, RAND Corporation)	Statistical analysis and interpretation of data
Val Lattimer (Professor of Health Services Research and Dean of Health Sciences, University of East Anglia)	Study advisor: formulated aspects of the research question, contributed to the design of the analysis and the interpretation of the data and commented on the report
Richard Parker (Research Assistant, University of Cambridge)	Statistical analysis and interpretation of data

Chapter 5

This chapter describes further analyses of GP Patient Survey data conducted by members of the IMPROVE team during the course of the programme. We would like to thank Ipsos MORI for assisting with various enquiries during this time, as well as NHS England for their continued support for our analytical work in this area.

TABLE 66 *Chapter 5* acknowledgements: contributions to the GP Patient Survey analyses on experiences of minority ethnic groups

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator and co-principal investigator for this workstream: oversaw the design and conduct of the data analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator and co-principal investigator for this workstream: oversaw the design and conduct of the data analysis and interpretation of the data and edited the report as necessary
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager: contributed to the design of a number of the ethnicity analyses and interpretation of the data and drafted the report

TABLE 66 *Chapter 5* acknowledgements: contributions to the GP Patient Survey analyses on experiences of minority ethnic groups (*continued*)

Name and role	Nature of contribution
Gary Abel (Senior Research Associate, University of Cambridge)	Study statistician: designed and conducted the ethnicity interaction analysis and the practice-level analysis and interpreted the data and drafted the report
Marc N Elliott (Distinguished Chair in Statistics, RAND Corporation)	Statistical advisor: contributed to the design, conduct and interpretation of the analyses and contributed to drafting of the report
Cathy Lloyd (Professor of Health Studies, The Open University)	Study advisor: contributed to the interpretation of the ethnicity interaction analysis
Georgios Lyratzopoulos (Reader in Cancer Epidemiology, University College London)	Lead for the first ethnicity analysis: designed and oversaw the analysis, interpreted the data and contributed to the drafting of the report
Claude Setodji (Senior Statistician, RAND Corporation)	Study statistician: designed and conducted the DIF analysis, interpreted the data and contributed to the drafting of the report

Chapter 6

This complex study would not have been possible without the contributions of many people. We would particularly like to thank Steve Attmore for his assistance with the development and recording of the study vignettes and the Media Studio at Cambridge University Hospitals NHS Foundation Trust for its assistance with the recording and editing of the vignettes. We would also like to thank all of the actors who took roles in the vignettes. A wide range of staff at Ipsos MORI contributed to developing and refining the study design: we would particularly like to thank Anna Carluccio and Lara Sarson for their professional oversight of the project and their colleagues James Wilks and Victoria Hough for their input. **Pete Bower** gave important advice on study design. Special thanks go to the team of Ipsos MORI fieldworkers who so diligently worked to recruit participants and conduct interviews. Special thanks, too, to the 1124 participants who gave up their time to view and rate the simulated GP consultation vignettes – without them this project would not have been possible. Finally, many thanks to the IMPROVE advisory group for its assistance with study design and data interpretation.

TABLE 67 *Chapter 6* acknowledgements: contributions to the vignette study

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator: contributed to the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager and workstream lead: designed the study, designed and produced the study vignettes, oversaw the study conduct, assisted with the analysis and interpretation of the data and drafted the report
Gary Abel (Senior Research Associate, University of Cambridge)	Lead study statistician: designed the study, conducted data analysis and interpreted the data and drafted the report
Julia Beckwith (Research Assistant, University of Cambridge)	Study researcher: co-ordinated the rating of vignettes by GCRS raters
John Benson (Senior Lecturer, University of Cambridge)	Study advisor: contributed to the development and production of the study vignettes

TABLE 67 *Chapter 6* acknowledgements: contributions to the vignette study (*continued*)

Name and role	Nature of contribution
Marc N Elliott (Distinguished Chair in Statistics, RAND Corporation)	Statistical advisor: contributed to the design of the study, data analysis and interpretation and drafting of the report
Natasha Elmore (Research Assistant, University of Cambridge)	Study researcher: conducted the review of the literature and contributed to the development and production of the study vignettes
Nadia Llanwarne (Academic Clinical Fellow/ GP, University of Cambridge)	Study advisor: contributed to the production of the study vignettes
Cathy Lloyd (Professor of Health Studies, The Open University)	Study advisor: contributed to the study design and interpretation of the data
Contributions of others	
Steve Attmore (Simulated Patient Co-ordinator, University of Cambridge)	Study contributor: assisted with the design and development of the vignettes, recruited all vignette actors and oversaw the vignette role plays
Anna Carluccio (Research Director, Ipsos MORI)	Project leader at market research agency: contributed to the study design and oversaw data collection
Lara Sarson (Research Manager, Ipsos MORI)	Project manager at market research agency: contributed to the study design and managed data collection

Chapter 7

This study, involving focus groups with practice staff, was linked to the survey reported in *Chapter 9*. We would like to thank all those practices that made our research team so welcome throughout the data collection period. We would particularly like to thank all of the practice staff who gave up their time to take part in focus groups and reflect on the way in which they engage with patient feedback: we are most grateful for their important contribution to this work. Thanks, too, to the IMPROVE advisory group who supported the research team throughout.

TABLE 68 *Chapter 7* acknowledgements: contributions to the focus group study

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator: contributed to the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the study and the analysis and interpretation of the data and drafted the report
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager: contributed to the design of the study, oversaw the conduct of the study, analysed the data and drafted the report
Anthea Asprey (Associate Research Fellow, University of Exeter)	Study researcher: conducted focus groups and analysed the data
Olga Boiko (Associate Research Fellow, University of Exeter)	Study researcher: contributed to the design of the study and study set-up, conducted focus groups, analysed the data and edited the report as necessary
Antoinette Davey (Research Fellow, University of Exeter)	Study researcher: assisted with study set-up, practice recruitment and data entry
Natasha Elmore (Research Assistant, University of Cambridge)	Study researcher: assisted with study set-up, practice recruitment, data collection and data entry
Conor Farrington (Research Associate, University of Cambridge)	Study researcher: assisted with data collection

TABLE 68 *Chapter 7* acknowledgements: contributions to the focus group study (*continued*)

Name and role	Nature of contribution
Inocencio Maramba (Associate Research Fellow, University of Exeter)	Study researcher: assisted with study set-up and practice recruitment
Jenny Newbould (Honorary Research Fellow, University of Cambridge)	Study researcher: assisted with study set-up, practice recruitment and data collection
Contributions of others	
Emily Taylor (Research Associate, University of Cambridge)	Study researcher: assisted with study set-up, practice recruitment and data collection

Chapter 8

This study, involving interviews with GPs, was linked to the survey reported in *Chapter 9*. We would like to thank all of those practices who made our research team so welcome as we conducted the survey. The study would not have happened without those GPs who were willing to participate in interviews with our research team, in which they reflected honestly and openly about their views on patient feedback and, in particular, their personal experiences of receiving patient feedback. Thanks go additionally to the IMPROVE advisory group who supported the research team throughout.

TABLE 69 *Chapter 8* acknowledgements: contributions to the GP interview study

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager: contributed to the design of the study, oversaw the conduct of the study, contributed to data collection and the analysis of the data and edited the report as necessary
Olga Boiko (Associate Research Fellow, University of Exeter)	Study researcher: contributed to the design of the study and study set-up, carried out data collection and contributed to the analysis of the data
Antoinette Davey (Research Fellow, University of Exeter)	Study researcher: assisted with study set-up, practice recruitment and data entry
Natasha Elmore (Research Assistant, University of Cambridge)	Study researcher: assisted with study set-up and practice recruitment
Conor Farrington (Research Associate, University of Cambridge)	Study researcher: contributed to the design of the study and study set-up, carried out data collection, analysed and interpreted the data and drafted the report
Inocencio Maramba (Associate Research Fellow, University of Exeter)	Study researcher: assisted with study set-up and practice recruitment
Jenny Newbould (Honorary Research Fellow, University of Cambridge)	Study researcher: assisted with study set-up and practice recruitment
Contributions of others	
Emily Taylor (Research Associate, University of Cambridge)	Study researcher: assisted with study set-up and practice recruitment

Chapter 9

The survey reported within this chapter involved a large-scale data collection effort to which many people contributed. We would like to extend particular thanks to the 25 general practices that participated in the study and the staff within these who went out of their way to ensure that the survey was conducted efficiently and to the highest standards. Thanks, too, to all those patients who took the time to respond to the questionnaire. The IMPROVE advisory group contributed particular help with devising study documentation, for which we are very grateful. Finally, **Pete Bower** gave important advice on study design.

TABLE 70 *Chapter 9* acknowledgements: contributions to the patient survey workstream

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager: contributed to the design of the study, oversaw study set-up, practice recruitment and the conduct of the study, contributed to data collection, analysis and interpretation and drafted and edited the report as necessary
Gary Abel (Senior Research Associate, University of Cambridge)	Statistician: contributed to the study design, sampled practices for the study, contributed to the analysis plan, analysis and data visualisation and interpretation of the study and helped to draft and edit the report
Anthea Asprey (Associate Research Fellow, University of Exeter)	Study researcher: contributed to study set-up
Mary Carter (Associate Research Fellow, University of Exeter)	Study researcher: contributed to study set-up, practice recruitment and data collection
Antoinette Davey (Research Fellow, University of Exeter)	Study researcher: contributed to the organisation of the study, practice recruitment, data collection and drafting of the report
Marc N Elliott (Distinguished Chair in Statistics, RAND Corporation)	Statistical advisor: contributed to the study design, analysis plan and analysis and data visualisation and interpretation of the study and helped to draft and critique the report
Natasha Elmore (Research Assistant, University of Cambridge)	Study researcher: contributed to study set-up, practice recruitment, data collection and data entry
Inocencio Maramba (Associate Research Fellow, University of Exeter)	Study researcher: contributed to data collection
Jenny Newbould (Honorary Research Fellow, University of Cambridge)	Study researcher: contributed to study set-up, practice recruitment and data collection
Charlotte Paddison (Senior Lecturer, Anglia Ruskin University)	Study advisor: assisted with study design and set up
Martin Roberts (Senior Psychometrician, University of Plymouth)	Statistician: conducted data analysis and contributed to the drafting of the report
Contributions of others	
Amy Gratton (Administrator, University of Exeter)	Study administrator: assisted with study organisation and data entry
Dawn Swancutt (Project Manager, University of Exeter)	Project manager: assisted with study set-up
Emily Taylor (Research Associate, University of Cambridge)	Study researcher: contributed to study set-up, practice recruitment and data collection
Emma Whitton (Administrator, University of Exeter)	Study administrator: assisted with study organisation and data entry

Chapter 10

The completion of this complex workstream was possible only with the contribution of a great many people. We would particularly like to thank the patients and staff from the 12 general practices that participated in the project. We thank also the facilitators who delivered team feedback reflection sessions at six practices during the feasibility and exploratory trial phases. We are grateful to staff from CRT Limited (particularly Richard Farrell, Toby Knight and Nicky Allen) who provided the touch screen equipment, organised data cleaning and summarising, prepared RTF reports for practices and provided technical assistance and advice before and during the RTF implementation period. **Antoinette Davey** and **Mary Carter** conducted all of the fieldwork in the South West of England. **Natasha Elmore**, **Jenny Newbould** and **Jenni Burt** conducted fieldwork at the two Cambridge practices during the exploratory trial phase. **Ed Wilson** designed, analysed and reported the cost analysis elements. **Luke Mounce** conducted and reported the quantitative analysis for the exploratory trial phase. **John Campbell**, **Martin Roland**, **Jenni Burt** and **Gary Abel** provided helpful comments during the development of the study protocol. **Christine Wright** managed the overall conduct and delivery of the workstream.

The development of the value of patient feedback tool as part of this workstream rested on the contribution of a wide range of people. We would particularly like to thank **Nadia Llanwarne**, **John Benson**, Felix Greaves and **Pete Bower** for their critical input into the construction of the scale; the GPs who took part in cognitive interviews; and all of the clinicians who participated in the piloting phases of development by completing the scale in its various developmental incarnations. James Brimicombe was instrumental in co-ordinating online piloting of the tool and we extend our particular thanks to him for all his support with this.

TABLE 71 *Chapter 10* acknowledgements: contributions to the RTF exploratory trial workstream

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Jenni Burt (Senior Research Associate, University of Cambridge)	Programme manager: contributed to the design of the study and the qualitative analysis plan, conducted qualitative data collection, assisted with interpretation of the data and edited the report as necessary
Pete Bower (Professor, University of Manchester)	Study advisor: contributed to study design and reviewing the literature
Mary Carter (Associate Research Fellow, University of Exeter)	Study researcher: collected quantitative and qualitative data, conducted the majority of the qualitative analysis and contributed to the interpretation of the results and; drafted the qualitative section of the report
Antoinette Davey (Research Fellow, University of Exeter)	Contributed to the study design, organisation of the study, recruitment of practices, data collection and input, analysis and interpretation of the qualitative data and drafting of the qualitative results for the report
Natasha Elmore (Research Assistant, University of Cambridge)	Study researcher: responsible for local study set-up (research management and governance and recruitment), collected the data for the Cambridge sites, entered the data for the Cambridge sites and commented on the report
Luke Mounce (Associate Research Fellow, University of Exeter)	Study statistician: conducted quantitative analysis and contributed to the drafting of the report
Jenny Newbould (Honorary Research Fellow, University of Cambridge)	Study researcher: contributed to qualitative data collection

TABLE 71 *Chapter 10* acknowledgements: contributions to the RTF exploratory trial workstream (*continued*)

Name and role	Nature of contribution
Ed Wilson (Senior Research Associate, University of Cambridge)	Study researcher: responsible for the economic analysis
Christine Wright (Research Fellow, University of Exeter Medical School)	Workstream lead: contributed to study design (development of the protocol), study organisation and set-up (recruitment of practices, ethics and research management and governance), reviewing of the literature, supervision of data collection, collation of cost analysis data, the draft quantitative analysis plan, data interpretation and drafting of the report

Chapter 11

The out-of-hours workstream involved contributions from a wide variety of organisations and people. We would particularly like to thank all of the out-of-hours service providers and their staff who participated in the research. We also thank all those service users who took the time to respond to the questionnaire. We are grateful to Ipsos MORI for their assistance in providing the GP Patient Survey data for analysis; Jonathan Jackson from the Health and Social Care Information Centre for providing the data to map out-of-hours GP providers to associated practices and for analytical input; and James Wallis from NHS England for analytical input. Finally, we thank **Martin Roberts** for statistical assistance.

TABLE 72 *Chapter 11* acknowledgements: contributions to the out-of-hours workstream

Name and role	Nature of contribution
Contributions of authors	
Martin Roland (Professor of Health Services Research, University of Cambridge)	Co-chief investigator: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
John Campbell (Professor of General Practice and Primary Care, University of Exeter)	Co-chief investigator and principal investigator for this workstream: oversaw the design and conduct of the study and the analysis and interpretation of the data and edited the report as necessary
Anthea Asprey (Associate Research Fellow, University of Exeter)	Study researcher: secondary analysis of qualitative data
Heather Barry (Associate Research Fellow, University of Exeter)	Study researcher: contributed to study design, organisation, data collection and analysis and interpretation of the findings and drafting of the report
Raff Calitri (Research Fellow, University of Exeter)	Study researcher: assisted with organisation, data collection, data analysis and interpretation
Antoinette Davey (Research Fellow, University of Exeter)	Study researcher: contributed to data collection and data entry
William Henley (Professor of Medical Statistics, University of Exeter)	Study contributor: assisted with data analysis and interpretation
Luke Mounce (Associate Research Fellow, University of Exeter)	Study researcher: contributed to study design, organisation, data collection and analysis and interpretation of the findings and drafting of the report
Suzanne Richards (Senior Lecturer in Primary Care, University of Exeter)	Workstream lead: responsible for protocol design, study organisation, data collection, analysis and interpretation of the findings, drafting of the report and critiquing all outputs for important intellectual content
Fiona Warren (Lecturer in Medical Statistics, University of Exeter)	Study contributor: assisted with data analysis and interpretation

Publications

Articles

Chapter 4

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Chapter 2

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Chapter 3

Abel G. *Rating Communication in GP Consultations: Do Patients and Experienced Trained Raters Agree?* Society for Academic Primary Care London & South East Regional Conference, Cambridge, UK, January 2015.

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Chapter 5

Burt J. *Do Ethnic Disparities in Patient Reported GP–Patient Communication Vary by Age and Gender? Evidence from a National Patient Survey*. Society of Academic Primary Care Annual Scientific Meeting, Oxford, UK, July 2015.

Chapter 6

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Chapter 7

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Data sharing statement

The data arising from the various strands of this programme of work have been archived in accordance with the agreements covered by ethical approvals for the research. For *Chapters 2* and *3*, consent to participate was given on condition of video recording of consultations and associated data being accessible only to members of the immediate IMPROVE research team; therefore, the data generated in these chapters are not suitable for sharing. The GP Patient Survey data used in *Chapters 4* and *5* are accessible by request to NHS England; please contact the author for further information. *Chapter 6* data – rating of simulated consultations – are available by request to the author, as are the survey data set out in *Chapter 9*. The data used in *Chapters 7*, *8*, *10* and *11*, including interviews, observations and focus groups, are not currently available to ensure the confidentiality of the practices that participated.

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Appendix 1 Global Consultation Rating Scale

Calgary Cambridge- Global Consultation Scale (CC-GCS)	Good (2)	Adequate (1)	Not done/poor (0)	Not applicab
Initiating the session				
Greets patient				
Introduces self and nature of interview				
Demonstrates interest and **respect**, attends to patient's physical comfort				
Uses appropriate opening question				
Overall Score for Initiating the Session				
Gathering Information				
Listens attentively, minimising interruption and leaving space for patient				
Encourages patient to **tell the story** of the problem(s) from when first started to the present				
Checks and **screens** for further problems and negotiates agenda				
Overall Score for Problem Identification				
Uses **open and closed questions**, appropriately moving from open to closed				
Facilitates patient's responses verbally and non–verbally e.g. silence, repetition, paraphrasing				
Picks up and responds to verbal and non–verbal **cues** (body language, speech, facial expression)				
Clarifies statements which are vague or need amplification				
Periodically **summarises** & invites patient to correct interpretation or provide further information.				
Uses clear, easily understood language, avoids jargon				
Overall Score for Problem Exploration				
Actively **determines patient's perspective** (ideas, concerns, expectations, feelings, effects on life)				
Appropriately and sensitively **responds to and further explores patient's perspective**				
Overall Score for Patient's Perspective				
Building the relationship				
Demonstrates appropriate **non–verbal behaviour** e.g. eye contact, posture, position, movement, facial				
Overall Score for Non-verbal Communication				
Acknowledges patient's views and feelings; is not judgmental				
Uses **empathy** to communicate appreciation of the patient's feelings or predicament				
Provides **support**: expresses concern, understanding, willingness to help				
Overall Score for Developing Rapport				
Providing Structure				
Progresses from one section to another using **signposting**; includes rationale for next section				
Structures interview in logical **sequence**, attends to **timing**, keeps interview on task				
Overall Score for Providing Structure				
Providing the correct amount/type of info for the individual patient				
Chunks and checks, using patient's response to guide next steps				
Assesses the **patient's starting point** *(good if carefully tailors explanation)*				
Discovers what **other information** would help patient, seeks and addresses patient's info needs				
Overall Score for providing correct amount and type of information				
Aiding accurate recall and understanding				
Organises explanation *(good if uses signposting/summarising)*				
Checks patient's understanding *(good if asks patient to restate information given)*				
Uses clear language, avoids jargon and confusing language				
Overall Score for aiding accurate recall and understanding				
Achieving a shared understanding: incorporating the patient's perspective				
Relates explanations to patient's **illness framework**				
Encourages patient to contribute reactions, feelings and own ideas *(good if responds well)*				
Picks up and responds to **patient's non-verbal and covert verbal cues**				
Overall Score for incorporating the patient's perspective				
Planning: shared decision making				
Explores management **options** with patient				
Involves patient in decision making (good if establishes level of involvement patent wishes)				
Appropriately **negotiates** mutually acceptable action plan				
Overall Score for planning and shared decision-making				
Closure				
Contracts with patient re next steps				
Safety nets				
Summarises session briefly and clarifies plan of care				
Final check that patient agrees and is comfortable with plan				
Overall Score for closure				

Appendix 2 *Chapter 9*: patient questionnaire

PENINSULA
COLLEGE OF MEDICINE & DENTISTRY
UNIVERSITIES OF EXETER & PLYMOUTH

improve

SEEING THE DOCTOR

Please answer the questions below by putting an ✗ in ONE BOX for each question unless more than one answer is allowed (these questions are clearly marked). We will keep your answers completely confidential.

APPOINTMENTS AT YOUR GP SURGERY OR HEALTH CENTRE

How do you normally book your appointments to see a doctor or nurse at this GP surgery or health centre?

Please ✗ <u>all</u> the boxes that apply to you

☐ In person   ☐ Online
☐ By phone   ☐ Digital TV
☐ By fax machine   ☐ Doesn't apply

Which of the following methods would you <u>prefer</u> to use to book appointments at this GP surgery or health centre?

Please ✗ <u>all</u> the boxes that apply to you

☐ In person   ☐ Online
☐ By phone   ☐ Digital TV
☐ By fax machine   ☐ No preference

B. GETTING THROUGH ON THE PHONE

Now please think about times you have phoned this GP surgery or health centre <u>in the past 6 months</u>.

Q3 **In the past 6 months, how easy have you found the following?**

Please put an ✗ in one box for <u>each</u> row

C. SEEING A DOCTOR

Q4 **In the past 6 months, have you <u>tried</u> to see a doctor fairly quickly?**
By 'fairly quickly' we mean on the same day or in the next 2 weekdays the GP surgery or health centre was open.

☐ Yes.........................Please go to Q5
☐ No ....Please go to Q7
☐ Can't remember ....Please go to Q7

page 1   Please turn over ☞

Q5 Think about the last time you tried to see a doctor fairly quickly. <u>Were you able to</u> see a doctor on the same day or in the next 2 weekdays the GP surgery or health centre was open?

☐ Yes .... Please go to Q7
☐ No .... Please go to Q6
☐ Can't remember .... Please go to Q7

Q6 If you couldn't be seen within the next 2 weekdays the GP surgery or health centre was open, why was that?

Please ✗ <u>all</u> the boxes that apply to you

☐ There weren't any appointments
☐ The times offered didn't suit me
☐ The appointment was with a doctor I didn't want to see
☐ I could have seen a nurse but I wanted to see a doctor
☐ I was offered an appointment at a different branch of my surgery
☐ Another reason
☐ Can't remember

Q7 In the past 6 months, have you <u>tried</u> to book ahead for an appointment with a doctor? By 'booking ahead' we mean booking an appointment more than 2 full weekdays in advance.

☐ Yes .... Please go to Q8
☐ No .... Please go to Q9
☐ Can't remember .... Please go to Q9

Q8 Last time you tried to, were you <u>able</u> to get an appointment with a doctor <u>more than</u> 2 full weekdays in advance?

☐ Yes
☐ No
☐ Can't remember

D. ARRIVING FOR YOUR APPOINTMENT

Q9 How easy do you find it to get into the building at this GP surgery or health centre?

☐ Very easy
☐ Fairly easy
☐ Not very easy
☐ Not at all easy

Q10 How clean is this GP surgery or health centre?

☐ Very clean
☐ Fairly clean
☐ Not very clean
☐ Not at all clean
☐ Don't know

Q11 In the reception area, can other patients overhear what you say to the receptionist?

☐ Yes, but I don't mind
☐ Yes, and I am not happy about it
☐ No, other patients can't overhear
☐ Don't know

Q12 How helpful do you find the receptionists at this GP surgery or health centre?

☐ Very helpful
☐ Fairly helpful
☐ Not very helpful
☐ Not at all helpful

Page 2

Q13 **How long after your appointment time do you normally wait to be seen?**

- ☐ I don't normally have appointments at a particular time
- ☐ I am normally seen at my appointment time
- ☐ Less than 5 minutes
- ☐ 5 to 15 minutes
- ☐ 16 to 30 minutes
- ☐ More than 30 minutes
- ☐ Can't remember

Q14 **How do you feel about how long you normally have to wait?**

- ☐ I don't normally have to wait too long
- ☐ I have to wait a bit too long
- ☐ I have to wait far too long
- ☐ No opinion/doesn't apply

E. SEEING THE DOCTOR YOU PREFER

Q15 **Is there a particular doctor you prefer to see at this GP surgery or health centre?**

- ☐ Yes ..... Please go to Q16
- ☐ No ...... Please go to Q18
- ☐ There is usually only one doctor in my GP surgery or health centre .... Please go to Q18

Q16 **HoHow often do you see the doctor you prefer to see?**

- ☐ Always or almost always
- ☐ A lot of the time Some
- ☐ of the time Never or
- ☐ almost never
- ☐ Not tried at this GP surgery or health centre

Q17 **Was your consultation, which took place on the date referred to in the accompanying letter, with the doctor you prefer to see?**

- ☐ Yes
- ☐ No

F. OPENING HOURS

Q18 **How satisfied are you with the hours that this GP surgery or health centre is open?**

- ☐ Very satisfied
- ☐ Fairly satisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Fairly dissatisfied
- ☐ Very dissatisfied
- ☐ I'm not sure when my GP surgery or health centre is open

page 3

Please turn over ☞

Q19 **As far as you know, is this GP surgery or health centre open…**

Please put an ✗ in one box for each row

	Yes	No	Sometimes	Don't know
… before 8am?	☐	☐	☐	☐
… at lunchtime?	☐	☐	☐	☐
… after 6.30pm?	☐	☐	☐	☐
… on Saturdays?	☐	☐	☐	☐
… on Sundays?	☐	☐	☐	☐

Q20 **Would you like this GP surgery or health centre to open at additional times?**

☐ Yes ..... Please go to Q21

☐ No ...... Please go to Section G

Q21 **Which one of the following additional times would you most like this GP surgery or health centre to be open? Please pick one answer showing the time you would most like it to be open.**

☐ Before 8am

☐ At lunchtime

☐ After 6.30pm

☐ On a Saturday

☐ On a Sunday

G. SEEING A DOCTOR AT THE GP SURGERY OR HEALTH CENTRE

Thinking about the consultation, which took place on the date referred to in the letter accompanying this questionnaire…

Q22 **How good was the doctor at each of the following?**

Please put an ✗ in one box for each row

	Very good	Good	Neither good nor poor	Poor	Very poor	Doesn't apply
Giving you enough time	☐	☐	☐	☐	☐	☐
Asking about your symptoms	☐	☐	☐	☐	☐	☐
Listening to you	☐	☐	☐	☐	☐	☐
Explaining tests and treatments	☐	☐	☐	☐	☐	☐
Involving you in decisions about your care	☐	☐	☐	☐	☐	☐
Treating you with care and concern	☐	☐	☐	☐	☐	☐
Taking your problems seriously	☐	☐	☐	☐	☐	☐

Q23 **Did you have confidence and trust in the doctor you saw?**

☐ Yes, definitely

☐ Yes, to some extent

☐ No, not at all

☐ Don't know/can't say

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H. YOUR OVERALL SATISFACTION

Q24 **In general, how satisfied are you with the care you get at this GP surgery or health centre?**

☐ Very satisfied
☐ Fairly satisfied
☐ Neither satisfied nor dissatisfied
☐ Fairly dissatisfied
☐ Very dissatisfied

Q25 **Would you recommend this GP surgery or health centre to someone who has just moved to your local area?**

☐ Yes, would definitely recommend
☐ Yes, might recommend
☐ Not sure
☐ No, would probably not recommend
☐ No, would definitely not recommend
☐ Don't know

I. SOME QUESTIONS ABOUT YOU

The following questions will help us to see how experiences vary between different groups of the population. We will keep your answers completely confidential.

Q26 **Are you male or female?**

☐ Male
☐ Female

Q27 **How old are you?**

☐ Under 18   ☐ 55 to 64
☐ 18 to 24   ☐ 65 to 74
☐ 25 to 34   ☐ 75 to 84
☐ 35 to 44   ☐ 85 or over
☐ 45 to 54

Q28 **Which of these best describes what you are doing at present?**

If more than one of these applies to you, please ✗ the main ONE only

☐ Full-time paid work (30 hours or more each week) ....Please go to Q29

☐ Part-time paid work (under 30 hours each week) ....Please go to Q29

☐ Full-time education at school, college or university

☐ Unemployed

☐ Permanently sick or disabled

☐ Fully retired from work

☐ Looking after the home

☐ Doing something else

Please go to Q31

Q29 **In general, how long does your journey take from home to work (door to door)?**

☐ Up to 30 minutes
☐ 31 minutes to 1 hour
☐ More than 1 hour
☐ I live on site

Q30 **If you need to see a doctor at your GP surgery or health centre during your typical working hours, can you take time away from your work to do this?**

☐ Yes
☐ No

Q31 **In general, would you say your health is…?**

☐ Excellent
☐ Very good
☐ Good
☐ Fair
☐ Poor

Please turn over ☞

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Q32 **Do you have any of the following long-standing conditions? Please include problems which are due to old age.**

Please ✗ all the boxes that apply to you

☐ Deafness or severe hearing impairment

☐ Blindness or severe visual impairment

☐ A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, lifting or carrying

☐ A learning difficulty

☐ A long-standing psychological or emotional condition

☐ Other, including any long-standing illness

☐ No, I do not have a long-standing condition

Q33 **Are you a deaf person who uses sign language?**

☐ Yes

☐ No

Q34 **Are you a parent or a legal guardian for any children aged under 16 currently living in your home?**

☐ Yes

☐ No

Q35 **Do you have carer responsibilities for anyone in your household with a long-standing health problem or disability?**

☐ Yes

☐ No

Q36 **What is your ethnic group?**
Choose one section from A to E below, then select the appropriate option to indicate your ethnic group

A. White

☐ British

☐ Irish

☐ Any other White background

B. Mixed

☐ White and Black Caribbean

☐ White and Black African

☐ White and Asian

☐ Any other Mixed background

C. Asian or Asian British

☐ Indian

☐ Pakistani

☐ Bangladeshi

☐ Any other Asian background

D. Black or Black British

☐ Caribbean

☐ African

☐ Any other Black background

E. Chinese or other ethnic group

☐ Chinese

☐ Any other ethnic group

Q37 **Were you born in the UK?**

☐ Yes

☐ No

Q38 **What language do you speak most often at home?**

☐ English

☐ Other (please specify)

[   ]

page **6**

THANK YOU FOR YOUR TIME
Please return this questionnaire in the pre-paid envelope provided (no stamp is needed).

If for any reason you do not have a pre-paid envelope, please return the questionnaire using the freepost address below:

GPPS PROGAMME
FREEPOST RRJE-SLSG-RJSY
Peninsula College of Medicine and Dentistry
Primary Care Research Group
Smeall Building, St Lukes Campus
Magdalen Road
Exeter
EX1 2LU

This questionnaire has been developed in conjunction with the Peninsula Medical School and the General Practice and Primary Care Research Unit at the University of Cambridge.

Your practice has asked that we collect any further comments you would like to make about the service they provide.

_____

_____

_____

_____

_____

_____

_____

_____

_____

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Appendix 3 *Chapter 9*: calculation of reliability

Reliability of doctors' mean scores

Unit-level reliability is defined as the proportion of variance in reported unit sample means (e.g. practice means or physician means) attributable to true variation between units.[30] Owing to the nesting of doctors within practices, the reliability of the mean score for a randomly chosen doctor is calculated from the variance components of the three-level hierarchical model using the formula:

$$\text{Reliability} = [\text{var}(P) + \text{var}(D)]/[\text{var}(P) + \text{var}(D) + \text{var}(E)/N], \tag{2}$$

where var(P) = variance due to practices; var(D) = variance due to doctors; var(E) = variance due to patients and random error; and N = number of patient scores per doctor.

By inserting the values of the variance components and manipulating this formula, the number of patient scores per doctor that are required to achieve a given level of reliability can be calculated. These calculations can be performed using variance components obtained from a model with no fixed effects where the resulting reliability is that pertaining to the raw mean scores. Alternatively, we can take into account the fact that some of the variation (at all levels) may occur due to different patient demographics and calculate a reliability of an adjusted mean score such as those shown in *Figures 20* and *21*. Both raw and adjusted reliabilities estimated from our data are shown in *Table 29*.

Appendix 4 Cochrane Central Register of Controlled Trials (CENTRAL) search strategy

#1　MeSH descriptor Family Practice, this term only

#2　MeSH descriptor Primary Health Care, this term only

#3　MeSH descriptor Community Health Services explode all trees

#4　MeSH descriptor Physicians, Family, this term only

#5　MeSH descriptor Comprehensive Health Care, this term only

#6　MeSH descriptor Patient Care Team, this term only

#7　MeSH descriptor Ambulatory Care, this term only

#8　"shared care":ti,ab

#9　"integrated care":ti,ab

#10　"family practice":ti,ab

#11　"family practitioner":ti,ab

#12　"general practice":ti,ab

#13　"general practitioner":ti,ab

#14　"community care":ti,ab

#15　"family medicine":ti,ab

#16　"family physician":ti,ab

#17　"family physicians":ti,ab

#18　"primary care":ti,ab

#19　"primary health care":ti,ab

#20　"primary healthcare":ti,ab

#21　"family doctor":ti,ab

#22　"family doctors":ti,ab

#23　"primary medical care":ti,ab

#24　"general physician":ti,ab

#25   "general physicians":ti,ab

#26   "general practices":ti,ab

#27   "general practitioners":ti,ab

#28   "primary care practitioners":ti,ab

#29   "primary care practitioner":ti,ab

#30   (community next health):ti,ab

#31   (community next healthcare):ti,ab

#32   "health care":ti,ab

#33   GP:ti,ab

#34   GPs:ti,ab

#35   "primary healthcare team":ti,ab

#36   "primary healthcare teams":ti,ab

#37   "primary medical care":ti,ab

#38   "general internist":ti,ab

#39   "general internists":ti,ab

#40   obstetric*:ti,ab

#41   paediatric*:ti,ab

#42   pediatric*:ti,ab

#43   (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42)

#44   MeSH descriptor Practice Management, Medical, this term only

#45   MeSH descriptor Quality Assurance, Health Care, this term only

#46   MeSH descriptor Quality Indicators, Health Care, this term only

#47   MeSH descriptor Quality of Health Care explode all trees

#48   MeSH descriptor Education, Professional, this term only

#49   MeSH descriptor Attitude of Health Personnel, this term only

#50   MeSH descriptor Patient Acceptance of Health Care, this term only

#51   MeSH descriptor Cooperative Behavior, this term only

#52   MeSH descriptor Professional-Patient Relations, this term only

#53   MeSH descriptor Professional Competence, this term only

#54   MeSH descriptor Physician's Practice Patterns, this term only

#55   MeSH descriptor Professional Practice, this term only

#56   MeSH descriptor Patient-Centered Care, this term only

#57   MeSH descriptor Education, Medical, Continuing, this term only

#58   MeSH descriptor Professional Role, this term only

#59   MeSH descriptor Physician-Patient Relations, this term only

#60   "quality assurance":ti,ab

#61   "professional behaviour":ti,ab

#62   cpd:ti,ab

#63   "continuing professional development":ti,ab

#64   "patient centered care":ti,ab

#65   "patient centred care":ti,ab

#66   "continuing medical education":ti,ab

#67   (training next program*):ti,ab

#68   (training next intervention*):ti,ab

#69   (training next meeting*):ti,ab

#70   (training next session*):ti,ab

#71   (training next strateg*):ti,ab

#72   (training next workshop*):ti,ab

#73   (education* next program*):ti,ab

#74   (education* next intervention*):ti,ab

#75   (education* next meeting*):ti,ab

#76   (education* next session*):ti,ab

#77   (education* next strateg*):ti,ab

#78   "professional behavior":ti,ab

#79   (#44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62 OR #63 OR #64 OR #64 OR #66 OR #67 OR #68 OR #69 OR #70 OR #71 OR #72 OR #73 OR #74 OR #75 OR #76 OR #77 OR #78)

#80   MeSH descriptor Feedback explode all trees

#81   MeSH descriptor Interpersonal Relations, this term only

#82   MeSH descriptor Communication explode all trees

#83   MeSH Descriptor Patient Satisfaction explode all trees

#84   (interpersonal next skill*):ti,ab

#85   (consultation next skill*):ti,ab

#86   (communication next skill*):ti,ab

#87   (client next feedback*):ti,ab

#88   (patient next feedback*):ti,ab

#89   (user next feedback*):ti,ab

#90   (consumer next feedback*):ti,ab

#91   (carer next feedback*):ti,ab

#92   (client next evaluation*):ti,ab

#93   (patient* next evaluation*):ti,ab

#94   (user next evaluation*):ti,ab

#95   (consumer next evaluation*):ti,ab

#96   (customer next evaluation*):ti,ab

#97   (carer next evaluation*):ti,ab

#98   (interpersonal next care):ti,ab

#99   feedback:ti,ab

#100   (patient next derived):ti,ab

#101   (patient next mediated):ti,ab

#102   (patient next illicited):ti,ab

#103   (patient next initiated):ti,ab

#104   (#99 OR #100 OR #101 OR #102)

#105   (#98 AND #103)

#106   (feedback near/25 change):ti,ab

#107   (feedback near/25 effect*):ti,ab

#108   (feedback near/25 impact):ti,ab

#109   (feedback near/25 evaluat*):ti,ab

#110   (feedback near/25 compar*):ti,ab

#111   (feedback near/25 modif*):ti,ab

#112   (problem-based next learning):ti,ab

#113   (problem-based next teaching):ti,ab

#114   (problem-based next skill):ti,ab

#115   (problem-based next training):ti,ab

#116   (motivational next interview*):ti,ab

#117   (doctor next patient* next relation*):ti,ab

#118   (doctor next client* next relation*):ti,ab

#119   (physician* next patient* next relation*):ti,ab

#120   (physician* next client* next relation*):ti,ab

#121   (practitioner* next patient* next relation*):ti,ab

#122   (practitioner* next client* next relation*):ti,ab

#123   (doctor next consumer* next relation*):ti,ab

#124   (physician* next consumer* next relation*):ti,ab

#125   (practitioner* next consumer* next relation*):ti,ab

#126   (doctor* next patient* next interaction*):ti,ab

#127   (doctor* next client* next interaction*):ti,ab

#128   (physician* next patient* next interaction*):ti,ab

#129   (physician* next client* next interaction*):ti,ab

#130   (practitioner* next patient* next interaction*):ti,ab

#131   (practitioner* next client* next interaction*):ti,ab

#132   (doctor* next consumer* next interaction*):ti,ab

#133   (physician* next consumer* next interaction*):ti,ab

#134   (practitioner* next consumer* next interaction*):ti,ab

#135   (patient next survey*):ti,ab

#136   (patient next questionnaire*):ti,ab

#137   (#80 OR #81 OR #82 OR #83 OR #84 OR #85 OR #86 OR #87 OR #88 OR #89 OR #90 OR #91 OR #92 OR #93 OR #94 OR #95 OR #96 OR #97 OR #104 OR #105 OR #106 OR #107 OR #108 OR #109 OR #110 OR #111 OR #112 OR #113 OR #114 OR #115 OR #116 OR #117 OR #118 OR #119 OR #120 OR #121 OR #122 OR #123 OR #124 OR #125 OR #126 OR #127 OR #128 OR #129 OR #130 OR #131 OR #132 OR #133 OR #134 OR #135 OR #136)

#138   (#43 AND #79 AND #137)

Appendix 5 *Chapter 10*: the development of the Value of Patient Feedback scale

improve

The Value of Patient Feedback scale: a report on the development of a new scale

This report sets out the development to date of the Value of Patient Feedback scale, a new scale developed to assess the perceived value to clinicians of receiving patient feedback.

Conceptualisation and scope of the scale

Recent policy initiatives have highlighted the importance for NHS service providers of inviting and reacting to patient feedback. The NHS Operating Framework for 2012/13 requires that 'NHS organisations must actively seek out, respond positively and improve services in line with patient feedback. This includes acting on complaints, patient comments, local and national surveys and results from 'real time' data techniques'.[312] Although patient feedback is now routinely collected from a multitude of sources, as listed above, the impact of this on health-care professionals remains poorly understood. One recent study found that, although the attitudes of GPs towards the concept of patient feedback were often broadly positive, there remained concerns about the credibility of patient experience surveys as a foundation for changes to practice.[119]

To assist with studies of the impact of patient feedback on health-care professionals, we have developed a new instrument – the VOP scale – to measure health-care professionals' attitudes towards receiving feedback from patients. The availability of a robust approach to evaluating perceptions of the utility and impact of patient feedback is an important step in assessing the engagement of health-care professionals with patient experience data and the likely impact of such information on professional practice.

In developing this scale, we defined 'patient feedback' as 'the views and opinions of patients and service users on the health care they experience, as reported to or sought out by service providers through a range of mechanisms and modes, both solicited and unsolicited' (adapted from The Picker Institute[313]).

Patient feedback therefore consists of:

- comments from patients or services users concerning their actual experience of health care, such as a recent GP or outpatient appointment or hospital inpatient stay
- the communication of these comments to the relevant health-care provider or the seeking out of these comments by the relevant health-care provider, for example through the scanning of online repositories of patient opinion.

Patient feedback may relate to a service as whole (e.g. a general practice or clinic) or to a particular individual (e.g. a doctor or a nurse). Mechanisms of patient feedback are multiple and include solicited opinions (e.g. those that are specifically sought through surveys, RTF, focus groups and interviews) and unsolicited opinions (e.g. those that are made in response to a particular experience, e.g. complaints, compliments, comments through online routes such as NHS Choices or Patient Opinion and comments through social media including Facebook [Facebook, Inc., Menlo Park, CA, USA) and Twitter (Twitter, Inc., San Francisco, CA, USA)].

A literature review of the area located no scale developed specifically to address this area. We therefore initiated the construction of a new instrument.

Drawing on our definition of patient feedback, we used qualitative data collected in previous studies conducted by the research team to derive key constructs to cover in the scale. These data were:

- interviews with 40 GPs and 14 focus groups with primary care practice staff concerning the impact and utility of patient experience surveys, conducted as part of this NIHR programme grant
- interviews with 18 GPs concerning their attitudes to patient experience surveys, conducted as part of this NIHR programme grant examining various aspects of the GP Patient Survey

We therefore used an inductive approach to identifying relevant constructs, drawing on existing qualitative data, supplemented with a review of relevant literature in the area.

Consideration of the data and literature suggested that the core construct that we wished to evaluate was multidimensional, covering the following key domains:

- the right of patients to give feedback
- responsibility for organising patient feedback
- preferred mode of patient feedback
- credibility of patient feedback
- utility of patient feedback
- impact of receiving patient feedback
- changes to individual practice as a result of patient feedback
- changes to overall quality of health care as a result of patient feedback
- overall value of patient feedback value.

Item generation

Based on the key domains outlined above, the research team developed a pool of potential items. Items were all positively worded; however, we aimed to create a balanced pool by constructing items to evaluate either positive or negative aspects of domains when possible. We chose to use a five-point Likert response scale (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree). *Table 73* provides the full list of potential items. We then undertook initial content validation for the scale by mapping each potential item onto the key domains to ensure that each was represented by at a number of items and that no items were irrelevant to the construct under consideration (see *Annex A*).

Expert panel review

Following the generation of the item pool, we asked six experts in the field to critically analyse the proposed scale to review (a) content validity – whether or not the items fully cover the concept adequately – and (b) the clarity, readability and content of each item. Experts were all academics and clinicians involved in the evaluation of patient experience of care. Draft item statements were sent to all six panel members who were asked to assess, comment on and suggest changes to the items. We subsequently drew on these evaluations to further review the item pool, removing, retaining, adding or rewording items as required. *Annex B* sets out the responses to each item from each reviewer: either items were retained as is or amendments were suggested by reviewers. Following the receipt of all comments, the research team met and by group consensus derived a final list of 52 items to take forward to the next stage.

Cognitive interviewing

Methods

Following the collation of the revised item pool, we undertook cognitive testing through interviews with clinicians. We used a combination of cognitive interviewing techniques (rephrasing, thinking aloud and probing) to evaluate respondents' approaches to answering items, the wording of items and particular items or words that were problematic.[314] The revised items ($n = 52$) were divided into three groups, two groups of 18 items and one group of 19 (see *Annex C*).These groups were selected to cover each of the major domains of interest and to ensure that a number of respondents considered each item.

TABLE 73 Item pool following initial generation of items

Number	Item
1	Patients should have the opportunity to provide feedback on their experiences of care provided
2	It is important to listen to patients about their experiences of care
3	It is a clinician's responsibility to gather evidence of patients' experience of care
4	It is the responsibility of clinical commissioning groups and hospitals to gather evidence of patients' experience of care
5	It is the responsibility of NHS England to gather evidence of patient' experience of care
6	I have reservations about patient feedback received via complaints and compliments
7	I have reservations about patient feedback received via surveys
8	I have reservations about patient feedback received via patient forums or participant groups
9	I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)
10	It is beneficial to receive patient feedback via complaints and compliments
11	It is beneficial to receive patient feedback via surveys
12	It is beneficial to receive patient feedback via patient forums or participant groups
13	It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)
14	I am interested in learning more about receiving patient feedback through social media such as Twitter or Facebook
15	Responders to patient surveys are representative of my patient population
16	Data from patient surveys are valid and reliable
17	Patients always have grounds for the complaints they make
18	Patient feedback via patient forums or participant groups is a reliable indicator of patient concerns
19	Patients who use online patient feedback mechanisms (such as NHS Choices or Patient Opinion) are representative of my patient population
20	I trust patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)
21	Patients are able to provide useful feedback on my clinical skills
22	Patients are able to provide useful feedback on my interpersonal skills
23	Patients are able to provide useful feedback on administrative and organisational issues
24	Patient survey data are more valuable if they include benchmarking
25	Free-text comments are the most useful aspect of patient surveys
26	I find it difficult to interpret the results of patient surveys
27	I find it easy to understand patient feedback
28	Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results
29	Feedback from patient surveys is presented in a timely way
30	Patient feedback on specific identifiable care experiences is more helpful than general opinions
31	Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation
32	Patient surveys indicate what needs to be done to improve
33	Patient anonymity limits the usefulness of most patient feedback

TABLE 73 Item pool following initial generation of items (*continued*)

Number	Item
34	I know how to act on anonymous patient feedback
35	I know how to act on feedback received from a named patient
36	I can make good use of patient feedback
37	I have doubted my competence after receiving feedback from patients
38	Receiving feedback from patients has improved my confidence at work
39	Receiving patient feedback via patient surveys is a positive experience
40	Receiving a complaint from a patient can impact on my ability to work effectively
41	Engaging with patient feedback requires a lot of energy
42	I worry about my workplace's reputation as a result of patient feedback being made public
43	I worry about my individual reputation as a result of patient feedback being made public
44	Acting on patient feedback can improve the clinical quality of care I provide
45	Acting on patient feedback can improve the interpersonal quality of care I provide
46	Acting on patient feedback can improve the organisation and administration of the care I provide
47	Receiving patient feedback can improve my relationship with patients
48	I have made changes to my individual practice as a result of patient feedback
49	I am likely to make changes to my individual practice as a result of patient feedback
50	It is necessary to have patient feedback to improve the overall quality of health care
51	Listening to patients will lead to useful changes to health care
52	Patient feedback is an important mechanism of quality improvement
53	Gathering patient feedback is beneficial to the health service
54	Data collection for large, representative patient surveys is cost-effective
55	Online patient feedback mechanisms (such as NHS Choices or Patient Opinion) are beneficial to the health service
56	I value feedback from colleagues more than feedback from patients

Participants (*n* = 7) were recruited from the General Practice Education Group at the University of Cambridge Institute of Public Health. Interviews took place between December 2013 and January 2014. Each participant completed one of the subscales at the start of the interview (*Table 74*). Participants were free to discuss items as they went along or wait until the longer discussion after completing all of the items in full. The interviewer also noted any hesitation in response that took place for specific items. This was discussed in more detail after completion of the scale and participants were asked to describe how they found the scale overall and if there were any particular items of concern. An interview guide with a number of suggested prompts was used to help guide the discussion (see *Annex D*). Broadly, interview probes examined retrieval, comprehension, confidence and response.[314] Interviews lasted approximately 20 minutes and were recorded and transcribed verbatim. NVivo 10 software was used to assist with interview coding and interviews were analysed thematically. An initial coding framework was developed that incorporated each of the scale items. Additional codes were added when participants discussed issues that did not relate to a specific scale item. When a new code was identified, transcripts were rechecked for instances of this new code.

TABLE 74 Group distribution for cognitive interviews

Participant ID	VOP version assignment
VOP1_GP1	1
VOP2_GP1	2
VOP3_GP2	3
VOP3_GP1	3
VOP1_GP2	1
VOP2_GP2	2
VOP1_GP3	1

Analysis

Overall, responses to the scale were found to be positive. In terms of phrasing and comprehension, no items were found to be difficult to understand. In more general terms, some participants had concerns that the overall methodological approach of establishing clinicians' attitudes towards patient feedback may not be best obtained through a questionnaire. Additionally, for some participants, the term 'patient feedback' was problematic. For example, some interpreted this term as encompassing all types of feedback received from patients, inclusive of verbal feedback, comments and complaints, online feedback and practice-level or national surveys. However, others (and this appeared to be older GPs) viewed feedback more as surveys. Although some items related to specific types of feedback, many of the participants responded verbally with 'it depends'. There were also issues relating to the organisational level (individual vs. practice vs. national) that we referred to.

After the first three interviews, we added an introductory 'blurb' to the start of the scale to try to provide greater clarity on the term 'patient feedback'. However, when subsequent participants were asked about how useful the blurb was at the start of the questionnaire, none of the participants reported having read it. This may have been a result of the layout and design of the scale rather than the blurb; however, even after having read it when prompted, it did not seem to assist participants in answering the items.

One item in particular seemed to cause some concern among several of the participants: 'It is a clinician's responsibility to gather evidence of patients' experience of care'. This item caused ambiguity. One GP suggested that the wording implied that the clinician should be the one to be physically administering questionnaires, etc. (VOP2_GP1). 'To gather' caused ambiguity (VOP3_GP1). 'I think, on reflection, it is my responsibility. It doesn't necessarily mean to say I have to do it, but I have a responsibility to ensure it happens' (VOP2_GP1). A second ambiguity related to the 'responsibility', as another GP pointed out that this may vary depending on position, for example hospital doctor, salaried GP, GP partner and so on (VOP1_GP2).

Other items that participants provided specific feedback on were as follows:

- 'I have reservations about patient feedback received via patient forums or participant groups': similar question to 'It is beneficial to receive patient feedback via patient forums or participant groups' – see previous comments by VOP3_GP1; can you say something is beneficial without being representative (VOP3_GP2) or biased (VOP3_GP1)?
- 'It is beneficial to receive patient feedback via patient forums or participant groups': same comments as above (VOP3_GP1, VOP3_GP2)
- Free-text comments are better than replies to closed questions: probably, but not always convenient and, therefore, tick boxes win over (VOP1_GP1, VOP1_GP2); not a straightforward response.

- 'I worry about my workplace's reputation as a result of patient feedback being made public': distinctions need to be made about sharing accurate, representative, unbiased data with the public. If that feedback is then negative then this should be shared, but if not it provides an unfair view (VOP2_GP1, VOP2_GP2).
- Patient feedback can improve the clinical quality of care I provide: consider making the distinction in the question about 'detailed and specific' patient feedback (VOP1_GP1). Similar (although different perspective) question to '. . . quality of care I provide . . .' (VOP1_GP2).
- 'I have made changes to my clinical practice as a result of patient feedback': tension between wanting to say yes to justify other responses (patient feedback is good, etc.) but not wanting to say strongly agree, as some types of patient feedback are viewed negatively (NHS Choices, etc.) (VOP2_GP1, VOP2_GP2).
- I find it difficult to make tangible changes to my practice as a result of patient survey results: ambiguity from 'tangible' in the context – changes made all the time, some without realising, therefore difficult to respond to (VOP3_GP1, VOP3_GP2).
- I have a good idea of how satisfied my patients are with the care I provide: difficult to answer as 'you don't know what you don't know'. Similar to the representativeness issues as likely to be only the people who like you who will come back and provide positive feedback (VOP3_GP1, VOP3_GP2). Easier to answer on a practice level. Consider having this question at the beginning? (VOP3_GP2).
- 'I have reservations about patient feedback received via complaints and compliments': very similar issues raised for this item as for other 'beneficial' vs. 'reservation' items (see previous comments) (VOP1_GP1, VOP1_GP2).

Conclusions

Following cognitive interviews, the 52 items were further reduced to 43, with textual amendments made to some items.

Pretesting

To undertake pretesting of the scale, we conducted an online survey of doctors and nurses using the established web interface QuestionPro (QuestionPro Inc., San Francisco, CA, USA). Consent was indicated by completion of the items. The sample was recruited using snowball methods. We initially approached participants by e-mail, drawing on those we were already in contact with through the IMPROVE programme (e.g. those who participated in previous projects within the IMPROVE NIHR programme grant) and colleagues (e.g. the General Practice Education Group at the University of Cambridge; nursing and midwifery units). Respondents were asked to forward details of the survey to clinical colleagues. We also used social media, including Twitter, to ask for respondents to complete the questionnaire. As an incentive, all respondents who completed the questionnaire were offered the opportunity to enter a prize draw to win a Kindle Paperwhite. The survey was conducted from February to May 2014. It included the 43 VOP items alongside some brief sociodemographic questions (see *Annex E*). An initial analysis of the first 30 responses found no problems with missing data and we continued the survey as planned. By the closing date, we had obtained 215 responses from doctors and nurses.

A stacked bar chart showing the proportion of respondents selecting each response for each item is shown in *Figure 25*. We can see a range of response tendencies across questions. *Table 75* shows the polychoric correlation matrix for all items, with green indicating a positive correlation and red indicating a negative correlation (colour coding has been allowed to saturate at ±0.5 to illustrate variation). What is quite clear from this table is that some items are negatively correlated with most other items (indicated by bands of red). These items tend to be those for which strongly agreeing with a statement conveys a lack of support for patient feedback, for example 'I have reservations about patient feedback currently received via surveys'. Such negative questions had been identified prior to the analysis. We then reversed the scoring of these questions and the resulting stacked bar chart and correlation matrix are shown in *Figure 26* and *Table 76*, respectively. In the correlation matrix the vast majority of correlations are positive, except those for question 19, 'Patient survey data are more valuable if they include comparison with how others are doing'. On reflection, it was not clear whether agreeing with this statement is supportive of patient feedback or not. As we were trying to develop a scale to measure the value that responders place on
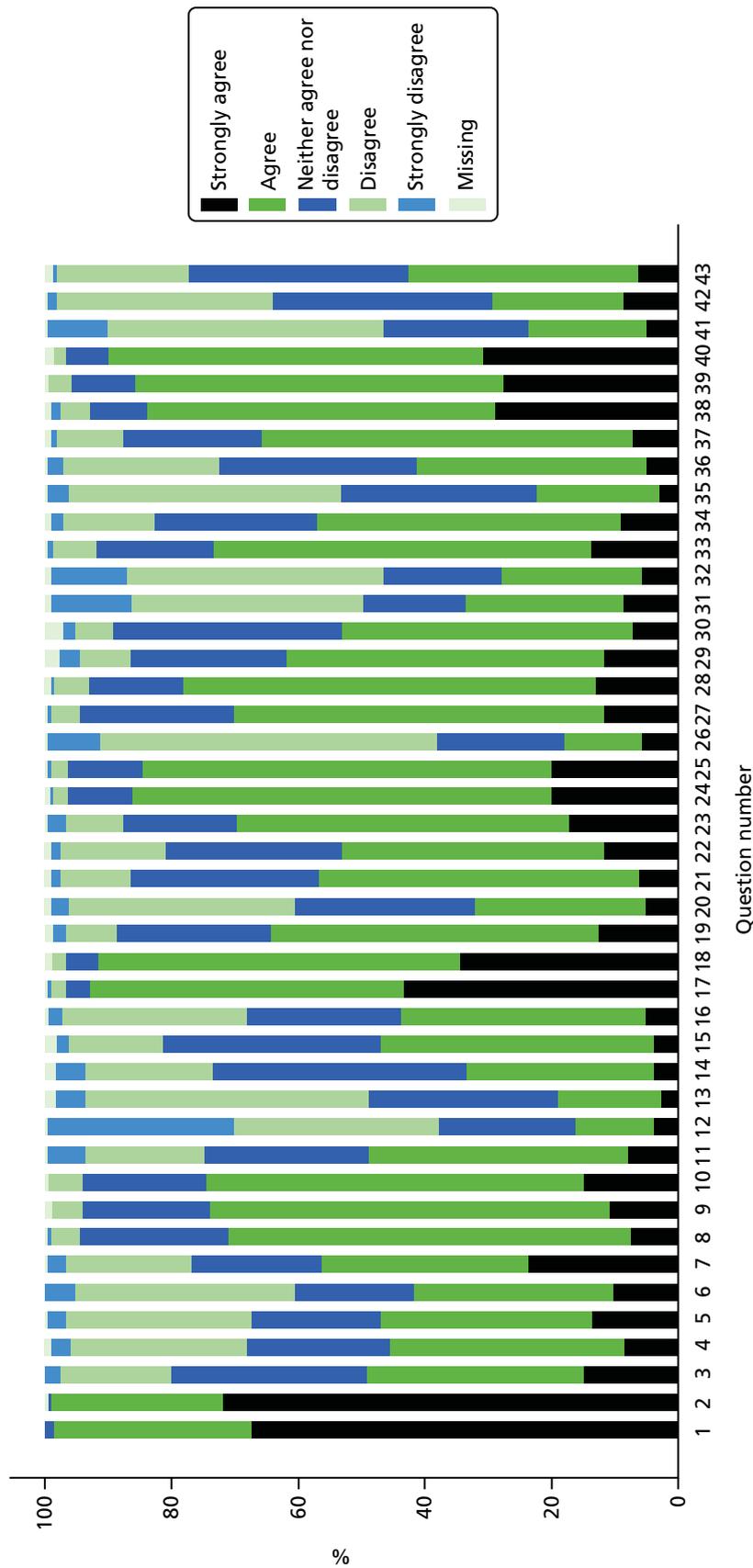
FIGURE 25 Percentage endorsing each response category for each question (including missing when question not answered rather than page missing), with 'strongly positive' indicating a view in favour of patient feedback.

TABLE 75 Polychoric correlation matrix for all items

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
Q1	1.00										
Q2	0.88	1.00									
Q3	0.44	0.35	1.00								
Q4	−0.28	−0.22	−0.05	1.00							
Q5	−0.13	−0.25	−0.08	0.49	1.00						
Q6	−0.19	−0.30	−0.20	0.52	0.50	1.00					
Q7	−0.39	−0.40	−0.08	0.41	0.54	0.60	1.00				
Q8	0.31	0.30	0.21	−0.48	−0.14	−0.32	−0.29	1.00			
Q9	0.41	0.37	0.14	−0.28	−0.50	−0.35	−0.40	0.56	1.00		
Q10	0.23	0.31	0.33	−0.26	−0.21	−0.55	−0.35	0.66	0.52	1.00	
Q11	0.34	0.33	0.17	−0.22	−0.29	−0.27	−0.68	0.43	0.51	0.54	1.00
Q12	0.32	0.27	0.04	−0.26	−0.05	−0.14	−0.27	0.30	0.20	0.31	0.44
Q13	0.10	0.08	0.11	−0.25	−0.29	−0.26	−0.31	−0.01	0.10	0.05	0.19
Q14	0.12	0.10	0.10	−0.30	−0.51	−0.30	−0.36	−0.06	0.31	0.12	0.18
Q15	0.17	0.15	0.25	−0.39	−0.23	−0.42	−0.35	0.31	0.37	0.44	0.32
Q16	0.32	0.29	0.22	−0.22	−0.05	−0.25	−0.16	0.13	0.21	0.15	0.13
Q17	0.10	0.31	0.23	0.00	0.04	−0.13	0.02	0.33	0.25	0.27	0.12
Q18	0.17	0.36	0.21	−0.12	0.14	−0.11	−0.03	0.42	0.15	0.39	0.21
Q19	−0.15	−0.04	0.08	0.20	0.05	0.18	0.29	−0.11	0.00	−0.09	−0.10
Q20	−0.13	−0.10	−0.04	0.27	0.43	0.36	0.27	−0.10	−0.22	−0.23	−0.11
Q21	0.30	0.29	0.19	−0.24	−0.29	−0.42	−0.28	0.09	0.23	0.29	0.22
Q22	0.05	0.12	0.09	−0.09	−0.24	−0.26	−0.15	0.07	0.17	0.15	0.04
Q23	0.22	0.30	0.23	−0.22	−0.21	−0.38	−0.22	0.32	0.37	0.36	0.20
Q24	0.36	0.45	0.10	−0.39	−0.34	−0.41	−0.33	0.30	0.42	0.29	0.30
Q25	0.15	0.17	0.07	−0.35	−0.35	−0.37	−0.23	0.22	0.41	0.16	0.22
Q26	−0.12	−0.05	0.14	0.33	0.30	0.19	0.24	−0.24	−0.33	−0.09	−0.28
Q27	0.31	0.43	0.25	−0.27	−0.23	−0.34	−0.34	0.30	0.36	0.32	0.27
Q28	0.25	0.26	0.17	−0.21	−0.01	−0.23	−0.18	0.36	0.34	0.39	0.33
Q29	0.00	0.08	0.06	−0.26	−0.25	−0.31	−0.29	0.19	0.13	0.16	0.20
Q30	−0.05	−0.02	0.16	−0.24	−0.48	−0.35	−0.21	0.18	0.36	0.20	0.27
Q31	−0.05	−0.15	−0.04	0.35	0.27	0.34	0.45	−0.19	−0.17	−0.15	−0.30
Q32	−0.17	−0.16	−0.16	0.38	0.30	0.37	0.40	−0.18	−0.23	−0.20	−0.26
Q33	0.28	0.37	0.29	−0.25	−0.25	−0.34	−0.28	0.32	0.34	0.32	0.31
Q34	0.15	0.25	0.15	−0.24	−0.17	−0.29	−0.24	0.24	0.22	0.27	0.30
Q35	−0.07	−0.23	−0.18	0.32	0.24	0.57	0.34	−0.25	−0.23	−0.44	−0.26
Q36	0.09	0.14	0.10	−0.23	−0.17	−0.20	−0.07	0.12	0.03	0.25	0.18
Q37	0.31	0.38	0.17	−0.26	−0.37	−0.38	−0.31	0.24	0.32	0.36	0.38
Q38	0.50	0.45	0.12	−0.45	−0.32	−0.37	−0.37	0.41	0.40	0.36	0.35
Q39	0.42	0.52	0.23	−0.38	−0.39	−0.43	−0.41	0.44	0.57	0.45	0.49
Q40	0.42	0.57	0.14	−0.36	−0.39	−0.36	−0.34	0.53	0.57	0.50	0.48
Q41	−0.11	−0.20	−0.14	0.24	0.44	0.23	0.18	−0.15	−0.31	−0.29	−0.23
Q42	−0.22	−0.37	−0.21	0.31	0.24	0.41	0.24	−0.34	−0.40	−0.38	−0.38
Q43	0.26	0.33	0.22	−0.22	−0.30	−0.36	−0.29	0.16	0.23	0.19	0.28

Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23
1.00											
0.04	1.00										
0.02	0.55	1.00									
0.10	0.14	0.25	1.00								
0.09	0.22	0.12	0.22	1.00							
0.06	0.11	0.11	0.24	0.24	1.00						
0.26	0.14	0.07	0.27	0.29	0.59	1.00					
0.01	−0.14	0.02	−0.09	−0.17	0.13	0.06	1.00				
−0.12	−0.16	−0.34	−0.07	0.06	−0.04	0.13	0.02	1.00			
0.24	0.31	0.36	0.22	0.19	0.24	0.20	−0.04	−0.45	1.00		
−0.02	0.14	0.32	0.20	0.13	0.13	0.09	0.22	−0.08	0.09	1.00	
0.18	0.29	0.21	0.25	0.35	0.32	0.29	0.13	−0.25	0.39	0.21	1.00
0.35	0.18	0.40	0.16	0.39	0.27	0.42	0.06	−0.21	0.34	0.28	0.27
0.23	0.26	0.41	0.15	0.24	0.26	0.26	−0.05	−0.22	0.31	0.18	0.26
−0.09	−0.18	−0.19	−0.15	0.08	−0.10	0.09	0.01	0.23	−0.02	−0.05	−0.04
0.17	0.20	0.29	0.24	0.40	0.34	0.29	0.02	−0.26	0.33	0.27	0.43
0.27	0.00	0.07	0.26	0.29	0.33	0.40	0.13	−0.19	0.11	0.19	0.34
0.20	0.28	0.15	0.15	0.16	0.16	0.18	−0.15	−0.18	0.23	0.18	0.42
0.15	0.35	0.43	0.08	0.05	0.05	0.05	0.00	−0.39	0.39	0.17	0.35
−0.26	−0.30	−0.27	−0.12	0.00	−0.08	−0.07	0.17	0.25	−0.20	−0.02	−0.05
−0.23	−0.20	−0.24	−0.18	−0.02	−0.06	−0.08	0.14	0.23	−0.24	0.03	−0.08
0.24	0.10	0.16	0.31	0.41	0.28	0.28	−0.15	−0.12	0.20	0.34	0.43
0.22	0.02	0.14	0.31	0.20	0.11	0.29	−0.04	−0.05	0.10	0.22	0.29
−0.20	−0.27	−0.22	−0.19	−0.16	−0.10	−0.18	0.09	0.25	−0.29	−0.27	−0.24
0.10	0.05	0.10	0.26	0.23	0.05	0.21	−0.07	−0.11	0.20	0.14	0.21
0.19	0.12	0.20	0.29	0.26	0.17	0.29	−0.06	−0.26	0.30	0.24	0.36
0.37	0.15	0.21	0.26	0.22	0.27	0.24	−0.08	−0.16	0.29	0.19	0.40
0.30	0.12	0.32	0.41	0.26	0.39	0.37	0.05	−0.19	0.30	0.33	0.49
0.35	0.07	0.23	0.28	0.18	0.37	0.37	0.12	−0.23	0.30	0.28	0.47
−0.12	0.01	−0.23	−0.15	−0.07	−0.13	−0.10	0.03	0.24	−0.21	−0.11	−0.18
−0.33	−0.29	−0.25	−0.34	−0.25	−0.30	−0.21	0.18	0.17	−0.32	−0.14	−0.42
0.29	0.19	0.25	0.29	0.29	0.25	0.32	0.00	−0.02	0.07	0.23	0.22

TABLE 75 Polychoric correlation matrix for all items

	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33
Q1										
Q2										
Q3										
Q4										
Q5										
Q6										
Q7										
Q8										
Q9										
Q10										
Q11										
Q12										
Q13										
Q14										
Q15										
Q16										
Q17										
Q18										
Q19										
Q20										
Q21										
Q22										
Q23										
Q24	1.00									
Q25	0.74	1.00								
Q26	−0.14	−0.22	1.00							
Q27	0.61	0.44	−0.04	1.00						
Q28	0.28	0.27	−0.03	0.53	1.00					
Q29	0.23	0.27	−0.06	0.52	0.37	1.00				
Q30	0.33	0.49	−0.21	0.35	0.11	0.57	1.00			
Q31	−0.22	−0.28	0.33	−0.16	−0.05	−0.19	−0.25	1.00		
Q32	−0.21	−0.16	0.30	−0.18	−0.03	−0.23	−0.18	0.87	1.00	
Q33	0.46	0.47	−0.09	0.56	0.47	0.43	0.33	−0.25	−0.22	1.00
Q34	0.36	0.30	−0.01	0.41	0.61	0.44	0.29	−0.11	−0.15	0.65
Q35	−0.38	−0.37	0.10	−0.40	−0.35	−0.41	−0.25	0.24	0.25	−0.45
Q36	0.27	0.28	0.10	0.29	0.44	0.20	0.23	0.07	0.05	0.48
Q37	0.37	0.41	−0.06	0.57	0.57	0.44	0.41	−0.11	−0.06	0.62
Q38	0.49	0.36	−0.12	0.59	0.50	0.42	0.29	−0.31	−0.28	0.54
Q39	0.55	0.47	−0.15	0.64	0.55	0.40	0.40	−0.40	−0.32	0.67
Q40	0.56	0.41	−0.23	0.62	0.50	0.43	0.40	−0.39	−0.39	0.56
Q41	−0.19	−0.26	0.22	−0.18	−0.28	−0.16	−0.28	0.15	0.12	−0.35
Q42	−0.32	−0.35	0.21	−0.35	−0.19	−0.44	−0.32	0.25	0.28	−0.41
Q43	0.34	0.27	−0.05	0.33	0.29	0.27	0.15	−0.29	−0.34	0.46

TABLE 75 Polychoric correlation matrix for all items

Q34	Q35	Q36	Q37	Q38	Q39	Q40	Q41	Q42	Q43
1.00									
−0.38	1.00								
0.66	−0.26	1.00							
0.70	−0.51	0.61	1.00						
0.40	−0.40	0.23	0.45	1.00					
0.45	−0.38	0.22	0.55	0.83	1.00				
0.32	−0.34	0.14	0.48	0.79	0.94	1.00			
−0.29	0.27	−0.16	−0.33	−0.30	−0.49	−0.49	1.00		
−0.19	0.42	−0.11	−0.37	−0.43	−0.52	−0.50	0.30	1.00	
0.32	−0.25	0.25	0.33	0.37	0.59	0.54	−0.21	−0.34	1.00
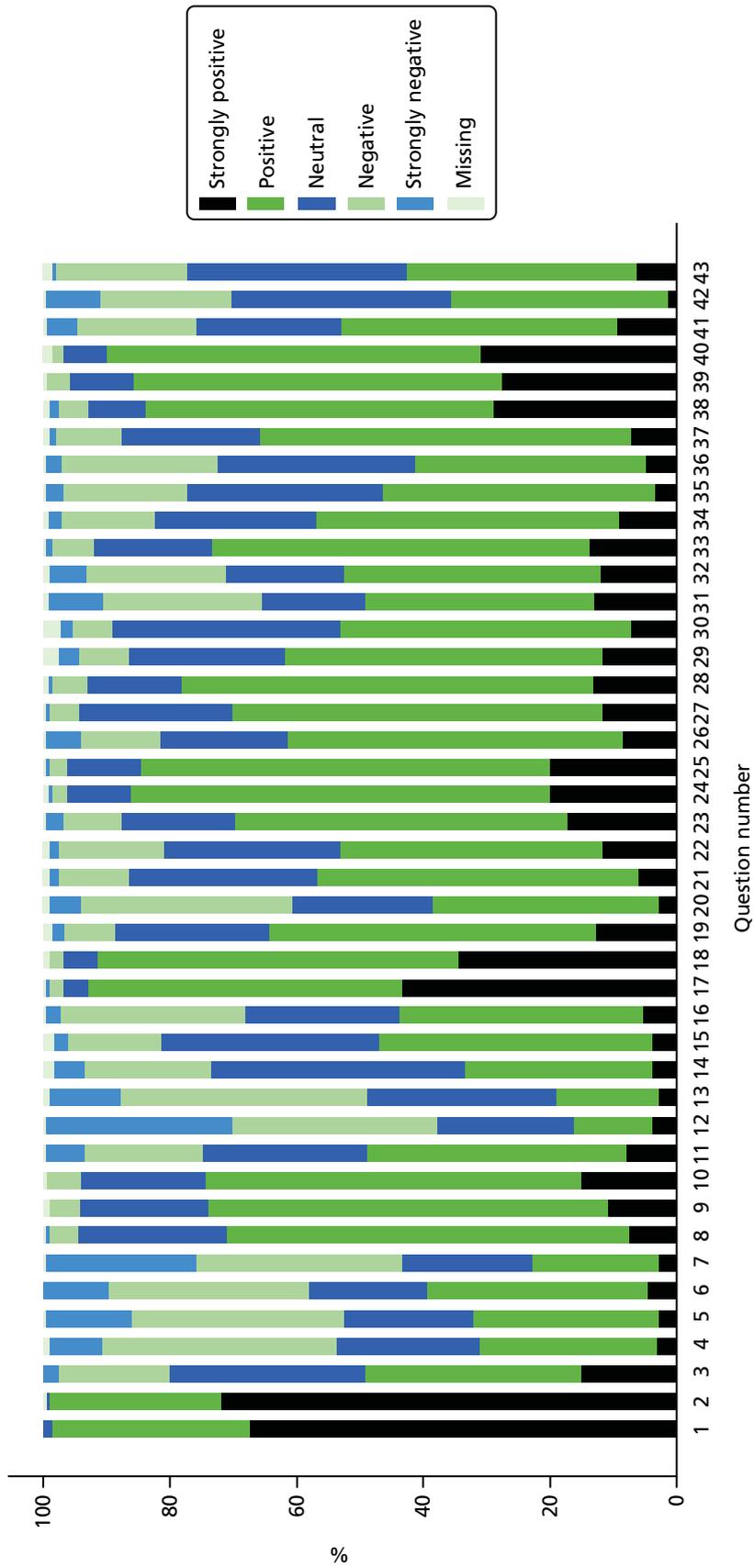
FIGURE 26 Percentage endorsing each response level for each question (including missing when question not answered rather than page missing), with 'strongly positive' indicating a view in favour of patient feedback.

patient feedback rather than to gather opinions, this question was not seen as helping and so was dropped from further analysis.

Item reduction was performed by identifying pairs or triplets of questions with high correlation coefficients (> 0.7). When this was the case, item redundancy led to such items being dropped ($n = 7$):

1. Q2   It is important to listen to patients about their experiences of care.
2. Q3   It is a clinician's responsibility to gather evidence of patient's experience of care.
3. Q25   Patient surveys help identify actions that might be taken to improve services.
4. Q31   I am concerned about my workplace's reputation as a result of the kinds of patient feedback currently being made public.
5. Q34   I have made changes to my clinical practice as a result of patient feedback.
6. Q38   It is necessary to have patient feedback to improve the overall quality of health care.
7. Q40   Gathering feedback is beneficial to the health service.

Two items were then removed from the analysis as they were specific to a UK setting and thus would not allow the scale to be used in an international context. These items were:

1. Q7   I have reservations about patient feedback currently received via online patient feedback mechanisms (such as NHS Choices, Patient Opinion or I Want Great Care).
2. Q11   It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion or I Want Great Care).

A further seven items were dropped from the analysis as they required responders to have received patient feedback to answer the question. There was a fear that if these questions were left in the resulting score would tell us about whether or not a responder had received feedback from patients rather than how they valued it. The dropped items were:

1. Q20   I find it difficult to interpret the results of patient surveys.
2. Q21   I find it easy to understand patient feedback.
3. Q28   I have questioned the way I do things after receiving feedback from patients.
4. Q29   Receiving feedback from patients has improved my confidence at work.
5. Q30   Receiving patient feedback via patient surveys is a positive experience.
6. Q35   I find it difficult to make changes to my practice as a result of patient survey results.
7. Q36   I have made changes to the way I consult as a result of patient surveys.

Finally one further item, 'I feel it is a clinician's responsibility to ensure evidence of patients' experience of care is collected', was dropped as cognitive testing had highlighted some concerns and we continued to have reservations about its relevance and performance. This left a final set of 26 items (*Table 77*), on which we performed an exploratory factor analysis.

The scree plot from the exploratory factor analysis is shown in *Figure 27*. There is not an obvious elbow from which to select the most appropriate number of factors but it suggests something in the range 2–5. Using a cut-off point of eigenvalues of > 1 would suggest using three factors. The Akaike information criterion suggests a seven-factor model whereas the Bayesian information criterion suggests a two-factor model. With no clear-cut solution we explored two-, three-, four- and five-factor models. Examination of these models suggested that the four-factor model gave the most interpretable solution, with the four factors covering the themes of changes in response to patient feedback, benefits of patient feedback, validity of patient feedback mechanisms and reservations about patient feedback.

The factor loadings from the four-factor model are shown in *Table 78*. Here, for each of the factors we list the items that loaded on that factor with a factor loading of at least 0.3. The items are ordered in decreasing order of loading, with shaded items having a factor loading of ≥ 0.4. Two items did not load

TABLE 76 Polychoric correlation matrix for all items after reversing negative items

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
Q1	1.00										
Q2	0.88	1.00									
Q3	0.44	0.35	1.00								
Q4	0.28	0.22	0.05	1.00							
Q5	0.13	0.25	0.08	0.49	1.00						
Q6	0.19	0.30	0.20	0.52	0.49	1.00					
Q7	0.39	0.39	0.08	0.41	0.53	0.59	1.00				
Q8	0.31	0.30	0.21	0.48	0.14	0.32	0.29	1.00			
Q9	0.41	0.37	0.14	0.28	0.50	0.35	0.40	0.56	1.00		
Q10	0.23	0.31	0.33	0.26	0.21	0.55	0.35	0.66	0.52	1.00	
Q11	0.34	0.33	0.17	0.22	0.29	0.27	0.68	0.43	0.51	0.54	1.00
Q12	0.32	0.27	0.04	0.26	0.05	0.14	0.26	0.30	0.20	0.31	0.44
Q13	0.10	0.08	0.11	0.25	0.29	0.26	0.31	−0.01	0.10	0.05	0.19
Q14	0.12	0.10	0.10	0.29	0.51	0.30	0.35	−0.06	0.31	0.12	0.18
Q15	0.17	0.15	0.25	0.39	0.23	0.42	0.35	0.31	0.37	0.44	0.32
Q16	0.32	0.29	0.22	0.22	0.05	0.25	0.16	0.13	0.21	0.15	0.13
Q17	0.10	0.31	0.23	0.00	−0.04	0.13	−0.02	0.33	0.25	0.27	0.12
Q18	0.17	0.36	0.21	0.12	−0.14	0.11	0.03	0.42	0.15	0.39	0.21
Q19	−0.15	−0.04	0.08	−0.20	−0.05	−0.18	−0.29	−0.11	0.00	−0.09	−0.10
Q20	0.13	0.10	0.03	0.27	0.43	0.36	0.26	0.10	0.22	0.23	0.11
Q21	0.30	0.29	0.19	0.24	0.29	0.42	0.28	0.09	0.23	0.29	0.22
Q22	0.05	0.12	0.09	0.09	0.24	0.26	0.15	0.07	0.17	0.15	0.04
Q23	0.22	0.30	0.23	0.21	0.20	0.38	0.22	0.32	0.37	0.36	0.20
Q24	0.36	0.45	0.10	0.39	0.34	0.41	0.33	0.30	0.42	0.29	0.30
Q25	0.15	0.17	0.07	0.34	0.35	0.37	0.23	0.22	0.41	0.16	0.22
Q26	0.12	0.05	−0.14	0.33	0.30	0.19	0.24	0.24	0.33	0.09	0.28
Q27	0.31	0.43	0.25	0.27	0.23	0.34	0.34	0.30	0.36	0.32	0.27
Q28	0.25	0.26	0.17	0.21	0.01	0.23	0.18	0.36	0.34	0.39	0.33
Q29	0.00	0.08	0.06	0.26	0.25	0.31	0.29	0.19	0.13	0.16	0.20
Q30	−0.05	−0.02	0.16	0.24	0.48	0.35	0.21	0.18	0.36	0.20	0.27
Q31	0.06	0.15	0.04	0.35	0.27	0.34	0.45	0.19	0.17	0.15	0.30
Q32	0.17	0.16	0.16	0.38	0.30	0.37	0.40	0.18	0.23	0.20	0.26
Q33	0.28	0.37	0.29	0.25	0.25	0.34	0.27	0.32	0.34	0.32	0.31
Q34	0.15	0.25	0.15	0.24	0.17	0.29	0.24	0.24	0.22	0.27	0.30
Q35	0.07	0.24	0.18	0.33	0.24	0.57	0.34	0.25	0.23	0.45	0.26
Q36	0.09	0.14	0.10	0.23	0.17	0.20	0.07	0.12	0.03	0.25	0.18
Q37	0.31	0.38	0.17	0.26	0.37	0.38	0.31	0.24	0.32	0.36	0.38
Q38	0.50	0.45	0.12	0.45	0.32	0.37	0.37	0.41	0.40	0.36	0.35
Q39	0.42	0.52	0.23	0.38	0.39	0.43	0.41	0.44	0.57	0.45	0.49
Q40	0.42	0.57	0.14	0.36	0.39	0.37	0.34	0.53	0.57	0.50	0.48
Q41	0.11	0.20	0.14	0.24	0.44	0.23	0.18	0.15	0.31	0.30	0.23
Q42	0.22	0.37	0.21	0.31	0.24	0.41	0.24	0.34	0.40	0.38	0.38
Q43	0.26	0.33	0.22	0.22	0.30	0.36	0.28	0.16	0.23	0.19	0.28

Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23
1.00											
0.04	1.00										
0.02	0.55	1.00									
0.10	0.14	0.25	1.00								
0.09	0.22	0.12	0.22	1.00							
0.06	0.11	0.11	0.24	0.24	1.00						
0.26	0.14	0.07	0.27	0.29	0.59	1.00					
0.01	−0.14	0.02	−0.09	−0.17	0.13	0.06	1.00				
0.12	0.16	0.34	0.07	−0.06	0.05	−0.13	−0.02	1.00			
0.24	0.31	0.36	0.22	0.19	0.24	0.20	−0.04	0.45	1.00		
−0.02	0.14	0.32	0.20	0.13	0.13	0.09	0.22	0.08	0.09	1.00	
0.18	0.29	0.21	0.25	0.35	0.32	0.29	0.13	0.25	0.39	0.21	1.00
0.35	0.18	0.40	0.16	0.39	0.27	0.42	0.06	0.21	0.34	0.28	0.27
0.23	0.26	0.41	0.15	0.24	0.26	0.26	−0.05	0.22	0.31	0.18	0.26
0.09	0.19	0.20	0.15	−0.08	0.10	−0.09	−0.01	0.23	0.02	0.06	0.04
0.17	0.20	0.29	0.24	0.40	0.34	0.29	0.02	0.26	0.33	0.27	0.43
0.27	0.00	0.07	0.26	0.29	0.33	0.40	0.13	0.19	0.11	0.19	0.34
0.20	0.28	0.15	0.15	0.16	0.16	0.18	−0.15	0.18	0.23	0.18	0.42
0.15	0.35	0.43	0.08	0.05	0.05	0.05	0.00	0.38	0.39	0.17	0.35
0.26	0.30	0.27	0.12	0.00	0.08	0.07	−0.17	0.25	0.20	0.02	0.05
0.23	0.20	0.24	0.18	0.02	0.07	0.08	−0.14	0.24	0.24	−0.03	0.08
0.24	0.10	0.16	0.31	0.41	0.28	0.28	−0.15	0.12	0.20	0.34	0.43
0.22	0.02	0.14	0.31	0.20	0.11	0.29	−0.04	0.05	0.10	0.22	0.29
0.20	0.27	0.22	0.20	0.17	0.10	0.19	−0.10	0.25	0.29	0.27	0.24
0.10	0.05	0.10	0.26	0.23	0.05	0.21	−0.07	0.11	0.20	0.14	0.21
0.19	0.12	0.20	0.29	0.26	0.17	0.29	−0.06	0.26	0.30	0.24	0.36
0.37	0.15	0.21	0.26	0.22	0.27	0.24	−0.08	0.16	0.29	0.19	0.40
0.30	0.12	0.32	0.41	0.26	0.39	0.37	0.05	0.19	0.30	0.33	0.49
0.35	0.07	0.23	0.28	0.18	0.37	0.37	0.12	0.23	0.30	0.28	0.47
0.12	−0.01	0.23	0.15	0.07	0.13	0.10	−0.03	0.24	0.21	0.11	0.18
0.33	0.29	0.25	0.34	0.25	0.30	0.21	−0.18	0.16	0.32	0.14	0.42
0.29	0.19	0.25	0.29	0.29	0.25	0.32	0.00	0.02	0.07	0.23	0.22

TABLE 76 Polychoric correlation matrix for all items after reversing negative items

	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32
Q1									
Q2									
Q3									
Q4									
Q5									
Q6									
Q7									
Q8									
Q9									
Q10									
Q11									
Q12									
Q13									
Q14									
Q15									
Q16									
Q17									
Q18									
Q19									
Q20									
Q21									
Q22									
Q23									
Q24	1.00								
Q25	0.74	1.00							
Q26	0.15	0.22	1.00						
Q27	0.61	0.44	0.04	1.00					
Q28	0.28	0.27	0.03	0.53	1.00				
Q29	0.23	0.27	0.06	0.52	0.37	1.00			
Q30	0.33	0.49	0.21	0.35	0.11	0.57	1.00		
Q31	0.22	0.28	0.33	0.16	0.05	0.19	0.25	1.00	
Q32	0.21	0.16	0.30	0.18	0.03	0.23	0.18	0.87	1.00
Q33	0.46	0.47	0.09	0.56	0.47	0.43	0.33	0.25	0.22
Q34	0.36	0.30	0.01	0.41	0.61	0.44	0.29	0.11	0.15
Q35	0.38	0.37	0.11	0.40	0.36	0.42	0.25	0.24	0.26
Q36	0.27	0.28	−0.10	0.29	0.44	0.20	0.23	−0.07	−0.05
Q37	0.37	0.41	0.06	0.57	0.57	0.44	0.41	0.11	0.06
Q38	0.49	0.36	0.13	0.59	0.50	0.42	0.29	0.31	0.28
Q39	0.55	0.47	0.15	0.64	0.55	0.40	0.40	0.40	0.33
Q40	0.56	0.41	0.23	0.62	0.50	0.43	0.40	0.39	0.39
Q41	0.19	0.26	0.22	0.19	0.28	0.16	0.28	0.15	0.12
Q42	0.31	0.35	0.21	0.34	0.19	0.44	0.32	0.25	0.28
Q43	0.34	0.27	0.05	0.33	0.29	0.27	0.15	0.29	0.34

TABLE 76 Polychoric correlation matrix for all items after reversing negative items

Q33	Q34	Q35	Q36	Q37	Q38	Q39	Q40	Q41	Q42	Q43
1.00										
0.65	1.00									
0.45	0.38	1.00								
0.48	0.66	0.26	1.00							
0.62	0.70	0.51	0.61	1.00						
0.54	0.40	0.41	0.23	0.45	1.00					
0.67	0.45	0.38	0.22	0.55	0.83	1.00				
0.56	0.32	0.35	0.14	0.48	0.79	0.94	1.00			
0.35	0.29	0.27	0.16	0.33	0.31	0.49	0.49	1.00		
0.41	0.19	0.42	0.11	0.37	0.43	0.52	0.50	0.30	1.00	
0.46	0.32	0.26	0.25	0.33	0.37	0.59	0.54	0.21	0.34	1.00

TABLE 77 Final set of questions used in exploratory factor analysis

Question number	Question
Q1	Patients should have the opportunity to provide feedback on their experiences of health care provided
Q4	I have reservations about patient feedback received via complaints
Q5	I have reservations about patient feedback currently received via surveys
Q6	I have reservations about patient feedback currently received via patient forums or participant groups
Q8	It is beneficial to receive patient feedback via complaints
Q9	It is beneficial to receive patient feedback via surveys
Q10	It is beneficial to receive patient feedback via patient forums or participant groups
Q12	I think social media such as Twitter or Facebook are a useful route for receiving patient feedback
Q13	Responders to patient surveys are representative of my patient population
Q14	Feedback from current patient surveys is usually reliable
Q15	Patients usually have grounds for the complaints they make
Q16	Patients are able to provide useful feedback on my clinical skills
Q17	Patients are able to provide useful feedback on my communication skills
Q18	Patients are able to provide useful feedback on organisational issues, such as appointment systems
Q22	Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results
Q23	I feel patient feedback is useful for individual performance assessment, such as in appraisal or revalidation
Q24	Patient surveys help identify areas for service improvement
Q26	Patient anonymity limits the usefulness of most patient feedback
Q27	I can make good use of patient feedback
Q32	I am concerned about my individual reputation as a result of patient feedback being made public
Q33	Patient feedback can improve the clinical quality of care I provide
Q37	I am likely to make changes to my individual practice as a result of patient feedback
Q39	Patient feedback is an important mechanism of quality improvement
Q41	Data collection for large, representative patient surveys is not a good use of resources
Q42	I value feedback from colleagues more than feedback from patients
Q43	Making patient feedback publicly available is beneficial to other patients

onto any factor (and thus are not listed in the table). To produce a final set of questions following this factor analysis we employed the following logic. We started with all items with a factor loading of ≥ 0.4. Q9 was also included because it formed a run of questions asking about the benefits of different modes of feedback and this run mirrored similar questions in the reservations group. We also removed Q26, 'Patient anonymity limits the usefulness of most patient feedback', as we continued to have reservations about its overall performance, considering all sources of evidence from testing. The final proposed set of questions is shown in *Box 7*.

We fitted a preliminary confirmatory factor analysis model to these data using our proposed final questionnaire. It had only a moderately good fit with RMSEA = 0.84, CFI = 0.85 and Tucker–Lewis Index[315] = 0.82.
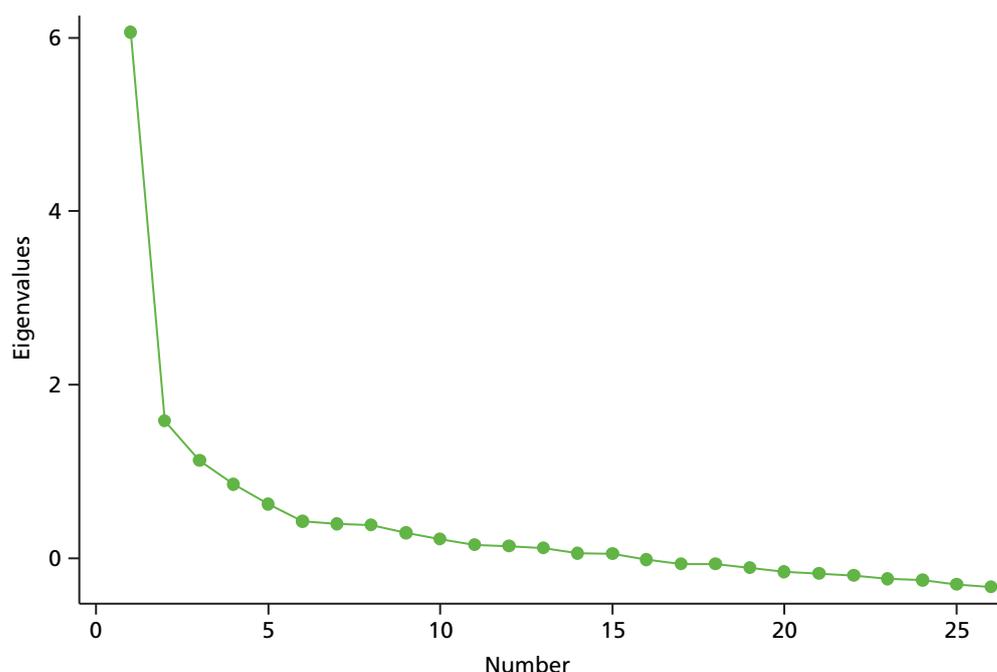
FIGURE 27 Scree plot of eigenvalues from exploratory factor analysis.

TABLE 78 Factor loadings from a four-factor exploratory factor analysis

Item	Wording	Factor loadings			
		1	2	3	4
Factor 1: changes in response to patient feedback					
Q33	Patient feedback can improve the clinical quality of care I provide	0.7764	−0.0317	−0.0606	−0.0233
Q39	Patient feedback is an important mechanism of quality improvement	0.7159	0.1149	−0.0706	0.1222
Q37	I am likely to make changes to my individual practice as a result of patient feedback	0.6678	−0.0213	0.0245	−0.0156
Q27	I can make good use of patient feedback	0.6377	0.0508	0.1077	−0.1083
Q43	Making patient feedback publicly available is beneficial to other patients	0.5051	−0.0479	0.0635	0.1011
Q24	Patient surveys help identify areas for service improvement	0.4613	0.1329	0.232	−0.0677
Q41	Data collection for large, representative patient surveys is not a good use of resources	0.3702	−0.0862	−0.198	0.382
Q16	Patients are able to provide useful feedback on my clinical skills	0.3543	0.1009	0.1944	−0.2482
					continued

TABLE 78 Factor loadings from a four-factor exploratory factor analysis (*continued*)

| Item | Wording | Factor loadings | | | |
		1	2	3	4
Factor 2: benefits of patient feedback					
Q8	It is beneficial to receive patient feedback via complaints	0.0104	0.7204	−0.1479	0.0961
Q10	It is beneficial to receive patient feedback via patient forums or participant groups	0.0523	0.6435	−0.0004	0.0478
Q18	Patients are able to provide useful feedback on organisational issues, such as appointment systems	0.1279	0.4559	0.187	−0.351
Q9	It is beneficial to receive patient feedback via surveys	0.1952	0.3754	0.1049	0.1693
Q15	Patients usually have grounds for the complaints they make	0.1344	0.3666	0.1476	0.078
Q17	Patients are able to provide useful feedback on my communication skills	0.131	0.3187	0.2275	−0.2768
Factor 3: validity of patient feedback mechanisms					
Q13	Responders to patient surveys are representative of my patient population	−0.0818	0.0177	0.6805	0.0132
Q14	Feedback from current patient surveys is usually reliable	0.1037	−0.1032	0.6413	0.1678
Q5	I have reservations about patient feedback currently received via surveys	0.1722	−0.1078	0.3378	0.5236
Factor 4: reservations about patient feedback					
Q4	I have reservations about patient feedback received via complaints	0.0244	0.2591	0.0995	0.5434
Q5	I have reservations about patient feedback currently received via surveys	0.1722	−0.1078	0.3378	0.5236
Q32	I am concerned about my individual reputation as a result of patient feedback being made public	0.0141	0.0942	0.0604	0.4994
Q26	Patient anonymity limits the usefulness of most patient feedback	−0.1337	0.1633	0.0671	0.4706
Q6	I have reservations about patient feedback currently received via patient forums or participant groups	0.1118	0.2575	0.2215	0.4081
Q41	Data collection for large, representative patient surveys is not a good use of resources	0.3702	−0.0862	−0.198	0.382

BOX 7 Proposed final set of questions for the VOP scale

Changes in response to patient feedback

Patient feedback can improve the clinical quality of care I provide.

Patient feedback is an important mechanism of quality improvement.

I am likely to make changes to my individual practice as a result of patient feedback.

I can make good use of patient feedback.

Making patient feedback publicly available is beneficial to other patients.

Patient surveys help identify areas for service improvement.

Benefits of patient feedback

It is beneficial to receive patient feedback via complaints.

It is beneficial to receive patient feedback via patient forums or participant groups.

It is beneficial to receive patient feedback via surveys.

Patients are able to provide useful feedback on organisational issues, such as appointment systems.

Validity of patient feedback mechanisms

Responders to patient surveys are representative of my patient population.

Feedback from current patient surveys is usually reliable.

Reservations about patient feedback

I have reservations about patient feedback received via complaints.

I have reservations about patient feedback currently received via patient forums or participant groups.

I have reservations about patient feedback currently received via surveys.

I am concerned about my individual reputation as a result of patient feedback being made public.

Annex A: content validation of initial item pool

TABLE 79 Content validation of initial pool of items

| Number | Wording of item | Domain of construct: 'value of patient feedback' | | | | | | | | |
		Right of patients to give feedback	Responsibility for organising patient feedback	Preferred mode of patient feedback	Credibility of patient feedback	Utility of patient feedback	Impact of receiving patient feedback	Changes to individual practice	Changes to overall quality of health care	Overall value of patient feedback
1	Patients should have the opportunity to provide feedback on their experiences of care provided	x								
2	It is important to listen to patients about their experiences of care	x								
3	It is a clinician's responsibility to gather evidence of patients' experience of care		x							
4	It is the responsibility of clinical commissioning groups and hospitals to gather evidence of patients' experience of care		x							
5	It is the responsibility of NHS England to gather evidence of patients' experience of care		x							
6	I have reservations about patient feedback received via complaints and compliments			x						
7	I have reservations about patient feedback received via surveys			x						
8	I have reservations about patient feedback received via patient forums or participant groups			x						
9	I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)			x						

Number	Wording of item	Right of patients to give feedback	Responsibility for organising patient feedback	Preferred mode of patient feedback	Credibility of patient feedback	Utility of patient feedback	Impact of receiving patient feedback	Changes to individual practice	Changes to overall quality of health care	Overall value of patient feedback
			Domain of construct: 'value of patient feedback'							
10	It is beneficial to receive patient feedback via complaints and compliments			x						
11	It is beneficial to receive patient feedback via surveys			x						
12	It is beneficial to receive patient feedback via patient forums or participant groups			x						
13	It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)			x						
14	I am interested in learning more about receiving patient feedback through social media such as Twitter or Facebook			x						
15	Responders to patient surveys are representative of my patient population				x					
16	Data from patient surveys are valid and reliable				x					
17	Patients always have grounds for the complaints they make				x					
18	Patient feedback via patient forums or participant groups is a reliable indicator of patient concerns				x					
19	Patients who use online patient feedback mechanisms (such as NHS Choices or Patient Opinion) are representative of my patient population				x					
20	I trust patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)				x					

TABLE 79 Content validation of initial pool of items (*continued*)

Number	Wording of item	Domain of construct: 'value of patient feedback'								
		Right of patients to give feedback	Responsibility for organising patient feedback	Preferred mode of patient feedback	Credibility of patient feedback	Utility of patient feedback	Impact of receiving patient feedback	Changes to individual practice	Changes to overall quality of health care	Overall value of patient feedback
21	Patients are able to provide useful feedback on my clinical skills					x				
22	Patients are able to provide useful feedback on my interpersonal skills					x				
23	Patients are able to provide useful feedback on administrative and organisational issues					x				
24	Patient survey data are more valuable if they include benchmarking					x				
25	Free-text comments are the most useful aspect of patient surveys					x				
26	I find it difficult to interpret the results of patient surveys					x				
27	I find it easy to understand patient feedback					x				
28	Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results					x				
29	Feedback from patient surveys is presented in a timely way					x				
30	Patient feedback on specific identifiable care experiences is more helpful than general opinions					x				
31	Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation					x				

Number	Wording of item	Domain of construct: 'value of patient feedback'								
		Right of patients to give feedback	Responsibility for organising patient feedback	Preferred mode of patient feedback	Credibility of patient feedback	Utility of patient feedback	Impact of receiving patient feedback	Changes to individual practice	Changes to overall quality of health care	Overall value of patient feedback
32	Patient surveys indicate what needs to be done to improve					x				
33	Patient anonymity limits the usefulness of most patient feedback					x				
34	I know how to act on anonymous patient feedback					x				
35	I know how to act on feedback received from a named patient					x				
36	I can make good use of patient feedback					x				
37	I have doubted my competence after receiving feedback from patients						x			
38	Receiving feedback from patients has improved my confidence at work						x			
39	Receiving patient feedback via patient surveys is a positive experience						x			
40	Receiving a complaint from a patient can impact on my ability to work effectively						x			
41	Engaging with patient feedback requires a lot of energy						x			
42	I worry about my workplace's reputation as a result of patient feedback being made public						x			
43	I worry about my individual reputation as a result of patient feedback being made public						x			
44	Acting on patient feedback can improve the clinical quality of care I provide							x		

TABLE 79 Content validation of initial pool of items (continued)

Number	Wording of item	Domain of construct: 'value of patient feedback'								
		Right of patients to give feedback	Responsibility for organising patient feedback	Preferred mode of patient feedback	Credibility of patient feedback	Utility of patient feedback	Impact of receiving patient feedback	Changes to individual practice	Changes to overall quality of health care	Overall value of patient feedback
45	Acting on patient feedback can improve the interpersonal quality of care I provide							x		
46	Acting on patient feedback can improve the organisation and administration of the care I provide							x		
47	Receiving patient feedback can improve my relationship with patients							x		
48	I have made changes to my individual practice as a result of patient feedback							x		
49	I am likely to make changes to my individual practice as a result of patient feedback							x		
50	It is necessary to have patient feedback to improve the overall quality of health care								x	
51	Listening to patients will lead to useful changes to health care								x	
52	Patient feedback is an important mechanism of quality improvement								x	
53	Gathering patient feedback is beneficial to the health service									x
54	Data collection for large, representative patient surveys is cost-effective									x
55	Online patient feedback mechanisms (such as NHS Choices or Patient Opinion) are beneficial to the health service									x
56	I value feedback from colleagues more than feedback from patients									x

Annex B: comments from expert reviewers

TABLE 80 Comments from expert reviewers

Item pool following initial generation of items	Comments from NL	Comments from PB	Comments from JC	Comments from FG	Revised item (round 1)
1. Patients should have the opportunity to provide feedback on their experiences of care provided	Patients should have the opportunity to provide feedback on their experiences of care provided	Patients should have the opportunity to provide feedback on their experiences of care	Patients should have the opportunity to provide feedback on their experiences of care provided	Patients should have the opportunity to provide feedback on their experiences of care provided	Patients should have the opportunity to provide feedback on their experiences of health care provided
2. It is important to listen to patients about their experiences of care	It is important to listen to patients about their experiences of care	It is important to listen to patients about their experiences of care	It is important to listen to patients about their experiences of care	It is important to listen to patients about their experiences of care	It is important to listen to patients about their experiences of care
3. It is a clinician's responsibility to gather evidence of patients' experience of care	It is a clinician's responsibility to gather evidence of patients' experience of care	It is a clinician's responsibility to gather evidence of patients' experience of care	It is a clinician's responsibility to gather evidence of patients' experience of care	It is a clinician's responsibility to gather evidence of patients' experience of care	It is a clinician's responsibility to gather evidence of patients' experience of care
6. I have reservations about patient feedback received via complaints and compliments	I have reservations about patient feedback received via complaints and compliments	I have reservations about patient feedback received via complaints and compliments	I have reservations about patient feedback received via complaints and compliments	I have reservations about patient feedback received via complaints and compliments	I have reservations about patient feedback received via complaints and compliments
7. I have reservations about patient feedback received via surveys	I have reservations about patient feedback received via surveys	I have reservations about patient feedback received via surveys	I have reservations about patient feedback received via surveys	I have reservations about patient feedback received via surveys	I have reservations about patient feedback received via surveys
8. I have reservations about patient feedback received via patient forums or participant groups	I have reservations about patient feedback received via patient forums or participant groups	I have reservations about patient feedback received via patient forums or participant groups	I have reservations about patient feedback received via patient forums or participant groups	I have reservations about patient feedback received via patient forums or participant groups	I have reservations about patient feedback received via patient forums or participant groups
9. I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices, Patient Opinion or I Want Great Care)

TABLE 80 Comments from expert reviewers (*continued*)

Item pool following initial generation of items	Comments from NL	Comments from PB	Comments from JC	Comments from FG	Revised item (round 1)
10. It is beneficial to receive patient feedback via complaints and compliments	It is beneficial to receive patient feedback via complaints and compliments	It is beneficial to receive patient feedback via complaints and compliments	It is beneficial to receive patient feedback via complaints and compliments	It is beneficial to receive patient feedback via complaints and compliments	It is beneficial to receive patient feedback via complaints and compliments
11. It is beneficial to receive patient feedback via surveys	It is beneficial to receive patient feedback via surveys	It is beneficial to receive patient feedback via surveys	It is beneficial to receive patient feedback via surveys	It is beneficial to receive patient feedback via surveys	It is beneficial to receive patient feedback via surveys
12. It is beneficial to receive patient feedback via patient forums or participant groups	It is beneficial to receive patient feedback via patient forums or participant groups	It is beneficial to receive patient feedback via patient forums or participant groups	It is beneficial to receive patient feedback via patient forums or participant groups	It is beneficial to receive patient feedback via patient forums or participant groups	It is beneficial to receive patient feedback via patient forums or participant groups
13. It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)	It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion)
14. I am interested in learning more about receiving patient feedback through social media such as Twitter or Facebook	I am interested in learning more about receiving patient feedback through social media such as Twitter or Facebook	I am interested in learning more about receiving patient feedback through social media such as Twitter or Facebook	I am interested in learning more about receiving patient feedback through social media such as Twitter or Facebook	I am interested in learning more about receiving patient feedback through social media such as Twitter or Facebook	I think social media such as Twitter or Facebook are a useful route for receiving patient feedback
15. Responders to patient surveys are representative of my patient population	Responders to patient surveys are representative of my patient population	Responders to patient surveys are representative of my patient population	Responders to patient surveys are representative of my patient population	Responders to patient surveys are representative of my patient population	Responders to patient surveys are representative of my patient population
16. Data from patient surveys are valid and reliable	Data from patient surveys are valid and reliable	Data from patient surveys are valid and reliable	Data from patient surveys are valid and reliable	Data from patient surveys are valid and reliable	Feedback from patient surveys is usually accurate
17. Patients always have grounds for the complaints they make	Patients always have grounds for the complaints they make	Patients always have grounds for the complaints they make	Patients always have grounds for the complaints they make	Patients always have grounds for the complaints they make	Patients usually have grounds for the complaints they make

Item pool following initial generation of items	Comments from NL	Comments from PB	Comments from JC	Comments from FG	Revised item (round 1)
21. Patients are able to provide useful feedback on my clinical skills	Patients are able to provide useful feedback on my clinical skills	Patients are able to provide useful feedback on my clinical skills	Patients are able to provide useful feedback on my clinical skills	Patients are able to provide useful feedback on my clinical skills	Patients are able to provide useful feedback on my clinical skills
22. Patients are able to provide useful feedback on my interpersonal skills	Patients are able to provide useful feedback on my interpersonal skills	Patients are able to provide useful feedback on my interpersonal skills	Patients are able to provide useful feedback on my interpersonal skills	Patients are able to provide useful feedback on my interpersonal skills	Patients are able to provide useful feedback on my communication skills
23. Patients are able to provide useful feedback on administrative and organisational issues	Patients are able to provide useful feedback on administrative and organisational issues	Patients are able to provide useful feedback on administrative and organisational issues	Patients are able to provide useful feedback on administrative and organisational issues	Patients are able to provide useful feedback on administrative and organisational issues	Patients are able to provide useful feedback on organisational issues, such as appointment systems
24. Patient survey data are more valuable if they include benchmarking	Patient survey data are more valuable if they include benchmarking	Patient survey data are more valuable if they include benchmarking	Patient survey data are more valuable if they include benchmarking	Patient survey data are more valuable if they include comparison with how others are doing	Patient survey data are more valuable if they include comparison with how others are doing
25. Free-text comments are the most useful aspect of patient surveys	Free-text comments are the most useful aspect of patient surveys	Free-text comments are the most useful aspect of patient surveys	Free-text comments are the most useful aspect of patient surveys	Free-text comments are the most useful aspect of patient surveys	Free-text comments are the most useful aspect of patient surveys
26. I find it difficult to interpret the results of patient surveys	I find it difficult to interpret the results of patient surveys	I find it difficult to interpret the results of patient surveys	I find it difficult to interpret the results of patient surveys	I find it difficult to interpret the results of patient surveys	I find it difficult to interpret the results of patient surveys
27. I find it easy to understand patient feedback	I find it easy to understand patient feedback	I find it easy to understand patient feedback	I find it easy to understand patient feedback	I find it easy to understand patient feedback	I find it easy to understand patient feedback
28. Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results	Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results	Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results	Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results	Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results	Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results

continued

TABLE 80 Comments from expert reviewers (*continued*)

Item pool following initial generation of items	Comments from NL	Comments from PB	Comments from JC	Comments from FG	Revised item (round 1)
31. Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation	Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation	Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation	Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation	Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation	Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation
32. Patient surveys indicate what needs to be done to improve	Patient surveys indicate what needs to be done to improve	Patient surveys indicate what needs to be done to improve	Patient surveys indicate what needs to be done to improve	Patient surveys indicate what needs to be done to improve	Patient surveys help identify areas for service improvement Patient surveys help identify actions that might be taken to improve services
33. Patient anonymity limits the usefulness of most patient feedback	Patient anonymity limits the usefulness of most patient feedback	Patient anonymity limits the usefulness of most patient feedback	Patient anonymity limits the usefulness of most patient feedback	Patient anonymity limits the usefulness of most patient feedback	Patient anonymity limits the usefulness of most patient feedback
34. I know how to act on anonymous patient feedback	I know how to act on anonymous patient feedback	I know how to act on anonymous patient feedback	I know how to act on anonymous patient feedback	I know how to act on anonymous patient feedback	I usually know how to act on anonymous patient feedback
35. I know how to act on feedback received from a named patient	I know how to act on feedback received from a named patient	I know how to act on feedback received from a named patient	I know how to act on feedback received from a named patient	I know how to act on feedback received from a named patient	I usually know how to act on feedback received from a named patient
36. I can make good use of patient feedback	I can make good use of patient feedback	I can make good use of patient feedback	I can make good use of patient feedback	I can make good use of patient feedback	I can make good use of patient feedback
37. I have doubted my competence after receiving feedback from patients	I have doubted my competence after receiving feedback from patients	I have doubted my competence after receiving feedback from patients	I have doubted my competence after receiving feedback from patients	I have doubted my competence after receiving feedback from patients	I have doubted my competence after receiving feedback from patients
38. Receiving feedback from patients has improved my confidence at work	Receiving feedback from patients has improved my confidence at work	Receiving feedback from patients has improved my confidence at work	Receiving feedback from patients has improved my confidence at work	Receiving feedback from patients has improved my confidence at work	Receiving feedback from patients has improved my confidence at work

Item pool following initial generation of items	Comments from NL	Comments from PB	Comments from JC	Comments from FG	Revised item (round 1)
39. Receiving patient feedback via patient surveys is a positive experience	Receiving patient feedback via patient surveys is a positive experience	Receiving patient feedback via patient surveys is a positive experience	Receiving patient feedback via patient surveys is a positive experience	Receiving patient feedback via patient surveys is a positive experience	Receiving patient feedback via patient surveys is a positive experience
40. Receiving a complaint from a patient can impact on my ability to work effectively	Receiving a complaint from a patient can impact on my ability to work effectively	Receiving a complaint from a patient can impact on my ability to work effectively	Receiving a complaint from a patient can impact on my ability to work effectively	Receiving a complaint from a patient can impact on my ability to work effectively	Receiving a complaint from a patient can impact on my ability to work effectively
41. Engaging with patient feedback requires a lot of energy	Engaging with patient feedback requires a lot of energy	Engaging with patient feedback requires a lot of energy	Engaging with patient feedback requires a lot of energy	Engaging with patient feedback requires a lot of energy	Engaging with patient feedback requires a lot of time
42. I worry about my workplace's reputation as a result of patient feedback being made public	I worry about my workplace's reputation as a result of patient feedback being made public	I worry about my workplace's reputation as a result of patient feedback being made public	I worry about my workplace's reputation as a result of patient feedback being made public	I worry about my workplace's reputation as a result of patient feedback being made public	I worry about my workplace's reputation as a result of patient feedback being made public
43. I worry about my individual reputation as a result of patient feedback being made public	I worry about my individual reputation as a result of patient feedback being made public	I worry about my individual reputation as a result of patient feedback being made public	I worry about my individual reputation as a result of patient feedback being made public	I worry about my individual reputation as a result of patient feedback being made public	I worry about my individual reputation as a result of patient feedback being made public
44. Acting on patient feedback can improve the clinical quality of care I provide	Acting on patient feedback can improve the clinical quality of care I provide	Acting on patient feedback can improve the clinical quality of care I provide	Acting on patient feedback can improve the clinical quality of care I provide	Acting on patient feedback can improve the clinical quality of care I provide	Patient feedback can improve the clinical quality of care I provide
45. Acting on patient feedback can improve the interpersonal quality of care I provide	Acting on patient feedback can improve the interpersonal quality of care I provide	Acting on patient feedback can improve the interpersonal quality of care I provide	Acting on patient feedback can improve the interpersonal quality of care I provide	Acting on patient feedback can improve the interpersonal quality of care I provide	Patient feedback can improve my communication skills
46. Acting on patient feedback can improve the organisation and administration of the care I provide	Acting on patient feedback can improve the organisation and administration of the care I provide	Acting on patient feedback can improve the organisation and administration of the care I provide	Acting on patient feedback can improve the organisation and administration of the care I provide	Acting on patient feedback can improve the organisation and administration of the care I provide	Patient feedback can improve organisational issues, such as appointment systems

TABLE 80 Comments from expert reviewers (*continued*)

Item pool following initial generation of items	Comments from NL	Comments from PB	Comments from JC	Comments from FG	Revised item (round 1)
47. Receiving patient feedback can improve my relationship with patients	Receiving patient feedback can improve my relationship with patients	Receiving patient feedback can improve my relationship with patients	Receiving patient feedback can improve my relationship with patients	Receiving patient feedback can improve my relationship with patients	Receiving patient feedback can improve the way I relate to my patients
48. I have made changes to my individual practice as a result of patient feedback	I have made changes to my individual practice as a result of patient feedback	I have made changes to my individual practice as a result of patient feedback	I have made changes to my individual practice as a result of patient feedback	I have made changes to my individual practice as a result of patient feedback	I have made changes to my clinical practice as a result of patient feedback I find it difficult to make tangible changes to my practice as a result of patient survey results I have made changes to the way I consult in response to feedback from patient surveys
49. I am likely to make changes to my individual practice as a result of patient feedback	I am likely to make changes to my individual practice as a result of patient feedback	I am likely to make changes to my individual practice as a result of patient feedback	I am likely to make changes to my individual practice as a result of patient feedback	I am likely to make changes to my individual practice as a result of patient feedback	I am likely to make changes to my individual practice as a result of patient feedback
50. It is necessary to have patient feedback to improve the overall quality of health care	It is necessary to have patient feedback to improve the overall quality of health care	It is necessary to have patient feedback to improve the overall quality of health care	It is necessary to have patient feedback to improve the overall quality of health care	It is necessary to have patient feedback to improve the overall quality of health care	It is necessary to have patient feedback to improve the overall quality of health care
52. Patient feedback is an important mechanism of quality improvement	Patient feedback is an important mechanism of quality improvement	Patient feedback is an important mechanism of quality improvement	Patient feedback is an important mechanism of quality improvement	Patient feedback is an important mechanism of quality improvement	Patient feedback is an important mechanism of quality improvement
53. Gathering patient feedback is beneficial to the health service	Gathering patient feedback is beneficial to the health service	Gathering patient feedback is beneficial to the health service	Gathering patient feedback is beneficial to the health service	Gathering patient feedback is beneficial to the health service	Gathering feedback is beneficial to the health service

Item pool following initial generation of items	Comments from NL	Comments from PB	Comments from JC	Comments from FG	Revised item (round 1)
54. Data collection for large, representative patient surveys is cost-effective	Data collection for large, representative patient surveys is cost-effective	Data collection for large, representative patient surveys is cost-effective	Data collection for large, representative patient surveys is cost-effective	Data collection for large, representative patient surveys is cost-effective	Data collection for large, representative patient surveys is not a good use of resources
56. I value feedback from colleagues more than feedback from patients	I value feedback from colleagues more than feedback from patients	I value feedback from colleagues more than feedback from patients	I value feedback from colleagues more than feedback from patients	I value feedback from colleagues more than feedback from patients	I value feedback from colleagues more than feedback from patients
New item. Making patient feedback publicly available is beneficial to other patients					Making patient feedback publicly available is beneficial to other patients
					I have a good idea of how satisfied my patients are with the care I provide

Annex C: item groupings for cognitive interviews

BOX 8 Revised items from cognitive interviews in group 1

Revised item (round 1)

Patients should have the opportunity to provide feedback on their experiences of health care provided.

It is a clinician's responsibility to gather evidence of patients' experience of care.

I have reservations about patient feedback received via complaints and compliments.

I have reservations about patient feedback received via online patient feedback mechanisms (such as NHS Choices, Patient Opinion or I Want Great Care).

It is beneficial to receive patient feedback via complaints and compliments.

It is beneficial to receive patient feedback via online patient feedback mechanisms (such as NHS Choices or Patient Opinion).

Feedback from patient surveys is usually accurate.

Patients are able to provide useful feedback on my communication skills.

Free-text comments are better than replies to closed questions.

Receiving supported feedback (such as with a facilitator) following surveys of patients' experience of care would help me gain a better understanding of the results.

Patient surveys help identify actions that might be taken to improve services.

I usually know how to act on feedback received from a named patient.

Receiving feedback from patients has improved my confidence at work.

Engaging with patient feedback requires a lot of time.

Patient feedback can improve the clinical quality of care I provide.

Receiving patient feedback can improve the way I relate to my patients.

I have made changes to the way I consult in response to feedback from patient surveys.

Patient feedback is an important mechanism of quality improvement.

I value feedback from colleagues more than feedback from patients.

BOX 9 Revised items from cognitive interviews in group 2

Revised item (round 1)

Patients should have the opportunity to provide feedback on their experiences of health care provided.

It is a clinician's responsibility to gather evidence of patients' experience of care.

I have reservations about patient feedback received via surveys.

It is beneficial to receive patient feedback via surveys.

I think social media such as Twitter or Facebook are a useful route for receiving patient feedback.

Patients usually have grounds for the complaints they make.

Patients are able to provide useful feedback on organisational issues, such as appointment systems.

I find it difficult to interpret the results of patient surveys.

Patient feedback is useful for individual performance assessment, such as in appraisal or revalidation.

Patient anonymity limits the usefulness of most patient feedback.

I can make good use of patient feedback.

Receiving patient feedback via patient surveys is a positive experience.

I am concerned about my workplace's reputation as a result of patient feedback being made public.

Patient feedback can improve my communication skills.

I have made changes to my clinical practice as a result of patient feedback.

I am likely to make changes to my individual practice as a result of patient feedback.

Gathering feedback is beneficial to the health service.

Making patient feedback publicly available is beneficial to other patients.

BOX 10 Revised items from cognitive interviews in group 3

Revised item (round 1)

It is important to listen to patients about their experiences of care.

It is a clinician's responsibility to gather evidence of patients' experience of care.

I have reservations about patient feedback received via patient forums or participant groups.

It is beneficial to receive patient feedback via patient forums or participant groups.

Responders to patient surveys are representative of my patient population.

Patients are able to provide useful feedback on my clinical skills.

Patient survey data are more valuable if they include comparison with how others are doing.

I find it easy to understand patient feedback.

Patient surveys help identify areas for service improvement.

I usually know how to act on anonymous patient feedback.

I have doubted aspects of my competence after receiving feedback from patients.

Receiving a complaint from a patient can impact on my ability to work effectively.

I am concerned about my individual reputation as a result of patient feedback being made public.

Patient feedback can improve organisational issues, such as appointment systems.

I find it difficult to make tangible changes to my practice as a result of patient survey results.

It is necessary to have patient feedback to improve the overall quality of health care.

Data collection for large, representative patient surveys is not a good use of resources.

I have a good idea of how satisfied my patients are with the care I provide.

Annex D: Value of Patient Feedback scale – cognitive interview topic guide

Preamble
(Obtain written consent.)

(Thank participant for taking part.)

The IMPROVE research team at the University of Cambridge and the University of Exeter is developing a scale to assess the value of patient feedback to clinicians. The aim of the interview today is to help develop the scale by identifying any items in the scale that might be difficult to answer or understand. We will work through the questionnaire, focusing on questions within the scale that the research team anticipate being problematic, and ask you questions about how you went about answering it. We will be audio recording the interview for later transcription but all information collected today will be held confidentially.

Probes (to be used as appropriate for 15–20 pre-identified problematic items, after each item answered)

- *Retrieval*: I noticed you hesitated before you answered the question, can you explain why?
- *Comprehension*: What does the term 'e.g. patient feedback mechanisms' mean to you?
- *Comprehension*: How would you rephrase this question in your own words? (seek clarification when required)
- *Comprehension*: What do you understand by 'e.g. patient feedback mechanisms'?
- *Confidence judgement*: How sure/confident of your answer are you?
- *Response*: Were you able to find your first answer to the question from the response options shown? If not, what additional response option would you like to see?

At end of scale
Finally, were there any other questions on the scale that you had difficulty answering?

If yes, then probe:

- Can you explain why do you think that was?
- How would you rephrase this question in your own words?

Thank participant for taking part again.

Annex E: pilot survey – outline of questions

What is the purpose of this research?
To better understand health-care professionals' attitudes to receiving feedback from patients, we are developing a new measurement instrument, the Value of Patient Feedback (VOP) scale. This questionnaire will be used to evaluate how doctors and nurses engage with the concept of patient feedback and how helpful and relevant they feel it is both to their practice and to the wider health-care system.

The research is being undertaken by the School of Clinical Medicine at the University of Cambridge and the University of Exeter Medical School (see end for full contact details).

What does taking part involve?
To help us develop a robust instrument, we are running a pilot survey of our questionnaire. We are inviting UK registered doctors and nurses to participate in the study by completing a series of online questions.

We will use these responses to refine the VOP scale, ready for use in research into the impact of patient feedback on doctors and nurses.

As a thank you, we are running a prize draw offering participants the chance to win a Kindle Paperwhite. If you wish to enter into the competition you will need to provide us with your GMC or NMC number, name and e-mail address when requested (see end for full terms and conditions).

How will my information be used?
All information collected during the course of this study will be kept strictly confidential. The anonymous questionnaires will be analysed by the research team. All data will be stored securely by the University of Cambridge and Exeter Medical School.

You are free to complete the survey giving no contact details. However, should you wish to be entered into the prize draw you will need to complete the contact details section, including your GMC or NMC number to confirm that you are a registered doctor or nurse.

Research team
For queries relating to this survey, please contact:

[Researcher name]

Lead Researcher

[Researcher contact details]

Survey questions

Part 1: VOP scale items
[Full list of VOP items to be taken forward to pilot testing.]

Part 2: some questions about you

1. Your professional role:
   - ☐ Nurse
   - ☐ Doctor
2. What is your grade, band or job title? (e.g. doctor grade FY2, nursing band 6)? Please write in:
3. Do you have direct clinical contact with patients?
   - ☐ Yes
   - ☐ No
4. Are you male or female?
   - ☐ Male
   - ☐ Female
5. How old are you?
   - ☐ Under 18
   - ☐ 18 to 24
   - ☐ 25 to 34
   - ☐ 35 to 44
   - ☐ 45 to 54
   - ☐ 55 to 64
   - ☐ 65 to 74
   - ☐ 75 or over

6. What is your ethnic group?

- White:
  - ☐ English/Welsh/Scottish/Northern Irish/British
  - ☐ Irish
  - ☐ Gypsy or Irish Traveller
  - ☐ Any other white background, please describe

7. Mixed/multiple ethnic groups
   - ☐ White and black Caribbean
   - ☐ White and black African
   - ☐ White and Asian
   - ☐ Any other mixed/multiple ethnic background, please describe

8. Asian/Asian British
   - ☐ Indian
   - ☐ Pakistani
   - ☐ Bangladeshi
   - ☐ Chinese
   - ☐ Any other Asian background, please describe

9. Black/African/Caribbean/black British
   - ☐ African
   - ☐ Caribbean
   - ☐ Any other black/African/Caribbean background, please describe

10. Other ethnic group
    - ☐ Arab
    - ☐ Any other ethnic group, please describe

Appendix 6 *Chapter 11*: supplementary tables

TABLE 81 Questionnaire item response distributions

Questionnaire item	*n* (total = 1396)	%
How easy was it to contact the out-of-hours GP service by telephone?		
Very easy	884	63.32
Fairly easy	404	28.94
Not very easy	42	3.01
Not at all easy	15	1.07
Don't know/didn't make contact by telephone	38	2.72
Not answered	13	0.93
How do you feel about how quickly you received care from the out-of-hours GP service?		
It was quicker than expected	605	43.34
It was about right	613	43.91
It took too long	152	10.89
Don't know/doesn't apply	13	0.93
Not answered	13	0.93
Did you have confidence and trust in the out-of-hours health-care professional you consulted with?		
Yes, definitely	928	66.48
Yes, to some extent	347	24.86
No, not at all	75	5.37
Don't know/can't say	29	2.08
Not answered	17	1.22
Overall, how would you describe your experience of the out-of-hours GP service?		
Very good	772	55.3
Good	417	29.87
Neither good nor poor	91	6.52
Poor	44	3.15
Very poor	39	2.79
Not answered	33	2.36
How do you rate [how long it took your call to be answered]?		
Very poor	30	2.15
Poor	36	2.58
Acceptable	349	25.00
Good	460	32.95
Excellent	432	30.95
Not answered	89	6.38

TABLE 81 Questionnaire item response distributions (*continued*)

Questionnaire item	*n* (total = 1396)	%
Please rate the helpfulness of the call operator		
Very poor	27	1.93
Poor	20	1.43
Acceptable	215	15.40
Good	554	39.68
Excellent	496	35.53
Not answered	84	6.02
Please rate the extent to which you felt the call operator listened to you		
Very poor	18	1.29
Poor	24	1.72
Acceptable	212	15.19
Good	549	39.33
Excellent	513	36.75
Not answered	80	5.73
How do you rate [how long it took for a health professional to call you back]?		
Very poor	34	2.44
Poor	105	7.52
Acceptable	320	22.92
Good	353	25.29
Excellent	364	26.07
Not applicable	192	13.75
Not answered	28	2.01
Were you happy with the type of care you received?		
Yes	1187	85.03
No	149	10.67
Not answered	60	4.30
How do you rate [the length of your consultation with the health professional]?		
Very poor	43	3.08
Poor	54	3.87
Acceptable	302	21.63
Good	481	34.46
Excellent	452	32.38
Not answered	64	4.58
Please rate the thoroughness of the consultation		
Very poor	34	2.44
Poor	50	3.58
Acceptable	213	15.26
Good	519	37.18

TABLE 81 Questionnaire item response distributions (*continued*)

Questionnaire item	*n* (total = 1396)	%
Excellent	525	37.61
Not applicable[a]	9	0.64
Not answered	46	3.30
Please rate the accuracy of the diagnosis		
Very poor	35	2.51
Poor	66	4.73
Acceptable	202	14.47
Good	486	34.81
Excellent	461	33.02
Not applicable[a]	71	5.09
Not answered	75	5.37
Please rate the treatment you were given		
Very poor	44	3.15
Poor	58	4.15
Acceptable	181	12.97
Good	424	30.37
Excellent	450	32.23
Not applicable[a]	161	11.53
Not answered	78	5.59
Please rate the advice and information you were given		
Very poor	42	3.01
Poor	64	4.58
Acceptable	197	14.11
Good	498	35.67
Excellent	513	36.75
Not applicable[a]	16	1.15
Not answered	66	4.73
Please rate the warmth of the health professional's manner		
Very poor	32	2.29
Poor	53	3.8
Acceptable	173	12.39
Good	438	31.38
Excellent	647	46.35
Not applicable[a]	4	0.29
Not answered	49	3.51

TABLE 81 Questionnaire item response distributions (*continued*)

Questionnaire item	*n* (total = 1396)	%
Please rate the extent to which you felt listened to		
Very poor	34	2.44
Poor	50	3.58
Acceptable	163	11.68
Good	473	33.88
Excellent	624	44.70
Not applicable[a]	3	0.21
Not answered	49	3.51
Please rate the extent to which you felt things were explained to you		
Very poor	32	2.29
Poor	63	4.51
Acceptable	183	13.11
Good	463	33.17
Excellent	583	41.76
Not applicable[a]	17	1.22
Not answered	55	3.94
Please rate the respect you were shown		
Very poor	29	2.08
Poor	23	1.65
Acceptable	147	10.53
Good	418	29.94
Excellent	724	51.86
Not applicable[a]	10	0.72
Not answered	45	3.22

a 'Not applicable' was a response option that could be selected by respondents to these items.

TABLE 82 Reliability of the overall satisfaction with out-of-hours care scale formed from the four modified GP Patient Survey items

Item	*n*	Item–test correlation[a]	Item–rest correlation[b]	Average inter-item correlation	Alpha
Ease of access	1345	0.697	0.451	0.538	0.777
Timeliness of care	1370	0.732	0.500	0.505	0.754
Confidence and trust	1350	0.790	0.598	0.442	0.704
Overall experience	1363	0.875	0.743	0.348	0.615
Scale				0.458	0.772

a Item–test correlations refer to the correlation between that item and the scale consisting of all of the items.
b Item–rest correlations refer to the correlation between that item and the scale consisting of the rest of the items.

Appendix 7 *Chapters 2 and 3*: practice information sheet

improve

INFORMATION SHEET

Improving Patient Experience in Primary Care: Practice information

We would like to invite the practice to join a project within the Improve Study, which has been set up by the University of Cambridge and the University of Exeter Medical School.

We are carrying out a study of around 500 patients to look at how doctors communicate with patients during a consultation, and how this is best captured in a questionnaire. Our goal is to understand in greater detail how patients use questionnaires to report experience of GP care, and to explore approaches to using patient surveys to improve reported experience.

Before you decide whether to participate, it is important for you to understand why the study is being conducted and what is involved. Please take the time to read the following information carefully, and discuss it with others if you wish.

If anything is not clear, or if you would like more information, please contact a member of our study team (see end for details).

WHY IS THE STUDY NEEDED?

Thank you for taking time to consider taking part in the IMPROVE study.

As you know, patient surveys are increasingly being used to evaluate NHS care. We would like to explore how well surveys actually measure what goes on in GP consultations. To do this, we plan to video record consultations between patients and GPs. After the consultation, we will ask both the doctor and the patient to complete a very short questionnaire. We will also ask external GPs, experienced in communication training and assessment, to confidentially view the videos of a small number of recorded consultations and evaluate these. Finally, we plan to interview a small number of patients to talk through in much more detail their experience of the recorded consultation and how they chose their answers on the questionnaire. We will then use these data sources to explore different perspectives on the consultation, and the implications of this for the use of patient questionnaires as an evaluation and feedback tool.

page | 1 |

Practice information sheet P3&4 v2.0. CA 11/09/2012 ☞

Please turn over

WHAT DOES TAKING PART INVOLVE?

Taking part in the IMPROVE study would involve agreeing the following:

➢ A small number of consultations with each participating GP to be video recorded (for example, one morning surgery per GP)

➢ Researchers to be present at your practice during each recorded surgery to recruit patients to the study, and to hand out questionnaires to individual patients following their consultation. Some assistance from receptionists in alerting patients to the presence of the research team is helpful.

➢ Participating GPs to complete a very short (seven tick box) questionnaire following each recorded consultation, taking less than a minute

WHY HAVE WE BEEN INVITED?

We intend to recruit up to 15 practices to take part in this study from two geographical areas: East Anglia & North London and Bristol & the South West. Practices' previous GPPS results (doctor-patient communication and patient choice items) will inform our sampling frame.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

Taking part will provide individuals and practices with the information necessary for identifying areas of strength and opportunities for improvement. For all participant GPs, we will provide access to their videoed consultations and a summary report of their own responses to the questionnaire. We suggest a range of potential activities aimed at improving consulting skills, based on participation in this study, to enable participating GPs to claim 4, 6 or 8 hours of CPD credits.

WHAT ARE THE POSSIBLE DISADVANTAGES?

We do not foresee major risks from participating in this study, although we do understand that some GPs may be unfamiliar with having their consultations video recorded. Participants are under no pressure to take part and are free to withdraw at any point without giving a reason. If you feel that a patient may be at risk of harm or a confidentiality breach, the doctor is free to stop recording and withdraw this patient from the research. Patients can also ask for the video recorder to be turned off at any point in a consultation.

page │ 2 │

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Please turn over

HOW WILL INFORMATION BE KEPT CONFIDENTIAL?

We will protect GPs' and patients' privacy at all times. The steps taken to ensure confidentiality are stated below.

- Participants' consent to take part in the study will be recorded on a form that will contain identifiers including their name. These forms will be stored in a secure location and separately from the study data.

- Participants' data will be stored using a unique, anonymous study identification number

- A single table linking anonymous study identification numbers to contact details will be stored on a separate password protected location which may be accessed by the members of the study team only.

- All study data will be stored in a restricted-access, study computer folder and database. The study data will be linked to participants' study identification number, but patients' personal details (surname, first name, date of birth, address) will never appear in this folder or database. Access to the study data (video recorded consultations and questionnaire responses) will be password protected and will be used only by named researchers working on this study under the direct supervision of the senior investigators.

- At no time will GPs know patients' questionnaire responses, or vice versa

- All handling, storage and disposal of data will be compliant with the Data Protection Act of 1998.

- In the unlikely event information suggests there may have been a breach of professional conduct or harm to patients, the relevant bodies will be informed.

WHO IS ORGANISING AND FUNDING THIS STUDY?

The study is organised by the University of Cambridge and the University of Exeter Medical School. The study is funded by the Department of Health. This project has been reviewed and was given a favourable review by the Hertfordshire Research Ethics Committee.

IMPROVE Project Office

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Forvie Site, Robinson Way

Cambridge CB2 0SR

Telephone: 01223 330596

Email: improve@medschl.cam.ac.uk

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Appendix 8 *Chapters 2* and *3*: general practitioner information sheet

improve

INFORMATION SHEET

Improving Patient Experience in Primary Care: GP Information

We would like to invite you to join a project within the Improve Study, which has been set up by the University of Cambridge and University of Exeter Medical School.

We are carrying out a study of around 500 patients to look at how doctors communicate with patients during a consultation, and how this is best captured in a questionnaire. Our goal is to understand in greater detail how patients use questionnaires to report experience of GP care, and to explore approaches to using patient surveys to improve reported experience.

Before you decide whether to participate, it is important for you to understand why the study is being conducted and what is involved. Please take the time to read the following information carefully, and discuss it with others if you wish.

If anything is not clear, or if you would like more information, please contact a member of our study team (see end for details).

WHY IS THE STUDY NEEDED?

Thank you for taking time to consider taking part in the IMPROVE study.

As you know, patient surveys are increasingly being used to evaluate NHS care. We would like to explore how well surveys actually measure what goes on in GP consultations. To do this, we plan to video record consultations between patients and GPs. After the consultation, we will ask both the doctor and the patient to complete a very short questionnaire. We will also ask external GPs, experienced in communication training and assessment, to confidentially view the videos of a small number of recorded consultations and evaluate these. Finally, we plan to interview a small number of patients to talk through in much more detail their experience of the recorded consultation and how they chose their answers on the questionnaire. We will then use these data sources to explore different perspectives on the consultation, and the implications of this for the use of patient questionnaires as an evaluation and feedback tool.

page 1

GP information sheet P3&4 v2.0. CA 11/09/2012

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Please turn over

WHAT DOES TAKING PART INVOLVE?

Taking part in the IMPROVE study would involve agreeing the following:

➢ A small number of consultations with each participating GP to be video recorded (for example, one morning surgery per GP)

➢ Researchers to be present at your practice during each recorded surgery to recruit patients to the study, and to hand out questionnaires to individual patients following their consultation. Some assistance from receptionists in alerting patients to the presence of the research team is helpful.

➢ Participating GPs to complete a very short (seven tick box) questionnaire following each recorded consultation, taking less than a minute

WHY HAVE WE BEEN INVITED?

We intend to recruit up to 15 practices to take part in this study from two geographical areas: East Anglia & North London and Bristol & the South West. We are approaching practices on the basis of their previous involvement in this research programme. Practices' previous GPPS results (doctor-patient communication and patient choice items) will inform our sampling frame.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

Taking part will provide individuals and practices with the information necessary for identifying areas of strength and opportunities for improvement. For all participant GPs, we will provide access to their videoed consultations and a summary report of their own responses to the questionnaire. We suggest a range of potential activities aimed at improving consulting skills, based on participation in this study, to enable participating GPs to claim 4, 6 or 8 hours of CPD credits.

WHAT ARE THE POSSIBLE DISADVANTAGES?

We do not foresee major risks from participating in this study, although we do understand that some GPs may be unfamiliar with having their consultations video recorded. Participants are under no pressure to take part and are free to withdraw at any point without giving a reason. If you feel that a patient may be at risk of harm or a confidentiality breach, the doctor is free to stop recording and withdraw this patient from the research. Patients can also ask for the video recorder to be turned off at any point in a consultation.

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HOW WILL MY INFORMATION KE KEPT CONFIDENTIAL

We will protect GPs' and patients' privacy at all times. The steps taken to ensure confidentiality are stated below.

- Participants' consent to take part in the study will be recorded on a form that will contain identifiers including their name. These forms will be stored in a secure location and separately from the study data.

- Participants' data will be stored using a unique, anonymous study identification number

- A single table linking anonymous study identification numbers to contact details will be stored on a separate password protected location which may be accessed by the members of the study team only.

- All study data will be stored in a restricted-access, study computer folder and database. The study data will be linked to participants' study identification number, but patients' personal details (surname, first name, date of birth, address) will never appear in this folder or database. Access to the study data (video recorded consultations and questionnaire responses) will be password protected and will be used only by named researchers working on this study under the direct supervision of the senior investigators.

- At no time will GPs know patients' questionnaire responses, or vice versa

- All handling, storage and disposal of data will be compliant with the Data Protection Act of 1998.

- In the unlikely event information suggests there may have been a breach of professional conduct or harm to patients, the relevant bodies will be informed.

WHO IS ORGANISING AND FUNDING THIS STUDY?

The study is organised by the University of Cambridge and the Peninsula Medical School. The study is funded by the Department of Health. This project has been reviewed and was given a favourable review by the Hertfordshire Research Ethics Committee.

IMPROVE Project Office

Primary Care Unit, University of Cambridge

Forvie Site, Robinson Way

Cambridge CB2 0SR

Telephone: 01223 330596

Email: improve@medschl.cam.ac.uk

page 3

☞

Please turn over

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┌─────────────────────────────────────┐
│            STUDY PROCESS              │
└─────────────────────────────────────┘
                   ↓
┌─────────────────────────────────────┐
│   Research team provide and set       │
│      up recording equipment           │
└─────────────────────────────────────┘
                   ↓
┌─────────────────────────────────────┐
│   Research team discuss study         │
│    with patient on arrival for        │
│           appointment                 │
└─────────────────────────────────────┘
                   ↓
┌─────────────────────────────────────┐
│      Patient consents to take part    │
└─────────────────────────────────────┘
                   ↓
┌─────────────────────────────────────┐
│     Consultation is video recorded    │
└─────────────────────────────────────┘
                   ↓
┌─────────────────────────────────────┐
│   GP and patient complete very        │
│    short questionnaire post           │
│           consultation                │
└─────────────────────────────────────┘
                   ↓
┌─────────────────────────────────────┐
│   GP is given access to recordings    │
│    and summary of their own           │
│   assessment of their performance     │
└─────────────────────────────────────┘
                   ↓
┌─────────────────────────────────────┐
│   Small number of patients            │
│  interviewed by research team to      │
│  discuss reaction to questionnaire    │
└─────────────────────────────────────┘
                   ↓
┌─────────────────────────────────────┐
│   Small number of recorded            │
│  consultations viewed by external     │
│    GPs trained in assessment          │
└─────────────────────────────────────┘
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Appendix 9 *Chapters 2* and *3*: general practitioner consent form

improve

CONSENT FORM

Participant Identification Number for study: …………………………………………...

Please initial box

➢ I confirm that I have considered the information sheet (version 2.0, 11/09/2012) for the above study and have had the opportunity to ask questions.

➢ I understand that participation is voluntary and that I am free to withdraw at any time.

➢ I agree to take part in the above study.

…………………………………………… …………………………… ………………………………………………

GP [print name]   Date   Signature

…………………………………………… …………………………… ………………………………………………

Researcher   Date   Signature

IMPROVE Project Office
Primary Care Unit
University of Cambridge
Institute of Public Health
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Telephone: 01223 763830
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GP consent form P3&4 v2.0 CA 11/09/2012

Appendix 10 *Chapters 2* and *3*: patient full information sheet

improve

INFORMATION SHEET

Improving Patient Experience in Primary Care

We would like to invite you to join the Improve Study, which has been set up by the University of Cambridge and the University Exeter Medical School.

We are carrying out a study of around 500 patients to look at how doctors communicate with patients during a consultation, and how this is best captured in a questionnaire. Our goal is to see how patient surveys can be used to improve care in GP practices.

Before you decide whether to participate, it is important for you to understand why the study is being conducted and what is involved. Please take the time to read the following information carefully, and discuss it with others if you wish.

If anything is not clear, or if you would like more information, please contact a member of our study team (see end for details).

Thank you for taking time to consider taking part in the IMPROVE study.

WHY IS THE STUDY NEEDED?

Patients often receive questionnaires about NHS care. This study is looking at how we can best use results from these surveys to improve the care people receive. We would like to explore how well surveys actually measure what goes on in GP consultations. To do this, we need to video record consultations between patients and their GPs. After the consultation, we will ask both the doctor and the patient to complete a short questionnaire. We will also ask GP experts to view the videos of a small number of recorded consultations and assess the GPs' actions. Finally, we plan to interview a small number of patients to talk through in much more detail their experience of the recorded consultation and how they chose their answers on the questionnaire.

page | 1 |

Patient information sheet video FULL P3 v2.0 CA. 12/09/2012

Please turn over

WHAT DOES TAKING PART INVOLVE?

Taking part in the IMPROVE study would involve you:

➢ Agreeing for your consultation with the GP to be video recorded.

➢ Completing a short questionnaire following the consultation. *Your views will really help us.*

➢ Letting us know if you would consider taking part in an interview.

➢ Agreeing to have your videoed consultation and questionnaire data stored securely by the IMPROVE study team in accordance with the Data Protection Act 1998. All data will be deleted within seven years of the recording taking place.

We would also like you to consider being contacted by the IMPROVE study team about possible further studies organised by the University of Cambridge and Peninsula Medical School. These would be future studies to build on results generated from the IMPROVE study to further understand what happens in consultations between patients and GPs. It is completely up to you if you would like to take part in further studies or not.

WHY HAVE I BEEN INVITED?

The doctor who you are seeing today is taking part in this study and has agreed for their consultations to be video recorded. We are therefore approaching all patients who have an appointment with this doctor today, and inviting them to take part in this research.

DO I HAVE TO TAKE PART?

No, it is completely up to you. If you decide to take part you will be asked to sign a consent form before and after your consultation. You are free to withdraw at any time, without giving a reason. Your decision has no influence on your health care.

page 2

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Please turn over

WHAT SHOULD I DO IF I WANT TO TAKE PART?

If you would like to join the study, then we will ask you to take a card to the GP to show you have agreed for the consultation to be recorded. Following the consultation, you will be asked to fill in a short questionnaire about seeing the doctor. You can do this before you leave the surgery, handing the completed form back to a member of the research team. If you do not have time to complete the questionnaire before leaving the surgery, you can post it back to the research team in the freepost envelope provided.

On the questionnaire you have the option to let us know if you might consider taking part in an interview in the next week or two. This is to help us understand in more detail how people choose which answers to give on questionnaires. For the small number of people we approach for interview, the researcher would show you the recording of your consultation to prompt discussion about your responses to the questionnaire.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

We cannot promise the study will benefit patients and GPs but we hope it will help us to:

- Understand how patients choose certain responses on questionnaires

- Understand how questionnaire responses can be used to identify what GPs could do differently to improve communication between themselves and their patients.

We hope to publish our results so that others can benefit from what we learn.

WHAT ARE THE POSSIBLE DISADVANTAGES?

We do not foresee any risk in taking part in this study. However, some people may feel uncomfortable at having their consultations video recorded. It is also possible that some people may feel concerned about taking the time to complete the questionnaire. You may complete the questionnaire later if that is easier. You are under no pressure to take part and are free to withdraw at any point without giving a reason.

page 3

☞

Please turn over

HOW WILL INFORMATION BE KEPT CONFIDENTIAL?

We will protect your privacy at all times. The steps taken to ensure confidentiality are stated below.

➢ Your consent to take part in the study will be recorded on a form that will contain identifiers including your name. These forms will be stored in a secure location and separately from the study data.

➢ Your data will be stored using a unique, anonymous study identification number

➢ A single table linking your anonymous study identification number to your contact details will be stored on a separate password protected location which may be accessed by the members of the study team only.

➢ All study data will be stored in a restricted-access, study computer folder and database. The study data will be linked to your study identification number, but your personal details (surname, first name, date of birth, address) will never appear in this folder or database. Access to the study data (video recorded consultations and questionnaire responses) will be password protected and will be used only by named researchers working on this study under the direct supervision of the senior investigators.

➢ At no time will your doctor know your questionnaire responses. However, it is possible that your doctor may view the recording of your consultation shortly after it takes place, to help them consider what they could do differently.

➢ All handling, storage and disposal of data will be compliant with the Data Protection Act of 1998.

➢ In the unlikely event information suggests there may have been a breach of professional conduct or harm to patients, the relevant bodies will be informed.

HOW DO I WITHDRAW IF I WANT TO DO SO?

We know that you have not had much time to think about this. If you agree to take part you can still change your mind later on. This can be either:

During the consultation: your doctor will stop the recording at any time if you wish

After the consultation: contact the research team using the contact details on this leaflet and we will remove your information from the study.

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Please turn over ☞

WHO IS ORGANISING AND FUNDING THIS STUDY?

The study is organised by the University of Cambridge and the University of Exeter Medical School. The study is funded by the Department of Health.

WHO HAS APPROVED THE STUDY?

All research in the NHS is reviewed by an independent group of people, called a Research Ethics Committee which is there to protect your safety, rights, wellbeing and dignity. This project has been reviewed and was given a favourable review by the Hertfordshire Research Ethics Committee.

WHAT IF THERE IS A PROBLEM?

If you have any concerns or complaints about anything to do with the IMPROVE study then you can telephone the research team on 01223 330596 or email us at improve@medschl.cam.ac.uk.

If you remain unhappy and wish to complain formally, you can contact the Patient Advice and Liaison Service (PALS), NHS Cambridgeshire, at c-pct.pals@nhs.net or call 0800 279 2535, or write to PALS, NHS Cambridgeshire, Lockton House, Clarendon Road, Cambridge, CB2 8FH. If you wish to have further independent advice you can contact the Independent Complaints and Advocacy Service, Cambridgeshire, Norfolk & Suffolk ICAS, on 0300 456 2370 or write to Cambridgeshire, Norfolk & Suffolk ICAS, POhWER, Unit 6, E Space North, 26 St Thomas Place, Ely, CB7 4EX.

Thank you for reading this information sheet and considering taking part in this study.

improve

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Institute of Public Health
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Email: improve@medschl.cam.ac.uk

Appendix 11 *Chapters 2* and *3*: patient summary information sheet

improve

SUMMARY

We would like to invite you to join the Improve Study, which has been set up by the University of Cambridge and the University of Exeter Medical School. Please see the full information sheet for all the details.

➢ This study is looking at how doctors communicate with patients during a consultation, and how this is best captured in a questionnaire.

➢ To do this, we need to video record consultations between patients and their GPs. After the consultation, we will ask both the doctor and the patient to complete a short questionnaire. We will also ask GP experts to view the videos of a small number of recorded consultations and assess the GP's actions.

➢ The study is being run by University of Cambridge and the University of Exeter Medical School

➢ Your doctor is taking part in the study

➢ We would like your permission to video record your consultation today

➢ We will also ask you to complete a short questionnaire after you have seen the doctor

➢ All information will be treated confidentially

➢ You are free to withdraw from the study at any point if you change your mind, and you do not need to give a reason. If you change your mind half way through the consultation, your doctor will simply turn the video recorder off and we will delete anything that has already been recorded. This will not affect the care that you receive in anyway

THANK YOU FOR CONSIDERING TAKING PART IN THIS STUDY

improve

IMPROVE Project Office
Primary Care Unit
University of Cambridge
Institute of Public Health
Forvie Site
Robinson Way
Cambridge CB2 0SR
Telephone: 01223 330596

Patient information sheet video SUMMARY P3 v2.0 CA. 12/09/2012

Appendix 12 *Chapters 2* and *3*: patient video consent form

Patient consent form P3 v2.0 CA. 12/09/2012

CONSENT TO PARTICIPATE

NAME: ……………………………………………

STUDY ID: ……………………………………………

PLACE OF VIDEO RECORDING: …………………………..

DATE: ……………………………………………

We are hoping to make video recordings of some of the consultations between patients and …………………………………….., whom you are seeing today. The videos will be used by researchers and GP assessors to review their consultations and compare their observations with patients' responses to questionnaires. The video recording is ONLY of you and the doctor talking together. Intimate examinations will not be recorded and the camera will be switched off on request.

All video/digital recordings are carried out according to guidelines issued by the General Medical Council, and will be stored securely in line with practice guidelines and data protection requirements.

You do not have to agree to your consultation with the doctor being recorded. If you want the camera turned off, please tell the GP—this is not a problem, and will not affect your consultation in any way. Equally, you can ask for the camera to be turned off half way through your consultation and we will delete anything that has been recorded. But if you do not mind your consultation being recorded, please sign below. **Thank you very much for your help.**

TO BE COMPLETED BY PATIENT:

I have read and understood the above information and give my permission for my consultation to be video recorded.

Signature of patient BEFORE CONSULTATION:

.... Date ....

After seeing the doctor I am still willing/I no longer wish my consultation to be used for the above purposes (delete as applicable).

Signature of patient AFTER CONSULTATION:

.... Date ....

YOUR CONTACT DETAILS

If you are happy to, please fill in your contact details below. This will enable us to contact you about possible further studies organised by the University of Cambridge and the University of Exeter Medical School. These would be future studies to build on results generated from the IMPROVE study, to further understand what happens in consultations between patients and GPs. It is completely up to you if you would like to take part in further studies.

Please note—these details will be stored in a secure location and separately from the study data.

Name: ………………………………………………………………………………………………………

Address: ………………………………………………………………………………………………………

                ………………………………………………………………………………………………………

                ………………………………………………………………………………………………………

Telephone: …………………………………………...

Mobile: …………………………………………

Email: …………………………………………

Appendix 13 *Chapters 2* and *3*: general practitioner questionnaire

Seeing this patient at the surgery/health centre

Please answer these questions about your last consultation with this patient

In your consultation with this patient, how good were you at each of the following?

Please put an x **in one box for each row**

	Very good	Good	Neither good nor poor	Poor	Very poor	Doesn't apply
Giving the patient enough time	☐	☐	☐	☐	☐	☐
Asking about the patient's symptoms	☐	☐	☐	☐	☐	☐
Listening to the patient	☐	☐	☐	☐	☐	☐
Explaining tests and treatments	☐	☐	☐	☐	☐	☐
Involving the patient in decisions about care....	☐	☐	☐	☐	☐	☐
Treating the patient with care and concern	☐	☐	☐	☐	☐	☐
Taking the patient's problems seriously	☐	☐	☐	☐	☐	☐

Appendix 14 *Chapters 2* and *3*: patient questionnaire

improve

SEEING THE DOCTOR

Please answer the questions below by putting an ✗ in ONE BOX for each question unless more than one answer is allowed (these questions are clearly marked). We will keep your answers completely confidential

A. SEEING THE DOCTOR YOU PREFER

Q1 **Is there a particular doctor you prefer to see at this GP surgery or health centre?**

☐   Yes…...Please go to Q2

☐   No……Please go to Q3

☐   There is usually only one doctor in my GP surgery or health centre …..Please go to Q3

Q2 **Was your consultation today with the doctor you prefer to see?**

☐   Yes

☐   No

B. SEEING THE DOCTOR TODAY

Thinking about the consultation which took place today

Q3 **How good was the doctor at each of the following?**

Please put an ✗ in one box for each row

	Very good	Good	Neither good nor poor	Poor	Very poor	Doesn't apply
Giving you enough time	☐	☐	☐	☐	☐	☐
Asking about your symptoms	☐	☐	☐	☐	☐	☐
Listening to you	☐	☐	☐	☐	☐	☐
Explaining tests and treatments	☐	☐	☐	☐	☐	☐
Involving you in decisions about your care	☐	☐	☐	☐	☐	☐
Treating you with care and concern	☐	☐	☐	☐	☐	☐
Taking your problems seriously	☐	☐	☐	☐	☐	☐

page 1 ☞

Please turn over

Patient questionnaire P3 v2.0 CA 12Sept12

Q4 **Did you have confidence and trust in the doctor you saw?**

☐ Yes, definitely
☐ Yes, to some extent
☐ No, not at all
☐ Don't know/can't say

Q5 **In general, how satisfied are you with the care you get at this GP surgery or health centre?**

☐ Very satisfied
☐ Fairly satisfied
☐ Neither satisfied nor dissatisfied
☐ Fairly dissatisfied
☐ Very dissatisfied

C. SOME QUESTIONS ABOUT YOU

The following questions will help us to see how experiences vary between different groups of the population. We will keep your answers completely confidential.

Q6 **Are you male or female?**

☐ Male
☐ Female

Q7 **How old are you?**

☐ Under 18   ☐ 55 to 64
☐ 18 to 24   ☐ 65 to 74
☐ 25 to 34   ☐ 75 to 84
☐ 35 to 44   ☐ 85 or over
☐ 45 to 54

Q8 **In general, would you say your health is?**

☐ Excellent
☐ Very good
☐ Good
☐ Fair
☐ Poor

Q9 **What language do you speak most often at home?**

☐ English
☐ Other (please specify)

Q10 **What is your ethnic group?**

Choose one section from A to E below, then select the appropriate option to indicate your ethnic group

A. White

☐ British
☐ Irish
☐ Any other White background

B. Mixed

☐ White and Black Caribbean
☐ White and Black African
☐ White and Asian
☐ Any other Mixed background

C. Asian or Asian British

☐ Indian
☐ Pakistani
☐ Bangladeshi
☐ Any other Asian background

D. Black or Black British

☐ Caribbean
☐ African
☐ Any other Black background

E. Chinese or other ethnic group

☐ Chinese
☐ Any other ethnic group

page 2

330

D FINALLY

Would you consider taking part in an interview as part of this study?

We are looking for people to talk to in more depth about how they chose their responses to this questionnaire. This would involve an informal interview with a member of the research team at a convenient time and place, such as in your own home. If this is something you might consider, tick the "yes" box below. A member of the research team may then contact you about this part of the study. *This does not mean you are committed to an interview in any way.*

A member of the research team may contact me to discuss taking part in an interview:

☐ Yes
☐ No

If you have any further comments about any aspect of the consultation with your GP today, please feel free to use the space below. Thank you.

....

....

....

....

....

....

....

THANK YOU VERY MUCH FOR YOUR TIME

Please place this questionnaire in the envelope provided and return it to a member of the research team or reception staff.

Alternatively, please post it back to us (no stamp is needed). If for any reason you do not have a pre-paid envelope, please return the questionnaire using the freepost address below:

GPPS PROGRAMME
FREEPOST CB617 GPPCRU
Institute of Public Health
Forvie Site, Robinson Way
Cambridge, CB2 0SR

page 3

improve

IMPROVE Project Office
Primary Care Unit
University of Cambridge
Institute of Public Health
Forvie Site
Robinson Way
Cambridge CB2 0SR

Telephone: 01223 330596
Email: improve@medschl.cam.ac.uk

page 4

Appendix 15 *Chapter 2*: patient interview information sheet

improve

INFORMATION SHEET

Improving Patient Experience in Primary Care: Interviews

We would like to invite you to take part in another aspect of the Improve Study, set up by the University of Cambridge and Peninsula Medical School.

We are carrying out interviews with around 50 patients, to look at how doctors communicate with patients during a consultation, and how this is best captured in a questionnaire. Our goal is to see how patient surveys can be used to improve care in GP practices.

Before you decide whether to participate, it is important for you to understand why the study is being conducted and what is involved. Please take the time to read the following information carefully, and discuss it with others if you wish.

If anything is not clear, or if you would like more information, please contact a member of our study team (see end for details).

Thank you for taking time to consider taking part.

WHY IS THE STUDY NEEDED?

Patients often receive questionnaires about NHS care. This study is looking at how we can best use results from these surveys to improve the care people receive. We would like to explore how well surveys actually measure what goes on in GP consultations. To do this, we need to video record consultations between patients and their GPs. After the consultation, we will ask both the doctor and the patient to complete a short questionnaire. We will also ask GP experts to view the videos of a small number of recorded consultations and assess the GP's actions. Finally, we plan to interview a small number of patients to talk through in much more detail their experience of the recorded consultation and how they chose their answers on the questionnaire.

page 1

Patient information sheet interviews P4 v2.0 CA 12/09/2012

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Please turn over

WHAT DOES TAKING PART INVOLVE?

If you decide to take part, a member of the research team will contact you to arrange a convenient time to talk in more detail about your recent consultation, and how you completed the questionnaire after this. During this interview, we will show you the recording of your consultation as well as your answers to the questionnaire. We will then talk over with you what you happened in the consultation, and how you chose the responses you gave on the questionnaire. We will also ask if there is anything in particular that you feel the doctor could do to improve their care, based on your experience.

The interview will take place at a convenient place of your choosing, such as your own home. If you are happy for us to, we would like to audio record the interview. We expect that the interview will last around one hour.

WHY HAVE I BEEN INVITED?

You kindly allowed us to record your appointment with the doctor recently, and completed a questionnaire. You also told us that you wouldn't mind if we contacted you at a later date to talk to you about your answers to the questionnaire.

DO I HAVE TO TAKE PART?

No, it is completely up to you. If you decide to take part you will be asked to sign a consent form. You are free to withdraw at any time, without giving a reason. Your decision has no influence on your health care.

WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?

We cannot promise the study will benefit patients and GPs but we hope it will help us to understand how patients choose certain responses on questionnaires. We hope to publish our results so that others can benefit from what we learn.

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Please turn over

WHAT ARE THE POSSIBLE DISADVANTAGES?

We do not foresee any risk in taking part in this study. Some participants may become tired during the interview, or even upset. If this is the case, the researcher will pause the interview until you are ready to continue. If you no longer want to continue with the interview, the researchers will stop the recording. It will be made clear throughout the study that all participants are under no pressure to take part and are free to withdraw at any point without giving a reason.

HOW WILL INFORMATION BE KEPT CONFIDENTIAL?

We will protect your privacy at all times. The steps taken to ensure confidentiality are taken below.

➢ Your consent to take part in the study will be recorded on a form that will contain identifiers including your name. These forms will be stored in a secure location and separately from the study data.

➢ Your data will be stored using a unique, anonymous study identification number

➢ A single table linking your anonymous study identification number to your contact details will be stored on a separate password protected location which may be accessed by the members of the study team only.

➢ All study data will be stored in a restricted-access, study computer folder and database. The study data will be linked to your study identification number, but your personal details (surname, first name, date of birth, address) will never appear in this folder or database. Access to the study data (audio recorded interviews and transcripts) will be password protected and will be used only by named researchers working on this study under the direct supervision of the senior investigators.

➢ At no time will your doctor know the content of the interview

➢ All handling, storage and disposal of data will be compliant with the Data Protection Act of 1998.

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Please turn over

WHAT ARE THE POSSIBLE DISADVANTAGES?

We do not foresee any risk in taking part in this study. Some participants may become tired during the interview, or even upset. If this is the case, the researcher will pause the interview until you are ready to continue. If you no longer want to continue with the interview, the researchers will stop the recording. It will be made clear throughout the study that all participants are under no pressure to take part and are free to withdraw at any point without giving a reason.

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➢ All study data will be stored in a restricted-access, study computer folder and database. The study data will be linked to your study identification number, but your personal details (surname, first name, date of birth, address) will never appear in this folder or database. Access to the study data (audio recorded interviews and transcripts) will be password protected and will be used only by named researchers working on this study under the direct supervision of the senior investigators.

➢ At no time will your doctor know the content of the interview

➢ All handling, storage and disposal of data will be compliant with the Data Protection Act of 1998.

☞

page ⌐3⌐   **Please turn over**

WHO IS ORGANISING AND FUNDING THIS STUDY?

The study is organised by the University of Cambridge and the Peninsula Medical School. The study is funded by the Department of Health.

WHO HAS APPROVED THE STUDY?

All research in the NHS is reviewed by an independent group of people, called a Research Ethics Committee which is there to protect your safety, rights, wellbeing and dignity. This project has been reviewed and was given a favourable review by the Hertfordshire Research Ethics Committee.

WHAT IF THERE IS A PROBLEM?

If you have any concerns or complaints about anything to do with the IMPROVE study then you can telephone the research team on 01223 330596 or email us at improve@medschl.cam.ac.uk. If you remain unhappy and wish to complain formally, you can contact the Patient Advice and Liaison Service (PALS), NHS Cambridgeshire, at c-pct.pals@nhs.net or call 0800 279 2535, or write to PALS, NHS Cambridgeshire, Lockton House, Clarendon Road, Cambridge, CB2 8FH. If you wish to have further independent advice you can contact the Independent Complaints and Advocacy Service, Cambridgeshire, Norfolk & Suffolk ICAS, on 0300 456 2370 or write to Cambridgeshire, Norfolk & Suffolk ICAS, POhWER, Unit 6, E Space North, 26 St Thomas Place, Ely, CB7 4EX.

Thank you for reading this information sheet and considering taking part in this study.

improve

IMPROVE Project Office
Primary Care Unit
University of Cambridge
Institute of Public Health
Forvie Site
Robinson Way
Cambridge CB2 0SR
Telephone: 01223 330596
Email: improve@medschl.cam.ac.uk

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Appendix 16 *Chapter 2*: patient interview consent form

improve

CONSENT FORM

Participant Identification Number for study: ……………………..

Improving Patient Experience in Primary Care: Interviews

Please tick the appropriate boxes

Taking Part

	Yes	No
I have read and understood the project information sheet dated 12/09/2012		
I have been given the opportunity to ask questions about the project.	☐	☐
I agree to take part in the project. Taking part in the project will include being interviewed and audio recorded	☐	☐
I understand that my taking part is voluntary; I can withdraw from the study at any time and I do not have to give any reasons for why I no longer want to take part.	☐	☐
Use of the information I provide	☐	☐
I understand my personal details such as my name and address will not be revealed to people outside the project.		
I understand that my words may be quoted in publications, reports, web pages, and other research outputs.	☐	☐
	☐	☐

…………………………………. …………………………………. …………………………………...
Name of participant [printed]   Signature   Date

…………………………………. …………………………………. …………………………………...
Name of researcher [printed]   Signature   Date

IMPROVE Project Office
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Email: improve@medschl.cam.ac.uk

Appendix 17 *Chapter 2*: video elicitation interview topic guide

Video Elicitation Interview topic guide – 12.9.13

Introduction and Consent Process
- Researcher to introduce themselves and check understanding of study and processes
- Informed consent and permission to audio record the interview obtained from the participant and partner (or other) if present

Discussion of the patient's video-recorded consultation
During the interview, participants will be shown the video-recording of their consultation and encouraged to pause it at any point. The researcher may also stop the video recording at any point. The researcher will also show the participant their responses to the questionnaire items, for discussion throughout the interview.

Introductory questions
- Have you seen this doctor before?
- Have you consulted for this problem before?
- Have you seen this doctor for the same problem before?
- Is this still a problem for you?
- In a moment I am going to show you the video of the consultation. If we can think back to the day that you went to the surgery, when you were in the waiting room before going in to see the doctor, can you tell me how you were feeling then?

Discussion points whilst viewing consultation and questionnaire responses

About the consultation
- What were you doing / trying to do at this point in the consultation?
- What were you noticing / hearing at this point?
- Were there any other thoughts going through your mind?
- Can you tell me what you felt at this point?
- Can you recall more details about your feelings?
- What makes this moment in particular stand out to you?
- What do you notice about your actions at this point?
- What about your behaviour at this point surprises you?
- Why did you make that statement / ask that question?
- How did you want the doctor to perceive you?
- What did you think the doctor was thinking about you at this point?
- What were your impressions of the doctor's actions at this point?

- Why do you think the doctor made that statement at this moment?

About the questionnaire

- I will now ask you about the questionnaire that you filled in after visiting the doctor. We are interested in why you have responded the way you did to the questions so I'll ask you about each of your responses in more detail.
- How do you interpret 'giving enough time' in a consultation, do you think it is important?
  - *If you had to explain to a medical student what being good at 'giving enough time' looks like what would you say?*
- How was '*giving enough time*' in this consultation we have just watched?
  (Relate this to questionnaire response to this question)
- Can you tell me what you were thinking when you answered that question?
- What made you decide this was the right response to give?
- Was it easy or hard to answer?

  Ask above questions for each domain;
      Asking about your symptoms
      Listening to you
      Explaining tests and treatments
      Involving you in decisions about your care
      Treating you with care and concern
      Taking your problems seriously

- (if respondent has ticked very good) So our scale here has the highest rating as 'very good' but what it is had an 'outstanding' – would you have scored the doctor as outstanding?
  If not why not?
- When you are answering these questions, do you think about them each individually or together as a general overall feeling?
  - *Do you think that you differentiate between the domains when answering these questions, or is it more of a general overall feeling?*
- Imagining for a moment an ideal world do you think there are any ways in which the consultation could have been better?

Additional questions

- To what extent do you think the questionnaire captured your views on this consultation?
- Is this consultation similar to those you have had with this GP before?
  - If not, in what ways is it different? [content/set-up/manner of GP/outcome etc.]
- What are the key things you hope to get from your doctor?
- How similar do you feel you and the doctor you saw are?
  - *Are there any characteristics in the doctor that you feel are positive or negative? Like their age or gender, or maybe if they are family orientated (if the patient mentions that they know the GP has a family)*
  - *Were you aware of any differences in general values in life/age/gender/ethnic background/culture/language?*
- Do you feel your view of this consultation would be different if you were more (*or less*) similar to the GP?

- Can you think of anything else that we have not discussed, about this topic, which you would like to raise?

Interview close

- Participants will be thanked for taking part in the study and reminded that their responses will remain confidential
- Participants will once again have the opportunity to ask the researcher any questions and will also be given the opportunity to raise any additional issues that they feel are relevant to the topic
- Participants will be reminded that they can contact the research team at any time using the details on the information leaflet should they have any further questions or wish to remove their responses from the study.

Appendix 18 *Chapter 6*: computer-assisted personal interview schedule

14-027063-01 GP CONSULTATION SIMULATION QUESTIONNAIRE

Target audience: General public 18+, England only, White British and Pakistani respondents only

Sample Size: 1,120 total – 560 White British (280 18-54 years old, 280 55+ years old) and 560 Pakistani (280 18-54 years old, 280 55+ years old).

Good morning, afternoon, evening. My name is …… I work for Ipsos MORI, an independent market research agency. I am working in your area today and am asking people from different ethnic backgrounds to watch a few videos of discussions with a doctor and asking them to rate these videos.

Would you have up to 30 minutes in which to help answer my questions?

I would like to assure you that all the information we collect will be kept in strictest confidence by Ipsos MORI, and used for research purposes only. No identifiable information about you or your household will be passed to anyone else

POSTCODE TO BE ENTERED BY INTERVIEWER TO CHECK WITH SAMPLING POINT INFO. INFORMATION TO BE KEPT WITH RESPONSE SO CAN APPEND IMD INFORMATION AT THE END.

SCREENER

ASK ALL
S1. SHOWCARD A. **What is your ethnic group?**
SINGLE CODE ONLY

WHITE	
1. English / Welsh / Scottish / Northern Irish / British	GO TO S2
2. Irish	CLOSE
3. Gypsy or Irish Traveller	CLOSE
4. Any other White background	CLOSE
MIXED	
5. White and Black Caribbean	CLOSE
6. White and Black African	CLOSE
7. White and Asian	CLOSE
8. Any other Mixed / Multiple ethnic background	CLOSE
ASIAN OR ASIAN BRITISH	
9. Indian	CLOSE
10. Pakistani	GO TO S2
11. Bangladeshi	CLOSE
12. Chinese	CLOSE
13. Any other Asian background	CLOSE
BLACK OR BLACK BRITISH	
14. African	CLOSE
15. Caribbean	CLOSE
16. Any other Black / African / Caribbean background	CLOSE
OTHER ETHNIC GROUP	
17. Arab	CLOSE
18. Any other ethnic group	CLOSE

CLOSE MESSAGE: **We are interviewing people from certain ethnic groups in your area. Unfortunately, we are not interviewing people from your ethnic group at the moment. Thank you very much for your help.**

ASK IF CODE 10 TO S1
S2. **As I mentioned earlier, we will be asking you to watch a few short videos, which are all in English. I wanted to check that you feel you would be able to understand these videos?**

        YES   CONTINUE TO S3
        NO   CLOSE

CLOSE MESSAGE (IF NO TO S2): Thank you very much for your time.

ASK IF CODE 1 TO S1 OR YES TO S2.
S3. SHOWCARD B. **Which of the age groups on this card applies to you?**
SINGLE CODE ONLY

       1. 18 to 24
       2. 25 to 34
       3. 35 to 44
       4. 45 to 54
       5. 55 to 64
       6. 65 to 74
       7. 75 to 84
       8. 85 or over

S4. INTERVIEWER CODE GENDER
SINGLE CODE ONLY

       1. Male
       2. Female

DEMOGRAPHICS

ASK ALL
1. SHOWCARD C. **In general, would you say your health is…?**
SINGLE CODE ONLY. DON'T KNOW/REFUSED ALLOWED.

       1. Excellent
       2. Very good
       3. Good
       4. Fair
       5. Poor

Don't know   NOT ON SHOWCARD
Refused   NOT ON SHOWCARD

ASK ALL
2. **Were you born in the UK?**
SINGLE CODE ONLY. REFUSED ALLOWED.

       1. Yes

2. No

ASK ALL
3. What language do you speak most often at home?
SINGLE CODE ONLY. REFUSED ALLOWED.

1. English
2. Other (please state)

VIDEOS

FOR ALL VIDEOS, RANDOMISE THE ORDER OF THE 3 VIDEOS SHOWN IN EACH GROUPING.

SHOW VIDEO 1 [THIS WILL BE AUTOMATICALLY SHOWN ON THE CAPI SCREEN AND WILL BE A PRESELECTED VIDEO]

Thinking about the doctor you have just seen in the video, how good was the doctor at:

V1_Q1.SHOWCARD D. **Giving the patient enough time**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V1_Q2. SHOWCARD D. **Listening to the patient**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V1_Q3. SHOWCARD D. **Explaining tests and treatments**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V1_Q4. SHOWCARD D. **Involving the patient in decisions about his or her care**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V1_Q5. SHOWCARD D. **Treating the patient with care and concern**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

SHOW VIDEO 2 [THIS WILL BE AUTOMATICALLY SHOWN ON THE CAPI SCREEN AND WILL BE A PRESELECTED VIDEO]

Thinking about the doctor you have just seen in the video, how good was the doctor at:

V2_Q1. SHOWCARD D. **Giving the patient enough time**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V2_Q2. SHOWCARD D. **Listening to the patient**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V2_Q3. SHOWCARD D. **Explaining tests and treatments**

SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V2_Q4. SHOWCARD D. **Involving the patient in decisions about his or her care**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V2_Q5. SHOWCARD D. **Treating the patient with care and concern**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

SHOW VIDEO 3 [THIS WILL BE AUTOMATICALLY SHOWN ON THE CAPI SCREEN AND WILL BE A PRESELECTED VIDEO]

Thinking about the doctor you have just seen in the video, how good was the doctor at:

V3_Q1. SHOWCARD D. **Giving the patient enough time**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V3_Q2. SHOWCARD D. **Listening to the patient**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V3_Q3. SHOWCARD D. **Explaining tests and treatments**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V3_Q4. SHOWCARD D. **Involving the patient in decisions about his or her care**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

V3_Q5. SHOWCARD D. **Treating the patient with care and concern**
SINGLE CODE ONLY

1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very poor
6. Don't know

THANK AND CLOSE

END

Appendix 19 *Chapter 7*: participant information sheet

THE GP PATIENT SURVEY

**Improving Patient Experience in Primary Care
(Individual Practitioner Feedback)**

Information Sheet for practice staff (focus groups)

Introduction

This study is part of a programme of research that is examining various ways of improving patient experience in primary care. Results from the national GP Patient Survey (GPPS) are providing a description of patient experience in all 8500 general practices in England. This study will explore responses to the results of the GPPS with practices and individual GPs, and use the results of a modified survey (based on the GPPS) to provide feedback to individual practitioners from their patients.

Before you decide whether you would like to take part, please take time to read the following information. If there is anything that is not clear, or if you would like more information then please contact the research team (see reverse for details). All communication will be treated confidentially.

What is the purpose of this study?

The NHS is increasingly interested in patients' views of their doctors, nurses and health care; the introduction of the General Practice Patient Survey (GPPS) is part of this development. The results of the survey have been used by practices to inform practice development. We are inviting members of staff (GPs, nurses and practice manager) to participate in a focus group to explore responses to your practice's GPPS results.

What if there is a problem?

If you have any reason to complain about any aspect of the study or the way you have been approached or treated during the course of this study, please contact the lead researchers.

What will happen next?

Once the research team has received your completed response sheet, a researcher will contact you by telephone or email to discuss your participation further. In the meantime if you would like any further information please use the contact details below.

Further information

If you would like more information before deciding, or have any queries concerning the study, please feel free to contact the research team:

General Practice and Primary Care Research Group
Department of Public Health and Primary Care
Institute of Public Health
Forvie Site
Robinson Way
Cambridge, CB2 0SR

Consumers for Ethics in Research (CERES) provides independent information and advice on research in the NHS.
CERES
PO Box 1365, London N16 0BW
E-mail: info@ceres.org.uk; Visit: http://www.ceres.org.uk/about.htm

Thank you for considering taking part in this study

We have also modified the GPPS in order to provide specific feedback to individual practitioners from their patients. We will use the results of this study to compare responses immediately following a consultation with the same questionnaire completed one week later by a sample of patients. We are also inviting a small number of GPs to be interviewed about their practice's GPPS results.

Why has my practice been chosen?

We intend to recruit a total of 25 practices to take part in this study from two geographical areas: Area A (Devon, Plymouth, Cornwall & Isles of Scilly, Torbay and Bristol) and Area B (Islington, Bedfordshire, Cambridgeshire, Luton, Peterborough, Redbridge and Newham). Practices' previous GPPS results (doctor–patient communication and patient choice items) will inform our sampling frame.

Do I have to take part?

We do hope that you will be willing to take part, but there is no obligation to do so. If you decide not to take part, we will respect your decision and, of course, it will not affect your professional role in any way. If you do decide to take part, you will be asked to sign a consent form before you take part in the research. You are still free to withdraw at any time, however, and without giving a reason. We will also ask someone within the practice (lead partner, Practice Manager) to sign a consent form on behalf of the practice.

What will happen if I agree to take part?

Our research team will discuss arrangements for a focus group at your practice with your practice manager or lead GP. They will agree a date and time. During the focus group, participants will be encouraged to discuss their responses to the GPPS and their ideas for addressing areas which appear to require attention. The focus group would be audio recorded (with participants' permission).

Who would have access to the information?

All information collected during the course of this study will be kept strictly confidential. The anonymous questionnaires will be analysed by the research team. All data will be stored securely by the University of Cambridge and the Peninsula Medical School.

At the end of the study the confidential records and files will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

What will happen to the study results?

The findings from this study will be published to help policy makers understand the views of individual doctors and other practice staff about survey results, and how they may be used to make improvements in the future. No individual will be identified personally in any report or publication.

What are the possible disadvantages & risks of taking part?

We do not foresee any risk in participating in this study, although we do understand that some people may feel uncomfortable about talking to a researcher about potentially sensitive issues.

What are the possible benefits of taking part?

Taking part will provide individuals and practices with the information necessary for identifying areas of strength and opportunities for improvement.

Who is organising & funding the study?

The study is organised by the University of Cambridge and the Peninsula Medical School. The study is funded by the Department of Health.

Who has reviewed the study?

This study has been reviewed and given a favourable opinion by the Devon & Torbay and Cambridgeshire ethics committees.

Appendix 20 *Chapter 7*: participant consent form

Participant Identification Number for study:

CONSENT FORM (focus groups)

Title of Project: Improving Patient Experience in Primary Care (Individual Practitioner Feedback)

Please initial box

I confirm that I have considered the information sheet dated 12.7.11 for the above study and have had the opportunity to ask questions.	
I understand that participation is voluntary and that I am free to withdraw at any time.	
I agree to take part in the above study.	

_____   _____   _____
Name   Date   Signature

_____   _____   _____
Person taking consent   Date   Signature
(If different from researcher)

_____   _____   _____
Researcher   Date   Signature

Appendix 21 *Chapter 7*: focus group topic guide

Improving patient experience in primary care (individual general practitioner feedback)

(Researcher 1 leads the focus group session while researcher 2 assists and scribes)

Focus group topic guide: practice teams

Researchers answer any questions and ensure each participant has had an opportunity to read the information leaflet and has signed the consent form.

Introduction

Thank you for agreeing to take part in our study. The purpose of this focus group is to listen to your thoughts and ideas so that we can get an understanding of what you know about surveys of patient experience of general practice/primary care – such as the national GP Patient Survey, local surveys of patient experience or patient surveys for appraisal or revalidation. We are interested in how your practice might respond to scores based on patient surveys and how these surveys and/or scores may be used to inform any changes your practice is considering. We are also interested in how practices might respond to surveys carried out of patients' experiences of individual doctors – in general, not focusing on doctors from this particular practice.

We would like the discussion to be as informal as possible. There are no right or wrong answers and everything you say will be in confidence. Feel free to ask if something is not clear or if you want to add anything or even change your mind about something – this is more of a conversation to explore your views rather than a formal meeting. Before we start may I ask if everyone is happy to have this focus group audio recorded?

(Turn on recorder)

Please would everyone introduce themselves by giving their name and role in the practice.

1. Are the results of patient surveys (such as the GP Patient Survey or surveys you have done in your own practice) circulated within your practice and, if so, to whom?

    o GPs
    o Nurses
    o Receptionists
    o Other members of staff (health-care assistants, etc.)

2. Which results are circulated – summary/good/bad/nothing?
3. Overall, what do you think the survey results are saying to your practice?
4. Are you aware of the score of your practice on any particular questions in any surveys that have been carried out?

    o Which questions?
    o Why did you focus on these?
    o Were there any surprises?
    o Where did you access this information?
    o Was the information easy to understand/interpret? For you? For your patients?
    o Have you compared these with other practices? If so, which practices, over which questions and why?

5. Have the scores made you or your colleagues want to change anything?

- Do you currently intend to change anything in response to scores on the GP Patient Survey or surveys you have done in your own practice?
- What would make you want to change?

This research is about how practices may respond to patient feedback about individual doctors, so the next questions focus on this issue:

1. Do you think that individual GP scores following a patient experience survey could have an impact on the practice as a whole – perhaps on the way things are done?

- In a positive or a negative way? Why?

2. I'd like you to try and think of an average type of practice – say four or five doctors and 7000 patients. Imagine that a patient experience survey carried out for individual doctors in the practice had identified that two of the doctors had scores that were not very good on communication skills with patients.

- Can you think of any ways that the practice as a whole in that type of situation might address the issues raised by these results?
- Do you think it would have an impact on the rest of the practice staff if a GP had a low individual score in such an area?
- If yes, in what way?

3. Now I'd like you to try and think again of an average type of practice – say four or five doctors and 7000 patients. Imagine that a patient experience survey carried out for individual doctors in the practice showed that patients found it really hard to get to see one or two of the doctors, that is, patients were not able to see the doctor of their choice.

- Can you think of any ways that the practice as a whole in that type of situation might address the issues raised by these results?
- Do you think it would have an impact on the rest of the practice staff if the practice had a low score in such an area?
- If yes, in what way?
- In your experience, what priority do patients give to seeing the same person when they come to the surgery?

4. Do you think that, over time, surveys of patient experience that focus on individual doctors' skills might affect the attitude of doctors towards their patients – or the attitude of patients towards their doctors?

- If so, in what ways?
- Do patients ever talk to you about any of the patient feedback surveys?

5. In general, what do you think about surveys of patient experience?

- At practice level
- At individual doctor level
- What might be the strengths of such surveys?
- And weaknesses?

6. Can you think of anything else that we have not discussed about this topic that you would like to raise?

7. Thanks

   o Reassurance of confidentiality
   o Reassurance of removal of all identifying material in records and publications
   o Any further questions: use details on information sheet

Thank you very much for your time.

Appendix 22 *Chapter 8*: participant information sheet

THE GP PATIENT SURVEY

Improving Patient Experience in Primary Care
(Individual Practitioner Feedback)

Information Sheet for individual GPs

Introduction

This study is part of a programme of research that is examining various ways of improving patient experience in primary care. Results from the national GP Patient Survey (GPPS) are providing a description of patient experience in all 8500 general practices in England. This study will use the results of a modified survey (based on the GPPS) to provide feedback to individual practitioners from their patients.

Before you decide whether you would like to take part, please take time to read the following information. If there is anything that is not clear, or if you would like more information then please contact the research team (see reverse for details). All communication will be treated confidentially.

What is the purpose of this study?

The NHS is increasingly interested in patients' views of their doctors, nurses and health care; the introduction of the General Practice Patient Survey (GPPS) is part of this development. The results of the survey have been used by practices to identify areas for improvement. We have modified the GPPS in order to provide specific feedback to individual practitioners from their patients. We are also inviting a small number of GPs to be interviewed about their practice's GPPS results.

What if there is a problem?

If you have any reason to complain about any aspect of the study or the way you have been approached or treated during the course of this study, please contact the lead researchers.

What will happen next?

Once the research team has received your completed response sheet, a researcher will contact you by telephone or email to discuss your participation further. In the meantime if you would like any further information please use the contact details below.

Further information

If you would like more information before deciding, or have any queries concerning the study, please feel free to contact the research team:

General Practice and Primary Care Research Group
Department of Public Health and Primary Care
Institute of Public Health
Forvie Site
Robinson Way
Cambridge, CB2 0SR

Consumers for Ethics in Research (CERES) provides independent information and advice on research in the NHS.

CERES

PO Box 1365. London N16 0BW

E-mail: info@ceres.org.uk; Visit: http://www.ceres.org.uk/about.htm

At no time will anyone else at your practice have access to what you say during the interview.

What will happen to the study results?

The findings from this study will be published to help policy makers understand the views of individual doctors about survey results, and how they may be used to make improvements in the future. No individual will be identified personally in any report or publication.

What are the possible disadvantages & risks of taking part?

We do not foresee any risk in participating in this study, although we do understand that some people may feel uncomfortable about talking to a researcher about potentially sensitive issues. For this reason GPs in participating practices will be encouraged to identify a supporting medical colleague with whom they would feel comfortable discussing their individual GPPS scores. At the appropriate time, this colleague will be alerted to the fact that the participating GP has just been sent their results, and that s/he may wish to contact them for advice or support.

What are the possible benefits of taking part?

Taking part will provide individuals and practices with the information necessary for identifying areas of strength and opportunities for improvement.

Who is organising & funding the study?

The study is organised by the University of Cambridge and the Peninsula Medical School. The study is funded by the Department of Health.

Who has reviewed the study?

This study has been reviewed and given a favourable opinion by the Devon & Torbay and Cambridgeshire ethics committees

Why has my practice been chosen?

We intend to recruit a total of 25 practices to take part in this study from two geographical areas: Area A (Devon, Plymouth, Cornwall & Isles of Scilly, Torbay and Bristol) and Area B (Islington, Bedfordshire, Cambridgeshire, Luton, Peterborough, Redbridge and Newham). Practices' previous GPPS results (doctor-patient communication and patient choice items) will inform our sampling frame. We would like to interview a small number of professionals in participating practices as part of the study.

Do I have to take part?

We do hope that you will be willing to take part, but there is no obligation to do so. If you decide not to take part, we will respect your decision and, of course, it will not affect your professional role in any way. If you do decide to take part, you will be asked to sign a consent form before you take part in the research. You are still free to withdraw at any time, however, and without giving a reason. We will also ask someone within the practice (lead partner, Practice Manager) to sign a consent form on behalf of the practice.

What will happen if I agree to take part?

A researcher would contact you to arrange an interview. It would take place at a time that is best for you at your GP practice or elsewhere if you prefer (your travel expenses would be reimbursed). Interviews will be informal, last approximately 30-60 minutes and would be audio recorded (with your permission).

Who would have access to the information?

All information collected during the course of this study will be kept strictly confidential. The anonymous questionnaires will be analysed by the research team. All data would be stored securely by the University of Cambridge and the Peninsula Medical School.

At the end of the study the confidential records and files will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

Appendix 23 *Chapter 8*: participant consent form

Participant Identification Number for study:

CONSENT FORM (interviews)

Title of Project: Improving Patient Experience in Primary Care (Individual Practitioner Feedback)

Please initial box

I confirm that I have considered the information sheet dated 12.7.11 for the above study and have had the opportunity to ask questions	
I understand that participation is voluntary and that I am free to withdraw at any time.	
I agree to take part in the above study.	

_____   _____   _____
GP   Date   Signature

_____   _____   _____
Person taking consent   Date   Signature
(If different from researcher)

_____   _____   _____
Researcher   Date   Signature

1 for GP's records; 1 for research team

Appendix 24 *Chapter 8*: interview topic guide

Improving patient experience in primary care (individual practitioner feedback)

Interview topic guide: individual general practitioners
(Researcher answers any questions and ensures that the participant has had an opportunity to read the information leaflet and has signed the consent form)

Thank you for agreeing to take part in our study. The purpose of this interview is to listen to your thoughts and ideas so that we can get an understanding of how you feel about getting feedback from your patients as a result of using patient surveys – such as the national GP Patient Survey, local surveys of patient experience or patient surveys for appraisal or revalidation. We are interested in how you might respond to such feedback and how it may be used to inform any changes you might consider. We would like the discussion to be as informal as possible. There are no right or wrong answers and everything you say will be in confidence. Feel free to ask if something is not clear or if you want to add anything or even change your mind about something – remember, this is more of a conversation to explore your views rather than a formal interview. Before we start may I ask if you are happy to have this interview audio recorded?

1. What experience have you had of patient feedback obtained through surveys of patient experience?

   - For example, how closely have you been involved with the practice results from the national GP Patient Survey or surveys you have done in your own practice?

2. Thinking about the feedback that your practice has had from patients, can you tell me your thoughts and ideas/reflections about the feedback?

   - Did anything surprise you?
   - What things stood out particularly for you?

3. You have recently taken part in an individual-level patient survey and had a chance to have a look at your personal results.

   - Can you tell me your thoughts and ideas/reflections about the feedback?
   - Did anything surprise you?
   - What things stood out particularly for you?
   - Have your own scores made you want to change anything?
   - As an individual – what sorts of things?
   - In terms of the practice – what sorts of things?
   - If there was something you wanted to change, how would you go about it? What sort of help might you need?

4. Do you think it is different to get feedback as an individual GP rather than for the practice as a whole?

   - In what ways?
   - Do you prefer one method over the other?
   - What are the strengths and weaknesses of each approach?

5. In your opinion, how do you think feedback from your patients could best be used to develop care?
6. Have any patients ever mentioned their participation in (any) patient surveys to you – either about completing the survey or about the results?

7. Do you think it is possible or likely that over time the survey (at an individual level) might affect your relationship with your patients?

   ○ If so, in what ways?

8. Do you think it is possible or likely that over time the survey (at an individual level) might affect the way you might do things?

   ○ If so, in what ways?

9. Would you mind if a member of the research team contacts you in a few months' time to find out how you have changed your practice or behaviour as an individual?

   ○ If so, what would be the best method of contacting you?

10. Can you think of anything else that we have not discussed about this topic that you would like to raise?

Thank you for talking to me today. Remember, not only will all your details be kept confidential, but any identifying information relating to you or anyone else you spoke about will be deleted from the record that we will keep and use. If there is anything you would like to ask after you have left today, remember you can contact us using the details on the information sheet. Thank you very much for your time.

Appendix 25 *Chapter 9*: practice information sheet

Improving Patient Experience in Primary Care

(Individual Practitioner Feedback)

Information Sheet for Practice Staff

Introduction

This study is part of a programme of research that is looking at how practices can use patient surveys to help them improve care. We will explore responses to patient surveys with practices and individual GPs, and use the results of a modified survey (based on the national GP Patient Survey) to provide feedback to individual practitioners from their patients.

Before you decide whether you would like the practice to take part, please take time to read the following information. If there is anything that is not clear, or if you would like more information then please contact the research team (see reverse for details). All communication will be treated confidentially.

What is the purpose of this study?

The NHS is increasingly interested in patients' views of their doctors, nurses and health care; the introduction of the General Practice Patient Survey (GPPS) and the new Patient Participation DES is part of this development. The results of the survey have been used by some practices to identify areas for improvement. We have modified the GPPS in order to provide specific feedback to individual GPs from their patients. This information can be used to inform personal development and for appraisal purposes, individual GP feedback will be reported to the GP only and not other members of the practice. We will also use the results of this study to compare responses immediately following a consultation with the same questionnaire completed 7-10 days later in a sample of patients.

What if there is a problem?

If you have any reason to complain about any aspect of the study or the way you have been approached or treated during the course of this study, please contact the lead researchers.

What will happen next?

Once the research team has received your completed response sheet, a researcher will contact you by telephone or email to discuss your participation further. In the meantime if you would like any further information please use the contact details below.

Further information

If you would like more information before deciding, or have any queries concerning the study, please feel free to contact the study's lead researchers:

General Practice and Primary Care Research Group Department of Public Health and Primary Care Institute of Public Health

Forvie Site
Robinson Way
Cambridge, CB2
0SR

<Prinicipal Investigator name>
<contact number>
<email address>

<Lead Researcher name>
<contact number>
<email address>

The association of Research Ethics Committees provides independent advice and information on research in the NHS:

The Association of Research Ethics Committees

AREC Office 13

Cherry Drive

Durham

DH6 2BG

Tel. 0845 604 5466

www.arec.org.uk

Thank you for considering taking part in this study

Why has the practice been chosen?

We intend to recruit a total of 25 practices to take part in this study from two geographical areas: Area A (Devon, Plymouth, Cornwall & Isles of Scilly, Torbay and Bristol) and Area B (Islington, Bedfordshire, Cambridgeshire, Luton, Peterborough, Redbridge and Newham). Practices' previous GPPS results (doctor–patient communication and patient choice items) will inform our sampling frame.

Does the practice have to take part?

We do hope that your practice will be willing to take part, but there is no obligation to do so. If you decide not to take part, we will respect your decision. If you do decide to take part, you will be asked to sign a consent form on behalf of the practice before you take part in the research. The practice is still free to withdraw at any time, however, and without giving a reason. GPs and other practice staff who agree to participate in this study will also be asked to sign an individual consent form.

What would happen if the practice agrees to take part?

We would like to arrange a convenient time to visit the practice to explain the study in more detail, and answer any queries or concerns GPs and other staff may have about taking part.

■ After that preliminary meeting, we would like to agree suitable dates/times for the following:

■ Focus group with practice staff (GPs, nurses, Practice Manager) to explore responses to the results of the GPPS in your practice Researcher(s) to be present at your practice to work with staff in sending questionnaires to individual patients following their consultation. Patients will be asked to complete the questionnaire and return it by post, using a reply-paid envelope (provided by the research team). A sample of patients will be posted another questionnaire to complete after 7–10 days.

We will also be inviting GPs to participate in one-to-one interviews.

Who would have access to the information?

All information collected during the course of this study will be kept strictly confidential. The anonymous questionnaires will be analysed app_ii practice information sheet c3v2 17 11 11 cadoc_jb (2)mr3 University of Cambridge and the Peninsula Medical School. At the end of the study the confidential records and files will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

What will happen to the study results?

The findings from this study will be published to help policy makers understand the views of patients with regard to their particular doctor and select the best way to use the survey results in the future. No individual will be identified personally in any report or publication.

What are the possible disadvantages and risks of taking part?

We do not foresee any risk in participating in this study, although we do understand that some GPs may feel uncomfortable about receiving individual feedback. For this reason, we will encourage participating GPs to identify a supporting medical colleague with whom they would feel comfortable discussing their individual GPPS scores.

What are the possible benefits of taking part?

Taking part will provide individuals and practices with the information necessary for identifying areas of strength and opportunities for improvement.

Who is organising and funding the study?

The study is organised by the University of Cambridge and the Peninsula Medical School. The study is funded by the Department of Health.

Who has reviewed the study?

This study has been reviewed and given a favourable opinion by the Devon & Torbay and Cambridgeshire ethics committees.

Appendix 26 *Chapter 9*: patient information sheet

Improving Patient Experience in Primary Care
(Individual GP Feedback)

Information Sheet for Patients

Doctors from your practice have agreed to take part in this study – we really need your help too!

Introduction

This study is part of a programme of research that is examining various ways of improving patient experience in primary care. This study will use the results of a questionnaire to provide anonymous feedback to individual GPs from their patients. We will be inviting all patients visiting participating GPs over a number of weeks to complete a questionnaire. A small number of these patients will also be invited to complete a similar questionnaire some days later.

Before you decide whether you would like to take part, please take time to read the following information. If there is anything that is not clear, or if you would like more information, please contact the research team (see reverse for details). All communication will be treated confidentially.

What is the purpose of this study?

The NHS is increasingly interested in patients' views of their doctors, nurses and health care. As part of this it has recently introduced a questionnaire called the General Practice Patient Survey (GPPS) filled out by some

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Further information

If you would like more information, or have any queries concerning the study, please feel free to contact the research team:

General Practice and Primary Care Research Team
Institute of Public Health
Forvie Site,
University of Cambridge
Robinson Way
Cambridge, CB2 0SR

<Principal investigator name>
(Principal Investigator)
<Contact number>
<Contact email>

<Lead researcher name>
(Research Associate)
<Contact number>
<Contact email>

The Association of Research Ethics Committees provides independent information and advice on research in the NHS.

AREC Office 13
Cherry Drive
Durham
DH6 2BG
Tel: 0845 604 5466
www.arec.org.uk

Thank you for considering taking part in this study

patients. You may or may not have received this survey yourself. The results of the survey have been used by practices to improve the service they provide. Individual doctors now want to use feedback from their patients to help them improve some aspects of the care they provide.

will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

Why have I been chosen?

We are inviting patients who have had an appointment with one of the doctors at your practice to take part.

Do I have to take part?

It is up to you to decide whether or not to take part. If you decide not to take part, we will respect your decision. This will not affect the health care you receive in any way. If you do decide to take part, you are still free to withdraw at any time and without giving a reason.

What would happen to me if I take part?

You will find enclosed with this letter a questionnaire for you to complete following your recent consultation with the GP. It should take no longer than 10 minutes to complete. You can then post it back in the reply-paid envelope provided.

A small sample of patients will also be sent a second questionnaire some days later. This is because it is important for our research to find out any differences or similarities in responses given shortly after a consultation and later. If you receive a second questionnaire, please follow the instructions given in the enclosed letter and information sheet.

Who will have access to my information?

All information collected during the course of this study will be kept strictly confidential. The anonymous questionnaires will be analysed by the research team. All data will be stored securely by the University of Cambridge and the Peninsula Medical School.

At the end of the study the confidential records and files

What will happen to the study results?

The findings from this study will be published to help policy makers understand patients' views of their doctors and the best way to use survey results in the future. No individual will be identified personally in any report or publication.

What are the possible disadvantages and risks of taking part?

We do not foresee any risk in participating in this study, although we do understand that some people may feel concerned about taking the time to complete the questionnaire.

What are the possible benefits of taking part?

Taking part will give you an opportunity to have your say about your practice and doctor.

Who is organising and funding the study?

The study is organised by the Peninsula Medical School and the University of Cambridge. The study is funded by the Department of Health.

Who has reviewed the study?

This study has been reviewed and given a favourable opinion by the South West 2 Research Ethics Committee.

What happens if there is a problem?

If you have any reason to complain about any aspect of the study, or the way you have been approached or treated during the course of this study, please contact the research team (contact details overleaf).

Appendix 27 *Chapter 10*: practice information sheet

Practice Information Sheet – Exploratory Trial Phase

We would like to invite your practice to take part in a research study. The study is part of a programme of research that is examining ways of improving patient experience in primary care. Before you decide whether you would like the practice to take part, please take time to read the following information. If there is anything that is not clear, or if you would like more information then please contact the research team (see reverse for details). All communication will be treated confidentially.

What is the purpose of this study?
The NHS is increasingly interested in patients' views of their doctors, nurses and health care. The introduction of the national General Practice Patient Survey (GPPS) is part of this development. Results from the national survey are providing a description of patient experience in all 8500 general practices in England and have been used by practices to identify areas for improvement.

Real-time feedback (RTF) is another method for collecting patient feedback. It involves the systematic collection, analysis and reporting of information from patients after they use a health care service. Feedback on specific topics can be collected continuously using touch-screen kiosks or hand-held devices in the waiting area. The feedback can be regularly collated (e.g. every fortnight) and reported back to the practice to inform and support service improvement. By reflecting and acting on the patient feedback while it is 'fresh', organisations can monitor whether improvements are needed and, if changes are implemented, what effect these are having on the experience of patients.

This exploratory trial will investigate with a small number of GP practices whether RTF might be a feasible and acceptable means (with or without facilitated reflection) of identifying ways in which practices can improve patient experience. The results of the study will guide the design of a larger randomised controlled trial which could investigate the effectiveness of real-time feedback in bringing about improvements in this setting.

Why has the practice been chosen?
We intend to recruit a total of 10 practices to take part in the exploratory trial from a number of geographical areas, including: Devon, Cornwall, Bristol, Somerset, Cambridgeshire, Bedfordshire and North London. Practices' previous GPPS results will inform which practices we invite.

Does the practice have to take part?
We hope that your practice will be willing to take part, but there is no obligation to do so. If you decide not to take part, we will respect your decision and, of course, it will not affect your professional role in any way. If you do decide to take part, the practice manager or senior GP partner will be asked to sign a consent form on behalf of the practice before the research begins. The practice is however free to withdraw at any time, and without giving a reason. Practice team members will be asked to individually sign a separate consent form if they are willing to take part in a focus group at the end of the study to help us evaluate the RTF intervention and the research methods.

What would happen if the practice agrees to take part?
If your practice agrees to take part, we will arrange a convenient time to visit to explain the study in more detail, and answer any questions or concerns the practice team might have about the research. After the preliminary meeting, we will ask the practice manager (or senior GP) to complete a consent form and fill in a *short questionnaire about the practice*. We will also ask each

member of the practice team to individually fill in a *short questionnaire about team working and their attitudes to patient feedback*.

Practices will then be randomly allocated to one of four different RTF intervention groups (2 practices per group) or to a control group (2 practices). The practice will **not** be able to choose which trial group it goes into. All practices will receive some form of RTF package – at no cost to the practice – but we will vary the timing of RTF collection, the level of feedback reporting, and whether or not the practice team receives support from a trained facilitator. The researcher will contact you after the randomisation stage to let you know which group the practice has been allocated to and will explain what this means in practical terms. The researcher will also agree convenient dates when the different research activities can take place.

If your practice is allocated an <u>intervention group</u>, the study will involve the following stages:
- *RTF set-up and training:* We will arrange for two touch-screens to be set up in the practice waiting area and for your staff to have a training session. This will be followed by a 1- to 2-week 'run-in' or 'test' period to allow staff to become familiar with the equipment and (with our support) iron out any practical problems.
- *The RTF collection phase* will then start and run continuously for 12 weeks. During this period, you will be asked to collect feedback from patients who attend the practice (see below).
- *Practice feedback reports:* The practice will receive reports (every fortnight) which summarise the patient feedback that has been collected via the touch-screen equipment. The type of report you receive will depend on the intervention group you are allocated to. Some practices will receive feedback at the level of the practice team only, while other practices will receive feedback at the practice team level <u>and</u> at the individual practitioner level (for GPs and nurses).
- *Facilitated reflection session:* Approximately half of the practices will also receive input from a trained and experienced facilitator mid-way through the RTF collection phase. The facilitator will help the practice team to reflect on their patient feedback and discuss whether/how improvements could be made. The session will last 1 hour and will take place at the practice on a date/time that suits the team. Refreshments will be provided.
- *Follow-up staff questionnaire:* At the end of the RTF collection phase, each member of the practice team will be asked to fill in a short questionnaire about their attitudes to patient feedback.
- *Team focus group:* At the end of the study, we would also like to organise a group discussion (to include GPs, nurses, practice managers, and reception staff) to explore your views and experiences of the RTF package the practice piloted. The discussion will last approximately 1 hour and will take place at the practice. Refreshments will be provided.

With your permission, a researcher will visit the practice once a fortnight to observe how the feedback collection process is working and to explore patient reactions to this. During two of these visits, the researcher will also request *anonymised* data on the number and age/gender breakdown of consulting patients for a specific time period so that we can calculate your RTF response rate.

If your practice is allocated to the <u>control group</u>, the study will involve the following stages:
- *Follow-up staff questionnaire:* Approximately 14 weeks after the practice has been randomised, each member of the practice team will be asked to fill in a short questionnaire about their attitudes to patient feedback.
- *RTF set-up and training:* Once all follow-up questionnaires have been returned, we will arrange for two touch-screens to be set up in the practice waiting area and for reception staff to have a training session. This will be followed by a 1- to 2-week 'run-in' or 'test' period to allow staff to become familiar with the equipment and (with our support) iron out any practical problems.
- *RTF collection* will then start and run continuously for up to 12 weeks. During this period, you will be asked to collect feedback from patients who attend the practice (see below).

- *Practice feedback reports:* The practice will receive reports (every fortnight) which summarise the patient feedback that has been collected via the touch-screen equipment. The reports will be presented at the practice level <u>and</u> at the individual practitioner level (for GPs and nurses).

With your agreement, we would like to have access to the patient feedback you collect using the touch-screens (this data will be supplied to us *in anonymised form* by the RTF provider). We would also like to have *anonymised* data on the number and the age/gender breakdown of consulting patients over the 12 weeks that you collected RTF, so that we can calculate an RTF response rate.

Your team will <u>not</u> be asked to attend a facilitated reflection session or to take part in a focus group at the end of the study.

How will the RTF equipment work?
All patients who attend the practice during the 12 weeks of RTF data collection will be eligible to provide their *anonymous* feedback as they leave the practice, using a touch-screen kiosk or desk-top device. We will provide, free-of-charge, the RTF equipment as well as posters and leaflets to inform patients about the opportunity to provide feedback. Practice staff (receptionists, GPs, nurses) can also encourage patients to leave their feedback.

Throughout the study, technical support will be available if needed from the RTF provider, Customer Research Technology (CRT). The touch-screen equipment can usually be set up so that data is automatically transmitted to CRT Limited for analysis (e.g. using Wi-Fi Networks or 3G technology). Where connectivity is poor, RTF responses can be saved onto a data stick but practice staff would need to e-mail RTF data to CRT Limited at the end of each day.

The touch-screens will present a series of questions asking patients about:

- their age, gender and ethnic group;
- their experience of accessing services – e.g. contacting the practice by telephone, booking an appointment, helpfulness of reception staff;
- their overall satisfaction with the service they receive from the practice;
- whether they would recommend the practice to their family or friends;
- whether they have just seen a health professional;
- (if they have seen a GP or nurse) how they rate that health professional's communication skills.

The practice team will also be able to choose <u>up to two questions</u> relating to areas on which they would like to collect patient feedback. These questions could be varied if necessary across the 12 weeks of RTF collection.

Who would have access to the information?
All information collected during the course of this study will be kept strictly confidential. All anonymised patient feedback collected by the touch-screen equipment will be analysed by the RTF provider for the purposes of producing the practice fortnightly reports. All patient feedback and other data collected from staff questionnaires, focus groups or observational work will be analysed by the research team for publication. All study data will be stored securely by the University of Exeter Medical School. At the end of the study, the confidential records and files will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

What will happen to the study results?
The findings from this study will be published to help NHS staff, organisations, policy makers and researchers understand whether RTF might be a feasible and acceptable method for obtaining and acting on patient feedback. No individual will be identified personally in any report or publication.

The findings of the study will also help the research team to determine whether RTF is an effective way of improving patient experience.

What are the possible benefits and the possible risks of taking part?
Taking part will provide practice teams with patient feedback that can be used to identify areas of strength and opportunities for improvement. We do not foresee any risk in participating in this study, although we do understand that some staff may feel uncomfortable about receiving feedback. For this reason, we will encourage participating GPs/nurses to identify a supporting medical colleague with whom they would feel comfortable discussing their personalised feedback.

Service support costs
We will reimburse participating practices for the time that their staff spend supporting the research activities. We have applied for funding from NHS service support costs and will confirm the exact payments that will be available as soon as possible.

Who is organising and funding the study?
The study is organised by the University of Exeter Medical School and the University of Cambridge. The study is funded by the Department of Health.

Who has reviewed the study?
This study has been considered by the appropriate NHS Ethics regulatory body and the Royal Devon & Exeter NHS Foundation Trust R&D local research committee who have determined that this study does not require NHS Ethics approval. All other local research governance approvals are in place.

What if there is a problem?
If you have any reason to complain about any aspect of the study or the way you have been approached or treated during the course of this study, please contact the lead researchers.

What will happen next?
Once the research team has received your completed response sheet, a researcher will contact you by telephone or email to discuss your participation further. In the meantime, if you would like any further information, please use the contact details below.

Further information
If you would like more information before deciding, or have any queries concerning the study, please feel free to contact the study researchers.

Appendix 28 *Chapter 10*: practice consent form

Practice ID Number for study: _____

improve

Improving Patient Experience in Primary Care

Exploratory trial of a real-time feedback intervention in general practice

PRACTICE CONSENT FORM
(Exploratory Trial Phase)

(Please **initial** in box)

I confirm that the practice team has considered the study information sheet (Version 1.0b, dated 20 January 2014) for the above project and has had the opportunity to ask questions.

We understand that our participation in this study is voluntary and that the practice is free to withdraw at any time.

We agree to take part in the above study.

_____   _____   _____
Print name   Date   Signature
(Lead GP / Practice Manager)

_____   _____   _____
Print name   Date
                                                        Signature
(Researcher)

1 copy for practice records; 1 copy for research team

Appendix 29 *Chapter 10*: practice profile questionnaire

improve

IMPROVING PATIENT EXPERIENCE IN PRIMARY CARE

A NATIONAL INSTITUTE OF HEALTH RESEARCH FUNDED RESEARCH PROGRAMME

Project 6: Exploratory trial of a real-time feedback intervention

to improve patient experience in general practice

This information will be used by the research team only for the purpose of the Improve Project. Please complete all the questions as accurately as possible.

1. PRACTICE CONTACT DETAILS

Practice ID:	Telephone:
Address:	Email:
Post code:	**Alternative contact name:**
	Telephone:
Fax:	Email:
Clinical Commissioning Group/ NHS Trust:	**Contact name responsible for IT:**
	Telephone:
	Email:

2. LIST SIZE AND STAFFING

Q1. What is your current practice list size?

Q2. Please indicate the <u>numbers</u> of staff currently employed within the practice:
(include all staff working mainly in the practice, whether employed by the practice or PCT)

	Full time	**Part time**
GPs (principals or salaried)	☐	☐
Nurse practitioners	☐	☐
Practice nurses	☐	☐
Healthcare assistants	☐	☐
Physiotherapists	☐	☐
District nurses	☐	☐
Midwives	☐	☐
Practice counsellors / therapists	☐	☐
Practice managers	☐	☐
Other managers / deputy managers	☐	☐
Receptionists	☐	☐
Administrative / secretarial staff	☐	☐
Other *(please specify)* _____	☐	☐
Other *(please specify)* _____	☐	☐
Other *(please specify)* _____	☐	☐

3. PRACTICE CHARACTERISTICS

Please put a cross ☒ *in the relevant box to indicate your answers*

Q3. Would your classify your practice as:

☐ Rural
☐ Urban
☐ (Inner) city

Q4. Please can you confirm the number of registered patients you have in total and in each of the following age/gender groups?

Total registered population: _____ patients

Made up as follows:

Age group	Males	Females
Under 18 years		
18-25 years		
26-45 years		
46-65 years		
Over 65 years		

4. CONSULTATIONS/ APPOINTMENTS

Q5. What appointment system do you currently use?

☐ Emis Web
☐ Emis LV
☐ Emis PCS
☐ Vision
☐ SystmOne
☐ Other (please specify) ………………………

Q7. What proportion of consultations do you conduct on the telephone?

☐ < 25%
☐ 26-50%
☐ 51-75%
☐ 76-100%
☐ Cannot estimate

5. STAFF DETAILS

Q8. Please complete the table below: *please attach additional sheet(s) if necessary*

Name of Staff member	Role	If GP No. of sessions per week*	Other members of staff: full-time/part-time	Age	Contact details (email address)

*a session is defined as a four hour block of consultation time.

Thank you for your time. Please return this questionnaire to the research team in the reply paid envelope provided

Appendix 30 *Chapter 10*: The Value of Patient Feedback scale

The Value of Patient Feedback

1. Have you ever received structured patient feedback (such as through patient surveys)?

☐ At an individual level (e.g. through a report of patient feedback specific to the care you have provided) At

☐ an organisational level (e.g. through a report of patient feedback aggregated for your practice or clinic) I

☐ have never received structured patient feedback (such as through a patient survey)

2. Please put an X in one box for <u>each</u> row to indicate your attitude towards each statement:

	Strongly agree		Neither agree nor disagree		Strongly disagree
1. Patient feedback is an important mechanism of quality improvement	☐	☐	☐	☐	☐
2. Making patient feedback publicly available is beneficial to other patients	☐	☐	☐	☐	☐
3. I have reservations about patient feedback received via complaints	☐	☐	☐	☐	☐
4. I have reservations about patient feedback currently received via patient forums or participant groups	☐	☐	☐	☐	☐
5. I have reservations about patient feedback currently received via surveys	☐	☐	☐	☐	☐
6 Patient surveys help identify areas for service improvement	☐	☐	☐	☐	☐
7 I can make good use of patient feedback	☐	☐	☐	☐	☐
8 Responders to patient surveys are representative of my patient population	☐	☐	☐	☐	☐
9 Feedback from current patient surveys is usually reliable	☐	☐	☐	☐	☐
10 It is beneficial to receive patient feedback via complaints	☐	☐	☐	☐	☐
11 It is beneficial to receive patient feedback via patient forums or participant groups	☐	☐	☐	☐	☐
12 It is beneficial to receive patient feedback via surveys	☐	☐	☐	☐	☐
13 I am likely to make changes to my individual practice as a result of patient feedback	☐	☐	☐	☐	☐
14 Patients are able to provide useful feedback on organisational issues, such as appointment systems	☐	☐	☐	☐	☐
15 I am concerned about my individual reputation as a result of patient feedback being made public	☐	☐	☐	☐	☐

Appendix 31 *Chapter 10*: structured observation sheets

improve

IMPROVING PATIENT EXPERIENCE IN PRIMARY CARE

A NATIONAL INSTITUTE OF HEALTH RESEARCH FUNDED RESEARCH PROGRAMME

RTF Structured Observation Sheets for Practice Visits

Exploratory trial of a real-time feedback intervention
in general practice

Practice name:

Practice ID:

Visit date:

Observation time: Start (00:00 hrs)   End (00:00 hrs)

Observer name:

Location of observer relative

to RTF screen(s)

Notes for Researchers

Please use the attached sheets to record your observations of practice staff and patients who attend the practice during your observation session.

Each pair of sheets permits the recording of observations for up to 4 patients who attend the practice during the session. One sheet is for free text comments and the other is for structured observation of specific target behaviours or events.

For each patient who walks past the real-time feedback equipment in the waiting area **(on their way out of the practice)**, please code the target behaviours or events as follows:

✗ = No (behaviour or event was not observed)

✓ = Yes (behaviour or event was observed)

? = Not visible from observation point

Please also record any free text observations you make relating to the patient's interaction with the equipment or with practice staff – for example, you may wish to note:

- the nature/duration of any help practice staff provide to the patient in relation to the RTF equipment or process;
- the gist of any comments the patient makes while interacting with the RTF screen, or discussing RTF more generally with practice staff;
- any non-verbal reactions to the RTF equipment or process.

At times when the practice is particularly busy, it may not be possible to observe every patient as they leave the waiting area. If you are aware that you have been unable to observe any individual patient(s), please write 'MISSED' in the appropriate patient column(s).

Please add further observation sheets as necessary.

General observations

When you arrive at the practice and before starting the structured observations, please record some general information about the practice waiting area, the RTF equipment, and the availability of publicity materials. If anything about the environment changes later in the observation session, note this in the box at the bottom of the 'free text' observation sheets.

Waiting area

How many practice staff are working on the reception desk?	
How many doctors/nurses are in the practice, running surgeries?	
How busy does the waiting area seem?	
Any other observations about the practice/waiting area?	

Location and status of RTF equipment

Machine	Location within waiting area	Switched on? (Y/N)
Free-standing kiosk		
Desk-top screen		

RTF publicity materials

Material	Materials available? (Y/N)	Readily visible? (Y/N)	Location of materials
RTF poster (A3)			
Patient flyers (A5: with photo of RTF kiosk)			

Detailed patient information booklets			
Other publicity materials (e.g. practice website, newsletter, notice board)			

(Please replenish publicity materials if you observe there are none in the waiting area)

Practice name: _____ **Practice ID:** _____

Observation date: _____ Sheet No: _____

Please use this space to record your free text observations of the patients' interactions with the real-time feedback equipment or practice staff.

Patient Number	Observation notes
001	
002	
003	
004	

Additional general observations:

Practice ID: _____ **Observation date**: _____ Time started: _____

Sheet No: _

Coding: ✗ = Behaviour/event was <u>not</u> observed ✓ = Behaviour/event <u>was</u> observed **?** = Not visible from observation point

Patient characteristics	Patient Number			
	001	**002**	**003**	**004**
Gender of patient (circle as appropriate) M = Male; F = Female	M / F	M / F	M / F	M / F
Estimated age group (e.g. 20's, 30's, 60's)				
Practice staff raise awareness of/encourage RTF – receptionists (record "R" next to your tick ✓) or health professionals ("HP")				
Patient interacts with a receptionist or health professional **(for <u>any</u> reason)**				
Staff member **tells the patient about the opportunity** to leave RTF (verbal)				
Staff member **physically points to (or takes patient to)** the touch-screen(s)				
Staff member **hands an RTF leaflet/flyer** to the patient				
Staff member **offers to show** the patient how to use the RTF equipment				
Patient interaction with publicity materials				
Patient **picks up** an RTF flyer/leaflet and/or **looks at** an RTF poster				
Patient **stops to read** the leaflet/flyer or poster about the RTF				
Patient interaction with RTF touch screen – either on arrival at (record "A" next to your tick ✓) or on leaving ("L") the practice				
Patient **notices** the touch-screen (looks at it from a distance, even momentarily)				
Patient **approaches** the kiosk or desk-top RTF device (walks up to it)				
A touch-screen is free for the patient to use				
Patient **has to wait** for a touch-screen to become free				
Patient **stops to read the first screen**				
Patient **touches the first screen to begin** the				

survey				
Patient **stops using the screen** (without appearing to answer any questions)				
Patient **answers some or all of the survey questions**				
Patient-staff interactions: requests for assistance with RTF – receptionists (record "R" next to your tick ✓) or health professionals ("HP")				
Patient asks a staff member **what the RTF screen is for**				
Patient approaches staff to request **help to start** using the RTF device				
Patient approaches staff to request **further help** with the RTF device				
Staff member **helps patient** – record nature/duration of help in free text section				

Appendix 32 *Chapter 10*: patient exit surveys

improve

IMPROVING PATIENT EXPERIENCE IN PRIMARY CARE

A NATIONAL INSTITUTE OF HEALTH RESEARCH FUNDED RESEARCH PROGRAMME

Patient Exit Survey Sheets for Practice Visits

Exploratory trial of a real-time feedback intervention in general practice

Practice ID: _____

Visit date: _____

Notes for Researchers

Please use the attached survey sheets to elicit and record:
- the views of patients who **use** the RTF touch-screens; <u>and</u>
- the views of patients who **do not use** the RTF touch-screens.

Approach patients as they are on their way out of the practice, e.g. in a suitable space near to the exit door.

- Patients do <u>not</u> need to give you their name and they do not need to sign a consent form.

To introduce yourself and the survey:

"Hello, I am ----------------------. I am a researcher from University of Exeter Medical School (or University of Cambridge)."

"As part of a research study, this practice is trying out the touch-screens in the waiting area to collect patient feedback on a number of different issues".

"I am visiting the surgery today to see how patients and staff are getting on with the touch-screen equipment …

- *I noticed that you were using one of the touch-screens just now and I wondered if you would be willing to tell me how you found it.*

 OR

- *I noticed that you did not use the touch-screens today and I wondered if you would be willing to tell me why that was.*

It should only take a couple of minutes of your time and you wouldn't have to give me your name. However, it is entirely voluntary so you don't have to take part if you don't want to."

- If the patient agrees to take part, please read out the questions and record their responses on one of the sheets.

- Where patients <u>decline</u> to take part in the exit survey, please note each incidence by adding a '✓' in the box below:

Exit survey questions for patients who <u>HAVE</u> used the RTF kiosk

Today's date: _____　　　**Patient ID:** _____(e.g. 001)

1. How did you find out about the opportunity to leave feedback?

☐　Saw the touch-screen equipment and wondered what it was

☐　Saw a poster/flyer in the waiting area

☐　A member of the practice team mentioned it

> *If yes,* was this a ….
>
> Doctor / Nurse / Other health professional / Receptionist /
> Another member of staff / Patient volunteer / Don't know
>
> *(delete as applicable)*

☐　Heard about it from another patient/ relative/ friend

☐　Read about it in a practice newsletter or on the practice website / noticeboard

☐　Other means (please specify below)

2. Did you have to wait to use one of the touch-screens?

☐ Yes　　　　　　　　☐ No

If the patient had to wait, roughly for how long? _____ minutes

3. How easy did you find it to use the touch-screen equipment?

☐ Very easy　　　　☐ Quite easy　　　　☐ Not at all easy

If the patient needed help with the touch-screen, who provided this?

A receptionist / Someone accompanying the patient / Another patient /
Someone else

(delete as applicable)

4. Did you have difficulty understanding any of the questions?

☐ Yes   ☐ No

If specific questions caused the patient difficulty, note which/why …

5. Did you answer all the questions presented on the touch-screen?

☐ Yes   ☐ No

6. Roughly how long did it take you to answer the questions? _____

(minutes)

7. Generally, what do you think of the touch-screens as a way of collecting feedback from patients?

☐ A good idea   ☐ A bad idea   ☐ Indifferent / don't know

8. Any other comments?

Patient's gender:

Male ☐   Female ☐

Which age group?

Under 18 years ☐   18-25 years ☐   26-45 years ☐

46-65 years ☐   Over 65 years ☐   Declined ☐

Exit survey questions for patients who have <u>NOT</u> used the RTF kiosk

Today's date: _____ **Patient ID:** _____(e.g. 001)

1. Did you know that the practice team is using the touch-screens to collect feedback from patients who visit the surgery?

☐ Yes   ☐ No

If 'Yes', please go to Question 2.

If 'No', please go to Question 5.

2. How did you find out about the opportunity to leave feedback?

Tick any that the patient mentions:

☐ Saw the touch-screen equipment and wondered what it was

☐ Saw a poster/flyer in the waiting area

☐ A member of the practice team mentioned it

> *PROMPT: If yes,* was this a ….
>
> Doctor / Nurse / Other health professional / Receptionist / Another member of staff / Patient volunteer / Don't know
>
> *(delete as applicable)*

☐ Heard about it from another patient/ relative/ friend

☐ Read about it in a practice newsletter or on the practice website / noticeboard

☐ Other means (please specify below)

3. Did you have any specific reasons for <u>not</u> using the touch screen to leave feedback for the practice today?

☐ Yes   ☐ No

If 'Yes', please go to Question 4

If 'No', please go to Question 5

4.   Can you briefly tell me what your reason(s) were?

Tick any that the patient mentions:

☐	None of the touch-screens were free
☐	In a hurry / didn't have time to stop to use a touch-screen
☐	Wasn't sure how to use the touch-screen
☐	Didn't like to ask the receptionists for help
☐	Generally don't like using this type of equipment
☐	Generally don't like the idea of giving the practice feedback
☐	Wasn't sure how the feedback would be used or who would see the feedback
☐	Worried that giving feedback would affect my relationship with the practice staff
☐	Happy with the services at the practice – didn't see the need to give feedback
☐	Other reason(s): - please list below

5. Generally, what do you think of the touch-screens as a way of collecting feedback from patients?

☐ A good idea   ☐ A bad idea   ☐ Indifferent / don't know

6. Any other comments?

Patient's gender:

Male ☐   Female ☐

Which age group?

Under 18 years ☐   18-25 years ☐   26-45 years ☐

46-65 years ☐   Over 65 years ☐   Declined ☐

Appendix 33 *Chapter 10*: example focus group/interview topic guide

improve

Exploratory trial of a real-time feedback intervention in general practice

PRACTICE FOCUS GROUP/INTERVIEW TOPIC GUIDE

(Exploratory Trial Phase – Group A practices)

Before the discussion begins

- Explain the purpose of the focus group, how the discussion will be managed, how the information will be used, and explain that you would like to record the discussion.
- Invite questions from participants about taking part.
- Ask individual participants to complete a consent form confirming their agreement to take part and for the discussion to be audio-recorded/transcribed for analysis.
- Ask participants to complete 'Attendance List' to indicate their professional role within the practice.

Start the audio-recording and alert participants that this is occurring

If we could start by discussing your views and experiences of the different components of the real-time feedback (RTF) package that your team has been piloting over the last 3 months ...

1. Training and set-up of RTF equipment and processes
   - Which team members attended the training session?
     - ○ *Optional prompts:* How did you decide this?

   - How useful did you find the training session?

- o *Optional prompts:* Did it cover everything you needed to know? Were you left with unanswered questions or concerns? What other information would you have liked?

- Was the <u>amount of time</u> offered for the training appropriate or sufficient?

- Did you feel you had enough say in the set-up process?
  - o *Optional prompts:* <u>How</u> the equipment was set up – location of RTF devices and publicity materials? <u>What questions</u> patients were asked?

- What were the <u>main problems or challenges</u> that you encountered in the set-up phase?
  - o How did you resolve these?

- What did you feel about the <u>level of advice and technical support</u> you received during the set-up period?

2. Collection of real-time feedback from patients
  - <u>Which team members</u> were mostly involved in the RTF collection process?
    - o *Optional prompt:* How did you decide this?

  - <u>How did you encourage patients</u> to leave their feedback?
    - o *Optional prompts:*
      - Did team members inform patients of the opportunity to leave feedback? If so, which team members did this – receptionists, GPs, nurses, etc? Did you engage patient volunteers/members of the PPG in the process?
      - Did you just rely on the publicity materials provided?
      - Did you publicise the RTF in other ways (e.g. in practice newsletters, on practice website or notice boards, through the PPG, or other mechanisms)?
      - How acceptable was the level of encouragement you had to provide?

  - What level of <u>help/support did patients require</u>?
    - o *Optional prompts:*
      - Which team members provided help? Did you engage patient volunteers/members of the PPG in this activity?
      - How often did patients need help/support to use the RTF equipment?
      - What type of help/support did you have to provide?
      - What impact did this have on your workload and/or usual practice routines?
      - How acceptable was the level of help/support you had to provide?

  - What were the <u>main problems or challenges</u> that you encountered during the main RTF collection phase?
    - o How did you resolve these?

- What did you feel about the <u>level of advice and technical support</u> you received during the main RTF collection phase?

3. Fortnightly patient feedback reports

- <u>Which team members</u> saw the feedback reports every fortnight?
  - *Optional prompts:* How did you decide this?

- What did you think about the <u>frequency and format</u> of the feedback reports?
  - *Optional prompts:* Was a fortnightly report appropriate? Was the electronic format acceptable? What did you think about the length of the reports?

- How <u>easy was it to understand</u> the content of the reports?
  - *Optional prompt:* Could any aspects of the report presentation be improved?

- How <u>useful</u> was the content of the reports?
  - *Optional prompt:* Were any sections unnecessary? Was there information missing that you would like to have seen?

- To what <u>extent did team members look at the reports</u> as these arrived?
  - Did staff discuss the feedback before the facilitated team session? What form did these discussions take – e.g. in small groups, with supportive colleague, or at wider team meetings?

4. Team facilitated reflection session

- <u>Which team members</u> attended the team facilitated session?
  - How did you decide this?

- What did you think about <u>the timing</u> of the facilitated session (after 6-8 weeks of RTF)?

- What did you think about <u>the format</u> of the facilitated session?
  - *Optional prompts:* Length of the session – 1 hour? Style of the session? Number of sessions – is one sufficient?

- How easy was it for staff to <u>engage in a group discussion</u> of the feedback?
  - *Optional prompt:* Was it easier for some staff groups than others?

- How <u>useful</u> was the facilitated session?
  - *Optional prompts:*
    - What aspects of the session were most helpful – reviewing reports, identifying strengths/areas for improvement, planning action?
    - Were any aspects unhelpful or unnecessary?
    - Could any aspects of the session be improved?

5. Use of and reactions to patient feedback

- Overall, what do you think about the value of collection of real-time feedback from patients?

- How do you think real-time feedback compares to more traditional ways of collecting patient feedback – such as postal surveys or complaints/compliments?

- What has the team's reaction been to the feedback you collected?
  - Optional prompts:
    - Positive / amenable to hearing patients' feedback and motivated to act on this?
    - Negative / distrustful of patient feedback or processes used to collect it?

- Has the practice made changes or planned changes as a result of the real-time feedback process?
  - Optional prompts:
    - If so, what changes? How has this been managed?
    - Which team members have led on this?
    - How far as this progressed?

- Has the team informed patients about the feedback they have received and how they have acted on it or plan to act on it?
  - How did you do this?

Are there any other issues you wish to mention or discuss about the real-time feedback intervention that we haven't already covered?

If we could now briefly discuss your experiences of the other aspects of the research ... Do you have any comments you wish to make about:

1. Practice recruitment materials and processes

- *Optional prompts:* Clarity and accuracy of information provided? Usefulness of briefing session? Amount of paperwork involved?

2. Randomisation

- *Optional prompts:* You did not know exactly which RTF intervention you would be receiving in advance of agreeing to take part. What was this like? How did the uncertainty affect your arriving at a decision to take part?

3. Researcher's observation/monitoring visits

- *Optional prompts:*

- o Level of disruption cause? Time/burden required of reception/other staff?
- o Any comments received from staff or patients about the observation work or exit survey?

4. General perceptions of advantages and disadvantages of taking part in study

- *Optional prompts:*
  - o Balance of burden and benefits of taking part in the study?
  - o Finding time for all team members to complete study questionnaires and taking part in focus group?
  - o Keeping track of what needs to be done when?

Are there any other issues you wish to mention or discuss about taking part in the study that we haven't already covered?

Thank you for your input

Appendix 34 *Chapter 10*: facilitator interview topic guide

improve

Improving Patient Experience in Primary Care

Exploratory trial of a real-time feedback intervention in general practice

FACILITATOR INTERVIEW TOPIC GUIDE
(Exploratory Trial Phase)

1. Background information

Confirm number of facilitated sessions completed in exploratory trial phase.

2. Broad approach to running the facilitated sessions

Can you describe how you structured and ran the facilitated sessions?
- Did you use the same approach in all practices, or did your approach vary between the four?
- If you used a different approach at the different practices, what brought about that decision?

3. Practice teams' response/reaction to the sessions

How many and what range of staff attended the sessions?
- Did this vary between the four practices?

How long did the sessions last?
- Did this vary between the four practices?
- Was one hour sufficient time to cover everything?

Were the discussions driven by particular groups of staff – e.g. doctors, practice manager – or did all staff contribute equally?
- Were there particular staff groups who dominated the discussion?
- Were there particular staff groups that were more difficult to engage than others?
- Did this vary between the four practices?

How well do you think the practice teams **understood** the purpose of the facilitated session?
- Did the teams have any specific expectations about the session before it began?
- Did this vary between the four practices?
- Or between different staff groups?

How well do you think the practice teams **understood** the content of the RTF reports?
- Did you feel the team had looked in detail at the reports before the session?
- Did this vary between the four practices?
- Or between different staff groups?

- Do you think the layout or content of the RTF reports could be improved in any way?

How engaged did you feel the teams were in **discussing and reflecting** on the feedback in their RTF reports?
- How hard did you have to work to get the discussion going and keep it going?
- Were there particular staff groups who dominated or hindered the discussion?
- Were there particular staff groups that were more difficult to engage than others?
- Did this vary between the four practices?

How engaged did you feel the teams were in **identifying areas for improvement and planning changes** that they might be able to make as a result of the feedback?
- Did you have to work hard to get this part of the discussion going and keep it going?
- Were there particular staff groups who dominated or hindered the discussion?
- Were there particular staff groups that were more difficult to engage than others?
- Did this vary between the four practices?

How willing were the GPs and nurses to **discuss their <u>individualised</u> feedback** – or were the discussion mostly focus on the team level feedback?
- Did you encourage them to talk about their personalised feedback as well as the team-level feedback?
- Did you sense any resistance to talking about individualised feedback?
- Did this vary between the four practice teams?

4. Facilitator's perspective

What aspects of the sessions did you feel worked well?

What aspects of the sessions did you find more challenging?

How did the facilitator's role compare to other roles you've had in the past – e.g. one-to-one appraisals, other types of group work, etc?

Did you feel you had sufficient information to help you plan and lead the facilitated sessions?
- If no ... what information would have been useful?
- How easy did you find it to understand the RTF reports and pull out potential areas for discussion?

Do you think you would have benefited from additional training for the role?
- What sort of training would have been helpful?
- What core skills or experience do you think facilitators would need to have for this role?

How did you find the workload – in terms of preparation/delivery time and travelling?
- How much of your time did it take to prepare for each facilitated session?
- Is it reasonable to ask one person to run this number of facilitated sessions in the timescale you had?
- Is it reasonable to expect the facilitator to travel to practices in different locations?

5. General perceptions of value of facilitated sessions

In general, how do you feel the facilitated sessions have gone?

Do you feel the practice teams have found the sessions useful?
- Have any of the teams or individuals discovered anything new from the RTF/session?
- Have any of the teams or individuals planned to make changes based on the RTF/session?

Have you enjoyed the role and/or learned anything useful from it?

What changes or improvements would you recommend to the facilitated sessions in the next phase of the study?
- Content / structure
- Participant mix
- Timing of session (mid-way through RTF collection?)
- Number of sessions (one or two?)

6. Are there any other issues or areas you wish to discuss that we haven't already covered?

Thank you for your input

Appendix 35 *Chapter 11*: provider information sheet

Provider Information Sheet

Project title: Understanding patient experiences of out-of-hours primary care

Introduction

This study is part of a programme of research that is examining various ways of improving patient experience in primary care. For this project we will be surveying, and conducting interviews with, patients who have recently accessed an out-of-hours care provider. We will also be interviewing service providers to gather their views. The patient survey data we collect will be aggregated and fed back to service providers.

Before you decide whether you would like to take part, please take the time to read the following information. If there is anything that is unclear, or if you would like more information, please contact the research team (see reverse for details). All communication will be treated confidentially.

What is the purpose of this study?

The NHS is increasingly interested in patients' views of their health care; the introduction of the national General Practice Patient Survey (GPPS) is part of this development. A short part of the survey questionnaire asked patients about out-of-hours care. In this study we will use these questions in a patient survey, combined with the more detailed Out-of-hours Patient Questionnaire (OPQ). We are looking to understand how well the GPPS items reflect the experiences of people who use the out-of-hours service, and whether or not data from the GPPS survey could be used by the service to monitor and/or improve out-of-hours care.

Why has our organisation been chosen?

We will be recruiting six out-of-hours service providers in England to take part in this study. Organisations will be sampled to ensure diversity of previous GPPS scores and will represent city, urban and rural geographical settings. Two providers will be invited to participate in the pilot study (see below) and all six providers will be invited to participate in the main survey and providers' interviews.

Does our organisation have to take part?

We hope that your organisation will be willing to take part, but there is no obligation to do so. If you decide not to take part, we will respect your decision, and of course, it will not affect your service in any way. If your service does decide to take part, a nominated manager from your team will be asked to confirm in writing on behalf of your organisation before the research takes place.

What would happen if the organisation agrees to take part?

We would like to arrange a convenient time to visit you to explain the study in more detail, and answer any queries or concerns you and other staff may have about taking part. For organisations contributing to the **pilot study**, we will ask you to help us to recruit patients that have recently accessed out-of-hours care. You will be asked to approach approximately 400 patients, who will be asked to complete a survey (comprised of GPPS and Out-of-hours Patient Questionnaires) and return it by post; a small sample of patients will also be invited to interview by the researchers. We need to complete around 20 interviews with patients to explore their understanding and responses to the GPPS out-of-hours items as compared with their experiences.

For the main survey, we will ask you to distribute the survey to a larger group of approximately 850 patients. We will then collate the patient responses, and share them with the key stakeholders in your organisation. We will ask you to nominate up to three representatives of your organisation who would routinely be updated of patient survey results. We will then approach them to ask if they would be willing to contribute to a **short interview** regarding how useful they found the information provided. While we hope your staff might be willing to take part, the nominated staff do not have to take part if they choose not to.

We will reimburse staff time and provide any materials required to deliver the research using standardised rates.

Who would have access to the information?

All information collected during the course of this study will be kept strictly confidential. However, if professional misconduct or serious patient harm is reported or suspected, these cases will be referred by the Chief Investigator, where appropriate, to the Clinical Governance Manager of the out-of-hours service provider for further action. The data will be anonymised and analysed by the research team. All data will be stored securely by the University of Exeter Medical School. At the end of the study the confidential records and files will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

What will happen to the study results?

The results from patients recruited through each organisation will be confidentially fed back to that service provider. The findings from this study will be published to help policy makers understand the views of patients with regard to their out-of-hours care and select the best way to use the survey results in the future. No individual will be identified personally in any report or publication.

What are the possible disadvantages and risks of taking part?

We do not foresee any risk in participating in this study.

What are the possible benefits of taking part?

Taking part will enrich providers with the information necessary for identifying areas of strength and opportunities for improvement.

Who is organising and funding the study?

The study is organised by the University of Exeter Medical School. The study is funded by the Department of Health.

Who has reviewed the study?
This study has been reviewed and given a favourable opinion by the NRES Committee South Central – Berkshire B NHS Research Ethics Service (12/SC/0454).

What if there is a problem? If you have any reason to complain about any aspect of the study or the way you have been approached or treated during the course of this study, please contact the academic lead for this project (Dr Suzanne Richards).

What will happen next?
Once the research team has received your completed response sheet, a researcher will contact you by telephone or email to discuss your participation further. In the meantime if you would like any further information please use the contact details below.

Further information:
If you would like more information please contact the research team:
<div align="center">

<researcher name>

Lead Researcher

<researcher contact details>

</div>

<div align="center">

Thank you for considering taking part in this study

</div>

Appendix 36 *Chapter 11*: patient survey information sheet

improve

Patient Information Sheet

Project title: Understanding patient experiences of out-of-hours GP services: A survey study

Introduction

This study is part of a programme of research that is examining various ways of improving patient experience in primary care. For this project we will be interviewing patients who have recently used the local out-of-hours GP service. The information we gather will then be used to inform the Department of Health about out-of-hours care service planning and delivery.

Before you decide whether you would like to take part, please take the time to read the following information If there is anything that is unclear, or if you would like more information, please contact the research team (see reverse for details). All communication will be treated confidentially.

What is the purpose of this study?

The NHS is increasingly interested in patients' views of their health care. As part of this it has introduced a national questionnaire called the General Practice Patient Survey (GPPS) filled out by some patients. This survey includes questions about out-of-hours GP services. We are trying to understand how people answer these questions, with the ultimate aim of understanding if this information could be used by services to improve patient care.

What happens if there is a problem?

If you are unhappy about any aspect of the study, or the way you have been approached or treated during the course of this study, please contact the research team.

Further information

If you would like more information, would like this leaflet in a different format, or have any queries concerning the study, please feel free to contact the research team:

<researcher name>
Lead Researcher
<researcher contact details>

Alternatively, if you would like further advice, independent of the research team, please contact:

<contact name>
Patient and Public Involvement Team
[CONTACT DETAILS]

Thank you for considering taking part in this study

Why have I been chosen?
We are inviting approximately 5100 adult patients who have used the local out-of-hours GP service within the last two weeks.

Do I have to take part?
It is up to you to decide whether or not to take part. If you decide not to take part you can return the questionnaire to us blank in the pre-paid envelope (no stamp needed). We will respect your decision and will make no further attempts to contact you. This will not affect the health care you receive in any way.

If you do decide to take part, we will use the information you provide in your completed questionnaire. You are still free to withdraw at any time and without giving a reason, and it will not affect your future care.

What would happen to me if I take part?
You will be asked to complete a survey about your recent experience of using the out-of-hours service. This should take about 15-20 minutes. The survey is enclosed with this pack. Then post your completed questionnaires to the study team in the pre-paid envelope provided.

Who will have access to my information?
All information collected during the course of this study will be kept strictly confidential. However, if professional misconduct or serious patient harm is reported or suspected, these cases will be referred by the Chief Investigator, where appropriate, to the Clinical Governance Manager of the out-of-hours service provider for further action. The survey will be analysed by the research team. All data will be stored securely by University of Exeter Medical School. The research team will not have access to your medical records.

At the end of the study the confidential records and files will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

What will happen to the study results?
The findings from this study will be published to help policy makers understand the views of patients regarding their out-of-hours care experience. No individual will be identified personally in any report or publication and no personal information will be fed back to the out-of-hours GP service or any other party.

What are the possible disadvantages and risks of taking part?
We do not foresee any risk in participating in this study, although we do understand that some people may feel concerned about taking the time to complete the survey.

What are the possible benefits of taking part?
Taking part will give you an opportunity to have your say about your out-of-hours care.

Who is organising and funding the study?
The study is organised by University of Exeter Medical School. The study is funded by the Department of Health.

Who has reviewed the study?
This study has been reviewed and given a favourable opinion by the NRES Committee South Central – Berkshire B NHS Research Ethics Committee (12/SC/0454).

Appendix 37 *Chapter 11*: patient questionnaire

The GP Out-of-Hours Service

Please answer the questions below by putting a tick in ONE box for each question unless more than one answer is allowed (these questions are clearly marked).

We will keep your answers completely confidential.

These questions are about contacting an **out-of-hours GP service** when your GP surgery or health centre is closed (for example, in the evening, at night or at the weekend).

They are **NOT** about NHS Direct, NHS walk-in centres or Accident and Emergency (A&E) or Casualty services.

Part 1: Summary questions

Q1. In the past 6 months, when you tried to call an out-of-hours GP service when the surgery or health centre was closed, who was it for?

- ☐ Yourself
- ☐ Someone else

Q2. How easy was it to contact the out-of-hours GP service by telephone?

- ☐ Very easy
- ☐ Fairly easy
- ☐ Not very easy
- ☐ Not at all easy
- ☐ Don't know/didn't make contact

Q3. How do you feel about how quickly you received care from the out-of-hours GP service?

- ☐ It was about right
- ☐ It took too long
- ☐ Don't know/doesn't apply

Q4. Were you prescribed or recommended any medicines by the out-of-hours GP service you contacted?

- ☐ Yes..........................please go to Q5
- ☐ No...........................please go to Q6
- ☐ Don't know/doesn't apply........................please go to Q6

Q5. How easy was it to get these medicines?

- ☐ Very easy
- ☐ Fairly easy
- ☐ Not very easy
- ☐ Not at all easy

Q6. Did you have confidence and trust in the out-of-hours clinician you saw or spoke to?

- ☐ Yes, definitely
- ☐ Yes, to some extent
- ☐ No, not at all
- ☐ Don't know/can't say

Q7. Overall, how would you describe your experience of out-of-hours GP services?

- ☐ Very good
- ☐ Good
- ☐ Neither good nor poor
- ☐ Poor
- ☐ Very poor

Part 2: Detailed questions about your experience

If you did not call the service yourself, please complete by discussing the responses with the person who made the initial call to the out-of-hours service.

Please answer **ALL** the questions that apply to you by ticking the box that most closely resembles your experience. There are no right or wrong answers and the service will **NOT** be able to identify your individual responses.

Please follow the instructions carefully throughout the questionnaire, especially if you are the parent, carer, or guardian rather than the patient. Throughout the questionnaire, please tick the box that is nearest to your view.

Some questions may seem similar to the summary questions we have already asked you to complete. We are interested in finding out how much detail is useful for us to find out, so please complete all questions that apply to your care.

SECTION A – Making contact with the service

Q8. Did you contact the out-of-hours service for:

☐ Yourself

☐ Your child

☐ Your spouse or partner

☐ Another relative or friend

Q9a. Did you delay calling the out-of-hours service for any reason?

☐ Yes

☐ No............................please go to Q10a

Q9b. If yes, why:

(Please tick as many as appropriate)

☐ You didn't think your condition was serious enough

☐ You didn't want to waste anyone's time

☐ You weren't sure whether this was the right service to deal with your problem

Q10a. Excluding any introductory message please estimate how long it took for your call to be answered:

☐ Less than 30 secs

☐ 30 to 60 secs

☐ More than 60 secs

Q10b. How do you rate this?

☐ Very poor

☐ Poor

☐ Acceptable

☐ Good

☐ Excellent

Q11. Please rate the helpfulness of the call operator:

☐ Very poor

☐ Poor

☐ Acceptable

☐ Good

☐ Excellent

Q12. Please rate the extent to which you felt the call operator listened to you:

☐ Very poor

☐ Poor

☐ Acceptable

☐ Good

☐ Excellent

Q13. Were you told how long you might have to wait before a health professional would call you back?

'Health professionals' can include doctors, nurses, paramedics etc

- ☐ Yes
- ☐ No
- ☐ Not applicable.......please go to Section B

14a. How long did it take for a health professional to call you back?

- ☐ Less than 20 mins
- ☐ 20-60 mins
- ☐ More than 1 hour

Q14b. How do you rate this?

- ☐ Very poor
- ☐ Poor
- ☐ Acceptable
- ☐ Good
- ☐ Excellent

Q15. Did you feel able to describe your health problem over the telephone?

- ☐ Definitely not
- ☐ No, not really
- ☐ Yes, to some extent
- ☐ Yes, definitely

Q16. How do you rate the way your problem was dealt with over the phone?

- ☐ Very poor
- ☐ Poor
- ☐ Acceptable
- ☐ Good
- ☐ Excellent

SECTION B - The outcome of your call to the out-of-hours service

Q17a. What was the outcome of your <u>most recent</u> contact with the out-of-hours service?

(Please tick all that apply)

- ☐ I had a home visit
- ☐ I went to a treatment centre
- ☐ I had telephone advice
- ☐ An ambulance was called for me
- ☐ I was told to call an ambulance

Q17b. Were you happy with the type of care you received? i.e. home visit, treatment centre or telephone advice

(Please tick ONE box only)

- ☐ Yes, I was happy
- ☐ No, I should have had a home visit
- ☐ No, I should have been seen at a treatment centre
- ☐ No, I should have been given advice on the telephone
- ☐ Other (please specify): ....

SECTION C - The consultation with the health professional (e.g. doctor, nurse, paramedic)

Important: this is about your **most recent contact** and includes telephone advice as well as consultations at a treatment centre or home visit

Q18. Which health professional conducted the consultation?

☐ Doctor

☐ Nurse

☐ Paramedic

☐ Don't know

☐ Other (please specify):...

Q19a. How long was your consultation with the health professional?

☐ Less than 10 mins

☐ 10-20 mins

☐ More than 20 mins

Q19b. How do you rate this?

☐ Very poor

☐ Poor

☐ Acceptable

☐ Good

☐ Excellent

Please rate the following:	Very poor	Poor	Acceptable	Good	Excellent	Not applicable
Q20. The **thoroughness** of the consultation......................	☐	☐	☐	☐	☐	☐
Q21. The accuracy of the **diagnosis**.................................	☐	☐	☐	☐	☐	☐
Q22. The **treatment** you were given...................................	☐	☐	☐	☐	☐	☐
Q23. The **advice and information** you were given............	☐	☐	☐	☐	☐	☐
Q24. The **warmth** of the health professional's manner.......	☐	☐	☐	☐	☐	☐
Q25. The extent to which you felt **listened to**.....................	☐	☐	☐	☐	☐	☐
Q26. The extent to which you felt things were **explained** to you...	☐	☐	☐	☐	☐	☐
Q27. The **respect** you were shown....................................	☐	☐	☐	☐	☐	☐

Q28. Were you prescribed or recommended any medicines during the consultation?

☐ Yes

☐ No.................................please go to Q30

Q29. How easy was it to obtain any medicines that were needed?

☐ Very difficult

☐ Quite difficult

☐ Neither easy nor difficult

☐ Quite easy

☐ Very easy

Q30. Did you have any problems understanding the health professional because of language barriers?

☐ Yes

☐ No

Q31a. Is English your first language?

☐ Yes.................... please go to Section D

☐ No

Q31b. If no, were you offered a translation service when you contacted the out-of-hours service?

☐ Yes, within 15 minutes of ringing

☐ Yes, more than 15 minutes after ringing

☐ No, none needed

☐ No, none offered

SECTION D – Home visit

*If you received a **home visit**, please answer the following questions.*

*If not, please go to **Section E.***

Q32. Were you told how long you would have to wait for the health professional to visit?

☐ Yes

☐ No

Q33. Did you feel you were kept informed about the timing of your home visit?

☐ Yes, as much as I needed

☐ No, I would have liked a follow-up phone call

Q34a. How long did you have to wait for your home visit?

☐ Less than 30 mins

☐ 30-59 mins

☐ More than 1 hour, but less than 2 hours

☐ More than 2 hours, but less than 6 hours

☐ Over 6 hours

Q34b. How do you rate this?

☐ Very poor

☐ Poor

☐ Acceptable

☐ Good

☐ Excellent

SECTION E – Treatment centre

*If you attended a **treatment centre**, please answer the following questions.*

*If not, please go to **Section F.***

Q35. On arrival, were you told how long you would have to wait before being seen?

☐ Yes

☐ No

Q36a. How long did you have to wait before being seen by medical staff?

☐ Less than 20 mins

☐ 20-59 mins

☐ More than 1 hour, but less than 2 hours

☐ More than 2 hours, but less than 6 hours

☐ Over 6 hours

Please turn over ☞

Q36b. How do you rate this?

- ☐ Very poor
- ☐ Poor
- ☐ Acceptable
- ☐ Good
- ☐ Excellent

Q37. How do you rate having your care managed at a treatment centre?

- ☐ Very poor
- ☐ Poor
- ☐ Acceptable
- ☐ Good
- ☐ Excellent

Q38a. How long did it take to travel to the treatment centre?

- ☐ Less than 15 mins
- ☐ 15-29 mins
- ☐ 30-59 mins
- ☐ An hour or more

Q38b. How do you rate this?

- ☐ Very poor
- ☐ Poor
- ☐ Acceptable
- ☐ Good
- ☐ Excellent

Q39. Were any of the following a problem for you in getting to the treatment centre?

(Please tick all that apply)

- ☐ Relying on public transport
- ☐ Arranging childcare
- ☐ Worries about my personal safety
- ☐ Cost
- ☐ Being too ill or in too much pain to travel
- ☐ Access to a car

Q40. How long did it take between being asked on the phone to go to the treatment centre and being seen by medical staff there?

- ☐ Less than 1 hour
- ☐ More than 1 hour, but less than 2 hours
- ☐ More than 2 hours, but less than 6 hours
- ☐ Over 6 hours

SECTION F – In General

Q41. Please give an overall rating of the way your care was managed by the out-of-hours service:

- ☐ Very poor
- ☐ Poor
- ☐ Acceptable
- ☐ Good
- ☐ Excellent

Q42. Do you feel your case was managed with sufficient urgency?

- ☐ Definitely not
- ☐ No, I don't think so
- ☐ Yes, I think so
- ☐ Yes, definitely

Q43. In general, before calling the out-of-hours service what sort of quality of care were you expecting?

- ☐ Very poor
- ☐ Poor
- ☐ Acceptable
- ☐ Good
- ☐ Excellent

Q44. Overall….

(Please circle the appropriate number)

| I had a very | I had a very |
| poor experience | good experience |

0   1   2   3   4   5   6   7   8   9   10

SECTION G – Some questions about you

The following questions *relate to the person who had the health problem* and will help the out-of-hours service to get the best information out of the survey. We will keep your answers completely confidential.

Q45. How old are you? _____ years old

Q46. Are you: ☐ Male ☐ Female

Q47. What is your postcode? _____

Q48. Which ethnic group do you belong to?
(Please tick ONE box)

☐ White

☐ Black or Black British

☐ Asian or Asian British

☐ Mixed background

☐ Chinese

☐ Other ethnic group

☐ If other please specify...........................

Q49. Is your accommodation:

☐ Owner/occupied/mortgaged

☐ Rented/other

Q50. Do you have any longstanding illness, disability or infirmity?

(By longstanding we mean anything that has troubled you over a period of time)

☐ Yes

☐ No

Q51. Which of these best describes what you are doing at present?

(If more than one of these applies to you, please tick the main ONE only)

☐ Full-time paid work (30 hours or more a week)

☐ Part-time paid work (under 30 hours a week)

☐ Full-time education at school, college or university

☐ Unemployed   Please

☐ Permanently sick or disabled   go to

☐ Fully retired from work   Q54

☐ Looking after the home

☐ Doing something else

Q52. In general, how long does your journey take from home to work (door to door)?

☐ Up to 30 minutes
☐ 31 minutes to 1 hour
☐ More than 1 hour
☐ I live on site

Q53. If you need to see a doctor at your GP surgery or health centre during your typical working hours, can you take time away from your work to do this?

☐ Yes

☐ No

Q54. In general, would you say your health is…?

☐ Excellent

☐ Very good

☐ Good

☐ Fair

☐ Poor

Q55. Are you a deaf person who uses sign language?

☐ Yes

☐ No

Q56. Are you a parent or a legal guardian for any children aged under 16 currently living in your home?

☐ Yes

☐ No

Q57. Do you have carer responsibilities for anyone in your household with a long-standing health problem or disability?

☐ Yes

☐ No

Please turn over ☞

SECTION H – Any comments?

The space below is for you to write any additional comments you may wish to make about the out-of-hours service, which will be fed back to the service provider.

THANK YOU FOR YOUR TIME

Please return this questionnaire in the reply paid envelope (no stamp is needed)

If, for any reason, you do not have a pre-paid envelope, please return the questionnaire using the freepost address below:

improve

**Primary Care Research Group
FREEPOST RRJE-SLSG-RJSY
University of Exeter Medical School
Smeall Building
St Luke's Campus
Magdalen Road
Exeter
EX1 2LU**

Appendix 38 *Chapter 11*: patient interview information sheet

improve

Patient Information Sheet

Project title: Understanding patient experiences of out-of-hours GP services: An Interview study

Introduction

This study is part of a programme of research that is examining various ways of improving patient experience in primary care. For this project we will be interviewing patients who have recently used the local out-of-hours GP service. The information we gather will then be used to inform the Department of Health about out-of-hours care service planning and delivery.

Before you decide whether you would like to take part, please take the time to read the following information If there is anything that is unclear, or if you would like more information, please contact the research team (see reverse for details). All communication will be treated confidentially.

What is the purpose of this study?

The NHS is increasingly interested in patients' views of their health care. As part of this it has introduced a national questionnaire called the General Practice Patient Survey (GPPS) filled out by some patients. This survey includes questions about out-of-hours GP services. We are trying to understand how people answer these questions, with the ultimate aim of understanding if this information could be used by services to improve patient care. Because we believe that it is important to listen to service users as well as to survey them, we designed this interview with patients.

What happens if there is a problem?

If you are unhappy about any aspect of the study, or the way you have been approached or treated during the course of this study, please contact the research team.

Further information

If you would like more information, would like this leaflet in a different format, or have any queries concerning the study, please feel free to contact the research team:

Primary Care Research Group
Peninsula College of Medicine and Dentistry
Smeall Building
St Luke's Campus, University of Exeter
Magdalen Road
Exeter EX1 2LU

Alternatively, if you would like further advice, independent of the research team, please contact:

<contact name>
Patient and Public Involvement Team
[CONTACT DETAILS]

Thank you for considering taking part in this study

At the end of the study the confidential records and files will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

What will happen to the study results?

The findings from this study will be published to help policy makers understand the views of patients regarding their out-of-hours care experience and select the best way to use the survey results in the future. Although quotes from the interviews may be included, no individual will be identified personally in any report or publication.

What are the possible disadvantages and risks of taking part?

We do not foresee any risk in participating in this study, although we do understand that some people may feel concerned about taking the time to take part in the interview. The interview may make you "re-live" the experience, particularly if was traumatic at the time, but we will endeavour to minimise this. However, if it does occur and you feel distressed by it we will not take the interview further.

What are the possible benefits of taking part?

Taking part will give you an opportunity to have your say about your out-of-hours care. There is no financial reward for taking part in this study.

Who is organising and funding the study?

The study is organised by Peninsula College of Medicine and Dentistry. The study is funded by the Department of Health.

Who has reviewed the study?

This study has been reviewed and given a favourable opinion by the NRES Committee South Central – Berkshire B NHS Research Ethics Committee (REC ref. 12/SC/0454).

Why have I been chosen?

We are inviting approximately 170 adult patients to be interviewed who have used their local out-of-hours GP service within the last two weeks.

Do I have to take part?

It is up to you to decide whether or not to take part. If you decide not to take part we will respect your decision and will make no further attempts to contact you. This will not affect the health care you receive in any way.

If you do decide to take part, please, return the reply slip in pre-paid envelope (no stamp needed) or phone us using the numbers below. Our researcher will contact you to answer any questions you might have, and if appropriate, arrange for an interview. You are still free to withdraw at any time and without giving a reason, and it will not affect your future care.

What would happen to me if I take part?

At the interview you will be asked to fill in a short questionnaire about out-of-hours GP services. We will ask you to comment on how easy it was to understand the questions and how well the questions reflect your experience of out-of-hours care. The researcher will also be interested to hear about the most recent contact with the service: what happened to you when you last contacted the out-of-hours care and afterwards. With your permission we will record the interview, which will then be transcribed and analysed by the researchers.

Who will have access to my information?

All information collected during the course of this study will be kept strictly confidential. The questionnaires and interviews will be analysed by the research team. All data will be stored securely by Peninsula College of Medicine and Dentistry. The research team will not have access to your medical records.

Appendix 39 *Chapter 11*: patient interview consent form

improve

Service Number:
Participant Study Number:

Patient Consent Form

Title of Project: Understanding patient experiences of out-of-hours GP services. An interview study

Please initial box

1. I confirm that I have read and understood the information sheet dated 07.09.2012 (version 2) for the above study. I have had the opportunity to consider the information, ask questions and have these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

3. I agree to this interview being recorded.

4. I understand that quotes from the interview may be reproduced in reports and papers, but that my identity will be kept anonymous.

5. I understand that data collected during the study may be looked at by individuals from the Peninsula Medical School, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.

6. I agree to take part in the above study.

_____   _____   _____
Name of Participant   Date   Signature

_____   _____   _____
Name of Researcher   Date   Signature

Appendix 40 *Chapter 11*: patient interview topic guide

Project title: Understanding patient experiences of out-of-hours GP services: An interview study

TOPIC GUIDE: COGNITIVE INTERVIEWS WITH PATIENTS

Preparation before the interview

1. Discuss carefully the place and time of the interview with the study participant. Weigh the options of interviewing at the participant's home against choosing a neutral venue near their home. Some prefer more formal and public venues than others. Where the preference is for home interview, safety principles for researchers should apply (in accordance with the University Lone Working policy). Where the interview is taking place in the public settings, background noise and other distractions need to be minimised.

2. Check the researcher's copy of all ethics documentation: double copies of consent forms. It is advisable to have the spare copies of participant information sheets with you in case the participants lost theirs.

3. Check the equipment is in working order, spare batteries if needed.

The Cognitive Interview

Introduction

(To be said to all participants): I am a <NAME> a researcher from the Peninsula College of Medicine and Dentistry, conducting research about patient experiences of out-of-hours GP services.

In this study we are looking at the ways patient experience can be improved and we are interviewing patients who have recently used the out-of-hours GP service. In the interview I will ask you to complete a short questionnaire and to talk about its questions at some length and then you may be willing to share some of your recent experiences of contacting out-of-hours services.

Before we begin I need to make sure that you received all information that we provide for the participants in this interview. Are there any questions about the study that you would like to ask?'

Explaining what will happen in the interview and afterwards

'This is your opportunity to have your say about out-of-hours GP care and to share your experiences with us. The interview should not take longer than 40 minutes.

I will be recording the interview on a digital recorder, to ensure that we have an accurate and detailed record of your views. The digital recordings will be saved on a password-locked computer

and only those immediately involved in the research will listen to them. The recording will be transcribed word for word and any names or anything that could identify you will be removed so the information is anonymous. Once we have checked this process for accuracy, we will destroy the digital recording, retaining only the anonymised written summary. Then I will draw out the main ideas and themes and these will be put together with other people's ideas. These will be fed back to the out-of-hours GP service with the aim of introducing improvements to the service. The service will not be able to identify you from the information we feed back.

You are free to stop the discussion and/or the recording at any point. If there are questions that you would prefer not to answer, please let me know and we can move on to the next question.

Are you happy to carry on now and for me to record the discussion? Please, could you sign two copies of the consent forms: you keep one copy and I will take the other for our records'. (The consent forms must be already signed by the researcher).

Turn on the digital recorder.

During the interview

It is important to take notes (written notes preferably, otherwise mental mapping of topics disclosed by the participant) as the interview proceeds along the questionnaire items. Some of the ideas and examples may need to be picked up in the end of the interview – to ask the participant to expand on those.

Record non-verbal behaviour associated with each item (i.e. pausing, laughing out loud etc).

Part 1. Beginning the cognitive interview

> *'Now I would like to go through the out-of-hours questionnaire with you. We will be doing it in a slightly unusual manner, because we want to know more about what you were thinking when you read each question and how you decided to answer'.*

Warm up session: 'THINK ALOUD' (Willis 2005, p.44).
Talk through the warm up example:

> *'When we look at questionnaire responses we don't really know what was going through the person's mind when they answer the questions and sometimes we may misunderstand the answers they give. We are interested in finding out if the out-of-hours questions in the survey make sense to people and how they understand and answer them.*
>
> *To help you do this I want to help you to 'think aloud' when you are answering a question. So – try to visualise the place where you live, and think about how many windows there are in that place. As you count up the windows, tell me what you are seeing in your mind and what you are thinking about.*
>
> *Now I'm going to take you through each question of the out-of-hours GP questionnaire to try and understand what you are thinking when you answer the questions'.*

Part 2. Interviewing on questionnaire items

The questionnaire items (Out-of-Hours section of GPPS survey, n=7) will be tested using the following interview format:

1) Read aloud the question in its original form.
2) Ask the interviewee to comment in 'think aloud' manner.
3) Read the response options – ask to comment.
4) Use probes that would be appropriate in testing the question and/or response options.
5) Note down (map) the experience of out-of-hours GP care which the interviewee discloses along the way.
6) Ask for alternative suggestions on the question and/or response options.

Read the items to the participant and use the probes specified below (these can differ from question to question). If the interviewee brings up new ideas (examples of their experience) use the mapping technique or take written notes to ask later:

Question 1. (Q30) If you wanted to, would you know how to contact an out-of-hours GP service when the surgery of health centre is closed?
☐ *Yes*
☐ *No*

Possible probes:
- Was this hard or easy to answer?
- Can you repeat the question in your own words?
- What, to you, is the out-of-hours GP service?

Question 2. (Q31) In the past 6 months, have you tried to call an out-of-hours GP service when the surgery or health centre was closed?
☐ *Yes, for myself............ Please go to Q32*
☐ *Yes, for someone else...Please go to Q32*
☐ *(No........................... Please go to Section L - the option is non-applicable)*

Possible probes:
- How hard was this to answer? (Consider filters too)
- How do you remember this?

Question 3. (Q32) How easy was it to contact the out-of-hours GP service by telephone?

☐ **Very easy**
☐ **Fairly easy**
☐ **Not very easy**
☐ **Not at all easy**
☐ **Don't know/didn't make contact**

Possible probes:
- How sure are you of your answer?
- Was this hard to answer?
- How did you arrive at the answer about the 'ease' of contact with OOH GP service?

Question 4. (Q33) Were you prescribed or recommended any medicines by the out-of-hours GP service you contacted?

☐ **Yes.................................... Please go to Q34**
☐ **No..................................... Please go to Q35**
☐ **Don't know/doesn't apply Please go to Q35**

Possible probes:
- Can you repeat the question in your own words?
- How well do you remember whether this was a prescription or recommendation given to you?
- How sure are you of the answer?

Question 5. (Q34) How easy was it to get these medicines?

☐ **Very easy**
☐ **Fairly easy**
☐ **Not very easy**
☐ **Not at all easy**

Possible probes:
- Is it difficult to answer this?
- How did you arrive at the answer about the 'ease' of getting the medicines?

Question 6. (Q35) How do you feel about how quickly you received care from the out-of-hours GP service?

☐ **It was about right**
☐ **It tool too long**
☐ **Don't know/doesn't apply**

Possible probes:
- Can you repeat the question in your own words?
- How sure are you of the answer?
- How did you arrive at the answer about the 'quick' response from out-of-hours GP service?

Question 7. (Q36) Overall, how do you feel about the care you received from the out-of-hours service?

☐ **Very good**
☐ **Good**

☐*Neither good nor poor*
☐*Poor*
☐*Very poor*
☐*Don't know/doesn't apply*

Possible probes:
- Was it hard of easy to answer?
- How sure are you of the answer?

Part 3. Eliciting recent experience

This part of the interview is explorative, directed at the eliciting the interviewee's recent experience(s) of out-of-hours care. It is likely to be based on the examples that the interviewee already talked about in the cognitive interview so the open interview will be mapping techniques), however, for some interviewees this open question will be the opportunity that may have been waited for during the cognitive interview but being restrained by the format did not dare to share their experience in detail. Leave he question as open as you possible can:

'Thank you for your comments on the questionnaire. Now can I ask you about your recent experience of out-of-hours GP service? Would you like to talk a little bit more about this occasion: what happened to you, how did you contact the service, have you been able to receive the care you needed, and what did you feel about it?

Part 4. Finishing the discussion

'And finally – we would like to have your ideas about how the service could have been better from your point of view.

Question: ***Is there any way in which your contact with the out-of-hours service could have been better?***

Prompts:
- Obtaining information about the service
- Speed of response
- Helpfulness of the call operators
- Knowing who you were speaking to
- Explaining symptoms and other information
- Discussion with doctor
- The outcome of the consultation
- Issues relating to medicines

Thank you.

Appendix 41 *Chapter 11*: service provider information sheet

Participant Information Sheet

Project title: Understanding patient experiences of out-of-hours GP services

Introduction: This study is part of a programme of research funded by the National Institute of Health Research (Department of Health) that is examining various ways of improving patient experience in primary care. In the first stage of this research we have surveyed, and conducted interviews with, patients who had recently accessed out-of-hours primary care providers. In the second stage, which is commencing now, we will be interviewing staff from out-of-hours primary care services to gather their views on the results of the General Practice Patient Survey (GPPS).

Before you decide whether you would like to take part, please take the time to read the following information. If there is anything that is unclear, or if you would like more information, please contact the research team. All communication will be treated confidentially.

What is the purpose of this study? The NHS is increasingly interested in patients' views of their health care; the introduction of the national GPPS is part of this development. A short part of the survey asked patients about out-of-hours care. In the first stage of the study we have used these questions in a patient survey, combined with the more detailed Out-of-hours Patient Questionnaire (OPQ). Now we are looking to understand the providers' views on how to better use the survey results and how to improve out-of-hours primary care service and would like to interview a small number of the service representatives.

Why have I been chosen? Your service agreed to take part in this study. Organisations were chosen on the basis of previous GPPS scores and to ensure diversity of settings. We asked organisations to nominate up to three staff members whose role routinely involves gathering and/or acting upon patient feedback, and who we might approach to be interviewed for this study.

Do I have to take part? It is up to you to decide whether or not to take part. If you decide not to take part we will respect your decision, and of course, it will not affect your service or your position in any way. If you do decide to take part, please, return the reply slip in the pre-paid envelope or phone us using the numbers below. You are still free to withdraw at any time without giving a reason.

What would happen if you agree to take part? Our researcher will contact you to answer any questions you might have and to arrange for an interview at a location of your choice, and which will last 40-60 minute. At the interview you will be asked to comment on the use of patient surveys for out-of-hours care, both national surveys (GPPS) and in-house questionnaires. The researcher will also be interested to hear your views towards the patient feedback mechanisms your service has in place and on how services can act on patient feedback to improve the care that you provide. With your permission we will record the interview, which will then be transcribed and analysed by the researchers.

Who would have access to the information? All information collected during the course of this study will be kept strictly confidential. The data will be anonymised and analysed by the research team. All data will be stored securely by the Peninsula College of Medicine and Dentistry. The digital audio recording of the

interview will be destroyed once anonymised transcripts of the interview have been made and checked for accuracy. At the end of the study the confidential records and files will be kept for 7 years and then destroyed. The confidential handling, storage and disposal of data are compliant with the Data Protection Act of 1998.

What will happen to the study results? The findings from this study will be published to provide policy makers and service providers with guidance on how best to use the patient survey feedback information to shape practice. No individual will be identified personally in any report or publication.

What are the possible disadvantages and risks of taking part? We will be asking you to talk frankly about how patient surveys are conducted within your organisation, and what steps (if any) are taken to use this feedback to improve services. While we do not foresee any risks in taking part, you should be aware that we will be feeding back (anonymised) results to participating services. Please be reassured that when feeding back to services that any data that you provide with be grouped with responses from other respondents, and that the anonymity of staff interviewees will be prioritised. Your service will not know you took part unless you choose to let them know that you did.

What are the possible benefits of taking part? Taking part will provide services with the information necessary for identifying areas of strength and opportunities for improvement.

Who is organising and funding the study? The study is organised by the Peninsula College of Medicine and Dentistry. The study is funded by the Department of Health.

Who has reviewed the study? This study has been reviewed and given a favourable opinion by the <name> NHS Research Ethics Service <insert>.

What if there is a problem? If you have any reason to complain about any aspect of the study or the way you have been approached or treated during the course of this study, please contact the academic lead for this project (Dr Suzanne Richards), or <service lead> from you service.

What will happen next? Once the research team has received your completed response sheet, a researcher will contact you by telephone or email to discuss your participation further. In the meantime if you would like any further information please use the contact details below.

Further information: If you would like more information please contact the research team:

<Lead researcher name>

<researcher address>

Email: <researcher email>

Telephone: <research telephone number>

Thank you for considering taking part in this study

Appendix 42 *Chapter 11*: service provider consent form

Service Number:
Participant Study Number:

Staff Consent Form

Title of Project: Understanding patient experiences of out-of-hours primary care: Staff interviews

Please initial box

7. I confirm that I have read and understood the information sheet dated <u>07.09.2012 (version 2</u>) for the above study. I have had the opportunity to consider the information, ask questions and have these answered satisfactorily.

8. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

9. I agree to this interview being recorded.

10. I understand that quotes from the interview may be reproduced in reports and papers, but that my identity will be kept anonymous.

11. <u>I understand that data collected during the study may be looked at by individuals from Peninsula Medical School, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.</u>

12. I agree to take part in the above study.

_____   _____   _____

Name of Participant   Date   Signature

_____   _____   _____

Name of Researcher   Date   Signature

Appendix 43 *Chapter 11*: service provider interview topic guide

Understanding patient experiences of out-of-hours primary care: Staff Interviews

TOPIC GUIDE: STAFF INTERVIEWS

Preparation before the interview

4. Discuss carefully the place and time of the interview with the study participant. Weigh the options of interviewing at the participant's workplace against choosing a neutral venue near their office (or other as preferred). Some prefer more formal and public venues than others. Whatever the preferred location of interview, safety principles for researchers should apply (in accordance with the University of Exeter Lone Working policy). Where the interview is taking place in the public settings, background noise and other distractions need to be minimised.

5. Check the researcher's copy of all ethics documentation: double copies of consent forms. It is advisable to have the spare copies of participant information sheets with you in case the participants have lost theirs.

6. Check the equipment is in working order, bring spare batteries if needed.

THE FEEDBACK INTERVIEW

Introduction

(To be said to all participants): *'I am <NAME>, a researcher from the University of Exeter Medical School, conducting research about patients' experiences of out-of-hours GP primary medical care services.*

In this research we have been looking at the ways in which patient experience can be improved, and we have interviewed and surveyed patients who have recently used the out-of-hours service. In this final study we are going to speak to providers about their views on patient feedback and on the use of patient surveys in understanding the current state of play in the out-of-hours care. Can I check whether you are aware of the GPPS results for your out-of-hours service and have received the feedback report from us?

Before we begin I need to make sure that you received all the information that we provided for the participants in this interview. Are there any questions about the study that you would like to ask?'

Explaining what will happen in the interview and afterwards

'This is your opportunity to share your perspectives on patient feedback from the national surveys and your thoughts on the design of out-of-hours services. The interview should not take longer than an hour.

I will be recording the interview on a digital recorder, to ensure that we have an accurate and detailed record of your views. The digital recordings will be saved on a password-locked computer

and only those immediately involved in the research will listen to them. The recording will be transcribed word for word, and any names or anything that could identify you will be removed so that the information is anonymous. Once we have checked this process for accuracy, we will destroy the digital recording, retaining only the anonymised written summary. After we have collected the ideas of all service representatives within your organisation, and across the other services who are part of this study, we will write a report which will be published to inform service improvements.

You are free to stop the discussion and/or the recording at any point. If there are questions that you would prefer not to answer, please let me know and we can move on to the next question.

Are you happy to carry on now and for me to record the discussion? Please, could you sign two copies of the consent forms: you keep one copy and I will take the other for our records? (The consent forms must be already signed by the researcher)'.

Turn on the digital recorder.

During the interview

The semi-structured interviews will be conducted using the topic guide below. The researcher will also employ several in-depth interviewing techniques including mapping the emergent themes, probing and prompting. During the interview, the researcher will take brief written notes which will assist in identifying important issues to explore in greater depth. These will also help in creating memos and registering non-verbal behaviour.

Closing the interview

'Thank you very much for your answers. Do you have any questions you would like to ask about the interview or any other matters?

Thank you for your participation.'

Turn the recorder off. Arrange for reimbursement of travel expenses (if required).

INTERVIEW TOPIC GUIDE

The list of questions that follows is provisional. The researcher may include questions that are relevant to the role of individual participants (staff members), and the themes that they bring about in the interviews using the Depth interviewing techniques (NatCen, London).

The interview questions are structured in two parts. The first part is generic to all staff recruited from service providers who participated in the Stage 1 and Stage 2. The second part of the interview contains questions that relate exclusively to the six providers recruited during Stage 1.

Part 1. GPPS and patient surveys of out-of-hours primary medical care.

1. **From the 1st April 2012 out-of-hours service providers were required to register with the Care Quality Commission (CQC) and provide evidence that they are meeting essential standards of quality and safety. Some service providers design their own surveys and in-house questionnaires to explore patient experience and satisfaction:**

    Please describe briefly how your organisation routinely surveys patient experience for the purposes of satisfying National Quality requirements.

What mechanisms for change are in place in your organisation to channel and act upon this feedback?

In your opinion, what is the role of the surveys of patient experience in this movement towards standardisation of OOH?

Could you tell me, in what ways your organisation has responded to the results of these surveys: have any changes been made and how difficult was it to achieve them? Are some short-term goals while others are longer-term?

What needs to be done to make better use of surveys and to achieve improvements at the level of local decision-makers?

What needs to be done to make better use of surveys and to achieve improvements at the level of national decision-makers?

In your opinion, are there any other ways (other than surveys) to receive patient feedback that is needed for improvements?

How do service users know they have been listened to, and their suggestions have been implemented?

2. **Every year, twice annually, a sample of adult patients registered with every general practice in England is surveyed about their experience of primary care service. This survey is called the General Practice Patient Survey:**

What do you know about the GPPS in general? Does your service use information from it?

Do you see any advantages or disadvantages of a national survey such as the GPPS?

<u>Notes:</u> The researcher will have a copy of the GPPS questionnaire ready to discuss its design and specific questionnaire items if needed.

3. **Several questions in the GPPS are meant to identify patients' experience of out-of-hours primary medical care services. These were included in the feedback report that we sent you:**

How well, in your view, do these questions reflect the patient experiences of out-of-hours primary medical care?

Did you find them useful? In what respect (e.g. was comparative data with other providers useful)?
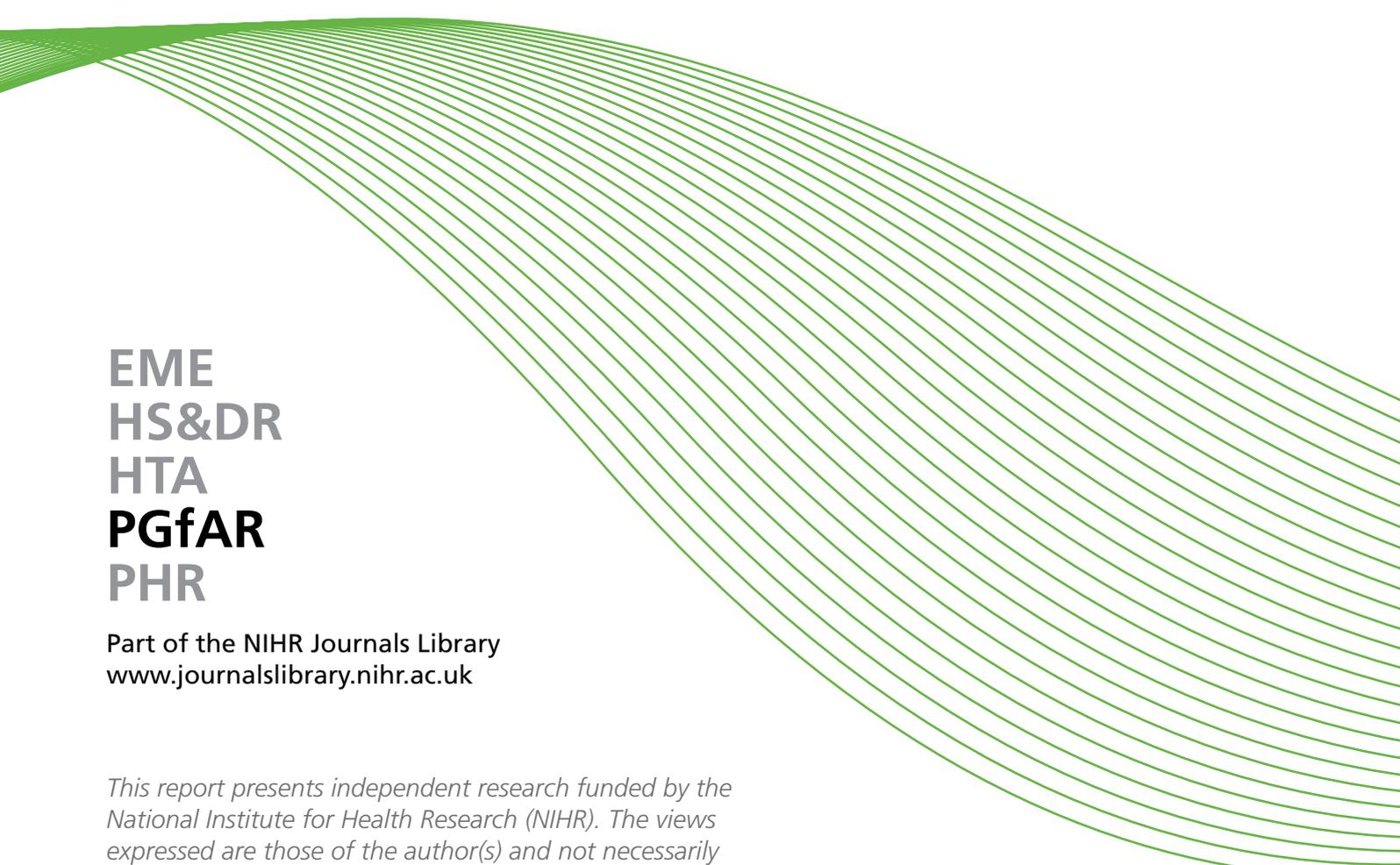
Is the level of information captured suitable for use in your National Quality Standards reporting? If not, what is missing?

Based on your GPPS results, did you make or propose any changes to your service to improve patient experience?

Thank you.

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HTA
PGfAR
PHR**

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