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Developing Quality Indicators in Community Pharmacies and Dispensing Doctor Practices

Final Report
May 2013

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The Pharmaceutical Trust for Educational and Charitable Objects commissioned the research on which this report is based. The research was undertaken by a project team at the University of Bath, who are the authors of this report. The views expressed here are those of the authors and not necessarily those of the commissioning body.

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Executive summary

Background and aims

This study set out to explore how pharmaceutical services are provided at community pharmacies (CPs) and dispensing doctor practices (DDs) and to determine the factors that influence service quality. Both CPs and DDs have to meet the NHS Pharmaceutical Services Regulations 2005 that set out the minimum standards in providing essential pharmaceutical services. However, no common guidelines exist as to what constitutes good quality service provision and how this can be achieved. Therefore, with this study we aimed to gain a better understanding of current pharmaceutical service quality as provided at CPs and DDs and to find out what influences quality. From these findings we defined a set of dimensions of pharmaceutical service quality, which could be used to improve the quality of services DDs and CPs provide.

Method

The study took place in three phases over 14 months:

- **Phase 1** involved a literature review and survey of CPs and DDs in South West England. This phase sought to identify what services were provided, areas of commonality and difference between CPs and DDs in service provision, and the existing monitoring systems which capture these services. The findings from Phase 1 were discussed with a project advisory group (PAG), made up of lay members, a dispensing GP and a CP, to decide the key areas on which to focus in Phase 2.
- **Phase 2** consisted of case studies of CP and DD sites. In this phase we considered why differences in service provision occur, areas appropriate for the development of common quality markers, unique selling points of services delivered by each provider and potential barriers to the use of common quality markers in practice. Data collection included documentary analysis, observation, and staff and patient interviews.
- **Phase 3** was focused on defining key aspects ('dimensions') of quality in pharmaceutical service provision. Using the findings from the previous phases the research team identified several quality dimensions and ways in which good quality could be demonstrated. We then conducted a Delphi survey with key stakeholders, including practitioners and patients, to ascertain to what extent they considered these dimensions to be important in service provision.

Participants

Response rates for the Phase 1 survey were 39% for CPs (134) and 48% for DDs (64), which can be considered good for a postal questionnaire of a sample of health professionals. In Phase 2, 7 case study sites (3 CP and 4DD) were initially recruited: complete case studies took place at all 3 CP sites and 2 DD sites, the remaining DD sites opted out after receiving 2 or 3 visits but allowed the data collected from them on these few visits to be used in the study. Seventeen staff interviews (pharmacists dispensing GPs, and dispensers/technicians) and 5 patient interviews were conducted. Twenty-two people completed both rounds of the Delphi survey in Phase 3; it is not possible to give response rates for this Phase since several of the people who

were directly invited by the researchers to take part also circulated the invitation to their colleagues.

Phase 1 results

Key areas that the survey highlighted for further investigation in phase 2 were: error handling techniques, how public health services were delivered, and what and how staff training was provided. A variety of error handling techniques, particularly, were reported in the surveys, both within and between groups (CPs and DDs), ranging from only keeping a log book of dispensed errors to recording and regularly auditing both dispensed errors and those picked up before the prescriptions were handed out. Although most CPs and DDs reported offering public health services, such as blood pressure checking and smoking cessation clinics, at DD practices these services were mostly delivered by nurses and so we wished to explore the extent of integration of the dispensaries with the public health services. The PAG meeting further highlighted accessibility of services and customer service as important areas to consider in Phase 2. Lay members of the PAG acknowledged that, although patient safety was the most important aspect of pharmaceutical services for them, it was something they took for granted and assumed it to be uniform across providers, whereas the professionals' survey responses suggested that safety procedures were in fact quite variable.

Phase 2 results

The case studies allowed the research team to see how the different procedures employed at the various sites affected overall service provision over time. Key themes to emerge from the Phase 2 results were: Communication (internal, external and between patient and provider), Safety (including standard operating procedures, errors and checking), Space, Training and learning, Public health and health promotion, and Ethos. The case study sites varied considerably in their organisation and procedures, and it was evident that a certain amount of flexibility and autonomy was required to accommodate variations in size of site, patient population and staff numbers. However, the themes illustrated broad aspects of practice that seemed to influence quality of service provision across sites.

Phase 3 results

Based on the themes from Phase 2 the research team developed 23 quality dimensions with descriptions that were intended to show what good practice could look like yet not be so prescriptive as to be inapplicable to certain sites. The first round of the Delphi survey of Phase 3 sought to establish whether stakeholders agreed that the dimensions represented important aspects of pharmaceutical service quality, how the dimensions could be improved and how good engagement with the dimensions could be demonstrated. In the second round of the Delphi the dimensions were grouped under the following headings: Patient-provider interaction, Workplace culture, Safety and dispensing, and Health promotion. Respondents were again asked to show the extent to which they agreed the dimensions represented important aspects of pharmaceutical service quality and also to rank the 23 dimensions in order of importance within their groups. The 4 groups were also placed in rank order. There was widespread agreement that the dimensions captured key areas of service quality and that the order of importance for the groups of dimensions was:

1. Safety and dispensing
2. Patient-provider interaction
3. Workplace culture
4. Health promotion

However, there was less agreement as to the order of importance of dimensions within the groups.

Discussion of results

A surprising finding from this study was the similarity between CPs and DDs – practices seemed to differ more on an individual rather than a group basis. Despite anecdotal reports that pharmacists and dispensing doctors have fundamentally different attitudes towards error handling and checking procedures, variation in attitude and procedures was found between all practices regardless of CP/DD group. With regards to error reporting and accuracy checking of prescriptions the extensive research evidence does not seem to have been passed on to all practitioners, or if it has, it is not being acted upon.

The importance of communication, both internally between staff at a practice and externally with local healthcare professionals, was highlighted in this study. However, although participants recognised that good communication was vital to providing good quality service, it was an area that received little attention or reflection from CP and DD teams. CPs and DDs may need to be supported to improve their communication practices, for there is much evidence to show how good communication within and between organisations leads to more efficient functioning, better staff commitment and higher levels of innovation. Guidance in improving communication can be taken from other fields, including private and third sector organisations.

There were mixed attitudes towards CP's and DD's roles in public health, and health promotion was generally poor with little proactive or opportunistic giving of advice and information. The Department of Health wants CP and general practice to become more involved in public health activities: to do this their precise roles in public health need to be clarified and support, such as training classes delivered by public health bodies (e.g. Public Health England), may be needed in order for them to fulfil these roles.

This study highlighted a number of potential barriers that CPs and DDs face in improving the quality of pharmaceutical service provision. A lack of time, and sometimes funding, prevented many pharmacists and dispensing assistants from attending training courses or holding team meetings in their Practices to review procedures. There also seemed to be a lack of awareness of the training and learning resources available. This report suggests ways in which these barriers could be overcome and how regulatory and funding bodies could support CPs and DDs to foster an ethos of continuous improvement.

We have developed a set of 23 quality dimensions to provide guidance to pharmaceutical service providers about aspects of their practice that they could focus on to achieve good quality. The dimensions are listed below in the order of importance for pharmaceutical service quality as decided in the Delphi survey. These dimensions could act as a basis on which to develop a reflective resource for pharmaceutical service providers. Such a resource could help

service providers identify areas where quality could be improved and link to supporting material showing how improvements can be made.

Final list of pharmaceutical service quality dimensions

1. Safety and dispensing

- 1.1 There is a clear culture of safety in how the dispensing process is managed.
- 1.2 The Practice has clear procedures for both second checking of prescriptions by another person (double checking) and second checking of one's own work (single checking).
- 1.3 Standard operating procedures (SOPs) align with actual staff practice; they are reviewed annually and all staff understand and sign up to the importance of these procedures.
- 1.4 The Practice recognises the importance of patient safety in the dispensing process and tries to ensure that dispensing staff are not interrupted in the middle of dispensing a prescription.
- 1.5 The Practice has clear SOPs for handling near-misses and dispensed errors. There is an easily accessible error/near-miss log, which is regularly reviewed and discussed among all dispensing staff.
- 1.6 Consideration is given to the optimal design of available space in the dispensary. Systems are in place to ensure efficient processing of prescriptions, taking into account space restrictions and staff schedules.

2. Patient-provider interaction

- 2.1 The Practice demonstrates an ethos of patient-centred care, committed to "going the extra mile" for the patient. This ethos is clearly demonstrated to all new members of staff.
- 2.2 Staff ensure that all patients (and/or carers) understand why they should take their medicines, how to take them and any precautionary information.
- 2.3 The Practice has effective and customer service-oriented methods of communicating with patients in one-to-one interactions.
- 2.4 Each staff member demonstrates excellent customer service. There is a team approach to defining and implementing good service.
- 2.5 Staff are always aware of, and acknowledge, waiting patients.
- 2.6 The Practice conducts MURs / DRUMs in a way that maximises patient benefit, and only with those patients who are likely to benefit from them.

3. Workplace culture

- 3.1 The Practice demonstrates effective methods of internal staff communication.
- 3.2 There is a culture of encouraging staff to improve internal procedures.
- 3.3 The Practice facilitates training for all staff. All staff have access to, and know how to use, online information sources and training resources.
- 3.4 The Practice makes an effort to develop and maintain relationships with other local health care providers.

- 3.5 Staff take a mature approach to Continuing Professional Development (CPD) and recognise it as a valuable learning opportunity.
- 3.6 The pharmacy ensures that locum pharmacists are able to uphold the good working relationships between the pharmacy and local healthcare providers.
- 3.7 Practices link up to run discussion groups/seminars on relevant issues – for dispensers/technicians as well as pharmacists and GPs.

4. Health promotion

- 4.1 Practice staff are well equipped to provide essential public health advice.
- 4.2 Patient waiting areas are comfortable and good use is made of these areas for health promotion/patient education.
- 4.3 The Practice proactively engages in health promotion.
- 4.4 The services offered by the Practice are clearly displayed.

1. Background to the project

1.1 Introduction

Currently pharmaceutical services can be provided directly to the public by community pharmacies and dispensing doctors. Doctors have long been able to provide pharmaceutical services to patients that live in an area 'rural in character' more than one mile (1.6km) from a pharmacy (Department of Health, 2010). Historically, there has been friction between these two providers. The provision for doctors to dispense medicines in dispensing practices, thereby preventing pharmacists from achieving an occupational monopoly on dispensing services, has been an enduring concern to community pharmacists (Gilbert, 1998). Arguments against doctors dispensing include the potential for less judicious prescribing due to a conflict between appropriate prescribing and cost self-interest, doctors' lack of training in dispensing with an increased potential for medication errors and a lack of patient choice (Lim et al. 2009).

Evidence from a recent review suggests that dispensing doctors prescribe more pharmaceutical items and less generically than doctors who do not dispense (Lim et al. 2009). Lim and colleagues (2009) propose that the benefits of doctor dispensing, such as patient convenience and dispensing profits enabling a practice to maintain patient services in rural areas, needs to be balanced against potential increased costs and possible less judicious prescribing. However, a subsequent mixed methods study in Australia found that dispensing doctors actually prescribed less, possibly due to a self-imposed pressure not to conform to the view that they over-prescribe for profit, a view espoused by their non-dispensing counterparts (Lim et al, 2011). Indeed, data from England assert that net ingredient cost per item is higher in pharmacies than in dispensing practices (Dispensing Doctors' Association, 2009) and that differences in prescribing patterns can be explained by the differing populations served by dispensing and non-dispensing GPs. Dispensing practices are based in rural locations serving populations with proportionately more very young or old, who tend to require more medications as they are generally more susceptible to illness (Dispensing Doctors' Association, 2011). Nonetheless, there is a need to ensure equity in terms of quality of service across the different types of venues that provide pharmaceutical services.

The provision of pharmaceutical services has moved on from the original focus on dispensing. The new pharmacy contract in 2005 brought about a major shift in the remuneration of pharmaceutical services, from payments solely based on dispensed items to also include payments for services (PSNC, 2005). This new Pharmacy Contract is divided into three tiers of services:

(a) *Essential services* (e.g. dispensing of medicines, opportunistic promotion of healthy lifestyles, signposting to services, disposal of medicines waste, support for self-care, clinical governance)

(b) *Advanced services* (medicine use reviews, new medicines service)

(c) *Enhanced services* (including independent and supplementary prescribing by a pharmacist, minor ailments services and public health services e.g. needle

exchange services, smoking cessation, supply of emergency hormonal contraception, brief alcohol advice)

In addition, Primary Care Organisations are now required to undertake pharmaceutical needs assessments in order to provide a framework for strategic development and to inform the commissioning of pharmaceutical services. These newer services are increasingly becoming more common in community pharmacies (Hampshire & Isle of Wight LPC, 2011). However there is a need to understand how pharmaceutical needs are being met across the different types of venues that provide pharmaceutical services as well as the quality of the services provided.

1.2 Measuring Quality

There has been some research investigating ways of measuring the quality of services provided by community pharmacies (Halsall et al. 2008). A detailed assurance framework (the Community Pharmacy Assurance Framework, CPAF) has been devised for use by Primary Care Organisations to ensure pharmacies have the structures in place to comply with NHS regulation (Primary Care Commissioning, 2007). There are also enhanced services specifications which include suggested quality indicators for each service (Primary Care Commissioning, 2011). Pharmacy team self-assessment questionnaires are available to measure safety culture (Ashcroft et al. 2005), the pharmacy's safety climate (Ashcroft & Parker, 2009) and safe medication practices (ISMC, 2010). Authors have also recommended the routine recording of pharmaceutical care issues (PCIs) or drug related problems (DRPs) as measures of quality to document the benefits of pharmacists' activities (Krska & Rowe, 2010).

Other tools are available to measure patient views such as the Community Pharmacy Patient Questionnaire (PSNC, 2008). A recent review identified a range of instruments designed to measure customer satisfaction with general services, intervention services and cognitive services in community pharmacies (Panelvelkar et al., 2009). Key issues identified were the insufficient validation of some instruments, lack of consistency in terms of area coverage and inadequate theoretical grounding. The robust development of patient assessments of pharmaceutical services remains a priority area for research and accords with the recent emphasis advocating the routine use of validated Patient Reported Outcome Measures (PROMs) across healthcare settings (Dawson et al. 2010).

For dispensing practices, there is already a scheme designed to enhance the quality of dispensing services. This is the Dispensary Services Quality Scheme (DSQS), which provides payment based on the number of patients receiving dispensary services. Practices partaking in the scheme must provide evidence to their PCT that they are complying with the requirements set out in the DSQS. These requirements relate to four areas: governance, dispensing staff, risk management, and reviews with patients of their use of medicines.

In general practice, the Quality and Outcomes Framework (QOF) was introduced as part of the new General Medical Services Contract. This is a group of indicators against which practices score points (and increased financial remuneration) according to their achievement (NICE, 2009). Such an approach is also being pursued in Scotland for community pharmacy. NHS Scotland is aiming "to produce a 'clinical dashboard' which will lay out key performance

indicators for pharmacists and allow quality outcomes to be measured across Scotland” (Anonymous, 2010).

Nonetheless, QOF as an approach to measuring quality has its detractors. Concerns include an over-emphasis on secondary prevention, a lack of focus on public health services, an orientation towards achieving a minimum threshold rather than quality improvement above a baseline and an inability to tackle health inequalities (Dixon et al, 2011). Other concerns with the QOF approach are that it encourages a fragmented, rather than holistic approach to care; its failure to address important, yet subjective aspects of care; and that it may be based on data and information that is of poor quality or difficult to access (Goodwin et al, 2011). These authors recommend a more creative approach, suggesting that national quantitative measures such as QOF should be supplemented by ‘locally tailored approaches to information gathering such as practice audit, critical appraisal by peers and the use of qualitative measures of performance’ (Goodwin et al 2011, p 30).

1.3 Study Rationale

There is a need to develop quality indicators for pharmaceutical services provided by dispensing doctors (DD) and community pharmacists (CP) which will ensure good quality and equity of service provision to patients regardless of where they receive their pharmaceutical services. These indicators might be in the form of QOF indicators (for continuous self-assessment as part of low-impact routine data collection) and may include preliminary work towards a pharmaceutical service PROM. For those providing these services, dispensing doctors and community pharmacists, the indicators need to be fair, appropriate, reflect current practice and be proportionate in terms of feasibility of implementation.

The results from this research will be used to inform pharmacy policy and practice with regard to how pharmaceutical services should be delivered and measured across community pharmacies and dispensing practices. These findings could also be used to inform future contractual agreements for pharmaceutical services provided by dispensing practices and community pharmacies.

2. Aim and objectives

The overall aim of this study is to develop indicators appropriate for assessing the quality of pharmaceutical services provided by community pharmacies (CPs) and dispensing doctor practices (DDs).

2.1 Objectives

1. To describe the services, and methods of recording these services, currently provided by CPs and DDs.
2. To identify areas of commonality of services provided by CPs and DDs.
3. To explore the nature of the service provided by CPs and DDs to include an investigation of why variations in the type and nature of services occur.
4. To explore the unique benefits provided by each provider and the potential barriers to the implementation of a common quality indicator approach.
5. To identify common and unique quality indicators appropriate for future roll-out and how they could be implemented in the two types of practice.

2.2 Changes to the original objectives

A minor semantic, but potentially influential, shift in emphasis in terms of the desired outcome of the project was made after starting the project. Having explored the literature in more depth, the original emphasis in the project application on devising QOF-like indicators applicable to community pharmacies and dispensing doctor practice seemed potentially restricting. Reports by the King's Fund (see 1.1 above and Dixon et al, 2011 and Goodwin et al. 2011) explicitly articulated the limitations of QOF and the need to take a broader perspective when developing quality outcomes. While quantitative QOF-like indicators may be appropriate for measuring some aspects of quality in community pharmacies and dispensing doctor practices, these may not be appropriate for all aspects of quality that we were to consider in this study. This point was also raised by members of our Project Advisory Group (PAG, see sections 3.4 and 4.2). Therefore, a more inclusive perspective on outcome measures (including locally tailored approaches and qualitative measures) was considered by the research team.

3. Methodology

3.1 Overview

The research took place in three phases, each phase addressing a specific research question, to fulfil the study's aim. A mixed methods design was followed including surveys with closed (quantitative) and open-ended (qualitative) questions, observation data, document analysis and semi-structured interviews.

The project was designed to take place over a 14-month time period and, with the recruitment of the project Research Officer, began on 23 January 2012.

The key research questions we sought to address were:

- What services are provided by dispensing doctors and community pharmacists, and how do they compare? (Phase 1)
- What are the differences in the services provided by CPs and DDs, and to what extent are those differences appropriate? (Phase 2)
- What are appropriate quality markers for service provision in CPs and DDs? (Phase 3)

Phase 1 was a descriptive survey of dispensing doctors' practices and community pharmacies in the south west and took place over months 1-5 (end date 23 June 2012). This phase sought to identify what services were provided by both CPs and DDs, areas of commonality of service provision and existing monitoring systems which capture these services.

Phase 2 involved 7 case studies, divided between CPs (n=3) and DDs (n=4) and took place over months 6 to 11. This phase considered why differences in service provision occur, areas appropriate for the development of common quality markers, unique selling points of services delivered by each provider and potential barriers to the use of common quality markers in practice. Data collection included documentary analysis, observation, staff and patient interviews. Data collection and analysis explored each site's ways of working and their organisation of pharmaceutical services, as well as staff and patient views of these.

Phase 3 (months 12-14) focused on the development of quality indicators relevant to CPs and DDs. The steering group identified quality markers from the findings in the previous phases and suggested ways in which practices could demonstrate good quality in relation to each marker. A Delphi survey was then set up to seek the opinions of CPs, DDs and patients (including members of the project advisory group, see section 3.1.1) on the proposed quality markers and how they could be demonstrated in practice.

3.1.1 The role of the Project Advisory Group

Integral to the development of the project was the establishment of a Project Advisory Group (PAG) which met with the researchers at the end of Phase 1 to discuss the interim findings and advise on important areas to explore in Phase 2. As part of Phase 3, the PAG members were invited to take part in the Delphi survey. The PAG was designed to be a small group consisting of some lay members, and representatives of community pharmacies and dispensing doctor practices to help ensure the project focused on aspects of pharmaceutical services that are important to the key stakeholders i.e. service users and health care providers.

3.1.2 Project management

The project was overseen by the Project Steering Group (PSG) consisting of the Lead Researcher (Marjorie Weiss), the Research Officer (Elisabeth Grey), a GP (Michael Harris), an academic and practising Health Psychologist (Karen Rodham) and a patient representative (Peter Hawkes). The PSG has met ten times; twice before the study began and the researcher officer was appointed (2 August 2011 and 4 October 2011) and eight times since the start of the project on 23 January 2012 (6 March 2012, 13 April 2012, 7 June 2012, 16 August 2012, 14 November 2012, 17 January 2013, 26 February 2013, 2 May 2013). Day to day oversight was conducted by Lead Researcher and the Research Officer.

3.2 Ethical and R&D approval

Ethical approval was granted by the Southmead Ethics Committee (ref 11/SW/0203) on 11 October 2011. Research and Development Approval was obtained from six Primary Care Trusts (PCTs) in the South West.

A minor amendment (not requiring ethical approval), involving revisions to the Phase 1 questionnaires, was undertaken in April / May 2012. A major amendment was submitted for ethical approval (primarily concerning revisions to the information sheets for the case study sites) in April 2012 and approved in May 2012. The project's sponsor is Professor Jane Millar at the University of Bath.

3.3 Phase 1: Descriptive survey

3.3.1 Recruitment

Dispensing Doctors

Lists of dispensing GP practices were obtained from the six PCTs included in this study (Bath and North East Somerset (BANES), Gloucestershire, North Somerset, South Gloucestershire, Swindon, and Wiltshire). Ninety-two practices were identified, however several formed partnerships and it was decided to contact only one practice within each partnership. This was because staff members in a partnership often work at multiple sites and so it was thought that the practises for each site were likely to be similar. Having selected only the main sites within partnerships¹ a list of 65 dispensing practices resulted and questionnaire packs were sent to each of these 65 sites.

Community Pharmacists

Addresses for all community pharmacies in the 6 PCTs were obtained from the NHS Choices website – 352 pharmacies were identified. A purposive sampling technique was employed: using the Office for National Statistics Postcode Directory (ONSPD v4 2011), all sites were categorised as rural (67) or urban (249)². All 67 rural pharmacies were selected in order to best enable comparisons with both a cross-section of pharmacies (both rural and urban) and with

¹ when a main site could not be identified in a partnership (practice websites usually state which of their sites is the main and which are branches), one site was chosen at random to be contacted

² Urban areas are regions with a minimum population of 10k according to the ONSPD. In this study areas classified as 'Town and Fringe', 'Village', and 'Hamlet and Isolated' in the ONSPD are taken as rural.

dispensing doctor practices. Sixty-seven urban pharmacies were then selected; a representative proportion according to the number of urban pharmacies within each PCT.

3.3.2 Materials

The selected pharmacies and dispensing GP practices were sent packs containing an invitation letter from the steering group, an information sheet about the study with instructions on completing the questionnaire, a questionnaire booklet (see below), a sheet requesting payment details and two envelopes (in order to employ the double-envelope method of maintaining participant confidentiality). Participants were offered £30 of high street shopping vouchers in return for completed questionnaires. The payment sheet asked where the participant would like the vouchers to be sent and also enquired whether they would be interested in taking part in Phase two of the study. This sheet was to be placed directly in the outer, numbered reply envelope and the questionnaire put in the blank inner envelope – the two envelopes were separated when received so that questionnaires remained anonymous.

Two questionnaires were designed by the project steering group – one for CPs and one for DDs. Two versions were required in order to make certain questions more applicable to their target readers, for example, in the pharmacists' questionnaire one question asks 'Approximately how many (if any) Medication Use Reviews (MURs) does your pharmacy conduct per week?' whereas the corresponding question for dispensing doctors is 'Approximately how many (if any) Dispensing Reviews of Use of Medicines (DRUMs) does your dispensary conduct per week?' The questionnaires begin with multiple-choice questions pertaining to general information about the GP practice or pharmacy (e.g. approximate list size) and then ask more open-ended questions about the running of the dispensary/pharmacy. The questionnaires were piloted as described below and amended before final versions were agreed and sent out. Copies of the final questionnaires can be found in appendices 1a and 1b.

3.3.3 Pilot study

Three local dispensing GPs and three local community pharmacists were approached to ascertain whether they would be willing to give feedback on an initial draft of the questionnaires; all accepted and were sent the appropriate questionnaire for their profession. One of the DDs failed to return their pilot questionnaire. Based on the respondents' feedback changes were made to the question order and wording of some questions.

The Dispensing Doctors' Association (DDA), Department of General Practitioners' at the British Medical Association (BMA), Pharmaceutical Services Negotiating Committee (PSNC), and National Pharmacy Association (NPA) were then contacted to gain their comments on the questionnaires. Only the DDA and BMA responded and a telephone conference was held on March 14, 2012 between their representatives (a Senior Policy Executive at the BMA, a Senior Research Analyst at the BMA, the Chair of the Dispensing Doctor Association and the Lead Negotiator on dispensing issues at the BMA) and three members of the PSG. Following this conference, further alterations were made to the phrasing of some questions, a few questions were omitted and some added with the overall aim of making the questionnaires easier and quicker to answer.

3.3.4 Procedure

Questionnaire packs were sent out in two waves, two weeks apart, to aid data entry. Reminder letters were sent to those sites that had not responded after two weeks, and four weeks after the initial questionnaires were sent, second questionnaire packs were posted to non-responders. When completed questionnaires were received the outer and inner envelopes were separated - the numbered, outer envelope allowed the respondents' sites to be noted in the database, while the blank, inner envelope kept the completed questionnaire anonymous.

3.3.5 Analysis

Quantitative data from the closed questionnaire items were entered in PASW Statistics-18 software and analysed for descriptive characteristics (frequencies, medians, inter-quartile ranges etc.) of the two groups of provider. Qualitative data from open-ended questions were subject to content analysis in QSR NVivo 9 software.

3.4 Project advisory group

3.4.1 Recruitment

South Gloucestershire and Wiltshire Local Involvement Network (LINK) and Avon and Wiltshire Service User Involvement Team offices were approached to ascertain if they would be able to distribute PAG recruitment materials to their members. South Gloucestershire and Wiltshire LINKs responded and were sent PAG information sheets (see Appendix 2a). Further information sheets were distributed by a member (PH) of the PSG to the Sirona³ Service User Panel. People interested in taking part were asked to return a reply slip, giving their contact details, to a freepost address at the University of Bath. Respondents were then contacted by a researcher to check they understood what participation would involve and explain how the meeting would be arranged.

Eight dispensing doctor practices situated less than 40 minutes' drive away from the University were identified and sent information sheets about the PAG (see Appendix 2b), a covering letter, reply slip and a freepost return envelope. Seven community pharmacists with whom the University Pharmacy Department had had previous contact (as sites for undergraduate pharmacy student placements) and were situated within 30 minutes' drive of Bath University were also sent information sheets (see Appendix 2c), a covering letter, reply slip and a freepost return envelope. In addition a member of staff in the department, who had previously worked for a large community pharmacy chain and is the Chair of the region's Local Practice Forum (LPF), was also approached.

3.4.2 Procedure

All those who had indicated an interest in taking part in the PAG were emailed a list of five potential dates (at least 3 weeks away) for a first face-to-face meeting and asked on which of the dates they would be able to attend. The date that suited most people was chosen for the meeting, 12 July 2012. Prior to the meeting, members were posted briefing sheets, giving an

³ Sirona Care & Health Community Interest Company (CIC) was created in October 2011 to deliver the community healthcare and adult social care services previously provided by Bath and North East Somerset PCT and Council respectively.

overview of pharmaceutical services provided in community pharmacies and dispensing doctors' practices, a summary of the purpose and structure of the study and the aim of the PAG meeting.

Lay members met with the researchers for an hour and a half prior to DD and CP representatives arriving. This time was used to give lay members the opportunity to ask questions about the information in the briefing sheet (as it was considered they might be less familiar with the issues and terminology), to make sure the lay members felt comfortable voicing their opinions before the arrival of the health care professionals and for the researchers to gain the lay members' opinions on what they wanted from a pharmaceutical service. The latter objective was considered especially important as Phase 1 of the study had focused only on the health professionals' opinions. There was then a half hour break for lunch, during which time the CP and DD representatives arrived, followed by a brief presentation on the study and some findings from the questionnaires. The afternoon session was then structured around three main discussion points to engage all members: what does quality in pharmaceutical services mean to you; what would distinguish an exemplary pharmaceutical service from a standard one; and what issues should the research team concentrate on in Phase 2?

Further use of the PAG in phase 3 of the research is described in section 3.6.

3.5 Phase 2: Case studies

3.5.1 Recruitment

In Phase 1 questionnaire respondents were asked to indicate on their payment forms whether they would be interested in acting as a case study site: 20 CPs (38.5%) and 16 DDs (53.3%) gave positive responses. Information sheets about what a case study would involve were sent to a selection of these sites and a follow-up telephone call was made one week later to discuss any questions the site may have and ascertain if they would like to participate. Only three to four sites from each provider group were contacted at one time since we only aimed to have six to eight case study sites in total due to time and budget constraints.

Sites were selected from the list of those that indicated an interest based on their size and location (in the case of dispensing doctor practices) or type and location (in the case of community pharmacies, type referring to chain/independent status and if they are co-located with a GP surgery). The rough size of the dispensing GP practices can be ascertained from their websites. A variety of practices (rural/semi-rural, large/small, chain/independent etc.) was sought in order to best represent and observe diverse means of service provision and to see what, if any, effect location has on providers.

Interviews with people using the dispensaries and pharmacies visited were also sought. At each site, information sheets inviting readers to take part in a telephone interview were handed out to patients/customers by the researcher after they had received their prescriptions. The researcher introduced herself and gave a brief overview of the study. A reply form and freepost envelope was given with the information sheet, for patients/customers to take away and complete if they wished. On receipt of the reply form the researcher would contact the person, by email or telephone (as indicated on the form by the respondent), ensure they understood

the interview process and ask if they still wanted to go ahead; if so a convenient time would be arranged for the interview to take place.

Poor response rates were attained for this method of recruiting patients and so in early November 2011 an advert was placed in rural community newspaper inviting people who had used a DD practice or CP to obtain a prescription in the last three months to take part in a telephone interview. Participants would be entered in to a prize draw to win £25 worth of high street shopping vouchers. The advert asked interested people to contact the researcher via email; on receipt of these enquiries the researcher would contact the respondent to check their understanding and arrange a convenient time for an interview.

3.5.2 Procedure

Each case study site was visited by the researcher (EBG) several times a week over the course of about a month. The exact number and length of visits varied depending on the size and type of practice – visits continued until enough data had been gathered to provide a comprehensive picture of each site. One DD practice did not want to participate in a full case study but invited the researcher to observe their practice and distribute patient interview information sheets. Another DD practice dropped out of the case study after 3 visits (see section 4.3.1).

During each case study several data collection methods were used including: document analysis of standard operating procedures (SOPs), error records, audit reports, patient information leaflets etc.; general observation of practice layout, organisation, structures, staff communication; digitally recorded semi-structured interviews with staff; observations of staff-patient/customer consultations; and observations of staff meetings and training sessions. Regular meetings between EBG and MCW during Phase 2, and steering group meetings, helped to ensure data collection continued according to the study objectives and on schedule.

Pharmacists, GPs and dispensing staff at case study sites were given information sheets about participating in interviews and then asked whether they would be willing to be interviewed. Staff interviews took place on site in private rooms (often consultation rooms or offices) during quiet periods or lunch breaks. Several pharmacist interviews suffered interruptions when the pharmacist was required to check a prescription for a waiting patient. Patient Interviews were conducted off site by telephone and digitally recorded, except in one instance where a patient was willing to have an interview at the case study site and a private room was available for this.

Interviews were guided by a semi-structured schedule of open-ended questions (different schedules were used for staff and patients, see appendices 3a and b). The schedules were checked by members of the research team, who brought varied interviewing experience and knowledge of the area, to help ensure acceptability and appropriateness of the questions. Questions were designed not to be explicit but additional prompts were used if necessary to try to engage the participant in discussion. As recommended by Willig (2008), at the end of each interview the researcher relayed a summary of what she understood the participant to have said and asked the participant to comment on whether or not this was a correct representation; in doing so the researcher ensured she had not misunderstood participants' responses. As is standard in semi-structured interviewing the schedules were not necessarily followed verbatim nor questions asked in the order shown. In semi-structured interviewing, how a question is phrased and when it is asked is partly dependent on how the researcher

perceives the participant to be responding (Smith & Osborn, 2008). Thus, a question may be asked earlier than it appears in the schedule if it seems relevant to something the participant has just said. Also, if participants mention something pertinent to the research but that is not covered in the schedule, the researcher can pursue this topic further if they deem it appropriate (Smith & Osborn, 2008).

3.5.3 Analysis

Extensive handwritten field notes were taken during site visits and organised and condensed into word-processed, detailed site reports. Recorded interviews were transcribed by an external transcriber. These typed documents were thematically analysed in QSR NVivo 9 software by EBG, using the six phase process described by Braun and Clarke (2006). This method was chosen for its compatibility with the contextualist theoretical framework, which acknowledges both the ways in which individuals' interpret their experiences and the ways that social context can shape these interpretations (Braun & Clark, 2006).

Interview transcripts were first analysed individually, identifying and coding initial areas of interest. The 'codes' for all staff interviews from one study site were then compared and condensed where possible, with constant reference to the original transcripts to ensure combining the codes made sense. The codes from staff interviews were also compared with codes identified in the site reports. Tables of codes were then made for each site, grouping them according to broader themes. For reliability purposes a subsection of transcripts were separately coded by MCW and the two researchers' coded transcripts compared; differences in coding were then discussed between the researchers and agreement reached as to the meaning of codes.

The theme tables were then compared across sites to identify common themes as well as areas of difference. Through this comparison and collation of data MCW and EBG identified the main overall themes that related to quality of service provision. Due to time limitations, the organisation of themes was focused on development of quality indicators for the Delphi survey in Phase 3. Several themes that were not directly applicable to the Delphi will not be presented in this report. To ensure rigour, as recommended by Meyrick (2006), the analysis and organisation of themes was also discussed among the steering group to verify that they made sense.

3.6 Phase 3: Delphi survey

Two consensus methods were considered for Phase 3: the Nominal Group Technique (NGT) and the Delphi technique. The NGT involves a face-to-face meeting of relevant experts, held in two sessions, where participants rate, discuss and re-rate the extent of their agreement with the given issues. In the Delphi technique rating and re-rating is done remotely either by online or paper-based survey. In both techniques summarised results from the first round(s) of rating are fed back to the participants before they re-rate the issues (Jones and Hunter, 1995).

The necessity of a face-to-face meeting of participants in a long meeting for the NGT was a major concern for the steering group; experience from the earlier PAG meeting had taught the difficulties of arranging mutually convenient times for meetings with DDs and CPs. It would have been necessary to cover locum fees for the professionals, which was beyond the budget

of this project. A Delphi survey was therefore chosen to enable a greater number of stakeholders to participate.

3.6.1 Recruitment

Opinions of key stakeholders were sought for the Delphi survey, including CPs, DDs, dispensing staff, board members of CP and DD professional bodies and patients (lay persons). Contacts made at case study sites (pharmacists, dispensing GPs, practice managers and dispensing assistants) and some sites that expressed an interest in the study but felt unable, at the time, to act as case sites, and all PAG participants were contacted by e-mail with information about the Delphi survey and asked whether they would like to take part in this phase of the project. Further lay members for the Delphi were recruited by EBG while they were participating in another project in the Pharmacy department at the University of Bath. In addition, contacts made at the Dispensing Doctors' Association and with board members of two large chain pharmacy companies were approached to take part. Enquiries were also made with the boards of the National Pharmacy Association and the Royal Pharmaceutical Society to see if any board members would participate. Reminder emails were sent to those who had not responded after a week.

3.6.2 Materials

The emphasis in Round 1 of the Delphi was to ask participants to rate *dimensions* of quality which were drawn from the qualitative themes identified from the case study sites (see section 4.3.4). The term 'dimension' was chosen to replace 'indicator' as the steering group felt that the latter is associated, particularly within healthcare, with assessment tools used for apportioning blame and punishment. It was not the aim of this study to design such a tool. Each dimension was given with a description of what that dimension meant or how that dimension was observed at the case study sites. Respondents were asked to rate the importance of each dimension. The project team did not wish to restrict respondents to the methods of engagement observed at the case studies and so the next section under each dimension (titled '*evidence*') asked respondents to suggest other ways in which good engagement could be demonstrated. Finally, for each dimension respondents were asked for any other comments. One dimension pertained only to community pharmacy, all others were relevant for both DDs and CPs. A glossary of terms used was also provided with each survey (See Appendix 4c). A copy of the Round 1 Delphi Survey is provided with Appendix 4a.

In Round 2 of the Delphi, respondents were asked to rate the importance of each dimension again but this time they were provided with the median rating gained in Round 1 for each dimension. They were also asked to state the reasons behind their choice of rating and were not asked to suggest ways evidence for a dimension. The dimensions were presented in a different order from Round 1; they were grouped into four key themes (patient safety and dispensing, patient-provider interaction, workplace culture and public health). After the dimensions in a theme had been rated, respondents were asked to place the dimensions in that theme in rank order of importance. Finally, respondents placed the four themes in order of importance for pharmaceutical service quality. A copy of the Round 2 Delphi Survey is provided in Appendix 4b.

Delphi participants could choose whether to complete the surveys online or have paper copies. The online versions of the surveys were set up using *SurveyMonkey*; participants were emailed a unique link to the survey and a separately attached glossary document explaining some of the terms used in the survey. The unique links allowed participants to exit the survey before completing it and return at a later time to finish, having saved their previous responses. Paper copies of the survey, including instructions for completion, were posted to participants with a copy of the glossary and a pre-paid return envelope. The questions in the online and printed surveys were the same and set out in the same format (1 question to each page). The first pages of the online survey gave the instructions for completion.

Consent was implied by the completion of the surveys. Participant group (CP, DD, lay etc.) was recorded but all other identifying information was removed in order to make responses anonymous.

The first Round survey went out to respondents on 19th February 2013 with an initial deadline of 4th March. Reminder emails were sent to online participants who had not responded after a week and again 3 days before the deadline. A couple of participants requested more time to complete the survey and so, to maximise sample size, the deadline was extended to 7th March. The second round survey was sent out on 13th March with a deadline set for 25th March. A late response to the first survey arrived on 14th March and the participant requested to be able to continue the Delphi; a link to the second survey was sent to them with an explanation that their responses to the first survey had not been incorporated in the summary results on the second survey.

4. Results

4.1 Phase 1

4.1.1 Participants

Good response rates were achieved for this relatively small target sample of health professionals. Postal questionnaires have been found to rarely gain response rates above 50% (Haralambos & Holborn, 1991) and more typically achieve 30% (Shaughnessy & Zechmeister, 1994). GP samples especially usually gain low response rates (McAvoy & Kaner, 1996).

Dispensing Doctors

One GP practice returned their questionnaire stating that they no longer dispense, meaning the total number of DDs sent questionnaires was 64. Thirty-one completed questionnaires were returned (48.4% response rate), 8 of which were returned after one reminder had been sent, 7 came after second questionnaires had been sent. Average demographic values of the DD sample (obtained from the questionnaires) are given in table 1.

Table 1. Average demographics for the DD questionnaire respondents.

Ordinal variables	Median
No. of items dispensed / month	2000 – 3499
Proportion of patients eligible for dispensary	50-80%
Nominal variables	Mode
Dominant age group of local population	65+ year olds
Affluence of local population	Middle
Dispensary in a branch or main practice	Main site
Co-located with pharmacy	No
Location	Rural
Continuous variables	Mean
FTE GPs	3.6
FTE dispensers	2.7
Weekday opening hours	46.0
Weekend opening hours	0*
Approximate list size	6000

*This value excludes 3 outliers – three practices opened for 2.5-3 hours at the weekend.

Community Pharmacists

Fifty-two completed questionnaires (out of 134) were received (38.9% response rate): 7 had been sent one reminder; 16 had been sent second questionnaires. Using Pearson's chi squared and Mann-Whitney U analyses, no significant differences were found between urban and rural pharmacies on the contextual variables given below, $p > 0.05$ (taking urban as self-reported city, town or suburban, and rural as rural or semi-rural). Average demographic values of the CP sample (obtained from the questionnaires) are given in table 2.

Table 2. Average demographics for the CP questionnaire respondents.

Ordinal variables	Median
No. of items dispensed / month	5500 – 6999
Nominal variables	Mode
Dominant age group of local population	65+ year olds
Affluence of local population	Middle
Type of pharmacy	Independent
Co-located with GP	No
Location	Town / Suburban
Continuous variables	Mean
FTE pharmacists	1.1
FTE non-pharmacists	2.6
Weekday opening hours	47.5
Weekend opening hours	6.6

4.1.2 Questionnaire results

Below are summaries of the main findings, more detailed questionnaire results are available on request.

Procedures

Many of the dispensing GP practices reported using software to highlight drug interactions, allergies and non-adherence issues but many also stated that it is the GP rather than the dispensary staff who checks these points. CPs also reported using computer software that alerts staff to drug interactions in prescriptions but, due to their lack of access to patients' full medical records, they have to rely more on questioning their customers with regards to allergies. Pharmacists were also more likely to mention reference materials, such as the BNF.

Nearly all respondents reported recording dispensing errors and most also recorded 'near misses' (where errors are noticed before the medicines leave the premises). However a great variety of recording methods were reported including simply keeping a log book, submitting electronic forms to company head offices, and conducting regular audits of recorded errors with all staff. There was variation in error recording practices both within and between groups. The responses highlighted an area for further investigation in the case studies: how are errors treated and acted upon? This is an area of practice that has had increasing attention over recent years, and current opinion is that the reporting of errors should be encouraged to enable learning. However, there are worries that health professionals are suffering 'reporting fatigue' and certain methods of error recording promote individual blame (Armitage, Newell & Wright, 2010), which lessens the opportunity for learning and quality improvement.

Public Health services

Proportionately more community pharmacies than dispensaries offered public health services, such as support to quit smoking, emergency hormonal contraception provision, chlamydia screening, blood pressure checking etc. and they offered a wider range of services. However, as one DD respondent pointed out in the 'additional comments' section at the end of the questionnaire, dispensing practices may also offer these services but not from the dispensary,

rather a practice nurse might conduct these public health sessions. An area we investigated in the case studies therefore was to what extent the dispensary in dispensing practices was integrated with other services provided at the practice e.g. do dispensers actively signpost patients to the public health services offered? Similarly, in pharmacies we looked at if/how customers were signposted to the available public health services.

Added value

The questions 'What do you regard as the **added value** that your pharmacy offers over the pharmaceutical services provided by a dispensing GP practice?' (for CPs) and 'What do you regard as the **added value** that your dispensing practice offers over the services provided by a non-dispensing GP practice?' (for DDs) elicited some interesting responses. Very few respondents omitted this question (only 3 CPs, 2 DDs). Although care must be taken in comparing the two groups due to the slightly different wording of the questions, it was curious that some of the points listed were seen as 'added values' of both community pharmacies and dispensing doctor practices – for example, both groups felt they offered a more convenient and approachable service and built good relationships with patients.

A very common theme in the DDs' responses was that of the 'one stop shop' allowing continuity of service. Many CPs reported their greater accessibility in terms of opening hours and access to professional advice on medications. Pharmacists also felt they had better medicines expertise than GPs although an interesting point was that DDs felt they had better knowledge of medicines than non-dispensing GPs.

4.2 Project advisory group

The role of the PAG was to ensure the project reflected aspects of pharmaceutical services that were important to the key stakeholders i.e. service users and health care providers.

4.2.1 Participants

Initially 6 members of the public, 2 dispensing GPs, 2 dispensers, 2 pharmacists and 1 former community pharmacist now working at the University expressed interest in taking part in the PAG. However, finding a mutually convenient date for the meeting proved difficult: eventually the 12th July was chosen as this was the day that suited most members, this amounted to 4 lay members, 1 DD, 1CP and the former CP. One lay member failed to attend on the day and so the actual PAG consisted of 3 lay members, 3 health professionals and 2 researchers (MW and EG).

4.2.2 Findings

Discussion at the PAG meeting highlighted several aspects of pharmaceutical services for the research team to consider. All participants contributed and lay members and professionals were able to respond to each other's comments. The key findings from the meeting could be grouped into the following categories: patient safety; customer service; promotion and innovation (See Appendix 5 for a copy of the summary sheet sent to PAG members following the meeting).

Patient safety should be the fundamental concern in pharmaceutical services; patients often simply assume that adequate measures are in place to protect them and so see no reason to question whether an individual practice is safe. It is therefore important to ensure not only

rigor in clinical and accuracy checks but also that any advice given to patients/carers (both opportunistically and in pre-arranged appointments) is clear and accurate. The current financial incentives for conducting certain advisory services (e.g. MURs) might be disincentives for offering advice opportunistically because health professionals are focused on providing targeted (remunerated) services rather than focusing on the actual patient. Indeed health professionals on the PAG suggested that the current quality assessment systems for pharmaceutical services place too much emphasis on procedures and processes, possibly encouraging staff to focus more on adhering to regulations and less on the actual patient.

Good customer service is key to ensuring patient satisfaction and practices that 'go the extra mile' in this area will be marked out as being of exemplary quality in patients' opinions. Both lay members and practitioners recognise this and yet current quality assessments take little account of customer service. Available services at community pharmacies and dispensing doctors' practices are often not well advertised, which limits patients' access. Further, current quality guidelines do little to encourage striving to meet the needs of the local population and innovation in pharmaceutical service delivery.

The findings from the PAG were added to the findings from the questionnaire and the literature to decide the key aspects to focus on in Phase 2:

- Standard Operating Procedures – How are they developed? Are they comprehensive? How well do staff know and adhere to them?
- Errors – Are they recorded? How are they recorded (is blame allocated)? Are they acted upon to reduce the likelihood of reoccurring?
- Training and further learning – Are staff confident to fulfil their tasks? Is further training encouraged/supported? Are any in-house training/learning sessions held?
- Staff relations – Do staff feel able to speak to manager about problems/report errors? What is the general ethos among staff?
- Patient/customer service – How are patients/customers greeted and treated? Are they happy with the service they receive? How are patient/customer queries or complaints handled? Are staff members willing to go the extra mile to meet the needs of patients?
- Promotion of services – Are the various services provided advertised well and easy for patients/carers to access?
- Public health – Are staff members vigilant to opportunities to promote better health? What PH services are offered and do they meet local population needs?
- Innovation – Are new materials/software/procedures considered and tried in order to improve service?

4.3 Phase 2

The target number of sites (6-8 in total) was recruited, however two of the four DD sites only received a few visits rather than a full case study for reasons discussed below.

4.3.1 Participants

Sixteen dispensing GP practices and 20 CPs indicated, on the questionnaires, that they would be interested in taking part in a case study. The first sites (3 CPs and 4 DDs) were sent information packs on 18th May 2012 and the first site was recruited on 30th May. All three of the pharmacy

sites agreed to act as case study sites (last one recruited 8th June), however it was more difficult to recruit dispensing GP practices partly because it was hard to get through to the GPs on the telephone and emails tended not to elicit responses for at least 3 weeks. Of the first 4 practices contacted 2 agreed to take part (on 11th and 27th June). Four further practices were sent information packs on 14th June and two of these agreed to participate (25th June and 16th July).

Dispensing Doctors' Practices

One small (dispensed fewer than 2000 items per month), two medium (dispensed between 5000 and 8000 per month) and one large dispensing practice (dispensed over 11000 items per month) were recruited. Three of the practices were from one of the six PCTs involved in the study (although sited quite far apart from each other) and one was from another. Of the six PCTs involved in this study, these two had the most dispensing doctor practices. Practices in two other PCTs were also approached but declined to take part. No practices in the remaining two PCTs that replied to the questionnaire indicated they would like to take part in a case study. All the practices were situated in small villages that had only a few other amenities, however the smallest practice had two surgeries each in villages that had another dispensing doctors' practice.

The largest DD practice did not want to participate in a full case study but invited the researcher to observe their practice and distribute patient interview information sheets over a couple of visits. The smallest practice dropped out of the case study after 3 visits. Lack of time to dedicate to answering the researcher's questions, staff declining recorded interviews and taking on new staff in the dispensary were cited by these practices as reasons for not participating in full case studies. Although these two sites did not want to continue with case study visits they were happy for the data already collected from them to be used in the study and offered their support in later phases of the project.

Community Pharmacies

The three recruited sites represented various types of pharmacy: one was part of a large supermarket chain and situated in a supermarket; one was a small independent pharmacy; and one was attached to (but not owned by) a GP surgery. The pharmacies were situated in three different PCT districts.

Based on initial findings and anecdotal reports from the first few case study sites the research team thought it would be good to conduct a case study of a pharmacy belonging to a large multiple. Only one pharmacy from a large multiple (non-supermarket) had expressed an interest in taking part as a case study site and in October 2012 this pharmacy was also approached with information about participation. However, the pharmacy's head office requested that they did not take part.

Staff interviews

Pharmacists, dispensing GPs and dispensing assistants/technicians at all sites were asked if they would like to take part in an interview. The site summaries below detail the total numbers of staff and how many staff interviews were conducted at each site. Interviews lasted between 25 minutes and an hour and a half. One of the main barriers to conducting staff interviews was

finding a time when other staff would be available to cover an individual's role for the course of the interview. Particularly in the smaller practices often only one or two members of staff would be present at any one time. Although after-work telephone interviews were also offered to staff, these were not taken up by anyone. Interviews with GPs were especially hard to arrange and several were cancelled or postponed due to the doctors needing to make emergency house visits.

Patient interviews

Eighty information sheets about interviews were given out to patients across 6 of the sites (not DD4). Two patients agreed at the study sites to take part and gave their contact details directly to the researcher, of these one was interviewed by telephone, the other could not be contacted. One further patient agreed and was interviewed on site. Three reply sheets were returned from patients at two different sites, of these two were interviewed, the other could not be contacted. Three people responded to the local newspaper advert, of these one agreed to and took part in an interview. In total five patient interviews were conducted, all with female patients, three of whom had used a CP to obtain a prescription and two had used a DD practice. Interviews lasted between 10 and 20 minutes.

4.3.2 Site summaries

Detailed case reports were made for each of the seven sites based on the field notes and documents collected. Case reports gave descriptions of the physical set-up of each site, their organisation, opening hours, staff numbers and services offered. The reports went on to include reflective accounts of staff relations and communication, training and induction processes, the dispensing process, stock handling, safety culture and practices, patient relations, health promotion practices, and innovation. For brevity, short overviews of each site are given below.

CP 1

- 11 visits over July and August 2012
- 5 interviews – 2 with pharmacists, 2 with technicians, 1 with a DA

A supermarket pharmacy in a large store on a retail site on the outskirts of a large town. Visits usually lasted approximately six hours and were made in both the mornings and afternoons and covered staff change-over periods. There were three permanent pharmacists, one of whom was the pharmacy manager (PM), and regular locums were used to cover Sundays. For five days of the week there would only be one pharmacist present, on the remaining two days two of the permanent pharmacists work together. The other staff members were 4 technicians, one dispensing assistant (DA) and 4 medicines counter assistants (MCAs). There is a minimum staff policy whereby during pharmacy opening hours there must be at least one MCA, one technician and one pharmacist present. However, for most of the day there were several more technicians present.

A GP practice was situated within a couple of minutes' walking distance, although a large chain pharmacy was sited in between the practice and CP1. The pharmacy was positioned at the entrance of the supermarket, which was very convenient for customers. The pharmacy counter provided a barrier between the supermarket and the dispensary but allowed customers to see

in to the dispensary and staff to see any waiting customers. However, the lack of a dividing wall meant the pharmacy staff heard all the noise from the supermarket. The dispensary area was large with well-organised worktop space; there was a very small consultation room accessed from the dispensary, meaning patients had to go behind the front counter to get into the consultation room.

Staff training was thorough and comprehensive at CP1; staff were encouraged and supported to take NVQ levels for dispensing beyond the minimum required NVQ level 2. In addition, the supermarket company required all staff to complete training, in areas such as customer service, annually. The pharmacy manager here was keen for the pharmacy to take part in new services and trials being run by the PCT and so some staff would also attend training for these new services.

Many services were offered at CP1, both those commissioned by the PCT and some Patient Group Directions (PGDs) offered by the supermarket. The staff that had worked at CP1 for the longest demonstrated an attitude of striving to meet patients' needs and this seemed to filter through to newer members of the pharmacy team. A limited delivery service is run by a member of the supermarket's staff (not a pharmacy staff member). This service is mainly for care homes and patients with dosette boxes and is not advertised. Pharmacy staff will also often hand-deliver prescriptions to patients who are less able to travel.

Communication among staff was very good; the PM would use a notice board to list all important issues requiring action, which staff would initial to show they had complied. Staff would discuss issues as they arose in the dispensary and the PM would use e-mail and SMS messages to convey information to staff not in the dispensary at the time. There was openness among all staff.

Standard Operating Procedures were made by the company's pharmacy head office and standardised across all branches, although individual pharmacies could apply to head office to adapt them or suggest changes. Staff viewed the SOPs earnestly and a strong emphasis was placed on adhering to them. Errors and near-misses were also taken seriously and recorded in error logs that were reviewed weekly by the PM. The large dispensary was kept well organised and colour-coded baskets for individual prescriptions helped ensure items did not get mixed up even at busy times. Staff members all knew their roles (e.g. labelling, dispensing, checking). It was company policy that all prescriptions must be checked by at least 2 people.

CP2

- 9 visits over September and October 2012
- 2 interviews – 1 with pharmacist (PM), 1 with the DA

A small independent pharmacy in a village. Visits usually lasted 8 ½ hours, the full weekday opening hours. CP2 was owned by a pharmacist with a pharmacy in a neighbouring village but managed by the pharmacist who worked here 4 ½ days a week. A regular locum pharmacist was used to cover the remaining day each week. There was one DA (in training) and 3 MCAs; for the majority of the time a pharmacist, the DA and one MCA would be present, but the minimum would be a pharmacist and MCA.

The pharmacy was in a very small, old building on the village high street. A dispensing GP surgery was situated about a minute's walk away from the pharmacy. When the pharmacy opened 15 years ago the DD practice put up a lot of opposition and created much hostility among the locals towards the pharmacy. The PM had worked hard to improve relations with the surgery and interaction between the two, throughout the case study, seemed mostly positive. The dispensary was very small and situated in a room behind the shop counter, however, the doorway between the two rooms was kept open allowing those in the dispensary to see when people enter the shop. The dispensary was kept well organised and with so few staff the limited space did not seem to be a disadvantage.

Staff were supported by the PM to do their NVQ training, however little emphasis was placed on further training or updating. The PM was happy to answer questions from the staff and would pass on information to the staff about new products if it was deemed to be relevant. There was no customer service training, however a strong emphasis was placed on friendliness and approachability amongst the staff, and the PM reported looking for these traits when choosing new members of staff.

SOPs were compiled by the pharmacy owner but were not regularly reviewed by all staff and not all important procedures had SOPs. All staff knew their roles however and the small dispensary was kept well organised. Errors and near misses were documented by the PM and there seemed to be a no-blame culture, whereby the PM and DA would discuss the mistakes openly and treat them as a learning opportunity. However, errors and procedures were not systematically reviewed or audited.

CP2 offered few extra services as defined by the NHS and there was no attempt to fill quotas of patients on advanced services (Medicines Use Reviews (MURs) and New Medicines Service (NMS)). However, the PM always gave advice to any new patients at the pharmacy or with any new prescriptions and is known in the village as a good provider of health information. The staff kitchen doubled up as a consultation room, used to provide privacy when conducting MURs, NMS or smoking cessation sessions. A delivery service is not offered but staff and the PM often drop prescriptions round to local customers who are less able to travel.

Communication at this site was mostly oral as there were so few staff and they saw each other regularly. While this worked well most of the time, on occasions messages were not passed and sometimes the PM or DA were interrupted while checking prescriptions in order to be given a message.

CP 3

- 7 visits over November and December 2012
- 3 interviews – with each owner (2 pharmacists and 1 DA)

An independent pharmacy attached to a GP surgery in a new town. CP3 opened just over a year ago as a 100-hour pharmacy. Visits lasted approximately 8 hours and took place during the day, when the pharmacy doors were open to customers; after 7pm the doors would be locked and only the pharmacist would be present - patients could access the pharmacist through a hatch in the wall. The pharmacy was owned and run by two pharmacists and a dispensing assistant, who had all worked together at other pharmacies before setting up CP3. A few months prior to the

case study four other members of staff were taken on – three as DAs and one to be a MCA. Two of the DAs were in training, the MCA had not started training. During the day one pharmacist and the DA owner would be present usually with at least one other member of staff.

The pharmacy was in the same building as the GP surgery and the pharmacy owners had excellent relations with the GPs and surgery staff. A mutually beneficial relationship existed whereby patient queries could be resolved quickly and easily as staff from the two practices would walk through to the other to discuss issues in person. Time was set aside by the GPs at the surgery each day to talk with one of the pharmacy owners.

The pharmacy was large, with two dispensaries: the main one accessed from behind the shop counter and viewable by customers, used for dispensing acute and repeat prescriptions; the other in a separate room, which was used for dispensing dosette boxes and medicine trays for nursing homes in a quiet environment with no distractions. The main dispensary was very large but, especially when unloading stock deliveries, became quite disorganised.

There was not much emphasis on staff training and updating. The owners tended to show staff any new procedures on an ad hoc basis and staff understanding of SOPs was not checked. However, the owners were happy to answer any questions from the staff. SOPs had been downloaded from the NPA and a few had been minimally amended to suit the pharmacy. An error and near-miss log was kept but there were very few entries.

CP3 offered few extra services, as defined by the NHS, and there was no attempt to fill quotas of patients on advanced services. However, the owners intended to introduce some services in the coming year; they had been focused on the essential services since opening relatively recently. There was a small consultation room off the shop area but this was little used.

Two other pharmacies were situated very near to CP3; the owners took the view that they would not try to actively persuade patients to use their pharmacy, rather they wanted to provide the best service they could and hope that would convince the patients to return. A delivery service was offered and ran twice a day – if an item was not in stock when a patient presented their prescription the pharmacy would offer to deliver it to the patient the same or next day. Good customer service was shown by the owners.

Communication among staff was mostly oral. The two pharmacists rarely saw each other as they worked alternate shifts; messages between the two were either via the third owner (who worked with both) or via email or telephone call. Team meetings were not held and the employed staff were not much involved in decision-making. However, staff relations were amiable and open.

DD1

- 12 visits over August, September and early October 2012
- 4 interviews – 1 with GP dispensing lead, 3 with DAs

A small, single-site practice in a village. Visits varied in length: most were either in the morning or the afternoon (approx. 5 hours), some were full-day visits (approx. 9 hours). There were 4 GPs, 2 practice nurses, a practice manager (PM) and 4 DAs as well as several reception staff. Two of the DAs completed their NVQ 2 qualifications during the case study, the others were

already qualified. All DAs worked part-time in the dispensary and part-time in administrative or healthcare assistant (HCA) roles at the Practice. During dispensary opening hours there would be one or two DAs present. In the year prior to the case study the Practice had undergone considerable staff change with several staff members leaving and new people replacing them – two of the dispensers and the PM were new to the team.

The dispensary was a very small room next to the reception with a hatch through to the waiting room, at which patients could collect their prescriptions. This system gave little privacy for patients wishing to discuss their medication with the dispensers. The limited storage space in the dispensary sometimes led to the worktop becoming crowded and items being misplaced.

DAs were financially supported to complete NVQ 2 qualifications by the surgery but higher qualifications were not offered. GPs did not supervise the NVQ training but DAs were encouraged to go to the GPs with any queries they had. Dispensary staff meetings were held monthly with the PM and occasionally the senior GP. At the time of the case study the SOPs were being updated, which entailed each DA checking a SOP each month and discussing any changes they felt could be made at the dispensary meetings. The GPs and nurses also held in-house training sessions for the DAs on topics such as dispensary management or asthma care. Occasionally staff attended external training courses.

SOPs had been compiled by the senior GP and previous DAs. They varied in quality and detail and the DAs seemed poorly acquainted with them. There was an error and near-miss log that DAs dutifully used – the senior GP was trying to promote an attitude of viewing errors as learning opportunities, however with previous DAs a blame-culture had existed and this still pervaded to some extent. The Practice was co-operating with a pharmacist from the district's Medicines Management team to try to improve their prescribing and dispensing practice and a couple of audits took place in the dispensary during the case study. However, the DAs had not been fully informed or did not understand the purpose of the audits.

Communication between GPs and DAs was mostly via written 'query' notes for specific prescriptions or via instant messages on the Practice intranet. DAs communicated orally amongst themselves and the lack of written communication sometimes caused messages not to be transmitted. The DAs got on well together and with other staff, however some of the GPs remained aloof, which sometimes prevented DAs taking queries to them. The DAs were all friendly towards patients and took time to speak with them, however, patients were often left waiting at the hatch before they were acknowledged by the DAs. There was not a formal delivery service but staff would sometimes hand-deliver prescriptions to local patients.

Many extra services were offered at DD1, however, they were not delivered by the DAs but by the GPs and nurses; DAs had not been offered training to deliver extra services. Dispensing reviews of use of medicines (DRUMs) were conducted by the DAs, however they were not done in accordance with the DRUM SOP; the DAs seemed to place more importance on fulfilling the quotas of DRUMs. The senior GP had noticed this and at the end of the case study reported that steps would be taken to improve the execution of DRUMs.

DD 2

- 7 visits over November and December 2012
- 3 interviews – all with DAs

A small, single-site practice in a village. Visits varied in length: some were either in the morning or the afternoon (approx. 5 hours), some were full-day visits (approx. 9 hours). This practice had 3 part-time GPs, a practice nurse, practice manager, 6 dispensing staff and 2 receptionists. The receptionists were not employed for the full opening hours and so DAs were required to simultaneously cover reception duties while working in the dispensary. There were usually 2-3 DAs on duty at a time except for one after per week when there was only one. All DAs were qualified to NVQ 2 level and would attend a few training courses each year, for example, on dealing with telephone calls or diabetes care.

The dispensary was fairly small but well organised, with designated checking areas for different types of prescription. However, baskets were not used to separate prescriptions waiting to be checked and the limited worktop space sometimes meant items for different prescriptions would be mixed up. There was a hatch through from the dispensary to one of the patient waiting areas where patients could collect their prescriptions; this did not afford much privacy.

Dispensary meetings took place monthly between the GPs, PM and lead DA, who gives informal summaries of the meeting to the other DAs. Communication among the DAs was generally oral although written notes and intranet messages were also used. Any important documents (e.g. PCT letters) had to be signed by each dispenser when they had read them. The DAs would mostly communicate with GPs regarding prescription queries via instant intranet messages; there was little other contact between dispensers and GPs. The DAs worked as a cohesive team and got on well together; any problems that arose in the dispensary would be discussed among them, often during their lunch break. Whole practice meetings took place twice a year.

SOPs had been adapted from templates available through the DDA. They were reviewed biennially by the GP dispensing lead, PM and lead dispenser. SOPs were not always adhered to and were seldom referred to by DAs, who tended to only look at the documents if they had been changed. If errors were made the lead dispenser would be informed and record it in the error log – there was confusion among the DAs as to whether near-misses needed to be reported as well. There was a no-blame culture at DD2 and an effort to learn from errors, however, the error log was not systematically reviewed and DAs were not necessarily encouraged to reflect on procedures to identify ways of preventing errors.

Extra services were conducted by the nurse and GPs, including DRUMs due to the lack of privacy at the dispensary hatch. A monthly prescription delivery service was run for some of the less able patients with the help of two patients who volunteered as delivery drivers. The DAs showed good customer service skills and strived hard to source items for patients. At times, though, patients were left waiting at the hatch for a while before being acknowledged.

DD 3

- 2 visits in August and September 2012 to main site
- No interviews

A large practice with a main site and a branch (both dispensing) in neighbouring small villages. Visits lasted approximately 7 hours. There were 5 GP partners, 4 nurses, 2 HCAs, 2 PMs, several administrative staff and 9 dispensary staff members – 2 dispensary receptionists, 5 DAs and 2 technicians – staff would divide their time across both sites. Two of the DAs were undergoing training to become technicians. There would always be a dispensary receptionist and at least 2 DAs present. It was policy that prescriptions must be checked by a different dispenser than the one who dispensed the items. Some of the dispensers had completed their training in community pharmacy, others had done all their training through the Practice. More senior dispensers would help support the junior members through their training if needed, although this was not always possible due to lack of time. The GP responsible for the dispensary (dGP) organised quarterly training sessions/seminars for the dispensers on topics that they would suggest, such as prescription claw-back or a certain disorder.

The dispensary was very large with lots of worktop and storage space. There was a hatch at which patients could collect their prescriptions but the partition wall prevented patients seeing in to the dispensary and dispensers seeing any waiting patients. It was the responsibility of the dispensary receptionist to check the hatch and attend to waiting patients; DAs tended to only deal with patients if there was a problem with their prescription (e.g. a delay) or if the patient had a query. Dispensers would each work at separate worktop areas to dispense, leave their dispensed prescriptions in baskets then swop areas to check each other's work.

Meetings between the lead dispenser and the dGP would usually take place each week to discuss dispensary business. The GP would then pass on any relevant points to the other GP partners at their weekly meetings and the lead dispenser would relay any issues to the other dispensers either in person or by email. A meeting between the dispensary staff was held every 6 weeks and brief minutes from these circulated to each member. Staff had individual pigeon holes for both external and internal communications. Most contact between GPs and dispensers was via instant intranet messaging concerning prescriptions.

SOPs were compiled by the dGP and lead dispenser and updated annually. There was an emphasis on adhering to good practice amongst the dispensers. Dispensing errors were recorded and discussed at the dispensary meetings in an effort to learn from them, however, near-misses were not recorded.

Many extra services are available at the practice but provided by the GPs and nurses. They do not conduct DRUMs although a consultation room is available for dispensers to use if they need to talk privately with a patient.

DD 4

- 3 visits in November 2012
- No interviews

A small practice with a main site and a branch in neighbouring villages; both villages had another dispensing practice. Both sites were dispensing but most took place from the smaller branch site, where visits took place. Two visits were full-day (approx. 8 hours) and one visit was 6 hours due to the reduced opening hours on certain weekdays at the branch site. There were 4 GP partners, a practice nurse, a HCA, a practice manager and 5 reception staff who would

simultaneously carry out dispensary duties. Only two of the dispenser/receptionists were NVQ level 2 qualified. At the branch site only one dispenser would be working at a time.

The dispensary was small but well organised, however, the main dispensing area was out of sight of the reception hatch meaning patients were often left waiting before being acknowledged. Generally dispensed prescriptions would be left in separate baskets for the next dispenser to check rather than dispensers self-checking. For acute prescriptions, if a GP or nurse was not available to second check the prescription, dispensers could ask patients to check their own prescriptions and sign a form to confirm they had done so. Dispensers varied in their levels of customer service; some were very friendly and took time to listen to patients, others showed little warmth and hardly spoke.

There was little emphasis on staff training; no in-house training took place and although dispensers could suggest, in their annual appraisals, courses they would like to attend but lack of funding was often cited as a barrier. SOPs were supposed to be updated annually by the lead dispenser, then checked by the dGP and PM before being read and signed by all dispensers; however, at the time of the visit the SOP folder was not and had not been available to the dispensers for 6 months while the PM was checking it. Staff demonstrated little understanding of the SOPs.

Errors were recorded on significant event forms and sent to the PM. These would be discussed at quarterly whole Practice meetings. Dispensers did not think that near-misses needed to be reported but the PM stated that they should be.

Most communication between dispensers was via intranet messaging which allowed the recipient to inform the sender when the message has been seen. While this system works well when used, there was a problem with some messages not being passed on to all team members; the dispensary team seemed divided. Meetings between the dGP and lead dispenser took place on an ad hoc basis.

Extra services were offered at the Practice and provided by the nurse or GPs. Dispensers conducted DRUMs at the reception hatch with patients on repeat medication; they followed a set question schedule but had not been given training on how to conduct the DRUMs.

4.3.4 Themes

The case studies garnered a wealth of rich data and a complex structure of themes was identified through the qualitative analysis. The main aim of the analysis of case study data was to identify areas of service provision appropriate for the development of quality indicators, i.e. to inform Phase 3 of the project. The themes presented here will be discussed in relation to their impact on quality of service provision. Quotes from interview transcripts are given in italics.

Communication

Communication affected many aspects of practice in all case study sites and examples of both good and bad communication were seen. Here this theme will be discussed in terms of internal staff communication, staff-patient communication and external communication between the site and other healthcare providers.

Internal communication

There was great diversity in how staff communicated with each other both within and between sites. Communication among staff was essential for the quick and correct processing of prescriptions. For example, in instances where communication broke down items were not ordered or not all staff members were aware that certain items had been specially ordered for specific patients and so were used for other prescriptions, resulting in a delay to patients getting their medications.

Noticeboards, practice diaries, instant messaging on practice software, emails, texting and of course face-to-face discussion were used in different sites to different extents. What was important for effective communication was whether there was a common understanding among staff as to how different messages should be communicated. In CP1 a noticeboard was updated every month by the PM with brief messages about various administration and training issues and drug updates; each member of staff knew they had to read the noticeboard and, for any points that required action, initial the board to show that they had complied. In two other practices however, noticeboards were not kept up-to-date and not all staff knew to regularly check the board.

The number of staff at a practice and their shift patterns affected the communication methods used. In CP1 staff would work in shifts and sometimes not work with certain colleagues for days or weeks at a time; here the PM led communication using email, SMS and the dispensary noticeboard. In contrast, in CP2, where the PM and sole dispenser worked together 4 days a week, communication was mostly oral except for messages that the staff felt they might forget,

There are no formal communication systems, because at the most there's only ever 3 of us in the pharmacy. So it is general, 'have you remembered to do' ... we will write notes to each other, we've got the diary where we write things in of what's happened and so on and to remind ourselves of doing things. (CP2, pharmacist).

At this site, when a locum was to be used, the pharmacist would always leave careful notes for the locum and go through them with the DA, who could then explain them, if necessary, to the locum. While this formal system was adhered to for locums, the staff did not always make notes for each other, instead relying on memory which on a few occasions led to delayed patient care.

CP3 had several staff and two pharmacists who would rarely see each other due to working alternate shifts. However, no formal communication system existed here either, rather the owners would discuss things as they worked or, because all three were never working all together, over the telephone. Any other staff present when the owners were discussing the business while working would have the opportunity to contribute ideas. However, the owners of CP3 realised that this system was not particularly robust and that they needed *better communication processes in place (CP3, pharmacist/owner)*, particularly having just taken on several new members of staff. They were considering holding staff meetings, however, difficulty in finding a time when all staff could be present was a major barrier particularly with their 100-hour opening contract.

Two of the dispensing doctors' practices found the instant messaging systems on their computer software had greatly improved the communication between staff, allowing them to contact colleagues in different rooms without leaving their posts and get a quick reply, thus reducing the waiting time for patients. The instant nature of the messaging systems overcame the reliance on memory and, one dispenser in DD2 felt, also helped improve team relations,

I think just by sending [instant messages] to doctors or INR results, they send it back to us, it's more of a team work. So I think it makes them more aware, oh, there are people down there, not just numbers. (DD2, dispenser)

The increased awareness of colleagues in turn helped ensure that messages were passed on,

... it makes doctors more aware that we need to know more of what's going on, either by them sending us a message down or whatever. (DD2, dispenser)

At DD1, however, the instant messaging system was not well used as some staff lacked confidence with the computer software, leading to other staff viewing it as an unreliable method of communication. Instead this practice used a paper-based system, which was slower and meant that staff could not check the status of a query to keep patients informed.

Perceived role divisions were a potential barrier to communication. In DD practices a lack of communication between GPs and dispensers had caused or still was causing problems. In DD1 the GP partners had worked hard to break down the perception of GPs as superior by engaging with their staff but had recently faced a turnover in staff and, due to new commitments, had not yet had time to build relationships with the new dispensers,

I think we've worked well with the staff to break that perception down, but at the moment it's still there. But we can't beat ourselves up too much, we've had lots of new staff and I think it will come. And most of them haven't had a social event with us yet. And also ... part of the trouble is I'm missing 3 days a week. (DD1, GP)

Here the GP partner recognised that engaging with the dispensers was important for building their confidence to bring queries to the GPs and point out changes in patients, which the dispensers were often in a better position to notice as they would have more regular contact.

DD2 had also experienced problems with a division between GPs and dispensers - *a feeling of them and us (DD2, dispenser)* - but this issue had been raised in a whole practice meeting by one of the more confident dispensers and since then relations had improved. In DD practices staff meetings were seen as a good way *to keep the communication flowing (DD2, dispenser)* between staff who didn't often work together. However, time constraints on the GPs meant that meetings for dispensary business would often be between the GP dispensing lead and lead dispenser only. It was then the responsibility of the lead dispenser to relay any decisions to the other dispensary staff. In DD2 this system worked well, there was a set channel of communication for ensuring that messages from the meetings were passed on to all dispensers and that individual's queries were taken to the meetings,

[Dispensary lead] is the one that attends the partners' meetings regarding the dispensary, so any dispensary queries would be given to [her]. Then when [she] is going to a

dispensary meeting she would ask beforehand is there anything that any of the members of staff want to be brought ... any points made at the meeting. (DD2, dispenser)

All dispensing staff thus felt they had a voice to suggest new ways of working or highlight problems. Unfortunately team meetings were not so positive in all practices. In DD4 GPs were not present at the dispensary meetings and two of the dispensers reported feeling unsupported by the GPs and management as any issues they brought to the meetings seemed to be over-ruled by the other dispensers without being heard by the GPs. In DD1, DD4 and CP3, communication between management and less senior staff about how practice could be improved did not seem to have been considered, and the less senior dispensing staff sometimes seemed disinclined to contribute their ideas, although they offered their suggestions to the researcher.

Despite the obvious importance of good internal communication for efficient practice, only DD1 had thought to conduct an audit on their communication methods; this audit was beginning at the end of the case study.

Staff-patient communication

This is obviously a very important area for both clinical and commercial reasons, which was acknowledged by all sites, and yet the quality of staff-patient communication and the extent to which good communication was emphasised varied considerably. From the patient interviews it was clear that the general customer service skills of being *friendly* and *welcoming* were considered to be key elements of providing a good service. At CPs 1 and 2 a strong emphasis was placed on friendliness. During the case study CP2 advertised and recruited a new MCA and the PM explained that fundamentally they wanted a smiling, personable person who would readily engage with customers – all other skills and knowledge for the role could be taught. This attitude was also voiced by the PM at CP1,

It's really, really important to me when I take on new members of staff, which doesn't happen very often, that they are engaging. It doesn't matter if they don't know the job, because I will teach them the job, but they've got to be smiley and they've got to be helpful. (CP1, PM)

All patients valued a friendly service but those on regular medications also appreciated *the personal touch (CP patient)*. In all but one of the sites staff would take time to build up a rapport with a regular customer. The PM in CP2 particularly had built up a reputation for knowing nearly all his customers well and greeting them in the way that they preferred (formal titles, first names etc.). This PM was viewed by the villagers as the first port of call for health information and advice,

It's a little while ago since I had my appraisal, but what I was told was, okay, it's not brand-driven pharmacy, it's brand [pharmacist's first name] that people come to. Which was very flattering. But I do think that's also right, because I think - I'm told - that people come in because they want to talk with me. (CP2, PM)

The dispensing staff at DD1 and DD2 also seemed to take great pride in the patient interaction aspect of their role, seeing it as adding value to the service offered by their surgeries,

I suppose being in the surgery here is like customer-related. Because myself and a few of the other girls have been here such a long time, we do know the patients and have built up quite a rapport with them. And I just think when they come in here they're quite often poorly, and when they come in here they see us, they see a friendly face, somebody that they know, it's not like a big health centre where they might not see the same person.
(DD2, dispenser)

A couple of the patients, and GPs, voiced frustration at sometimes being unable to build up a relationship with their local pharmacy due to there being a different locum pharmacist working each time. This was reported to be a particular problem with large chain pharmacies. The CPs studied all tried to employ regular locums in an effort to maintain continuity of care and ensure that a regular member of dispensing staff, who was well acquainted with the regular patients and local GP practices, would always be present when a locum was to be employed.

Despite the widespread acknowledgement that engaging with patients is essential to providing pharmaceutical services, little emphasis was placed on customer service skills in terms of training; rather it was assumed that common courtesy and etiquette would suffice. However, the lack of common understanding of, or adherence to protocol for, dealing with patients led to some staff leaving patients to wait at the counter or hatch without acknowledging them, for example, by saying 'I just need to finish this then I'll be with you'. On some occasions staff seemed to deliberately not look directly at the hatch or counter in order to avoid having to attend to a waiting patient. In contrast, the DA owner at CP3 regularly checked the counter area and CCTV screens of the shop area when working in the dispensary and would always immediately acknowledge patients. The owners at CP3, as with managers at other sites, expected staff to learn from their example in dealing with patients. Only the supermarket pharmacy provided formal, annual customer service skills training, although the extra care that staff took to ensure prescriptions were filled was again passed on informally,

I was the first one here, so if I train somebody I'll train them in that way. Don't just get a prescription and say you can't get it, if the manufacturer's out of supply ... we need to ring the doctor and change the script. So I'll say that to another technician who's learning, and then, hopefully, it will have a domino effect then, because it will always be how we train.
(CP1, technician)

Dispensers at DD2 had received a training session on customer service skills and reported finding it useful *to make us more aware of how we sound and how we are being for people to approach us* (DD2, DA). However they also felt periodic reminder sessions would be useful. Certainly at several of the sites staff, particularly during busy periods, often seemed less hospitable to patients they did not see regularly and this sometimes verged on rudeness.

External communication

All CPs and DD practices need to liaise with other health care professionals. For example, pharmacists may need to query a prescription that a GP has prescribed or dispensers at a DD practice may need to query a prescription made by a community nurse or out-patient clinic for one of their patients. Despite the many means of communication now available, communication with external professionals still proved difficult. Receptionists could act as

gatekeepers to prescribers and yet would have little understanding of the urgency of prescriptions. As with staff-patient communication, building up a relationship with external professionals was important,

It does make life a lot easier if they know who it is that's on the phone and they know that the chances are you're phoning them up about something important, rather than something trivial. And they normally respect your decision or respect your opinion of what's going on. (CP3, pharmacist)

Good external communication was observed at sites where staff had been proactive, introducing themselves to the other professionals and making an effort to pass on information that they thought might be of use, for example if a drug was currently out of supply. The pharmacists acknowledged and felt it right for the onus to be on them to initiate communication with GP surgeries, however, staff at both types of site felt that face-to-face meetings were beneficial for relations and for this to occur all parties need to be willing to engage.

The benefit of good communication between different healthcare providers for patients was that problems with prescriptions were rectified quickly and easily with little inconvenience to the patient. In the best cases all parties had good relationships, respected each other and had common understandings of each other's roles.

Again, little reflection seemed to have been made on external communication protocols or systems at most of the sites.

Safety

When asked, nearly all staff at all sites reported patient safety as the most important aspect of providing pharmaceutical services. However, the understanding of, and the procedures designed to ensure, safety differed across sites. This theme will be discussed in three parts: standard operating procedures; errors; and checking.

Standard operating procedures (SOPs)

In CP1 there was a particular emphasis on adherence to the SOPs, which were trusted to ensure safe practice. At this site the SOPs were compiled remotely at the Head Office by a team of pharmacists and were the same for all pharmacies in that company. They were thorough, comprehensive and well formatted for ease of use. Each year staff were allocated time to review the SOPs and sign each to state that they had understood them. The pharmacy manager at the site encouraged the staff to discuss any queries they had with the SOPs. Although the written SOP documents were usually only referred to once a year (at review) by staff, the strong emphasis on good practice and adherence to protocol propounded by all staff but particularly the PM and senior technicians, ensured they accurately reflected their working practices,

You adhere to them because that is a safe working practice, rather than, oh, I've read the SOP, I must do it like this. (CP1, technician)

DD3 also seemed to place much importance on adhering to good practice and following protocol; the other sites, however, seemed to place less emphasis on SOPs. This was reflected both in the comprehensiveness of the SOP documents and in staff familiarity with the SOPs. In the worst cases some staff members were not aware that there were SOPs for certain procedures and management did not check staff understanding and acceptance of the SOPs. The pharmacists at CPs 2 and 3 explained that they placed more importance on the actual training of staff, by demonstration and experience, than on the learning of the SOP documents.

They've certainly started reading them [SOPs], I wouldn't say they've ... I mean, certainly the 3 of us [owners] that have been here since day one have all read them and all signed them. The newer members of staff probably haven't at this stage. So that's something that needs to be gone through. But, hopefully, they've all been trained to work in a way that would comply with the SOPs anyway. (CP3, pharmacist)

Also in the CP sites, the pharmacists reported having a supervisory role, ensuring SOPs were adhered to.

In the role of pharmacist then you're probably supervising and keeping an eye on things and making sure that you're happy with the way things are being run. (CP3, pharmacist)

However, in the DD practices there would not necessarily be a supervisory presence and so more emphasis was placed on dispensers independently ensuring their own adherence to SOPs. In DD2 and DD3, where 2 or more people would usually be working in the dispensary at once, the dispensers could monitor each other's practice.

Sites differed as to how much input staff had in compiling and/or reviewing SOPs. At most of the sites the SOPs had been designed by management or had been adapted from templates available through the National Pharmaceutical Association (NPA) or Dispensing Doctors Association (DDA). DD1 had recently started a system of revising their SOPs whereby each month each dispenser would independently check through one of the SOPs to see if it accurately reflected their practice, then report their findings and suggested amendments to the rest of the dispensary team in their monthly meetings. This process improved the dispensers' familiarity with the SOPs, however, there was no involvement of a GP.

Errors

Different attitudes towards errors and error reporting were evident. All sites recorded dispensed errors but some did not record near-misses (errors that are detected before the prescription is handed out), and those that did defined a near-miss differently according to where in the dispensing process it was detected. Within a couple of the sites different definitions of near-misses existed and there was confusion among staff as to whether or not near-misses should be reported. This situation was not helped by the fact that some of the sites did not have SOPs for handling and reporting errors.

Although all staff recognised that the purpose of reporting errors was to learn from them and prevent errors occurring in future, most of the error and/or near-miss record books or sheets used did not provide space for staff to reflect on why the error occurred. Particularly near-misses tended to be recorded in tables with one narrow row allocated for each near-miss. At

most sites the name of the staff member(s) involved in the error was recorded in the error log, which for some staff led to a perceived blame culture. At DD1, a previous dispenser would use the error log to compare the individual dispensers' performances, which continued to make one of the current dispensers uncomfortable,

I think perhaps it ought to be talked about more generally. Not the errors, the near misses I mean, it should be discussed on a more general basis in the meetings, not perhaps minuted for all to see that, say, X did this and she's made 3 near misses on dosette boxes this week or this month or whatever. Because it's there in black and white and it does make you feel ... you feel bad enough about it as it is and you do beat yourself up about it, you think how did I miss it? But then to have it pointed again and it's just basically saying, well, you're rubbish, that's how it can make you feel. (DD1, dispenser)

This was despite the senior GP partner and PM at DD1 trying to reassure the dispensers that error recording was *not meant to be disciplinary, it's meant to be educational (DD1, dispensing GP)*.

In some practices errors were reviewed and discussed among staff at team meetings (or, in CP2, informally with the staff present at the time) meaning all team members would be aware of potentially hazardous areas and could all suggest ways to prevent the errors recurring. At other sites error records were reviewed by management to identify recurring patterns; problem areas would then be highlighted to the other staff. At one site error records were not regularly reviewed and there was no discussion among staff to highlight risks or identify ways of improving practice, which seemed like a missed opportunity for shared learning.

Checking

Checking prescriptions was an important area in the theme of safety and, again, different attitudes to and processes for checking were observed. It was widely stated that having at least two different people involved in processing each prescription is the ideal and for CP1 and DD2 it was company policy that each prescription must be checked by at least two different members of staff. CP1 was part of a large company and the PM acknowledged that this gave them a generous staff allowance, thus facilitating multiple checking. For other sites where it was not always feasible to have many staff working at once, either for space or cost reasons, prescriptions would be checked by two people when possible but it was recognised that at times prescriptions may be processed by only one person. If it was necessary to check their own work pharmacists and dispensers often reported using processes to try to improve safety,

I do my own double-checks in my mind, the way I work. So I do try and assemble the products before I produce the labels ... it's collect everything, produce the labels, put the labels on the product within a sequence. But if you've got the right product and you've got the labels and you're putting the labels on, you might, ah, no, that's not the right label for that product. So I've either produced the wrong label or picked up the wrong product. So it's a self-check in that way. (CP2, pharmacist)

Three of the DD practices made use of barcode scanning software, which they used as a second checker

We've got a system with the barcode reader on it, so if you pick up an inhaler as opposed to an autohaler the barcode would be wrong and it will flag that up to you. (DD2, dispenser)

Such technology was reassuring to the staff, however, its accuracy was dependent on being regularly updated either by the manufacturers or dispensary staff.

The variety of checking procedures used reflected the different sizes of and numbers of staff at the sites. Within all sites however the quality of checking varied and this was not always dependent on how busy the site was at the time. For example, double checking was sometimes performed with the staff member who assembled the prescription holding the item and script for the second member of staff to check, 'steering' them through the check by reading out the prescription. These checks were often done so quickly that it was hard to believe the second checker would have had time to read the script or labels themselves and when the first checker is standing over the second, deference to colleagues may make the second person less likely to look for or report errors. DD3 used allocated spaces within the dispensary for first and second checking with dispensers working independently at the different spaces, which prevented the 'steering' of second checks. At all sites, however, independent checks were at times also done with such speed as to call in to question their rigour.

Interruptions during checking procedures were common at all sites and in many cases these were unavoidable, for example having to take an urgent telephone call or deal with a waiting patient. However there were times when staff showed little respect for the need for concentration while checking and would interrupt their colleagues with non-urgent questions. At DD1 the GPs would sometimes go into the dispensary and start talking to the dispensers about, for example, a particular patient's prescription without waiting until the dispenser had finished checking the prescription they were currently working on, which the lead GP acknowledged was not acceptable,

The doctors going in there and having a conversation is ridiculous. The doctor just walking in and ignoring completely – which I do as well – that the dispenser's actually doing a job by themselves is daft. (DD1, GP)

Space

A lack of space in the dispensary was a common complaint and often there was little that could be done to create more space. However some sites employed techniques to better handle the limited workspace than others. Use of baskets to separate individual prescriptions prevented different prescriptions being mixed up, as occurred in some practices,

When we're putting up repeats and we're really busy, they get dispensed, labels stuck on and put in piles. Which is fine, great, but those piles, because we're limited on room, get pushed nearer and nearer and nearer together, so you've got one great big, long pile. If you go off and answer the telephone and you've done half your job, it's so easy to come back and pick up something that's almost next to your pile, touching your pile, to put it in a different bag. (DD2, dispenser)

CP1 developed the basket system to use colour-coded baskets for different types of prescription; this allowed urgent prescriptions to be quickly identified at busy times and fast-tracked in a queue of prescriptions. Fundamentally, good organisation was key to working in limited space but also all staff needed to be aware of the organisation systems used. Particularly at sites where there were no changeover periods, when staff going off shift could update the staff taking over, if commonly understood organisation systems were in place staff would quickly be able to recognise, for example, part-completed prescriptions awaiting items from the next stock delivery, thus prescription processing could run more efficiently.

The space available for patients often received little attention. Although seats were available, in pharmacies they were not always obvious and not always pointed out by the staff to waiting patients. Patient information leaflets were not always displayed in an easily accessible manner, necessitating leaning over seats or other patients to obtain them. Cramped counter areas where prescriptions were handed out, particularly in DD practices with hatches in the wall through to the dispensary, created problems with confidentiality,

It is quite a small hatch, and when you get a queue of people you've got to be aware of who's behind who, you can't really discuss much, apart from the normal giving out (DD2, dispenser)

All sites had more private consultation areas available although staff did not always seem to remember to use these and, as one pharmacist pointed out, the patients also may not have been keen to leave the usual patient area,

There's just that small counter area that we can use. But we have got that consulting-room. But some people don't like coming into the consulting-room, they see it as a barrier - oh, what do they want to talk to me about? Oh, people will see me going in there - and might be uncomfortable with that. (CP1, PM)

Training and learning

There were great differences in the attitudes towards training and education at the sites, with staff at some practices all motivated and supported to learn whereas at other sites once the minimum required qualifications had been gained further training was seen as unnecessary.

For pharmacists, GPs and accredited checking technicians continuing professional development (CPD) is compulsory and was duly adhered to by all professionals at the case study sites. Particularly the internet-based CPD exercises, however, were viewed scornfully as they were not thought to promote long-term retention of knowledge. This was possibly due to the attitude with which the exercises were completed – often due to a lack of time they were done quickly and seen as a necessary evil rather than an opportunity for improvement and reflection. On the contrary, external conferences and seminars for CPD were viewed as valuable, not necessarily for the course content but because they provided an opportunity to build up support networks with other professionals. The pharmacists particularly valued the opportunity to meet fellow professionals and share ideas since, unlike the GPs, they tended to be the only professional at their site at any one time.

Dispensing assistants and technicians do not have to undergo CPD and at some sites there was little emphasis on continued learning for these staff members beyond the required minimum qualifications. Lack of time and money were cited as reasons for not providing further training, especially in the case of externally run courses. Here, CP1 was at an advantage as the supermarket company enabled the pharmacy to employ enough staff to cover absences for training and provided funding and allocated time specifically for staff development. Combined with a PM who actively sought new learning opportunities and tried to encourage her staff to progress, the staff at CP1 felt well supported and motivated to learn,

[Supermarket company] are really, really good on sort of keeping everything up-to-date and any training courses that we can go on and things like that. Where I think probably if you were in a small, little independent, you perhaps wouldn't have so much access to things like that. Say like with the smoking cessation, there's always courses on that to keep your knowledge up-to-date, and there's a smoking conference once a year, which we sort of take it in turns to go on. (CP1, technician)

DD1 and DD3 held in-house training sessions for their dispensers, and although these were often held during lunch breaks or after hours the staff appreciated the extra knowledge gained,

[The training sessions are] definitely useful. The in-house ones were very good. Err ... Saturday morning isn't always ideal (laughs), but they give us lunch as well so it's not so bad. And then you haven't got the pressures of what's going on in the dispensary. (DD1, dispensing assistant)

DD3 had joined with another DD practice in a nearby village to deliver training for the dispensers, the practices taking it in turns to host the sessions, which allowed the dispensers to see how other dispensaries were organised. DD1 had also in the past joined with other DD practices and the dispensing staff reported how useful it was to see around other practices and meet other dispensers. As with the pharmacist and GP training seminars it seems that providing the non-professional CP and DD staff with the chance to share their experiences would be valuable, as the PM at CP1 realised,

Sometimes you're not even aware unless you see how other practices work. When we were on the study day on Monday, one of the technicians from [another pharmacy in the company] said she'd really like to come and see how our pharmacy works, because she's only ever worked in her pharmacy for 10 years and she said it would be really interesting to see how another pharmacy works. But that doesn't happen, they don't go off site very often and look. But we do have technicians' study days once a year, so the technicians from the different stores all get together. (CP1, PM)

Although external courses or in-house training sessions were perhaps not feasible for the other sites, staff could have been encouraged to make use of the internet-based learning resources for dispensing assistants, such as those on the NPA and Dispex websites, to which practices subscribe. While several of the pharmacists and GPs would use these websites, only at DD2 had dispensing staff been encouraged to access the resources.

Public health and health promotion

Staff at the case study sites seemed ambivalent towards their role in health promotion; although health information materials were available for patients at all sites staff did not seem keen to actively give health advice,

But I find that very hard, healthy living, I can only do it if they ask. You can't go out to a customer and say 'you're fat, you need to think about your healthy living'. (CP1, technician)

Although providing health information was still seen as an important aspect of pharmacy and general practice there was an acknowledgement that other sources were perhaps taking over the role,

I think we are a source of information. I'm not sure how much in this day and age of computer technology that people actually need to come to a pharmacy for that information. I think the vast majority of people if they need anything these days, their first port of call's the internet. But, yeah, I mean we still get requests, you still get people coming and asking you 'where's the nearest... whatever?' (CP3, pharmacist)

Staff, particularly dispensing assistants, were however not always familiar with what information materials were available on site. Health promotion materials and leaflets were often poorly displayed; although lack of space sometimes had a part to play, little thought seemed to have gone in to arranging materials for optimum impact. In contrast, the pharmacist at CP2 had made an eye-catching alcohol awareness display with visual props that he had sourced himself. This display received many comments from customers and, more importantly, got them looking at the information materials displayed alongside.

Ethos

Ethos can be seen as an over-arching theme in as much as the ethos of an organisation will shape all other aspects of practice. The ethos of a site could be gleaned from the extent to which different staff members demonstrated the same values in their everyday practice. At one site, where relationships between staff were often poor, there was no whole-practice ethos and patients would receive service of varying quality depending on which member of staff they saw.

Ethos and communication were closely linked: the management needed to be able to clearly convey their aims and values in order to gain the commitment of the staff. At CP1 there was a highly patient-centred ethos whereby staff would strive to always fulfil a patient's needs and this was attributed to the pharmacy manager,

People come here, because if they can't get service anywhere else they know that we'll chase it up. Can't get this drug, we won't say, 'oh', give the prescription back, 'we can't get this', we'll then ring the surgery, get an alternative and follow it through. A lot of that's down to [pharmacy manager] really, I think, because that's how she's trained everybody to do it. (CP1, technician)

All the staff at CP1 saw going the extra mile to fulfil a patient's needs as, not only good for business, but also their duty as a health care service provider,

If you give them back the prescription and say you can't get it, they might just go home and not ever take those tablets, whereas if we say 'it's not available but there are these alternatives, shall I phone the doctor and ask him?', then you're not only giving great customer service but you're also clinically helping that patient, because it's making sure they get what they need in a timely fashion. (CP1, pharmacist)

Several other practices also displayed a patient-centred ethos. The owners of CP3 particularly would go to great lengths to help both patients and other healthcare professionals, again seeing it as their duty of care. This was well demonstrated in their free delivery service, which, although it often cost the pharmacy more than they could hope to gain from prescription payments, they would offer to patients for whom they were unable to immediately fill their prescription,

I think I take it on me in a way, we didn't have it, in a way it's our fault, let's deliver it and help them out in a way.

The delivery service is expensive ... it's not cost effective, but, like we said, patient care is priority, you have to. No, sorry, you don't have to, but we here say we have to in a way and we try and get it done properly within the timescale we set in a way. (CP3, owner/dispensing assistant)

The attitude of the owners at CP3 was, however, not always demonstrated by the employed staff. The owners suggested this was due to the staff having only been taken on relatively recently and so their values had not yet been fully appreciated by the staff. At DD1 and DD4 communication problems meant that the managements' values also did not seem to be fully understood by the dispensing staff. In DD1 there was discrepancy in how the GP partners wanted DRUMs to be conducted and how the dispensers actually carried them out. This seemed to be due to the fact that dispensers had been informed that they needed to fulfil a quota of DRUMs in order for the surgery to receive payment but the GPs had not also emphasised what information they hoped to gain from the DRUMs and so the dispensers prioritised quantity over quality. At DD4 individual dispensers would go to different lengths to fill prescriptions and there was no common understanding of what was expected by the Practice partners.

A patient-centred ethos was also evinced in sites' approaches to DRUMs and MURs. The financial incentives attached to these reviews led to the staff at some of the practices feeling pressured to fill quotas and conduct DRUMs/MURs with patients whether or not they felt the patient would benefit from the process. A pharmacist at CP3 had worked for a large chain pharmacy before setting up their independent practice and cited the target-driven culture of the chain pharmacy as one of the main reasons for wanting to leave,

It came to a head about MURs, where the pressure was on that you had to do so many MURs a day. And it just got to a stage where it was just totally unfeasible to do it without it affecting patient care elsewhere ... that was one of the major issues. But it was just all

targets, you had to be meeting targets, some of which we had control over, a lot of which we had no control over whatsoever. (CP3, pharmacist)

At CP3 very few formal MURs were conducted – the pharmacists would often bring up the topics covered by MURs in their standard dialogue with patients but not record (and claim for) this as a MUR. Those MURs that were conducted were done so when the pharmacist had reason to believe the patient would benefit from a more in-depth, private discussion of their medicine use. A similar policy for MURs was also adopted at CP2. At CP1 the head office did place MUR targets for the pharmacy to reach, which the staff found unethical but had to abide by. The pharmacists at CP1 did try to ensure that the MURs were beneficial by using them as an opportunity to build rapport with customers and also promote other public health topics; half an hour was set aside for scheduled MURs to try to ensure the patient and pharmacist would not feel rushed. In contrast, where targets were placed on conducting DRUMs at DD1 and DD4 this led to dispensers trying to conduct DRUMs as quickly as possible with, seemingly, no thought to benefitting the patient. DD2 and DD3 did not ask dispensers to conduct DRUMs either due to the lack of a private consultation area for the dispensary or because the dispensary lead did not feel confident that the dispensing assistants would have sufficient knowledge to handle any queries that patients might bring up in a DRUM.

Staff at sites with a strong practice ethos also demonstrated respect for and trust in their colleagues. In turn staff felt more confident in their individual roles and came across as more motivated to ensure the good running of the practice. For example, at DD2 the GPs and practice manager acknowledged the dispensers' authority in the practical running and organisation of the dispensary and dispensers felt comfortable to suggest changes to improve efficiency,

If we realise that something's not working properly, we tend to flag it up amongst ourselves and then say to [PM] can we change this, can we do this differently, or whatever. And some of the girls have been doing it 20 plus years, so [PM]'s usually quite happy that if we feel something could run a bit better by changing it downstairs, she just lets us tend to get on (DD2, dispenser)

In contrast, at DD4 a couple of the dispensers felt their opinions were not respected by colleagues and, although they would fulfil what was required of them, showed a lack of commitment to the Practice in their unwillingness to share suggestions for improvement and absence of motivation to ensure patients' prescriptions were always filled.

While several sites demonstrated a patient-centred ethos, a couple of the sites additionally incorporated an ethos of continuing improvement where staff were motivated to regularly update their knowledge and learn how best to meet their local population's needs. At CP1 many training courses and assessment exercises, in addition to those required by the PCT, had to be completed for the supermarket's pharmacy head office. These could have been done to the minimum standard required but instead staff at this site approached these audits and courses with integrity and viewed them as an opportunity to learn,

Researcher: Do you find the audit and the due diligence process useful?

PM: Yes, I do. I do. You think, 'oh no, it's due diligence again', but they're standards, and these are minimum standards and we all should be working above the minimum standard. And sometimes, yes, a poster has got damaged and somebody's taken it down and you've just missed it. And so it's important that we do check. And what I try and do is I will oversee it always ... but I'll sometimes try and get [one of the other pharmacists and one of the technicians] to do it, so different people are looking at it, so that it's not just the same eyes seeing the same thing, but we actually look as opposed to it just being a tick box exercise. (CP1, PM)

At CP1 the staff would also try to learn from other pharmacies; whenever locums were employed the technicians would talk with them about the other pharmacies they had worked in, how things were done differently and what the locum felt might improve CP1. The technicians would then discuss this with the PM and new ideas would be tried. The PM acknowledged that *you can become stale if you're just doing the same job day in day out and not working anywhere else* and her attitude of striving for continual improvement had successfully been passed on to all the staff.

The senior GP partner at DD1 was trying to promote an ethos of continuing improvement and looked particularly to patient feedback to identify areas where service was below par. This Practice had a patient group who they would ask to complete surveys and also had organised a wider survey of the local villagers to gain the opinions of both those did and did not use the Practice. Patient feedback would be shared with the staff at DD1, which allowed them all to reflect on how practice could be improved and also, in the case of positive feedback, promoted a sense of pride in their work. In contrast, the patient questionnaires required by the PCTs at community pharmacies were viewed by many CP staff as pointless. This seemed to be due more to poor questionnaire design and implementation than a belief that patients' views did not matter, however, no attempts were made to gain patients' opinions by other means.

In summary, Phase 2 highlighted a number of aspects of practice that influenced pharmaceutical service provision. The case study sites varied considerably in their organisation and procedures, and it was evident that a certain amount of flexibility and autonomy is required to accommodate variations in size of site, patient population and staff numbers. However, the themes discussed above illustrate broad aspects of practice that seemed to influence quality of service provision across sites and it is these that were used to inform Phase 3 of the study. The steering group used these themes to develop the quality dimensions (see section 3.6.2) that were used in Phase 3. These dimensions were developed with the intention of focusing on areas where quality could have been improved at some or all of the sites visited. Descriptions of each dimension were designed to show what good practice would look like yet not be so prescriptive as to be inapplicable to certain sites. The first round of the Delphi survey of Phase 3 sought to establish whether stakeholders agreed that the dimensions represented important aspects of providing pharmaceutical services, how the dimensions could be improved and how good engagement with the dimensions could be demonstrated.

4.4 Phase 3

4.4.1 Participants

Over 35 people were invited to take part in the Delphi survey, an exact number cannot be given because some people were contacted and circulated the invitation to other members of staff at their practice/pharmacy or board members of their organisation. Table 3 details how many people from each stakeholder group were *directly* contacted, either via email or in person, by the researcher.

Table 3. Numbers of stakeholders directly contacted to take part in the Delphi survey.

Group	Number contacted
Dispensing doctors	6
Dispensing doctors' PM	4
Community pharmacists	8
Community pharmacists DA	1
Lay	10
DDA board members	4
Pharmacy chain executives	2

N.B. Several of the people detailed in this table also circulated the invitation to their colleagues. In addition, invitations were sent to the NPA and RPS.

Thirty people responded to the invitation, asking to participate in the Delphi (6 by post and 25 online). In the first round 23 participants completed the survey (4 post, 19 online) and 2 partially completed it (online). A breakdown of first round surveys sent and responses is given in table 4.

Table 4. First round surveys sent and responses received according to participant groups

Group	Surveys sent	Complete responses	Partial responses	No response
Dispensing doctors	4	3	-	1
Dispensing doctors DA	1	-	-	1
Community pharmacists	9	8	1	-
Community pharmacists DA	2	2	-	-
Lay	7	7	-	-
DDA board members	4	-	1	3
NPA board members	1	1	-	-
Pharmacy chain executives	2	2	-	-

The second round survey was sent to the 23 respondents who completed the first survey and only one participant failed to complete it. Table 5 gives a breakdown of the second round survey respondents.

Table 5. Second round surveys sent and received according to participant groups

Group	Surveys sent	Complete responses	No response
Dispensing doctors	3	2	1
Community pharmacists	8	8	-
Community pharmacists DA	2	2	-
Lay	7	7	-
NPA board members	1	1	-
Pharmacy chain executives	2	2	-

4.4.2 Results from Round 1 of the Delphi Survey

Most respondents rated all the dimensions highly and many respondents provided useful comments. Key issues in the comments section were the importance of getting the balance right in SOPs (neither too brief nor overly prescriptive) and the need for remuneration for services and sufficient staffing levels. Some respondents expressed scepticism over the usefulness of SOPs, which seemed to stem from a belief that SOPs cannot cover every possible eventuality. There were also some suggestions for the use of more innovative means of training, for example using simulated patients, and video recording staff interacting with patients then analysing their conduct. An additional dimension was suggested by one respondent and was included in Round 2 – this dimension pertained to the information given to patients about their medicines by staff.

A couple of participants commented that there seemed to be some overlap between some of the dimensions and that they could be combined. However we decided against condensing these dimensions as, although the dimensions in question related to the same areas of practice, they detailed slightly different behaviours or aspects of those areas, all of which were felt to be important. The dimensions were however re-ordered in the second round survey, grouping together dimensions that related to the same area of practice. It was thought that this would make the subtle differences in the dimensions easier to see. Grouping the dimensions also facilitated asking the respondents to rank the dimensions in order of importance for quality of service provision, in the ideal, since to place all the dimensions in rank order would have been difficult but to place the dimensions in order within each sub-group was more reasonable.

Participants were also asked to suggest ways for providing evidence or demonstrating that there was good engagement with dimensions. Based on the findings from Phases 1 and 2 of the project, the research team made some suggestions in the Delphi as to possible methods of providing such evidence, including: conducting (unscheduled) spot checks to ensure that staff are familiar with SOPs and that they are adhered to in everyday practice; keeping minutes of team meetings, which show that staff have reflected on, for example, the causes of errors or communication breakdowns; using 'mystery shoppers', who are trained to give constructive and prompt feedback following their visit to the site; and use of the Manchester Patient Safety Framework (MaPSaF)⁴ (see Appendix 4a for further suggestions of methods provided by the research team).

⁴ The MaPSaF was originally developed as a tool to help Primary Care teams identify their existing safety cultures and encourage them to reflect on ways in which they could develop safer practice. (National Primary Care Research and Development Centre (NPCRDC), 2006)

Further suggestions made by the Delphi participants included some more traditional methods, such as external audits (by GPhC or PCT), conducting specific audits (e.g. on prescription processing speed), and keeping records of staff training. More innovative methods were also suggested, such as self-assessment through video playback, use of patient feedback on websites (e.g. <https://www.iwantgreatcare.org/>), adding practice or pharmacy leaflets describing services to prescription bags, holding patient interviews, keeping track of the number of new patients switching to a practice or pharmacy, asking for feedback from other healthcare providers with whom the site has contact, and peer review of a service provider's performance.

4.4.3 Results from Round 2 of the Delphi Survey

Again, most respondents rated the dimensions highly, showing that they felt the dimensions of quality identified from phases 1 and 2 of the project were important aspects of pharmaceutical service provision. As shown in table 6 the median ratings for the dimensions varied little between rounds.

Table 6. Median ratings of dimensions in rounds 1 and 2 of Delphi survey.

NB. The question order changed between survey rounds, the dimension labels given here correspond to the order in which the dimensions appeared in the second round survey.

Dimension	Median rating Round 1*	Median rating Round 2
SD1	7.5	7.5
SD2	9	9
SD3	8.5	8
SD4	9	9
SD5	9	9
SD6	8	8
PI1	8	8
PI2	7.5	7
PI3	9	9
PI4	8.5	9
PI5	-	9
PI6	7.5	7
WP1	7	7
WP2	8	8
WP3	7	8
WP4	7.5	7
WP5	7	8
WP6	6.5	6
WP7	8	8
HP1	7	7
HP2	7	7
HP3	8	8
HP4	7	7

*Please note that some of the median ratings for Round 1 given in table 6 differ from those given to participants in Round 2 of the survey. This is due to several late responses to the first round survey arriving after the second round survey had been sent out. The late responses are incorporated in the results given in table 6 and it was explained to participants who responded late to Round 1 but requested to take part in Round 2 that the medians given did not include their ratings.

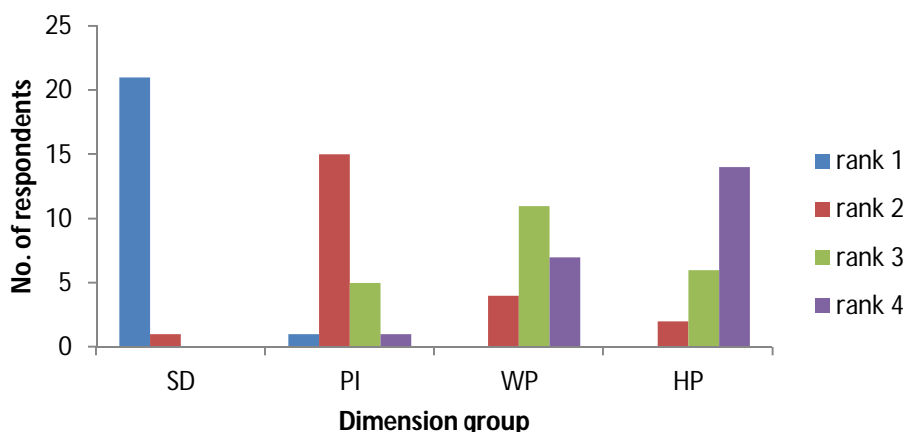
The ranges of ratings for each dimension did not reduce in the second round, indeed for some dimensions the diversity of ratings increased. Box plots for each dimension, comparing the variation in ratings for each round of the Delphi, are given in Appendix 6.

The groups of dimensions were also ranked by participants in the following order of importance for quality of pharmaceutical services (1 = most important):

1. Safety and dispensing (mean rank = 1.05)
2. Patient-provider interaction (mean rank = 2.27)
3. Workplace culture (mean rank = 3.14)
4. Health promotion (mean rank = 3.55)

Graph 1 shows how each group of dimensions was ranked by respondents relative to the others. In this graph the dimension groups are shown on the x-axis and different coloured bars have been used to represent the different ranks available. The height of each bar denotes the number of respondents that assigned a particular dimension group to each rank. To illustrate, the Safety and Dispensing dimension group (SD) was ranked as most important (rank 1, blue bar) by 21 respondents while one person ranked it second most important (rank 2, red bar). Patient-provider interaction (PI) was ranked second most important by 15 people, and so on.

Graph 1. Clustered bar graph showing distribution of rankings of dimension groups

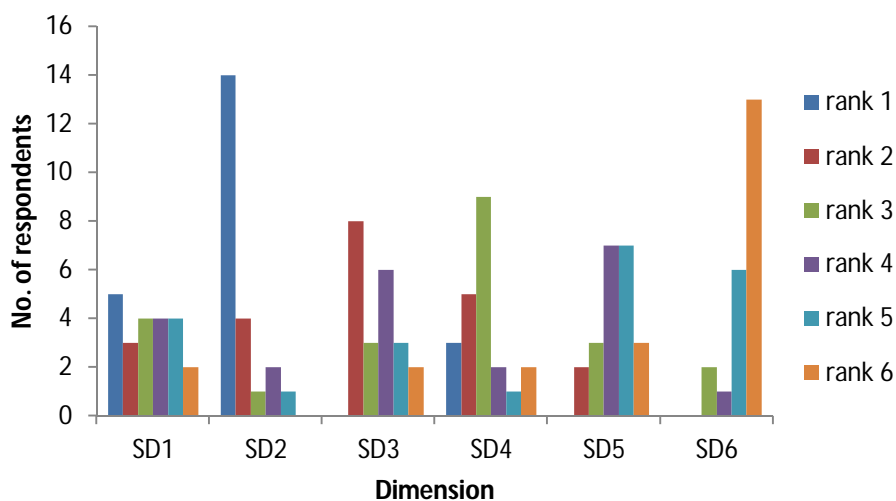


As shown in Graph 1 there were clear preferences among respondents for the order of importance of dimension groups, particularly seen in the widespread agreement for the SD group as the most important. The distributions of ranks for each dimension within the groups however gave more ambiguous pictures (see Graphs 2-5), and in these cases the mean rank assigned to each dimension was used to place them in order within their groups. The quality dimensions for each group are displayed below in their order of importance for quality of pharmaceutical services, as ranked by the respondents (1 = most important). Also given below are the labels that were assigned to the dimensions in the second round Delphi survey; these labels refer to the positions in which the dimensions appeared, e.g. the highest ranked Safety and Dispensing (SD) dimension (number 1 in the list below) was the second dimension presented in the survey, hence was labelled SD2. Mean rank scores are given in italics.

Safety and Dispensing (SD)

1. SD2. There is a clear culture of safety in how the dispensing process is managed. $M = 1.73$
2. SD4. The Practice has clear procedures for both second checking of prescriptions by another person (double checking) and second checking of one's own work (single checking). $M = 2.95$
3. SD1. Standard operating procedures (SOPs) align with actual staff practice; they are reviewed annually and all staff understand and sign up to the importance of these procedures. $M = 3.22$
4. SD3. The Practice recognises the importance of patient safety in the dispensing process and tries to ensure that dispensing staff are not interrupted in the middle of dispensing a prescription. $M = 3.45$
5. SD5. The Practice has clear SOPs for handling near-misses and dispensed errors. There is an easily accessible error/near-miss log, which is regularly reviewed and discussed among all dispensing staff. $M = 4.27$
6. SD6. Consideration is given to the optimal design of available space in the dispensary. Systems are in place to ensure efficient processing of prescriptions, taking in to account space restrictions and staff schedules. $M = 5.36$

Graph 2. Clustered bar graph showing the distribution of Safety and Dispensing dimensions assigned for each rank



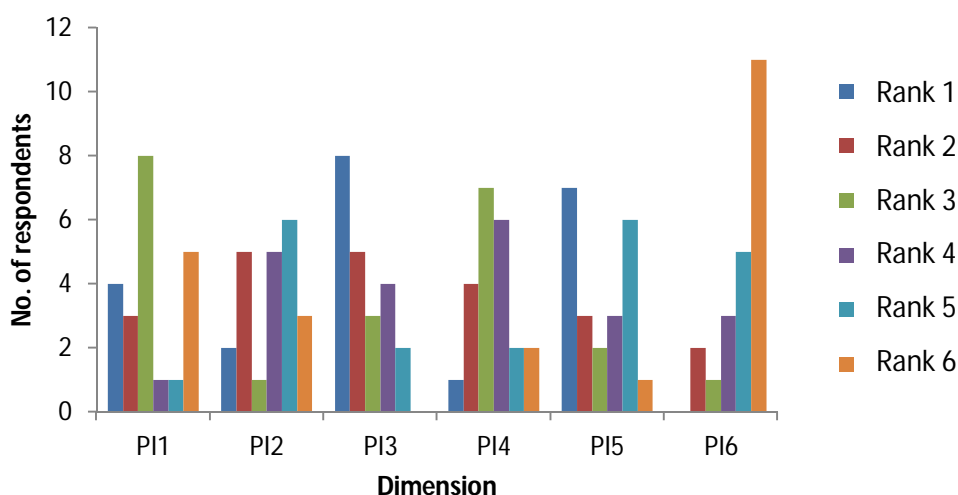
Note on reading the graphs

In Graphs 2-5 the various dimensions within each group are depicted on the x-axis and the different coloured bars represent the different ranks available. Each bar shows how many respondents assigned the particular dimension to a certain rank. For example, in Graph 2 the tall dark blue bar for SD2 shows that 14 respondents assigned SD2 to rank 1 (i.e. most important for quality).

Patient-Provider Interaction (PI)

1. PI3. The practice demonstrates an ethos of patient-centred care, committed to “going the extra mile” for the patient. This ethos is clearly demonstrated to all new members of staff. $M = 2.41$
2. PI5. Staff ensure that all patients (and/or carers) understand why they should take their medicines, how to take them and any precautionary information. $M = 3.05$
3. PI1. The Practice has effective and customer service-oriented methods of communicating with patients in one-to-one interactions. $M = 3.32$
4. PI4. Each staff member demonstrates excellent customer service. There is a team approach to defining and implementing good service. $M = 3.45$
5. PI2. Staff are always aware of and acknowledge waiting patients. $M = 3.77$
6. PI6. Practices conduct MURs / DRUMs in a way that maximises patient benefit, and only with those patients who are likely to benefit from them. $M = 5.00$

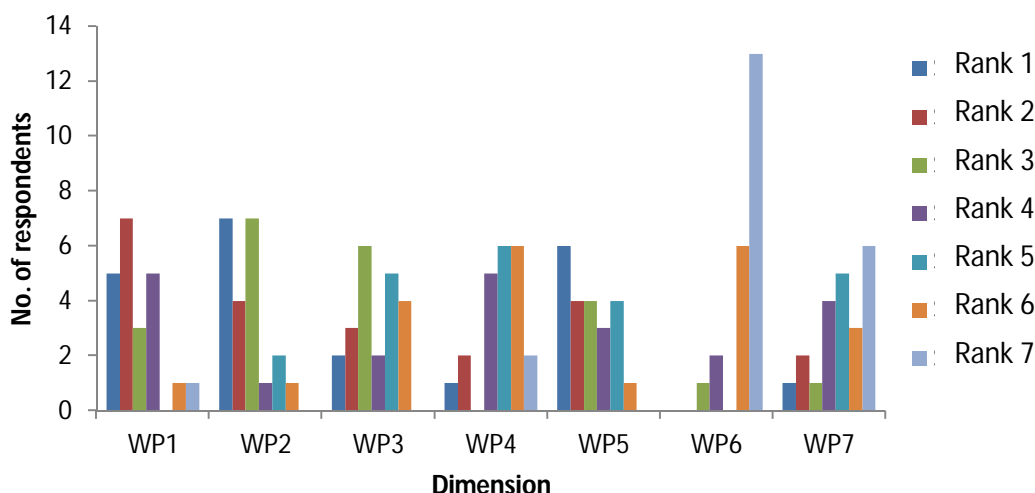
Graph 3. Clustered bar graph showing distribution of ranks assigned to each Patient-Provider Interaction dimension



Workplace Culture (WP)

1. WP2. The Practice demonstrates effective methods of internal staff communication. $M = 2.55$
2. WP1. There is a culture of encouraging staff to improve internal procedures. $M = 2.77$
3. WP5. The Practice facilitates training for all staff. All staff have access to, and know how to use, online information sources and training resources. $M = 2.91$
4. WP3. The Practice makes an effort to develop and maintain relationships with other local health care providers. $M = 3.77$
5. WP4. Staff take a mature approach to Continuing Professional Development (CPD) and recognise it as a valuable learning opportunity. $M = 4.77$
6. WP7. The pharmacy ensures that locum pharmacists are able to uphold the good working relationships between the pharmacy and local healthcare providers. $M = 4.95$
7. WP6. Practices link up to run discussion groups/seminars on relevant issues – for dispensers/technicians as well as pharmacists and GPs. $M = 6.27$

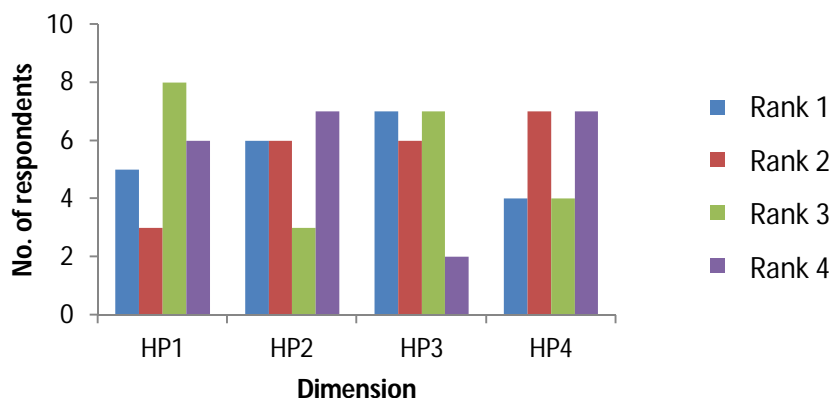
Graph 4. Clustered bar graph showing distribution of ranks assigned to each Workplace Culture dimension



Health Promotion

1. HP3. Staff in Practice are well equipped to provide essential public health advice. $M = 2.18$
2. HP2. Patient waiting areas are comfortable and good use is made of these areas for health promotion/patient education. $M = 2.50$
3. HP4. Practices proactively engage in health promotion. $M = 2.64$
4. HP1. The services offered by the Practice are clearly displayed. $M = 2.68$

Graph 5. Clustered bar graph showing distribution of ranks assigned to each Health Promotion dimension



Qualitative comments

The qualitative comments of respondents mostly further emphasised that patient safety is of 'paramount' importance in providing good pharmaceutical services. The comments of those who gave lower ratings of agreement to the dimensions, however, raised some interesting issues. A few of the professional respondents seemed to view good customer service or business practice and good pharmaceutical service as unrelated and, at times, at odds with each other. In contrast, many respondents saw good customer service as integral to providing good pharmaceutical services since much of what makes good customer service helps ensure patients understand and adhere to their medication regimes. However, several respondents

questioned the need for SOPs to include customer service issues, believing that good customer service is just '*common sense*' and '*good manners*'.

Another recurring issue was that, while the respondents agreed the dimensions represented important areas of service provision and should be seen as ideal standards '*to be aimed for*', some practices would find several of the dimensions difficult to implement due to lack of space, staff, time or resources. Staff training and interaction with external health care providers were seen as particularly problematic areas, especially for independent practices that have to fund their own training and cannot afford to employ more staff or locums to cover extra duties or training. Competitive rivalry between local practices and the historic hostility between pharmacy and dispensing doctors were also cited as barriers to engaging with external healthcare providers.

The comments elucidated the fact that the Health Promotion dimensions received lower levels of agreement and this group was ranked lowest overall; several participants viewed health promotion as '*secondary*' or '*peripheral*' to pharmaceutical services. One of the dispensing GPs saw health promotion as solely the responsibility of GPs and practice nurses. On the other hand, there were also several comments that health promotion is an '*increasingly important role*' for all staff in primary care.

5. Discussion

5.1 Key findings

The aim of this study was to develop indicators appropriate for assessing the quality of pharmaceutical services provided by community pharmacies (CPs) and dispensing doctor practices (DDs). The original focus on devising specific QOF-like indicators changed slightly over the course of the study in order to incorporate aspects of quality that might be less amenable to quantifying. The term 'quality indicator' was also changed to 'dimension of quality', which the steering group felt better represented their intention to produce a tool that would help practitioners improve the quality of the pharmaceutical services they provide (see section 3.6.2). To meet the aim of the study five objectives were addressed:

1. To describe the services, and methods of recording these services, currently provided by CPs and DDs.
2. To identify areas of commonality of services provided by CPs and DDs.
3. To explore the nature of the service provided by CPs and DDs to include an investigation of why variations in the type and nature of services occur.
4. To explore the unique benefits provided by each provider and the potential barriers to the implementation of a common quality indicator (dimension) approach.
5. To identify common and unique quality indicators (dimensions) appropriate for future roll-out and how they could be implemented in the two types of practice.

Over the three phases of the study, CPs and DDs seemed to differ as much within groups as between groups with regards to their pharmaceutical service provision. Although structural factors, such as size of site, patient population and number of staff, obviously affected the number of and way in which services could be provided, organisational factors seemed more influential in defining the quality of service provision. For example, good communication procedures that are well understood by all staff could overcome the difficulties associated with staff members having to work alternate shifts with no overlap periods. A strong practice ethos of striving for improvement could help ensure that recurring near-misses associated with an over-crowded checking area are identified and that a system be put in place to better organise the area (such as use of baskets for separate prescriptions).

Patient safety was widely acknowledged by participants as being the most important part of pharmaceutical service provision. However, despite some acknowledgement that good communication practices and a motivated, informed team can help ensure patient safety, there was little emphasis on communication (whether internal or with other healthcare providers) and further learning. Interaction between patients and providers was mixed, ranging from dispensers/pharmacists viewing it as their duty to ensure the patient felt cared for and informed, to medication being handed out in silence. Mixed views on the role of CPs and DDs in public health and health promotion were also found and there was little health promotion activity observed at the case study sites.

Potential barriers to better pharmaceutical service provision were identified. Lack of time or insufficient staffing levels were often cited as reasons for not engaging with further training and CPD exercises. However, the lack of acknowledgement of the importance of certain organisational factors, such as communication practices, and of auditing procedures also meant that there was little motivation to make time for, say, team meetings to revise SOPs or discuss error logs.

Twenty-three quality dimensions were designed based on the findings from the first two phases of this study. In Phase 3 key stakeholders rated the dimensions for their importance in pharmaceutical service quality. A complete list of the dimensions is given below. They are shown in rank order within the dimension groups and the groups are in the order of importance decided in the Delphi survey. It should be noted, however, that participants were not asked to rank all the dimensions across all groups (i.e. all 23 dimensions in rank order) and so it cannot be stated that, for example, the top rated dimension of the PI group was seen as less important than the bottom rated dimension of the SD group. A full list of dimensions, including proposed ways of assessing the extent to which there is good engagement with them, is given in Appendix 7.

5.1.1 Final list of pharmaceutical service quality dimensions

Safety and dispensing

1. There is a clear culture of safety in how the dispensing process is managed.
2. The Practice has clear procedures for both second checking of prescriptions by another person (double checking) and second checking of one's own work (single checking).
3. Standard operating procedures (SOPs) align with actual staff practice; they are reviewed annually and all staff understand and sign up to the importance of these procedures.
4. The Practice recognises the importance of patient safety in the dispensing process and tries to ensure that dispensing staff are not interrupted in the middle of dispensing a prescription.
5. The Practice has clear SOPs for handling near-misses and dispensed errors. There is an easily accessible error/near-miss log, which is regularly reviewed and discussed among all dispensing staff.
6. Consideration is given to the optimal design of available space in the dispensary. Systems are in place to ensure efficient processing of prescriptions, taking in to account space restrictions and staff schedules.

Patient-provider interaction

1. The practice demonstrates an ethos of patient-centred care, committed to "going the extra mile" for the patient. This ethos is clearly demonstrated to all new members of staff.
2. Staff ensure that all patients (and/or carers) understand why they should take their medicines, how to take them and any precautionary information.
3. The Practice has effective and customer service-oriented methods of communicating with patients in one-to-one interactions.
4. Each staff member demonstrates excellent customer service. There is a team approach to defining and implementing good service.

5. Staff are always aware of and acknowledge waiting patients.
6. Practices conduct MURs / DRUMs in a way that maximises patient benefit, and only with those patients who are likely to benefit from them.

Workplace culture

1. The Practice demonstrates effective methods of internal staff communication.
2. There is a culture of encouraging staff to improve internal procedures.
3. The Practice facilitates training for all staff. All staff have access to, and know how to use, online information sources and training resources.
4. The Practice makes an effort to develop and maintain relationships with other local health care providers.
5. Staff take a mature approach to Continuing Professional Development (CPD) and recognise it as a valuable learning opportunity.
6. The pharmacy ensures that locum pharmacists are able to uphold the good working relationships between the pharmacy and local healthcare providers.
7. Practices link up to run discussion groups/seminars on relevant issues – for dispensers/technicians as well as pharmacists and GPs.

Health promotion

1. Staff in Practice are well equipped to provide essential public health advice.
2. Patient waiting areas are comfortable and good use is made of these areas for health promotion/patient education.
3. Practices proactively engage in health promotion.
4. The services offered by the Practice are clearly displayed.

This study has not focused on the aspects of quality that are stipulated in the Pharmaceutical Services regulations (2005) and contractual frameworks, which should be standard in all practices. Instead the aim has been to address the areas of service provision that focus on quality improvement (beyond a minimal baseline), are not tightly regulated and are thus open to interpretation by individual providers. While freedom to adapt service provision in order to best meet the needs of the local population is important, guidance is needed to help providers know what to aim for and how to reach these aims. The quality dimensions identified in this study should help to provide such guidance. It is important to state, however, that the study team do not intend the dimensions to be used as performance assessment measures for apportioning blame or punitive procedures. Instead, the dimensions are intended to be used to develop a resource for pharmaceutical service providers that will help them identify areas where quality could be improved. By linking the resource to supportive (potentially web based) educational materials that promote quality improvement it would also give guidance as to how improvements could be made. In this sense, the resource could be used as part of team-based reflection to promote the quality of services.

Like Goodwin et al (2011), we have explicitly taken the measurement of quality to include 'hard to measure dimensions' and the development of new approaches to measuring quality such as qualitative measures of performance and critical appraisal by peers. The dimensions and potential assessment methods identified in this study are a significant first step in developing

such a supportive quality-based resource: the Delphi survey indicated that the dimensions are viewed by both patients and practitioners as representing important areas of service provision and further showed their ranked importance, indicating the areas that should be focused on in quality improvement efforts. It should be acknowledged though that, as seen in the case studies, there will be different ways of attaining good quality in each dimension and different methods will suit different practices depending on such factors as staffing levels, physical space and patient population demographics.

Future research could ascertain what form of quality improvement tool or resource providers would find most useful. Such a tool could then be developed, using the dimensions found in the present study, piloted and refined. The Manchester Patient Safety Framework (NPCRDC, 2006) is one potential model for a pharmaceutical service quality improvement tool. The MaPSaF provides users with descriptions of practices operating at various levels of safety in different domains of safety (e.g. education on safety, investigating safety incidents). The users can thus identify at what level they are currently operating in each domain and see what they need to be doing to operate at a higher safety level (NPCRDC, 2006). The dimensions of pharmaceutical service quality formulated in the present study could form the basis for a quality improvement tool in a similar format to the MaPSaF; further work would be needed to identify exactly what increasing levels of quality look like in practice for each dimension. Similar to the intentions of the current study team for developing a practice-based quality improvement tool, the authors of the MaPSaF emphasise that it is designed to be used as a team-based reflective exercise whereby team discussion is stimulated and differences in perception among team members are identified (NPCRDC, 2006). Everyone within the team can thus be encouraged to consider how practices could be improved and ideas can be pooled for the benefit of the whole team.

5.2 Reflection on results

There was more similarity found between CPs and DDs than expected, indeed sites seemed to differ more on an individual than a group basis. This is reflected in the fact that there was only one dimension that was applicable only to one of the service providers (CP), all the other dimensions applied to both groups. Although the presence of a pharmacist, the expert knowledge they bring, and their relative availability (compared to GPs) is obviously an advantage to CPs, the effect this has on quality of services for the patient is moderated by other factors. For example, although pharmacists have a more in-depth knowledge of medicines than dispensing assistants and technicians and are thus more able to identify prescribing errors, this might be balanced by GPs in dispensing practices possibly prescribing more cautiously, although no research has investigated this. Also, with the increased pressure on pharmacists to provide private consultation services, many have reported feeling their key role of dispensing was being compromised as they had less time to dedicate to checking the same number of scripts, if not more (Rapport et al, 2010).

There were anecdotal reports from some of the pharmacists at the CP sites that dispensing GPs and pharmacists differed in their attitudes towards errors. This would support research by Sarvadikar, Prescott & Williams (2010) who surveyed different health professionals in a hospital setting and found that doctors were unlikely to report 'less-serious' medication errors, whereas pharmacists were likely to report all medication errors regardless of severity. This is perhaps reflective of different training; much emphasis is placed on the importance of error reporting in

pharmacists' education. However, this potential difference in attitude did not seem to be borne out in how errors were handled at the various sites; practices differed as much within groups as between with regards to how rigorous an approach was taken in recording and reviewing errors. There is much research evidence on how best to report errors in order to ensure lessons are learnt and safety is improved (e.g. Armitage, Newell & Wright, 2010), however it seems that the research findings have not been passed on to all practitioners or, if they have been passed on, are not being acted upon.

Checking of prescriptions is another area where there was much individual difference both in attitude and practice. Double checking of medications before handing out to patients was seen by many participants as the standard to aim for, indeed at some case study sites double checking was mandatory, although in other sites this was not practicable. Double checking however comes with risks not present in single checking, such as deference to authority preventing one dispenser from pointing out or picking up on a more senior colleague's mistake, or a reduced sense of individual responsibility meaning that neither dispenser thoroughly checks the prescription, instead relying on the other person to do so (Armitage, 2009). What is important is that all practitioners and dispensing staff are aware of the risks involved in both types of checking and adhere to checking protocols (based on theory and research evidence) irrespective of the checking method.

The main difference between CPs and DDs was in how 'enhanced services', such as smoking cessation and sexual health services, were delivered. In DDs nurses tended to provide these services on a strictly appointment-only basis, whereas in CPs it was generally the pharmacists who would deliver the services, usually on an appointment basis but sometimes they would see drop-ins depending on how busy the pharmacy was that day. Dispensing assistants at the CPs could provide the smoking cessation service but at only one of the DD sites had a non-healthcare professional been trained to deliver this service (a medical secretary).

It was not within the scope of this study to compare the success of these services as delivered by nurses at a DD practice with those delivered by pharmacists and dispensing assistants, although this would be an interesting area for future research. However, one area that could be improved is the promotion of enhanced services; this differed according to individual sites, rather than on a group basis. The weak promotion of extra services and provision of health advice at some sites was indicative of the wider ambivalence towards the roles of CPs and DDs in public health. This suggests that the renewed focus that the Department of Health (DoH) placed on public health in CP and general practice (Healthy Lives, Healthy People – our strategy for public health in England, DoH, 2010) has not been successful at supporting practices to recognise their role in health promotion. Primary care professional bodies, such as the Pharmaceutical Services Negotiating Committee (PSNC), have produced resources to help practices increase their involvement in public health (e.g. Community Pharmacy: at the heart of public health, PSNC, 2010) but it would seem that more action needs to be taken if the DoH's aims are to be met.

A Healthy Living Pharmacy (HLP) programme is now being rolled out in a number of areas across the UK following the success of the pioneer programme in NHS Portsmouth (NPA, 2011). The programme aims to improve the involvement of CPs in public health. HLPs must: deliver several Enhanced services as well as the Essential and Advanced services in their contract; have

a Healthy Living Champion (HLC, formerly Health Trainer Champions) on their staff; provide targeted MURs; proactively engage in health promotion campaigns; and engage with their local GP practices and demonstrate multidisciplinary working. Although the good results of the HLPs are widely praised there is some question over the need for such a formal programme when, to some, community pharmacies should already be providing public health services and promoting good health (Khan, 2011). However, pharmacists and dispensing assistants receive little to no training on how to engage in public health campaigns or opportunistically deliver health advice. Importantly, pharmacists or managers at HLPs are given support and training in leadership and team development. The HLCs are also given training in how to mentor their pharmacy team to be able to provide effective health advice and signpost patients to services. The developers of the HLP programme see this training as 'critical to success' (NHS Portsmouth, 2010) as it ensures that not only the pharmacist and HLC in a pharmacy have the skills required to promote public health and proactively deliver health interventions but also that these individuals can better teach and motivate the rest of their pharmacy team to engage with the programme. On the other hand there is also a faction, particularly among GPs, that believes that public health and addressing the social determinants of health through health promotion campaigns is not within the remit of primary care (Gillam and Florin, 2002). It would seem that, in order to meet the DoH's vision, the precise role of CP and general practice in public health needs to be clarified and, importantly, adequate training must be provided to support practitioners and staff in their roles.

Communication between staff members was an important factor in the quality of service provision, and was recognised as such by practitioners in the Delphi survey. Effective communication can improve the processing speed of prescriptions, help a site to avoid running out of certain stock and even prevent errors. However, none of the case study sites reflected on their internal communication. There is extensive evidence from the fields of organisational psychology and business management showing that organisations, both in the private and public sectors, who have instigated and reflected on their communication systems perform better (e.g. Hargie and Tourish, 2009). Particularly communication between managers and staff can have profound effects on the performance of an organisation. When staff perceive that they are not well informed and not listened to, it is difficult to secure their commitment to the organisation. Job satisfaction levels will be low, which in turn are linked to low productivity and less efficient organisational functioning (Hargie and Tourish, 2009). Lack of staff commitment also impacts on external relations, especially, in this case, how patients and other stakeholders view the organisation. Staff who are less committed to an organisation are unlikely to portray the organisation's values (or at least the values that management would like to be portrayed) in their interactions with patients (Hargie and Tourish, 2009).

Besides the obvious competitive advantage of displaying a good image to patients, good internal communication, and hence staff commitment, can help a practice adopt the patient-centred approach to care that is widely advocated (Mead and Bower, 2000). Staff in patient-facing roles, such as dispensers, are in an ideal position to elicit patients' concerns and identify where information needs to be given, important characteristics of patient-centred care (Freeman et al, 2004). However, if employees are not committed to the patient-centred values of a practice it is unlikely they will engage in the caring dialogue with patients necessary to elicit concerns. Even if they do, poor communication with other staff at the practice will stymie the

transfer of information gleaned from the patient to other staff members involved in their care. Kanter (1988) has further proposed that open communication between departments, managers and staff in organisations promotes a feeling of involvement among staff, which in turn helps organisational aims to be met and also stimulates higher levels of innovation.

Internal communication can therefore be seen as vital in building and maintaining a strong organisation ethos, which in turn impacts on the quality of service provision. The private and third sectors offer several examples of successful organisations where their ethos has helped their performance. The John Lewis Waitrose Partnership in the UK is well known for its 'Partnership Spirit'; they acknowledge that customer satisfaction is vital for their success but also that the 'happiness of Partners [employees]' has a profound impact on the service provided to customers. The independent business advice and support network for small businesses, Smarta, identified several factors of John Lewis' approach that led to the Partnership's popularity and advocates that these factors be adopted by small businesses too (Smarta Enterprises Ltd, n.d.⁵). The Partnership tries to ensure that all staff care about customer service; all staff are partners and so share in any profits but further than this the organisation tries to foster a sense of ownership and pride among all partners. Although none of the case study sites operated as a partnership like John Lewis, with all staff as partners, it is notable that at the sites where staff felt valued and communication between management and staff was good, the staff evinced a sense of pride in their work and would strive to always fulfil a patient's needs.

Smarta also highlight that 'partners' at John Lewis are given a certain degree of autonomy and are encouraged to use their initiative (Smarta Enterprises Ltd, n.d.). It should be pointed out though that the Partnership first ensures the vision and values of the company have been understood and invests greatly in on-going training for 'partners', which empowers them to take decisions by themselves. In practice this means that customers receive a faster service as staff are not constantly referring to managers, but also the autonomy and responsibility given to staff helps to promote a sense of pride in their work. Pharmacists, in all phases of the current study, commented on their desire for flexibility and autonomy, which in large chain pharmacies was sometimes lacking as company directives and targets are applied to all branches and there is little leeway for adaptation according to the local population or branch size. This supports findings of Rapport et al (2010), amongst others, that community pharmacists can feel a 'loss of pride in professionalism' from the pressures placed on them by company requirements. Targets for MURs and DRUMs seemed to cause particular resentment and, in some cases, led to the quality of the reviews being diminished when staff put the need to reach targets above the purpose of the review, adopting a tick-box mentality. It would seem that allowing pharmacists and dispensers more autonomy would help embed a sense of responsibility and pride that will be reflected in the quality of their practice.

Before autonomy can be granted, however, it is necessary both for staff to feel ready to take on the responsibility and for managers to trust their staff to uphold the organisation's ethos; for this good training is essential. This study highlighted that training and learning, particularly for dispensing assistants, is an area requiring profession-wide attention. Several dispensing assistants felt unsupported when completing their NVQs as it was difficult, given the busy

⁵ N.d. = no date

workloads at CPs and DD practices, to set aside time for dispensers and GPs/pharmacists to discuss any queries they had on the course material. Lack of time was also a major barrier to providing further training for dispensing assistants after the minimum required qualifications had been gained. The CP and DD contracts do not seem to take account of the benefits that thorough and on-going training for all staff involved in patient care can bring. As one Delphi survey participant commented

Training ... provides better qualified staff, more self-confidence and job satisfaction and better patient care.

Although larger chain pharmacies and supermarket pharmacies might be in a position to provide such training, more could be done to help smaller, independent practices. Attending external courses is often problematic due to the extra travel costs and the need to employ cover but better use could be made of the internet as a means of delivering training. Numerous sources of information and support for pharmacies and dispensaries do exist online already (e.g. dispex.net, npa.co.uk etc). Although many practices subscribe to one or a couple of these websites, and so are able to use the training resources, at the case study sites not all members of staff were made aware of the resources, particularly dispensing assistants who, arguably, would benefit most from them. Time would still need to be allocated for using on-line resources and it is here that the contracts could be changed to support practices. Participants, in all phases of the study, did not seem to be aware of the full variety of training resources and support services available or where to access them.

Although the internet can provide a wealth of data for pharmaceutical service providers it is necessary for the provider to know in advance that, for example, healthcare-specific customer service training is available in order to search for providers. In addition, internet searching takes time and it is often this that is most limited for the service providers. A single, central website with reliable information and links to all the various learning resources and training provider websites would seem to be a much needed facility. It is important to note that we are not advocating all training and learning be delivered over the internet – not all subjects are suited to this method of teaching and many people still have difficulty accessing and/or effectively using the internet. Rather it is acknowledged that a central website could be an ideal base from which to signpost practitioners to various resources both on- and off-line.

Another lesson that can be taken from the John Lewis Partnership, which is highly applicable to CP and DD, is that frontline 'partners' (those with customer-facing roles) are encouraged to feedback their insights into customers (Smarta Enterprises Ltd, n.d.). This information is then acted upon. This practice demonstrates the Partnership's ethos of valuing the customers and also shows how essential good internal communication practices are within the company. The methods of gathering and responding to patient feedback at the case study sites were generally poor; too short data collection periods, use of questionnaires that did not elicit useful responses and feedback not being shared with all staff were the main problems encountered. Patient questionnaires are compulsory for CPs and there is a nationwide GP patient survey that collects data for individual practices. Guidance on conducting the questionnaires and analysing the feedback is available (e.g. from the Pharmaceutical Services Negotiating Committee) although it would seem that this guidance is not well used or that the questionnaires need to be revised. However, other methods of gaining patient feedback could be employed and better

use could be made of the frontline staff, as with John Lewis. Dispensing assistants and medicines counter assistants are in an ideal position to gain the views of patients and this should be acknowledged by other members of staff.

Overall, it should be acknowledged that ethos, communication, staff engagement and customer service all play an important role in the quality of pharmaceutical services and should not be dismissed as desirable but optional extras. Patient safety is the top priority in delivering pharmaceutical services, but ensuring safety should not be seen as a completely separate task. Motivated staff who are well-trained and up-to-date with relevant health information, clear communication systems and good staff-patient relationships that encourage patients to talk about their concerns will all contribute to a safer practice. It should therefore be seen as necessary to develop a practice ethos that encourages open communication, strives for continuous improvement and values staff and patients.

5.3 Limitations

This study involved CPs and DD practices in 6 PCTs in the South West of England and as such might not be representative of practices in the rest of Britain. Further to this, the case study technique chosen for Phase 2 of the study meant that the majority of data was collected from only 7 sites, 2 of which were not full case studies. The case study sites were chosen for their diversity and a good range was attained, allowing comparisons of sites according to size, staff numbers and rurality. The small sample size, however, prevented us from drawing firm conclusions based on these comparisons. The location of sites obviously affected the demographics of their patient populations. The patient population would dictate the amount and type of stock kept and the provision of extra services, however, rurality per se did not seem to influence the quality of service provision. Nonetheless, it is likely that there was response bias in all three phases.

None of the major pharmacy chains in the UK was represented in the case studies and the proportion of questionnaire responses from the chain pharmacies was lower than the actual proportion of large chain pharmacies in the area. In an attempt to better reflect the state of community pharmacy in the UK, executive board members of two large pharmacy chains were recruited to take part in the Delphi survey. Also, several of the pharmacists at the CP case study sites had previously worked for large chain pharmacies and recounted their experiences to the researcher.

5.4 Implications

If further training, CPD and on-going learning are to be encouraged among pharmaceutical service providers, commissioners and contracts will need to take account of the time required for this. There is a danger in attaching incentives to training as courses may be taken that are of little relevance or benefit to the individual or practice. However, to avoid learning being rushed and seen as a tick-box exercise, subsidising of training may be required to cover the time spent away from the dispensary. Training resources also need to be made more accessible to all staff at pharmacies and dispensing doctors' practices. Investment could usefully be made in creating a single, central internet-based resource that directs pharmacists, dispensers, MCAs and dispensing GPs to appropriate and up-to-date information and official regulatory documents. Such a resource could also include interactive learning exercises to make on-going training

more accessible for dispensing assistants in small independent practices. An internet-based resource for use by all who provide pharmaceutical services, including dispensing assistants, would be a good way to reach many providers and connect them with each other, which would be particularly valuable for the independent practitioners and dispensing assistants who rarely get to share their experiences with their counterparts in other practices.

The targets for MURs and DRUMs set by managers in order to gain maximum reimbursement are often unrealistic, which places pressure on pharmacists and dispensers that ultimately compromises the integrity of the reviews. In a questionnaire survey of CPs Harding and Wilcock (2010) found that pressure to reach targets and lack of opportunity to discuss review consultations with colleagues were seen by CPs to undermine the quality of MURs. Although targeted MURs have gone some way to preventing unnecessary reviews being conducted, it is our contention that the re-imbursement systems for MURs and DRUMs need to be re-considered. Pink (2009) illustrates with human motivation research how monetary reimbursement is only successful for mechanical processes that do not require higher cognitive processing. For tasks requiring higher level cognition, autonomy, mastery and a sense of purpose are better motivators. If good consultation skills, such as active listening and picking up on signs that patients' might not be adhering to their medication regimes, are to be encouraged in conducting MURs and DRUMs, it would seem apt not to use a reimbursement scheme that rewards quantity not quality of MURs/DRUMs.

The role of community pharmacy and general practice in public health, particularly health promotion, needs to be clarified and more explicitly advocated and supported by public health bodies such as Public Health England. The Healthy Living Pharmacy programme has shown that service providers greatly benefit from specific training in how to proactively deliver health advice and engage in health promotion campaigns (NHS Portsmouth, 2010), possibly because this is not something taught to pharmacists, or indeed GPs (Gillam and Florin, 2002), in their undergraduate education yet it is often expected of them. In their patient-facing roles dispensing assistants and MCAs in DD practices and CPs are in an ideal position to champion health promotion campaigns and signpost patients to other services. However, they need to be taught how best to do this.

5.5 Conclusion

The quality dimensions identified in this study will, we hope, provide CPs and DD practices guidance on where they could improve the quality of the services they offer. The dimensions highlight certain areas of service provision that perhaps have received less attention in the past, such as communication and customer service. This study has also highlighted the need for clarification of the role of community pharmacy and general practice in public health and health promotion. Further work includes the development of these dimensions into a reflective resource for pharmaceutical service providers as part of a team based exercise to help them identify areas where quality could be improved. This could then be linked to (potentially web based) guidance, support and educational materials that help them make changes to their practice that promotes quality.

6. References

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7. Appendices

Appendix 1a. Dispensing doctor questionnaire



Researching Pharmaceutical Services in Community Pharmacies and Dispensing Doctor Practices

What is this survey about?

The use of quality indicators in healthcare has been highlighted as an effective way of monitoring and improving service provision. At present no measure exists in England to assess the pharmaceutical services provided by both dispensing doctor practices and community pharmacies, yet such a tool could be a valuable asset in helping doctors and pharmacists to deliver the best care they can.

Quality indicators need to be sensitive to the context in which they are applied and so in this first stage of our research we want to look at the kinds of pharmaceutical services provided in GP dispensing practices and in pharmacies. The aim of this survey is to identify the unique features of each setting and use this information to design quality indicators applicable to those settings. There are no right or wrong answers - it is simply your views and experiences that we are interested in.

The research team has no pre-conceived ideas as to the relative merits of dispensing practices and community pharmacists. Board members of the Dispensing Doctors' Association and the British Medical Association had significant input in the design of this questionnaire, for which we are very grateful. The Pharmaceutical Trust for Charitable Objects (PTECO), a charity, is funding this project.

Who should complete the questionnaire?

The questions should be answered by the GP to whom the envelope was addressed.

The questionnaire is being sent to dispensing doctor practices and community pharmacists in six PCT areas in the South West of England.



Will I be paid for this?

As a "thank you" for completing the questionnaire, we will send you £30 of love2shop vouchers. Love2shop vouchers are accepted at a wide variety of retailers, restaurants and leisure facilities in the UK - for further details visit <http://www.highstreetvouchers.com/gift-vouchers/love2shop>

How will the information be used and will my participation be confidential?

The results of this survey will be used to inform the next stages of this study, including observation studies of dispensing doctor practices and community pharmacies, and

interviews with the various staff and patients at these sites. The overall aim is to develop quality indicators that are appropriate to each setting and acceptable to practitioners.

The findings may be discussed in academic journals and presented at conferences. However, at no stage will individual staff or practices be identified by name and all potentially identifying information will be removed. Your responses will be kept confidential.

Completing the questionnaire

The questionnaire takes about 20 minutes to complete. ***Your participation is voluntary*** and it is entirely up to you whether you decide to take part. ***By returning the questionnaire you will be giving us your consent to use the information you provide in our study.*** If you have any queries about the questionnaire, please do not hesitate to contact either Professor Marjorie Weiss or Elisabeth Grey (contact details given below).

The return of this questionnaire uses the 'double envelope' method. The outer envelope has a number which identifies your practice and will trigger payment of the £30 love2shop vouchers. You will need to complete the separate payment sheet, providing details of where to send the payment, and place this directly in the outer envelope. The inner envelope and the questionnaire are not numbered. Place the completed questionnaire in the inner envelope and then place this envelope in the outer envelope also. When you return the questionnaire we will tick your number off the list of returns and discard the outer envelope. This method ensures your responses remain anonymous and confidential.



If you do not wish to take part, or you do not want to answer some of the questions, you do not have to give a reason. Please return the completed questionnaire in the enclosed FREEPOST envelope by **11th April 2012**.

Thank you for taking the time to read this information and for thinking about taking part in this research.

Professor Marjorie C Weiss
Professor of Pharmacy Practice & Medicine Use
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Elisabeth Grey
Research Officer
Tel: 01225 384271
Email: e.b.grey@bath.ac.uk



Extra space for answers is provided on the last page of this booklet.

A. About Your Practice

Firstly, it would help us to know a little about your practice to put your answers into context.

1. Approximately how many items do you dispense in a month?

1 - 499	<input type="checkbox"/>	5000 - 6499	<input type="checkbox"/>
500 - 999	<input type="checkbox"/>	6500 - 7999	<input type="checkbox"/>
1000 - 1999	<input type="checkbox"/>	8000 - 9499	<input type="checkbox"/>
2000 - 3499	<input type="checkbox"/>	9500 - 10 999	<input type="checkbox"/>
3500 - 4999	<input type="checkbox"/>	11 000 +	<input type="checkbox"/>

2. Generally, how would you describe your local population in terms of

2a. Dominant age groups? (tick all that apply)

Young children (<12)	<input type="checkbox"/>	40 - 65 year olds	<input type="checkbox"/>
Adolescent and young adult (<25)	<input type="checkbox"/>	65+ year olds	<input type="checkbox"/>
26 - 40 year olds	<input type="checkbox"/>	Evenly mixed	<input type="checkbox"/>

2b. Affluence?

Low Middle High

3. Approximately what proportion of your patients is eligible for your dispensary services?

<20% 20-49% 50-80% > 80%

4. Is your dispensary in a branch or a main surgery?

Branch Main

5. Is a pharmacy co-located with your practice (in addition to the dispensary)?

Yes No

6. How would you describe the location of your dispensary?

City Rural

Town Semi-rural

Suburban

7. What are the opening hours of your practice's dispensary?

Weekdays:

Weekends:

8. How many full-time equivalent (FTE) GPs does your practice have?

9. How many FTE dispensary staff does your practice have?

10. What is the approximate list size of your practice?

11. Does your practice take part in the Dispensary Services Quality Scheme (DSQS)?

Yes No

B. Medication Services

12. After the GP has prescribed a medication, what (if any) additional measures does your dispensary take to check:

a. there are no **drug interactions** between the prescribed medication and other medications the patient might be taking?

b. whether the patient is **allergic** to the medication?

c. whether there are any **prescribing errors**?

13. How do you record interventions between dispensers and prescribers?

Within patients' usual clinical records

Other (please specify)

14. How do you record (if at all) dispensing errors?

15. Do you have a method or system for recording near-misses (errors which don't leave the dispensary)? If so, please outline here:

16. Are additional counselling services, regarding how to use medication, routinely offered outside the GP's consulting room by dispensary staff?

Yes No

If 'yes' please give brief details of the services offered -

17. Approximately how many (if any) Dispensing Review of Use of Medicines (DRUMs) does your dispensary conduct each week?

18. Over and above those services described in the previous questions, what (if anything) do your dispensary staff do to ensure that patients on long term treatment are adhering to their medication?

19. What do you regard as the **added value** that your dispensing practice offers over the services provided by a non-dispensing GP practice?

C. Public Health Services

20. Does your dispensary provide any public health services in addition to those listed in the GMS contract and QOF? If so, please give a brief outline of the services.

D. Other Services

21. Does your dispensary supply medication to residents in nursing or residential care homes?

Yes

No

21a. If yes, to approximately how many patients?

22. Of all the medication you supply, what proportion (if any) is provided in individualised dosage systems?

<20%

20-49%

50-79%

≥ 80%

23. What appliances do you supply to patients?

Trusses

Hosiery

Other (please state)

23a. Do you provide advice on how to use these appliances?

Yes

No

24. Do you provide stoma appliance customisation?

Yes

No

25. What kinds of compliance aids (e.g. dosette boxes) does your practice supply?

26. How often (if at all) do you or your practice colleagues access your dispensary outside normal surgery hours?

E. And finally...

27. Do you have a separate room available for consultations between dispensary staff and patients to take place in private?

Yes

No

28. What, if any, additional training on dispensing medication (beyond GNVQ level 2) do you provide for your dispensary staff? Please give brief details of the training.

Is there anything else you would like to add?

Thank you for your time!



Researching Pharmaceutical Services in Community Pharmacies and Dispensing Doctor Practices

What is this survey about?

The use of quality indicators in healthcare has been highlighted as an effective way of monitoring and improving service provision. At present no measure exists in England to assess the pharmaceutical services provided by both dispensing doctor practices and community pharmacies, yet such a tool could be a valuable asset in helping doctors and pharmacists to deliver the best care they can.

Quality indicators need to be sensitive to the context in which they are applied and so in this first stage of our research we want to look at the kinds of pharmaceutical services provided in GP dispensing practices and in pharmacies. The aim of this survey is to identify the unique features of each setting and use this information to design quality indicators applicable to those settings. There are no right or wrong answers - it is simply your views and experiences that we are interested in.

The research team has no pre-conceived ideas as to the relative merits of dispensing practices and community pharmacists. The Pharmaceutical Trust for Charitable Objects (PTECO), a charity, is funding this project.

Who should complete the questionnaire?

The questions should be answered by the community pharmacist in charge of providing dispensing and other pharmaceutical services at this pharmacy.

The questionnaire is being sent to community pharmacists and dispensing doctor practices in six PCT areas in the South West of England.



Will I be paid for this?

As a "thank you" for completing the questionnaire, we will send you £30 of love2shop vouchers. Love2shop vouchers are accepted at a wide variety of retailers, restaurants and leisure facilities in the UK - for further details visit <http://www.highstreetvouchers.com/gift-vouchers/love2shop>

How will the information be used and will my participation be confidential?

The results of this survey will be used to inform the next stages of this study, including observation studies of dispensing doctor practices and community

pharmacies, and interviews with the various staff and patients at these sites. The overall aim is to develop quality indicators that are appropriate to each setting and acceptable to practitioners.

The findings may be discussed in academic journals and presented at conferences. However, at no stage will individual staff or practices be identified by name and all potentially identifying information will be removed. Your responses will be kept confidential.

Completing the questionnaire

The questionnaire takes about 20 minutes to complete. **Your participation is voluntary** and it is entirely up to you whether you decide to take part. **By returning the questionnaire you will be giving us your consent to use the information you provide in our study.** If you have any queries about the questionnaire, please do not hesitate to contact either Professor Marjorie Weiss or Elisabeth Grey (contact details given below).

The return of this questionnaire uses the 'double envelope' method. The outer envelope has a number which identifies your practice and will trigger payment of the £30 love2shop vouchers. You will need to complete the separate payment sheet, providing details of where to send the payment, and place this directly in the outer envelope. The inner envelope and the questionnaire are not numbered. Place the completed questionnaire in the inner envelope and then place this envelope in the outer envelope also. When you return the questionnaire we will tick your number off the list of returns and discard the outer envelope. This method ensures your responses remain anonymous and confidential.



If you do not wish to take part, or you do not want to answer some of the questions, you do not have to give a reason. Otherwise, please return the completed questionnaire in the enclosed FREEPOST envelope by **11th April 2012**.

Thank you for taking the time to read this information and for thinking about taking part in this research.

Professor Marjorie C Weiss
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Elisabeth Grey
Research Officer
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Extra space for answers is provided on the last page of this booklet.

A. About Your Pharmacy

Firstly, it would help us to know a little about your pharmacy to put your answers into context.

1. Approximately how many items do you dispense in **a month**?

< 1000	<input type="checkbox"/>	5500 - 6999	<input type="checkbox"/>
1000 - 2499	<input type="checkbox"/>	7000 - 8499	<input type="checkbox"/>
2500 - 3999	<input type="checkbox"/>	8500 - 9999	<input type="checkbox"/>
4000 - 5499	<input type="checkbox"/>	≥ 10 000	<input type="checkbox"/>

2. Generally, how would you describe your local population in terms of

2a. Dominant age groups? (tick all that apply)

Young children (<12)	<input type="checkbox"/>	40 < 65 year olds	<input type="checkbox"/>
Adolescent and young adult (≤25)	<input type="checkbox"/>	65+ year olds	<input type="checkbox"/>
26 < 40 year olds	<input type="checkbox"/>	Evenly mixed	<input type="checkbox"/>

2b. Affluence?

Low	<input type="checkbox"/>	Middle	<input type="checkbox"/>	High	<input type="checkbox"/>
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3. How would you describe your type of pharmacy?

Independent	<input type="checkbox"/>	Large chain	<input type="checkbox"/>
Small chain	<input type="checkbox"/>	Supermarket	<input type="checkbox"/>

4. How would you describe the location of your pharmacy?

City	<input type="checkbox"/>	Rural	<input type="checkbox"/>
Town	<input type="checkbox"/>	Semi-rural	<input type="checkbox"/>
Suburban	<input type="checkbox"/>		

5. Is your pharmacy co-located within a GP practice?

Yes

No

6. How many full-time equivalent (FTE) pharmacists, that are engaged in providing pharmaceutical services, does your pharmacy have?

7. How many FTE, non-pharmacist dispensing staff does your pharmacy have?

B. Medication Services

8. What kind of information do you routinely ask a patient before dispensing a new prescription (where the patient is unknown to you)?

9. Having received a prescription from a new patient what (if anything) does your pharmacy do to check:

9a. there are no **drug interactions** between the prescribed medication and other medications the patient might be taking?

9b. whether the patient is **allergic** to the medication?

9c. whether there are any **prescribing errors**?

10. Do you keep a log of clinical interventions between pharmacy staff and prescribers?

Yes

No

11. How do you record (if at all) dispensing errors?

12. Do you have a method or system for recording near-misses (errors which don't leave the pharmacy)? If so, please outline here:

13. Are there any medications or appliances for which you routinely provide additional advice/counselling, for example, how to use an inhaler? If so, please outline here:

14. What (if anything) do you do to ensure that patients on long term treatment are adhering to their medication?

15. Approximately how many (if any) Medication Use Reviews does your pharmacy conduct?

_____ per week **OR** _____ per year

16. What (if anything) do you do to regularly monitor patients with long-term conditions (e.g. diabetes, asthma)?

17. Do you conduct any retrospective audits of your prescriptions to ensure they are clinically appropriate? If so, please outline how this is carried out.

18. Approximately how many *initial consultations* (i.e. not follow-up reviews) per week does your pharmacy usually conduct as part of the New Medicine Service (NMS)?

19. What do you regard as the **added value** that your pharmacy offers over the pharmaceutical services provided by a dispensing GP practice?

C. Public Health Services

20. Does your pharmacy provide any public health services (e.g. needle exchange, cholesterol measurement) **in addition to** the six mandatory public health campaigns commissioned by your PCT? If so, please give a brief outline of these services.

D. Other Services

21. How many extemporaneously dispensed products (compounded products or 'specials') do you *make* in a week?

22. Does your pharmacy supply medication to residents in nursing or residential care homes?

Yes

No

22a. If yes, to approximately how many patients?

23. Of all the medication you supply (including that supplied to nursing and care home residents), what proportion (if any) is provided in individualised dosage systems?

< 20% 20 - 49% 50 - 79% ≥ 80%

24. What kinds of appliances do you supply to patients?

Trusses Hosiery

Other (please state)

24a. Do you provide advice on how to use these appliances?

Yes No

25. Do you provide stoma appliance customisation?

Yes No

26. What kinds of compliance aids (e.g. dosette boxes) does your pharmacy supply or sell?

27. How often (if at all) do you or your pharmacist colleagues access your dispensary outside normal pharmacy opening or on-call rota hours?

28. What are the opening hours of your pharmacy?

Weekdays:

Weekends:

E. And finally...

29. Do you have a separate, private consultation area in your pharmacy for counselling/giving advice?

Yes No

30. What, if any, additional training on dispensing medication (beyond GNVQ level 2) do you provide for your dispensary staff? Please give brief details of the training.

Is there anything else you would like to add?

Extra space for answers or comments -

Thank you for your time!



Research study investigating the Pharmaceutical Services of Dispensing Doctor Practices and Community Pharmacists



Project Advisory Group – participant information sheet

You are invited to take part in a research study being conducted by the University of Bath. This sheet explains why the research is being carried out and what your participation would involve. Please read this information carefully before deciding whether or not you would like to take part. If there are any points you are not clear on please do ask the researchers, whose contact details are given below. Thank you for your time reading this sheet.

What is this study about?

This study is looking at the quality of medicine-related services provided by chemists and doctors. Medicine-related services can include activities such as providing advice on the use of medicines, dispensing medicines and providing general health advice, for example on healthy eating or stopping smoking. We want to find out the unique features of each setting (chemists and GP practices) and to use this information to come up with measures of service quality. These measures can then be used by both GP practices and chemists to assess the quality of their medicine-related services and highlight areas that could be improved. Ultimately, we want to help doctors and chemists to provide the best quality of medicine-related services possible.

Why have we contacted you?

We are very keen to involve people who use medicine-related services in this study – to gain their opinions and advice on the project. You do not need any special qualifications to do this or need to know anything about research. We hope to have a small group of patients/lay members and a few chemists and dispensing doctors, who will meet two to three times during the study – firstly to discuss initial findings from a survey of pharmacies and dispensing doctor practices in the South West, and then about seven months later to discuss the findings from interviews and observations at study sites. The discussions at these meetings will help to inform the next stages of the study, for example you may be able to give us advice on:

- How we are conducting the research to ensure that the project addresses issues of concern to patients
- The preparation of materials we would use when we conduct the research
- To make sure our final conclusions reflect issues important to patients

What will taking part involve?

You would be asked to attend the two to three project advisory group meetings to discuss the research project. The project advisory group will include some other patients, chemists and GPs. A member of the research team will also be present at the meetings. These meetings are likely to take place in May/June 2012 and January/February 2013 – but the exact times and dates for these meetings will be decided later. The meetings are expected to last 2-3 hours. You will be paid for your time at a rate of £100 per meeting and your travel costs will also be reimbursed.

What next?

Thank you for taking the time to read this. If you are interested in taking part please complete the enclosed form with details of how best to contact you and return it to us at the FREEPOST address on the form (no stamp required). If you would like to ask any questions about the study before deciding please feel free to contact either Marjorie Weiss or Elisabeth Grey (contact details given below). Please note that by returning the form or asking for more information you will be under no obligation to take part in the meetings.

Thank you for taking the time to read this

Professor Marjorie C Weiss
Professor of Pharmacy Practice & Medicine Use
Tel: 01225 386787
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Elisabeth Grey
Research Officer
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Appendix 2b. PAG information sheet for dispensing doctor practices



Researching Pharmaceutical Services in Dispensing Doctor Practices and Community Pharmacies



Project Advisory Group – participant information sheet

You are invited to participate on the Project Advisory Group (PAG) for a research study being conducted by the University of Bath. This sheet explains why the research is being carried out and what your participation on the PAG would involve. Please read this information carefully before deciding whether or not you would like to take part. If there are any points you are not clear on please do ask the researchers, whose contact details are given below. Thank you for taking the time to read this sheet.

What is this study about?

We are looking at the quality of pharmaceutical services provided by dispensing GPs and community pharmacists. We want to find out the unique features of each setting and to use this information to design measures of service quality. These measures can then be used by both dispensing doctors and pharmacists to assess the quality of their services and highlight areas that could be improved. Ultimately, we want to help doctors and pharmacists to provide the best quality of care possible.

Why have we contacted you?

We are very keen to involve dispensing doctors and community pharmacists, as well as people who use pharmaceutical services, in this study and gain their opinions and advice on the project. We hope to have a small group of patients/lay members, community pharmacists and dispensing doctors, who will meet two to three times during the study – firstly to discuss initial findings from a survey of pharmacies and dispensing doctor practices in the South West, and then about seven months later to discuss the findings from interviews and observations at case study sites. The discussions at these meetings will help to inform the next stages of the study.

As a dispensing GP you may be able to give us advice on:

- How we are conducting the research to ensure that the project addresses issues of concern to dispensing doctors
- The preparation of materials we could use when we conduct the research

- Making sure our final conclusions reflect issues that are important to your practice

What will taking part involve?

You would be asked to attend the two to three project advisory group meetings to discuss the research project. The project advisory group will include some lay members, pharmacists and dispensing GPs. A member of the research team will also be present at the meetings. The first meeting is expected to take place in June/July 2012 – the exact time and date will be decided later according to members' availability. This meeting will be face-to-face and is expected to last 2-3 hours. Subsequent 'meetings' might be held via the internet. You will be **paid** for your time at a rate of **£100 per meeting** and your **travel costs will also be reimbursed**.

What next?

Thank you for taking the time to read this. If you are interested in taking part please complete the enclosed form with details of how best to contact you and return it to us in the FREEPOST envelope provided (no stamp required). If you would like to ask any questions about the study before deciding please feel free to contact either Marjorie Weiss or Elisabeth Grey (contact details given below). Please note that by returning the form or asking for more information you will be under no obligation to take part in the meetings.

Thank you for taking the time to read this

Professor Marjorie C Weiss
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Researching Pharmaceutical Services in Community Pharmacies and Dispensing Doctor Practices



Project Advisory Group – participant information sheet

You are invited to participate on the Project Advisory Group (PAG) for a research study being conducted by the University of Bath. This sheet explains why the research is being carried out and what your participation on the PAG would involve. Please read this information carefully before deciding whether or not you would like to take part. If there are any points you are not clear on please do ask the researchers, whose contact details are given below. Thank you for taking the time to read this sheet.

What is this study about?

We are looking at the quality of pharmaceutical services provided by community pharmacists and dispensing GPs. We want to find out the unique features of each setting and to use this information to design measures of service quality. These measures can then be used by both dispensing doctors and pharmacists to assess the quality of their services and highlight areas that could be improved. Ultimately, we want to help pharmacists and doctors to provide the best quality of care possible.

Why have we contacted you?

We are very keen to involve community pharmacists and dispensing doctors, as well as people who use pharmaceutical services, in this study and gain their opinions and advice on the project. We hope to have a small group of patients/lay members, community pharmacists and dispensing doctors, who will meet two to three times during the study – firstly to discuss initial findings from a survey of community pharmacies and dispensing doctor practices in the South West, and then about seven months later to discuss the findings from interviews and observations at case study sites. The discussions at these meetings will help to inform the next stages of the study.

As a community pharmacist you may be able to give us advice on:

- How we are conducting the research to ensure that the project addresses issues of concern to community pharmacists
- The preparation of materials we could use when we conduct the research
- Making sure our final conclusions reflect issues that are important to your practice

What will taking part involve?

You would be asked to attend the two to three project advisory group meetings to discuss the research project. The project advisory group will include some lay members, pharmacists and dispensing GPs. A member of the research team will also be present at the meetings. The first meeting is expected to take place in June/July 2012 – the exact time and date will be decided later according to members' availability. This meeting will be face-to-face and is expected to last 2-3 hours. Subsequent 'meetings' might be held via the internet. You will be **paid** for your time at a rate of **£100 per meeting** and your **travel costs will also be reimbursed**.

What next?

Thank you for taking the time to read this. If you are interested in taking part please complete the enclosed form with details of how best to contact you and return it to us in the FREEPOST envelope provided (no stamp required). If you would like to ask any questions about the study before deciding please feel free to contact either Marjorie Weiss or Elisabeth Grey (contact details given below). Please note that by returning the form or asking for more information you will be under no obligation to take part in the meetings.

Thank you for taking the time to read this

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Appendix 3a. Interview schedule for case study site staff

Topic Guide

Staff Interviews – Researching Pharmaceutical Services in Community Pharmacies and Dispensing Doctor Practices

Thank you for agreeing to take part in this research, I've just got a few things to tell you before we begin. As you know the study is about pharmaceutical services in dispensing doctor practices and community pharmacies. This interview will be focusing on your experiences of providing pharmaceutical services at [*name of practice*].

Before we start I just want to reassure you that you do not have to answer a question if you don't feel comfortable to and if you would like to take a break or stop the interview at any time that is absolutely fine, just let me know. To ensure anonymity any identifying information mentioned, like names of people or places will be replaced when I come to transcribe the interviews. The interview will be recorded and in a minute I will ask you to state, just for the tape, that you are happy to be recorded. All recordings will be completely confidential and they will be destroyed when the study ends too. Before we start is there anything you would like to ask me about the process?

[*Turn on recorder*] Ok can I ask you to state for the tape that you _____ understand that this interview is being recorded? Thank you.

1. Background

We'll just start off with a bit of background information, could you tell me how long you have been working here?

Probe:

- *Previous work experience – have you worked in other dispensaries/pharmacies before? If yes, how does it compare – good and bad aspects?*

What qualifications have you got so far/working towards?

Do you do any other additional training?

Probe:

- *How well do you think the qualifications equipped you for your job here?*
- *Are you supported to continue with training if you want to? Do you feel able to go to someone to ask for help/guidance?*

2. Types of Pharmaceutical Services

What does the phrase 'pharmaceutical services' mean to you? [What do you think the delivery of pharmaceutical services involve?]

Probe:

- *Talk through process of dispensing*
- *Detecting drug interactions / allergies /contraindications*
- *Patient counselling provided? (e.g. inhaler use?) – formal appointments or opportunistic, as needed.*
- *Monitoring long term medication*
- *Public health services: smoking cessation, sexual health, obesity?*
- *Medicine Reviews?*
- *Extemporaneous dispensing?*
- *How do you identify the pharmaceutical service needs of patients / customers? (How) do you try to assess what information or advice to give a patient?*

3. Quality of Pharmaceutical Services

Consider structures, processes and outcomes.

Safety

How do you ensure safe practice? (protocols?)

Probe:

- *Do you record errors (and/or near misses)? How? Have you ever had to question a colleague's work or a prescriber's prescription? – How comfortable were you with doing that? Do you feel able to report mistakes?*
- *Patient safety alerts? Adverse Drug Reaction reporting?*
- *Training / competency of staff*

Customer service

How do you think customers view your practice?

Do you think you meet the needs of your local population? In what ways?

- *Convenience, friendliness, accessibility, delivery services, OoHs etc.*
- *Patient feedback or questionnaires (includes pharmaceutical services?)-How do you act on the findings from these? Are they useful?*
- *Complaints – how are they handled?*

4. Advantages / Barriers of this site for Pharmaceutical Services

What do you like about this particular site for providing pharmaceutical services?

- *building layout*
- *colleague relations - communication, ethos*
- *variety of customers/patients*
- *How do you think it might compare with a pharmacy / GP practice (whichever one this respondent is not from)?*
- *Any particular barriers / concerns about pharmaceutical services from this site?*

Has the practice ever tried to start new ways of doing things or offer new services [in order to improve]?

5. Quality guidelines

How effective do you think the current assessment procedures are?

Are there any areas of your practise that you feel are not recognised in current quality assessment procedures or guidelines?

- *If we produce new quality indicators, how should they be rolled out? (Probe: role of professional associations, branch network, local champions)*

Further comments or issues they'd like to raise?

Thank you for your time!

Appendix 3b. Interview schedule for patients

Topic Guide

Patient/Customer Interviews – Comparing Pharmaceutical Services in Community Pharmacies and Dispensing Doctor Practices

Thank you for agreeing to take part in this research, I've just got a few things to tell you before we begin. As you know the study is about pharmaceutical services in dispensing doctor practices and community pharmacies. This interview will be focusing on your experiences when you last visited [pharmacy/dispensary].

Before we start I just want to reassure you that you do not have to answer a question if you don't feel comfortable to and if you would like to take a break or stop the interview at any time that is absolutely fine, just let me know. To ensure anonymity any identifying information mentioned, like names of people or places will be replaced when I come to transcribe the interviews. The interview will be recorded and in a minute I will ask you to state, just for the tape, that you are happy to be recorded. All recordings will be completely confidential and they will be destroyed when the study ends too. Before we start is there anything you would like to ask me about the process?

[Turn on recorder] Ok can I ask you to state for the tape that you _____ understand that this interview is being recorded? Thank you.

1. Nature of Pharmaceutical Service Received

Was this your first visit to [name of practice] or have you used the dispensary/pharmacy before?

How do you feel the pharmacist/dispenser communicated with you?

Probe:

- *Were they friendly, clear, understandable? Did/have you built up a rapport?*

How long have you been going to that practice / pharmacy?

What information did you receive?

Probe:

- *Were you given or did you pick up any leaflets? How useful did they find it? (If they didn't take a leaflet) would they ever consider taking one?*

2. Other Types of Pharmaceutical Services

Would you go to [name of pharmacy/dispensary] for other pharmaceutical services?

E.g. medicine reviews, getting advice about a new medication or one of the public health services they offer, like sexual health advice.

Consider going anywhere else for this service? (convenience)

Why/why not this practice?

3. Quality of Pharmaceutical Services

Consider structures, processes and outcomes. Probe:

What, for you, are the key elements of a good pharmacy/dispensary service?

Probe:

- *Role of dispensing process as safety net*
- *Have you had any experience with / knowledge of errors in pharmaceutical services?*

E.g. receiving the wrong medication

- *Training / competency of staff*
- *Patient feedback or questionnaires – a good idea? (includes pharmaceutical services?).*

4. Advantages / Barriers of this site for Pharmaceutical Services

What do you like about this particular site for providing pharmaceutical services?

- *What they do well / less well?*
- *How does it compare with other pharmacies / GP practices (whichever one this respondent is not from)?*

Any particular barriers / concerns about pharmaceutical services from this site?

What would your ideal of this service look like?

Further comments or issues you would like to raise?

Thank you for your time!

Appendix 4a. Delphi survey round 1



Pharmaceutical service quality dimensions

Introduction

One of the aims of our project is to develop a tool that could be used by both community pharmacies (CP) and dispensing doctor surgeries (DD) to help them improve the quality of care they provide. This tool will take the form of a framework of the key aspects of **pharmaceutical service**⁶ quality (dimensions of quality) and provide suggestions for how good quality in each dimension could be achieved and demonstrated.

Our emphasis is on supporting service providers in their work to make improvements; the eventual tool is not intended to be used for apportioning blame or punishment where service quality is found wanting. Our aim is to promote an ethos of continuing improvement focused on patient centred care among staff at CPs and DDs. To do this, we want to identify key dimensions of quality and would like your assistance.

We recognise there are other aspects of pharmacy and dispensing practices that may not be covered here. Our final report will include other broader findings from our research along with the findings from this Delphi process. If you would like a summary of these findings, please let us know.

About this Delphi survey

Based on the previous stages of our project (literature reviews, case studies at community pharmacies and dispensing doctors' surgeries, interviews with staff and patients) we have identified the following quality dimensions for **pharmaceutical services**. We have also made suggestions of how good engagement with each dimension could be demonstrated. It is important that these dimensions are valid (i.e. that they do reflect the quality of services) and that we identify appropriate evidence of good engagement. So we would like to gain your advice



⁶ We have provided explanations in the glossary of what we mean by certain terms – these terms are in **bold** type. Please do refer to the glossary as sometimes our intended meanings do not exactly coincide with common understandings. Also in the glossary are some profession-specific terms that are not in common use.

and opinions on both the dimensions and the ways of demonstrating these dimensions (which we have called '*evidence*'). We are particularly interested in your opinion of these dimensions as *ideals*, which may not necessarily be your current practice or experience.

Each of the following questions is set out in the same way:

- The first part (A) asks you to read the given *dimension* and its *description* then rate, on a scale of 1-9, the extent to which you agree it is an important aspect of providing a good quality **pharmaceutical service**.
- In the second part (B) of each question (*evidence*), we give our suggestions for ways that CPs and DDs could demonstrate good engagement in that dimension of quality and reflect on their performance – please read these and then suggest any other ways that could be used.
- There is a section (C) after each question where you can add any *comments* on parts A and/or B – you might want to use this section to point out problems, give suggestions as to how the dimension could be improved or give the reason for your rating choice.

Please answer ALL the questions.

This is the first round of the Delphi; the responses gained here will be analysed and then a summary of the results will be sent out to participants along with the second survey. Please be assured that all responses will be anonymous.



Notes on terminology

Since the quality dimensions can be used by both pharmacies and dispensing GPs (except 8), for brevity community pharmacies and dispensing doctors' surgeries will be collectively referred to as 'Practices' in this document. For simplicity, those receiving products and services from the Practice are referred to here as 'patients', we recognise though that this will include carers, nursing homes, district nurses etc.

Please note there are questions on BOTH sides of the pages.

1. A) **Dimension: Standard operating procedures (SOPs)** align with actual staff practice; they are reviewed annually and all staff understand and sign up to the importance of these procedures.

Description: SOPs are comprehensive and reviewed and reflected upon each year by all staff members involved in the dispensing process (including medicines counter assistants and dispensary receptionists); this will also act as a refresher exercise. Records are kept of when each member of staff last reviewed each **SOP**. All staff members understand the purpose of **SOPs** and also understand their value for new and **locum** staff. All staff are involved in updating **SOPs** and developing new ones.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services? (Please circle a number)

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence:** Self or external assessment of whether **SOPs** cover all dispensing procedures (one way to think about this might be to ask 'from the **SOPs** alone would a new member of staff be able to find out what services we provide and all the processes that contribute to providing them?').

Records checked to see whether all staff have read, understood and had an opportunity to discuss all **SOPs** in the last year. **Spot checks** to examine whether any given member of staff can carry out any given procedure according to its **SOP**.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

2. A) **Dimension:** There is a clear culture of safety in how the dispensing process is managed.

Description: All staff members are involved in ensuring that the practice prioritises patient safety and are encouraged to reflect on the safety of current processes.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

- B) **Evidence:** Staff use a tool such as the **Manchester Patient Safety Framework**, on an annual basis, in order to reflect upon the safety of internal procedures.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

3. A) **Dimension:** The Practice demonstrates effective methods of internal staff communication.

Description: There are agreed methods for communicating different types of messages (e.g. new **protocols** will be listed on a noticeboard for all staff to sign when they have read them; issues that cannot be resolved that day concerning a particular prescription are to be noted in the diary for next staff etc.). These methods are documented in a **SOP** and, if appropriate, the **SOP** is also displayed as a poster in the dispensary for the benefit of **locum**/new staff. Regular practice review meetings should be held with all staff present or receiving minutes. Staff feel that they are listened to by their colleagues. Staff are required to reflect on how effective the communication systems are within the team at least annually.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
	1	2	3	4	5	6	7	8	9

B) **Evidence:** **SOP** for communication, detailing how various messages are communicated to all staff. **Spot checks** by appointed members of staff to ensure these communication **protocols** are adhered to.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

4. A) **Dimension:** The Practice has effective and customer service-oriented methods of communicating with patients in one-to-one interactions.

Description: Staff communicate well with patients: they are friendly and take time to listen and explain things in a way that patients find easy to understand. Staff have training on how to deal with patients, which has involved practical work (e.g. role-playing) as well as theoretical work; these training sessions are held every two years to act as a reminder. Patients find staff to be approachable.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence:** Individual staff portfolios with records of training sessions attended and brief accounts of what has been learnt. **Patient feedback** and **mystery shoppers**.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

5. A) **Dimension:** The services offered by the Practice are clearly displayed.
Description: Notices of what services are available at the practice are clearly visible to patients, they should not have to rely on staff telling them which services are offered. There is a specific noticeboard or area for advertising a practice's services (as opposed to various signs in different places).

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree		Neither agree nor disagree					Completely agree	
1	2	3	4	5	6	7	8	9

B) **Evidence:** Patient feedback and mystery shoppers

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

6. A) **Dimension:** Staff are always aware of and acknowledge waiting patients.
Description: Systems are in place to ensure staff are aware of any waiting patients, for example a bell is on the door to alert staff when a patient enters the shop/dispensary waiting area. There is a **SOP** for times when staff are unable to immediately deal with a patient (e.g. looking at patient and saying 'I'll be with you in a minute') to ensure that patients know they will be attended to as soon as possible.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

- B) **Evidence:** **SOP** for times when staff are unable to immediately deal with a patient; **spot checks**/audits to ensure this happens. **Patient feedback** on their waiting times before they are acknowledged.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

7. A) **Dimension:** The Practice makes an effort to develop and maintain relationships with other local health care providers.

Description: Staff (particularly pharmacists) make efforts to communicate with other local health care providers (GPs, other pharmacies, private healthcare professionals, district nurses etc.). For example, new practices/staff members introduce themselves to neighbouring practices, messages are sent to update neighbouring practices if, say, a change is made to their **formulary** or if a drug is out of supply. It might be more practical for some practices to have one or two designated members of staff for liaising with other practices.

There is a **SOP** detailing how to handle messages from other practices (i.e. how and where to record the message, who should be informed). Records are kept of communications that are made and received.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree			Neither agree nor disagree				Completely agree	
1	2	3	4	5	6	7	8	9

B) **Evidence:** There is a **SOP** for communicating with other practices (both initiating communication and receiving/processing messages). There is a readily accessible list of contact details for local practices in the dispensary. A record of attendance at local inter-professional meetings is kept along with details of decisions made at them.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

8. This dimension relates to community pharmacy only but all respondents are requested to complete it.

A) **Dimension:** The pharmacy ensures that **locum** pharmacists are able to uphold the good working relationships between the pharmacy and local healthcare providers

Description: Community pharmacies that have a high level of **locum** use (especially where there is no consistent use of the same **locum**) ensure that **locums** are made aware of local healthcare providers that might be in contact and have available information about these providers, for example a folder giving contact information for each provider, names of practice staff, common issues raised etc.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence:** Folder of information about local GP practices and healthcare providers with whom the pharmacy regularly has dealings is kept in the dispensary and **locum** pharmacists are directed to it on initiation.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

9. A) **Dimensions:** Practices link up to run discussion groups/seminars on relevant issues – for dispensers/technicians as well as pharmacists and GPs.

Description: Sharing experience and knowledge among local practices is incorporated into training. All staff spend time in different practices, both CPs and DDs, to see how they operate (local primary care provider groups could set this up as a regular exchange each year to encourage practices to continue to reflect on their own systems/organisation).

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence:** Records/minutes from multi-practice meetings. Brief, reflective summaries of time spent in other practices are kept by staff in their training portfolios.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

10. A) **Dimension:** The practice demonstrates an ethos of patient centred care, committed to “going the extra mile” for the patient. This ethos is clearly demonstrated to all new members of staff.

Description: Staff try to ensure that patients never leave without having their prescriptions filled or knowing where/when they can obtain the required items. For example, if the Practice is unable to immediately fill a prescription, staff make every effort to locate the required items by telephoning various suppliers. If necessary other **pharmaceutical service** providers are contacted on behalf of the patient (with prior permission) to reserve stock, so that the patient knows they will be able to obtain what they need.

Staff endeavour to make it as easy as possible for patients (particularly those less able) to obtain their prescription medication, for example by delivering medication to local patients who are temporarily finding it difficult to travel.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree			Neither agree nor disagree				Completely agree	
1	2	3	4	5	6	7	8	9

B) **Evidence:** Unfulfilled prescriptions and the reasons for them being unfulfilled are audited. Audit of all prescriptions received on a randomly selected day, and outcomes.

Mystery shoppers assess the Practice ethos and willingness to “go the extra mile”.
Patient feedback.

Practice mission statements detailing emphasis on patient care and an appropriate induction programme for new staff to ensure this ethos is passed on to them. (Over time new staff should pick up the ethos from the actions of existing staff.)

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

11. A) **Dimension:** Each staff member demonstrates excellent customer service. There is a team approach to defining and implementing good service.

Description: Staff have regular customer service training, involving practical exercises as well as theory. **SOPs** are in place for acknowledging patients and keeping them informed of the progress of their prescriptions. For example if a dispenser is having trouble locating their prescriptions or if the pharmacist has a query about the prescription and wants to talk to the prescriber, the patient is kept informed. On the telephone, patients are not left on hold for more than a minute; if needed, messages are taken and phone calls returned as soon as possible. Staff are aware of how tasks should be prioritised during busy periods.

Staff engage with patients and take time to listen to any concerns that are raised, they recognise that for some, particularly elderly patients, they might be the only human contact that patient has that day. Relevant information gleaned from regular patients is passed on to all members of staff (for example if a patient's family member has recently died).

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree			Neither agree nor disagree				Completely agree	
1	2	3	4	5	6	7	8	9

B) **Evidence:** **Mystery shoppers, patient feedback** followed by minutes from staff meetings discussing the feedback. Individual staff portfolios with records of training sessions attended and brief accounts of what has been learnt.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

12. A) **Dimension:** The Practice recognises the importance of patient safety in the dispensing process and tries to ensure that dispensing staff are not interrupted in the middle of dispensing a prescription.

Description: Dispensers/pharmacists have a quiet area available in the dispensary, where distractions are kept to a minimum. All staff at the Practice (not just those in the dispensing area) are aware that dispensers/pharmacists should not be interrupted when dispensing/checking a prescription and will wait until the dispenser/pharmacist has finished the current prescription (or reached a suitable point in the process to break from it) before approaching them. Where staff may feel uncomfortable if a patient crosses the boundary into the dispensary working area (e.g. in open-plan practices where the boundary is virtual), there are clear signs asking patients to respect this (e.g. asking them not to lean through the hatch or step behind the counter).

Systems are in place to help minimise the effect of unavoidable interruptions, for example coloured cards are made to identify unfinished prescriptions and these cards are easily available so that one can be placed with a prescription before attending to the interruption.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree		Neither agree nor disagree					Completely agree	
1	2	3	4	5	6	7	8	9

B) **Evidence:** **SOP** on how to handle interruptions when dispensing, including protocol for approaching a member of staff when they are dispensing. **Spot checks** to ensure **SOP** adhered to, followed by feedback to staff. Clear signs to patients if boundary to dispensary is virtual.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

13. A) **Dimension:** There is a culture of encouraging staff to improve internal procedures.
Description: All staff members feel valued by their colleagues and are able to make suggestions to their colleagues about how the running of the practice could be improved. Staff are encouraged to learn about other ways in which **pharmaceutical service** providers can operate and reflect on how they compare with their own practice. One way of doing this could be to establish links with local practices to allow staff members to visit them and compare/reflect on how things are done differently.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree			Neither agree nor disagree				Completely agree	
1	2	3	4	5	6	7	8	9

- B) **Evidence:** External observation of a team meeting and interviews with staff to find out to what extent they feel able to make suggestions and whether they feel the team listens to their ideas.

There are regular audits of service (e.g. of unfulfilled prescriptions, queries to prescribers) and internal assessments (e.g. random **spot checks**). Portfolio of audits and reports of how issues identified have been dealt with.

Minutes from practice meetings show that the team have reflected on their current practice. Records/evidence of visits that have been made by staff to other practices, individuals' reflective reviews of the other practice.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

14. A) **Dimension:** Practices conduct **MURs / DRUMs** in a way that maximises patient benefit, and only with those patients who are likely to benefit from them.

Description: **MURs/DRUMs** are only conducted with patients who staff believe will gain in understanding as a result, for example, if the patient seems uncertain about aspects of their prescription or there is reason to believe that the patient is not taking their medication properly. Staff fully understand the purpose and scope of **MURs/DRUMs**.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence:** **SOP** for identifying suitable patients for **MURs/DRUMs**. Peer review sessions (which could be internally organised in large practices or organisations) could be held to discuss a selection of recent **DRUMs/MURs** to help staff reflect on their purpose and improve their future practice and the findings from these sessions recorded. Patients are asked for their opinions on the usefulness of **DRUMs/MURs** and if/how they could be improved.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

15. A) **Dimension:** The Practice has clear procedures for both second checking of prescriptions by another person (double checking) and second checking of one's own work (single checking).

Description: It is not always feasible for two members of staff to check an item before it is given to the patient and there are times when both single and double checking would be used. There is research evidence for how both single and double checking can be done safely. Local checking procedures should incorporate this evidence into their single and double checking processes.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence:** SOPs for both single and double checking that incorporate processes to address safe checking procedures. Random **spot checks** to ensure adherence to **SOPs**.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

16. A) **Dimension:** The Practice has clear **SOPs** for handling **near-misses** and dispensed errors. There is an easily accessible error/**near-miss** log, which is regularly reviewed and discussed among all dispensing staff.

Description: Staff members have a common understanding of what constitutes a **near-miss** and a dispensed error. Both are recorded in a way that encourages the staff member(s) involved to reflect on how a similar error could be prevented in future. Error records give a clear, comprehensive report of what occurred and how it was dealt with.

There are regular reviews of error records, where the errors are discussed among all staff and they are encouraged to pool their ideas as to how practises/systems could be changed to prevent further errors. There is a no-blame culture – the names of those members of staff involved in errors need not be recorded in the communal error log.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely
disagree

Neither agree
nor disagree

Completely
agree

1 2 3 4 5 6 7 8 9

B) **Evidence:** **SOPs** for handling and reporting both dispensed errors and **near misses**.
Spot checks to ensure all staff members know and understand the **SOPs**.

Minutes kept of regular team meetings to discuss errors and evidence of changes made to practice as a result of reflective discussions.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

17. A) **Dimension:** Patient waiting areas are comfortable and good use is made of these areas for health promotion/patient education.

Description: Seating is available to patients while they wait; if necessary these seats are clearly signed and staff notify patients as to their location. These areas are comfortable and attractive with information leaflets and health promotions clearly laid out and accessible. Lighting is bright enough for patients to be able to read the information materials.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence:** **Patient feedback** and use of **mystery shoppers** to provide feedback and support for change.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

18. A) **Dimension:** Consideration is given to the optimal design of available space in the dispensary. Systems are in place to ensure efficient processing of prescriptions, taking in to account space restrictions and staff schedules.

Description: The amount of worktop space available for dispensing and checking is maximised and kept tidy/clear. If prescriptions are left on the dispensary worktop (e.g. prior to checking or if waiting for extra items), different prescriptions are easily distinguishable (e.g. baskets are used to keep different prescriptions' items separate).

There are coding systems to distinguish different types of prescriptions (urgent antibiotics, repeat prescriptions etc.). For example, colour-coded baskets could be used or separate areas of worktop are demarcated for placing different types of prescriptions. These coding systems are understood and employed by all staff and written down (in **SOPs**/on noticeboard) for **locums** and new staff and as reference for permanent staff.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence: Spot checks** to verify that coding systems are adhered to and check that it is clear why any items currently on the counter top are there.

Visits by staff to other **pharmaceutical service** providers could give ideas on how dispensary space can be most effectively organised.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

19. A) **Dimension:** Staff in Practice are well equipped to provide essential public health advice.

Description: All Practice staff with patient contact know what health information materials are available (on site and online). Staff seek out up-to-date information on services. Staff readily help patients locate information and have had training to be able to pick up on patients' cues that they need advice. Staff have a good basic knowledge of the topics in current health promotions at their Practice.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence: Spot checks or mystery shoppers:** any given member of staff can advise on what information leaflets they have available (e.g. on diabetes care) or know where to access information for patients. Records of staff training on giving health advice.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

20. A) **Dimension:** Practices proactively engage in health promotion.

Description: Health promotion displays are creative and eye-catching. Displays are regularly changed to maintain regular patients' interest.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

B) **Evidence:** **Mystery shopper** or **Patient feedback** on health promotion displays. Audit of how many people read the displays. Records of staff training on health promotion.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

21. A) **Dimension:** The Practice facilitates training for all staff. All staff have access to, and know how to use, online information sources and training resources.
Description: Senior/more qualified staff support their colleagues in training (e.g. reviewing any written exercises, explaining things that have not been understood). Time is allocated for staff to train/study and receive training support from colleagues. Staff are motivated to improve the quality of their work and feel encouraged to continue learning. All staff are aware of and make use of online support/information websites (for example on customer service training) and journals that the Practice has access to. On-site team training and revision sessions take place regularly. A record is kept of staff training that has been completed detailing the date, which staff attended, any qualification type awarded and date of qualification expiry (if applicable) – this will enable the Practice to see when refresher courses might be needed. Individual staff members keep portfolios of all training they have undertaken with brief accounts of what has been learnt.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree							Neither agree nor disagree							Completely agree
1	2	3	4	5	6	7	8	9						

B) **Evidence:** Staff portfolios and Practice records of staff training. Regular staff appraisals.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

22. A) **Dimension:** Staff take a mature approach to Continuing Professional Development (CPD) and recognise it as a valuable learning opportunity.

Description: Staff endeavour to gain as much as possible from mandatory CPD (rather than an attitude of 'just something to be done as quickly as possible'). CPD exercises are discussed among the team, reflecting on how the topics covered relate to their practice.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely disagree	Neither agree nor disagree					Completely agree		
1	2	3	4	5	6	7	8	9

B) **Evidence:** Individual staff CPD records kept, **spot checks** to see how well CPD learning has been retained, records/minutes of staff meetings on CPD material.

Please suggest any other methods of demonstrating good engagement with the dimension and ways that practices could reflect on their performance in this area.

C) **Comments**

Thank you!
Please return your completed survey in the envelope provided.

Appendix 4b. Delphi survey round 2



Pharmaceutical service quality dimensions

Delphi Survey, round 2

Introduction

Thank you for completing the first round Delphi survey. The Delphi process aims to develop consensus among participants, over the course of 2 or 3 rounds, regarding the importance of the various quality dimensions in providing pharmaceutical services. With this in mind we now present summarised results from the first round and ask you to respond again to the survey questions. This second round will be shorter, however, as we have removed the open-answer questions regarding how to demonstrate the dimensions.

General comments/issues

There were comments that some of the dimensions, although good in theory would not be practical to implement given current contract restrictions. Particularly it was noted that more staff would be needed and/or protected time for study/training. This would necessitate more funding than is currently provided through NHS contracts. We recognise these issues and will be commenting on them in our final report. However, in this survey we are most interested in your opinion of these dimensions as *ideals of practice* i.e. sufficient funding is assumed.

Some problems with SOPs were also mentioned by respondents: thorough SOP documents are too long to be remembered in detail and can never cover all scenarios anyway; if too much emphasis is placed on SOPs a 'box-ticking' mentality could develop with focus shifting to following SOPs to the letter instead of encouraging people to use their initiative; SOPs must be accompanied by personal instruction and learning from peers. We acknowledge these issues but still feel that SOPs are important for safe and efficient practice. They could however be made more reader-friendly and accessible; for example, full comprehensive SOPs could be used for initial training and referring to in significant event follow-ups and short versions (possibly in flowchart form) could be made for quick reference and revision.

The second round

In this second round we present the same dimensions of pharmaceutical quality as before along with the median ratings of agreement for each obtained in round 1 – this is to give you an idea of the extent to which other participants felt each dimension was important in pharmaceutical service provision. In light of these median ratings and the issues discussed above, please rate the dimensions again. Please also give the reasons for your choice of rating.

We have now grouped the dimensions under the following headings:

- Safety and dispensing
- Patient-Provider interaction
- Workplace culture
- Health promotion

The questions for all the dimensions are presented within their groups and at the end of each group we present a table of the dimensions and ask you to rank the dimensions in order from MOST important for pharmaceutical services (1) to LEAST important.

Example ranking

If you thought out of the following 3 dimensions that a culture of encouraging staff to improve internal procedures was the most important and that staff being well equipped to provide essential public health advice was the least important then you would indicate this in the ranking column as such:

Dimension	Ranking
The Practice has effective and customer service-oriented methods of communicating with patients in one-to-one interactions.	2
There is a culture of encouraging staff to improve internal procedures.	1
Staff in Practice are well equipped to provide essential public health advice.	3

Your responses are strictly confidential and we would like to stress the importance in this study of having everyone who completed the first round also completing to this round.

Please note there are questions on BOTH sides of the pages.

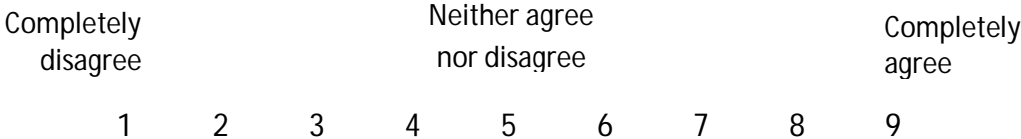
Safety and dispensing (SD)

SD1. Dimension: Standard operating procedures (SOPs) align with actual staff practice; they are reviewed annually and all staff understand and sign up to the importance of these procedures.

Description: SOPs are comprehensive and reviewed and reflected upon each year by all staff members involved in the dispensing process (including medicines counter assistants and dispensary receptionists); this will also act as a refresher exercise. Records are kept of when each member of staff last reviewed each SOP. All staff members understand the purpose of SOPs and also understand their value for new and locum staff. All staff are involved in updating SOPs and developing new ones.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services? (Please circle a number)

Median rating in round 1 = 7.5



Please state the reasons behind your choice of rating.

SD 2. Dimension: There is a clear culture of safety in how the dispensing process is managed.

Description: All staff members are involved in ensuring that the practice prioritises patient safety and are encouraged to reflect on the safety of current processes.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 9

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

SD 3. Dimension: The Practice recognises the importance of patient safety in the dispensing process and tries to ensure that dispensing staff are not interrupted in the middle of dispensing a prescription.

Description: Dispensers/pharmacists have a quiet area available in the dispensary, where distractions are kept to a minimum. All staff at the Practice (not just those in the dispensing area) are aware that dispensers/pharmacists should not be interrupted when dispensing/checking a prescription and will wait until the dispenser/pharmacist has finished the current prescription (or reached a suitable point in the process to break from it) before approaching them. Where staff may feel uncomfortable if a patient crosses the boundary into the dispensary working area (e.g. in open-plan practices where the boundary is virtual), there are clear signs asking patients to respect this (e.g. asking them not to lean through the hatch or step behind the counter).

Systems are in place to help minimise the effect of unavoidable interruptions, for example coloured cards are made to identify unfinished prescriptions and these cards are easily available so that one can be placed with a prescription before attending to the interruption.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 9

Completely disagree					Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9		

Please state the reasons behind your choice of rating.

SD 4. Dimension: The Practice has clear procedures for both second checking of prescriptions by another person (double checking) and second checking of one's own work (single checking).

Description: It is not always feasible for two members of staff to check an item before it is given to the patient and there are times when both single and double checking would be used. There is research evidence for how both single and double checking can be done safely. Local checking procedures should incorporate this evidence into their single and double checking processes.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 9

Completely
disagree

Neither agree
nor disagree

Completely
agree

1 2 3 4 5 6 7 8 9

Please state the reasons behind your choice of rating.

SD 5. Dimension: The Practice has clear **SOPs** for handling **near-misses** and dispensed errors. There is an easily accessible error/**near-miss** log, which is regularly reviewed and discussed among all dispensing staff.

Description: Staff members have a common understanding of what constitutes a **near-miss** and a dispensed error. Both are recorded in a way that encourages the staff member(s) involved to reflect on how a similar error could be prevented in future. Error records give a clear, comprehensive report of what occurred and how it was dealt with. There are regular reviews of error records, where the errors are discussed among all staff and they are encouraged to pool their ideas as to how practises/systems could be changed to prevent further errors. There is a no-blame culture – the names of those members of staff involved in errors need not be recorded in the communal error log.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 9

Completely disagree				Neither agree nor disagree				Completely agree
1	2	3	4	5	6	7	8	9

Please state the reasons behind your choice of rating.

SD 6. Dimension: Consideration is given to the optimal design of available space in the dispensary. Systems are in place to ensure efficient processing of prescriptions, taking in to account space restrictions and staff schedules.

Description: The amount of worktop space available for dispensing and checking is maximised and kept tidy/clear. If prescriptions are left on the dispensary worktop (e.g. prior to checking or if waiting for extra items), different prescriptions are easily distinguishable (e.g. baskets are used to keep different prescriptions' items separate). There are coding systems to distinguish different types of prescriptions (urgent antibiotics, repeat prescriptions etc.). For example, colour-coded baskets could be used or separate areas of worktop are demarcated for placing different types of prescriptions. These coding systems are understood and employed by all staff and written down (in **SOPs**/on noticeboard) for **locums** and new staff and as reference for permanent staff.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 8

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

Safety and dispensing ranking

Please rank the dimensions in order from MOST important for pharmaceutical services (1) to LEAST important (6).

<i>Dimension</i>	<i>Ranking</i>
SD 1. Standard operating procedures (SOPs) align with actual staff practice; they are reviewed annually and all staff understand and sign up to the importance of these procedures.	
SD 2. There is a clear culture of safety in how the dispensing process is managed.	
SD 3. The Practice recognises the importance of patient safety in the dispensing process and tries to ensure that dispensing staff are not interrupted in the middle of dispensing a prescription.	
SD 4. The Practice has clear procedures for both second checking of prescriptions by another person (double checking) and second checking of one's own work (single checking).	
SD 5. The Practice has clear SOPs for handling near-misses and dispensed errors. There is an easily accessible error/ near-miss log, which is regularly reviewed and discussed among all dispensing staff.	
SD 6. Consideration is given to the optimal design of available space in the dispensary. Systems are in place to ensure efficient processing of prescriptions, taking in to account space restrictions and staff schedules.	

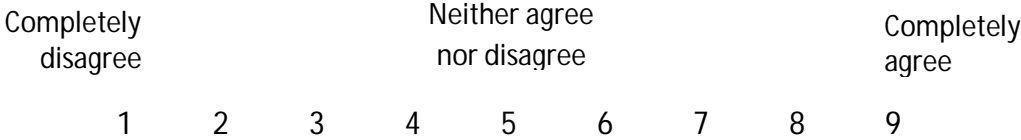
Patient-Provider interaction (PI)

PI 1. Dimension: The Practice has effective and customer service-oriented methods of communicating with patients in one-to-one interactions.

Description: Staff communicate well with patients: they are friendly and take time to listen and explain things in a way that patients find easy to understand. Staff have training on how to deal with patients, which has involved practical work (e.g. role-playing) as well as theoretical work; these training sessions are held every two years to act as a reminder. Patients find staff to be approachable.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 8



Please state the reasons behind your choice of rating.

PI 2. Dimension: Staff are always aware of and acknowledge waiting patients.

Description: Systems are in place to ensure staff are aware of any waiting patients, for example a bell is on the door to alert staff when a patient enters the shop/dispensary waiting area. There is a **SOP** for times when staff are unable to immediately deal with a patient (e.g. looking at patient and saying 'I'll be with you in a minute') to ensure that patients know they will be attended to as soon as possible.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 7.5

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

PI 3. Dimension: The practice demonstrates an ethos of patient centred care, committed to “going the extra mile” for the patient. This ethos is clearly demonstrated to all new members of staff.

Description: Staff try to ensure that patients never leave without having their prescriptions filled or knowing where/when they can obtain the required items. For example, if the Practice is unable to immediately fill a prescription, staff make every effort to locate the required items by telephoning various suppliers. If necessary other **pharmaceutical service** providers are contacted on behalf of the patient (with prior permission) to reserve stock, so that the patient knows they will be able to obtain what they need.

Staff endeavour to make it as easy as possible for patients (particularly those less able) to obtain their prescription medication, for example by delivering medication to local patients who are temporarily finding it difficult to travel.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 9

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

PI 4. Dimension: Each staff member demonstrates excellent customer service. There is a team approach to defining and implementing good service.

Description: Staff have regular customer service training, involving practical exercises as well as theory. **SOPs** are in place for acknowledging patients and keeping them informed of the progress of their prescriptions. For example if a dispenser is having trouble locating their prescriptions or if the pharmacist has a query about the prescription and wants to talk to the prescriber, the patient is kept informed. On the telephone, patients are not left on hold for more than a minute; if needed, messages are taken and phone calls returned as soon as possible. Staff are aware of how tasks should be prioritised during busy periods.

Staff engage with patients and take time to listen to any concerns that are raised, they recognise that for some, particularly elderly patients, they might be the only human contact that patient has that day. Relevant information gleaned from regular patients is passed on to all members of staff (for example if a patient's family member has recently died).

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 9

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

This is a new dimension.

PI 5. Dimension: Staff ensure that all patients (and/or carers) understand why they should take their medicines, how to take them and any precautionary information.

Description: Staff keep up-to-date with guidelines and evidence about medications to ensure the advice and information they provide for patients is accurate. Patients are always asked if they would like or require information on their prescription medications and staff always check that the patient understands how to take their medicines correctly.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Completely
disagree

Neither agree
nor disagree

Completely
agree

1 2 3 4 5 6 7 8 9

Please state the reasons behind your choice of rating.

PI 6. Dimension: Practices conduct **MURs / DRUMs** in a way that maximises patient benefit, and only with those patients who are likely to benefit from them.

Description: **MURs/DRUMs** are only conducted with patients who staff believe will gain in understanding as a result, for example, if the patient seems uncertain about aspects of their prescription or there is reason to believe that the patient is not taking their medication properly. Staff fully understand the purpose and scope of **MURs/DRUMs**.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 7

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

Patient-Provider interaction ranking

Please rank the dimensions in order from MOST important for pharmaceutical services (1) to LEAST important (6).

<i>Dimension</i>	<i>Ranking</i>
PI 1. The Practice has effective and customer service-oriented methods of communicating with patients in one-to-one interactions.	
PI 2. Staff are always aware of and acknowledge waiting patients.	
PI 3. The practice demonstrates an ethos of patient-centred care, committed to “going the extra mile” for the patient. This ethos is clearly demonstrated to all new members of staff.	
PI 4. Each staff member demonstrates excellent customer service. There is a team approach to defining and implementing good service.	
PI 5. Staff ensure that all patients (and/or carers) understand why they should take their medicines, how to take them and any precautionary information.	
PI 6. Practices conduct MURs / DRUMs in a way that maximises patient benefit, and only with those patients who are likely to benefit from them.	

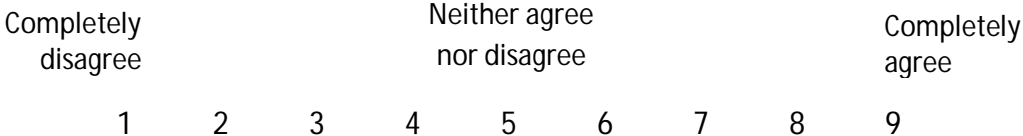
Workplace culture (WP)

WP 1. Dimension: There is a culture of encouraging staff to improve internal procedures.

Description: All staff members feel valued by their colleagues and are able to make suggestions to their colleagues about how the running of the practice could be improved. Staff are encouraged to learn about other ways in which **pharmaceutical service** providers can operate and reflect on how they compare with their own practice. One way of doing this could be to establish links with local practices to allow staff members to visit them and compare/reflect on how things are done differently.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 7



Please state the reasons behind your choice of rating.

WP 2. Dimension: The Practice demonstrates effective methods of internal staff communication.

Description: There are agreed methods for communicating different types of messages (e.g. new **protocols** will be listed on a noticeboard for all staff to sign when they have read them; issues that cannot be resolved that day concerning a particular prescription are to be noted in the diary for next staff etc.). These methods are documented in a **SOP** and, if appropriate, the **SOP** is also displayed as a poster in the dispensary for the benefit of **locum**/new staff. Regular practice review meetings should be held with all staff present or receiving minutes. Staff feel that they are listened to by their colleagues. Staff are required to reflect on how effective the communication systems are within the team at least annually.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 8

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

WP 3. Dimension: The Practice makes an effort to develop and maintain relationships with other local health care providers.

Description: Staff (particularly pharmacists) make efforts to communicate with other local health care providers (GPs, other pharmacies, private healthcare professionals, district nurses etc.). For example, new practices/staff members introduce themselves to neighbouring practices, messages are sent to update neighbouring practices if, say, a change is made to their **formulary** or if a drug is out of supply. It might be more practical for some practices to have one or two designated members of staff for liaising with other practices.

There is a **SOP** detailing how to handle messages from other practices (i.e. how and where to record the message, who should be informed). Records are kept of communications that are made and received.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 7

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

WP 4. Dimension: Staff take a mature approach to Continuing Professional Development (CPD) and recognise it as a valuable learning opportunity.

Description: Staff endeavour to gain as much as possible from mandatory CPD (rather than an attitude of 'just something to be done as quickly as possible'). CPD exercises are discussed among the team, reflecting on how the topics covered relate to their practice.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 7

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

WP 5. Dimension: The Practice facilitates training for all staff. All staff have access to, and know how to use, online information sources and training resources.

Description: Senior/more qualified staff support their colleagues in training (e.g. reviewing any written exercises, explaining things that have not been understood). Time is allocated for staff to train/study and receive training support from colleagues. Staff are motivated to improve the quality of their work and feel encouraged to continue learning. All staff are aware of and make use of online support/information websites (for example on customer service training) and journals that the Practice has access to. On-site team training and revision sessions take place regularly. A record is kept of staff training that has been completed detailing the date, which staff attended, any qualification type awarded and date of qualification expiry (if applicable) – this will enable the Practice to see when refresher courses might be needed. Individual staff members keep portfolios of all training they have undertaken with brief accounts of what has been learnt.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 7

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

WP 6. Dimensions: Practices link up to run discussion groups/seminars on relevant issues – for dispensers/technicians as well as pharmacists and GPs.

Description: Sharing experience and knowledge among local practices is incorporated into training. All staff spend time in different practices, both CPs and DDs, to see how they operate (local primary care provider groups could set this up as a regular exchange each year to encourage practices to continue to reflect on their own systems/organisation)

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 6.5

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

This dimension relates to community pharmacy only but all respondents are requested to complete it.

WP 7. Dimension: The pharmacy ensures that **locum** pharmacists are able to uphold the good working relationships between the pharmacy and local healthcare providers

Description: Community pharmacies that have a high level of **locum** use (especially where there is no consistent use of the same **locum**) ensure that **locums** are made aware of local healthcare providers that might be in contact and have available information about these providers, for example a folder giving contact information for each provider, names of practice staff, common issues raised etc.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 8

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

Workplace culture ranking

Please rank the dimensions in order from MOST important for pharmaceutical services (1) to LEAST important (7).

<i>Dimension</i>	<i>Ranking</i>
WP 1. There is a culture of encouraging staff to improve internal procedures.	
WP 2. The Practice demonstrates effective methods of internal staff communication.	
WP 3. The Practice makes an effort to develop and maintain relationships with other local health care providers.	
WP 4. Staff take a mature approach to Continuing Professional Development (CPD) and recognise it as a valuable learning opportunity.	
WP 5. The Practice facilitates training for all staff. All staff have access to, and know how to use, online information sources and training resources.	
WP 6. Practices link up to run discussion groups/seminars on relevant issues – for dispensers/technicians as well as pharmacists and GPs.	
WP 7. The pharmacy ensures that locum pharmacists are able to uphold the good working relationships between the pharmacy and local healthcare providers	

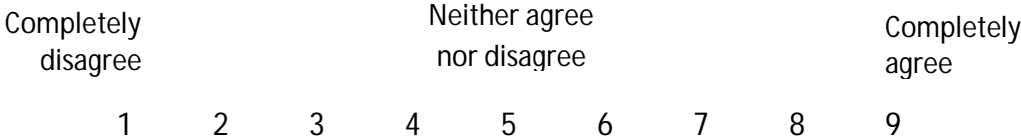
Health promotion (HP)

HP 1. Dimension: The services offered by the Practice are clearly displayed.

Description: Notices of what services are available at the practice are clearly visible to patients, they should not have to rely on staff telling them which services are offered. There is a specific noticeboard or area for advertising a practice's services (as opposed to various signs in different places).

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 6.5



Please state the reasons behind your choice of rating.

HP 2. Dimension: Patient waiting areas are comfortable and good use is made of these areas for health promotion/patient education.

Description: Seating is available to patients while they wait; if necessary these seats are clearly signed and staff notify patients as to their location. These areas are comfortable and attractive with information leaflets and health promotions clearly laid out and accessible. Lighting is bright enough for patients to be able to read the information materials.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 7

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

HP 3. Dimension: Staff in Practice are well equipped to provide essential public health advice.

Description: All Practice staff with patient contact know what health information materials are available (on site and online). Staff seek out up-to-date information on services. Staff readily help patients locate information and have had training to be able to pick up on patients' cues that they need advice. Staff have a good basic knowledge of the topics in current health promotions at their Practice.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 8

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

HP 4. Dimension: Practices proactively engage in health promotion.

Description: Health promotion displays are creative and eye-catching. Displays are regularly changed to maintain regular patients' interest.

To what extent do you agree that this dimension reflects an important aspect of providing good pharmaceutical services?

Median rating in round 1 = 7

Completely disagree				Neither agree nor disagree					Completely agree
1	2	3	4	5	6	7	8	9	

Please state the reasons behind your choice of rating.

Health promotion ranking

Please rank the dimensions in order from MOST important for pharmaceutical services (1) to LEAST important (4).

<i>Dimension</i>	<i>Ranking</i>
HP 1. The services offered by the Practice are clearly displayed.	
HP 2. Patient waiting areas are comfortable and good use is made of these areas for health promotion/patient education.	
HP 3. Staff in Practice are well equipped to provide essential public health advice.	
HP 4. Practices proactively engage in health promotion.	

Finally, please rank the 4 groups of dimensions, as described above, in order of importance for quality of pharmaceutical services, from MOST important (1) to LEAST important (4).

<i>Group</i>	<i>Ranking</i>
Safety and dispensing (SD)	
Patient-provider interaction (PI)	
Workplace culture (WP)	
Health promotion (HP)	

Further comments ...

Thank you!
Please return your completed survey in the envelope provided.

Appendix 4c. Glossary for Delphi survey

Glossary

Audit

An audit is a quality improvement exercise whereby a thorough evaluation of a specified area of practice is conducted: data is collected and the results studied to see where performance could be improved. Where changes are made to practice as a result of the audit, a second audit should be conducted to verify whether quality has improved.

Continuing Professional Development (CPD)

All GPs, pharmacists and accredited checking technicians (dispensers with a special qualification enabling them to perform the final accuracy check on prescriptions before they are dispensed) are required to undergo regular learning exercises in order to keep their skills and knowledge up to date and demonstrate their continuing competence to practice. Many CPD exercises are now completed online but attending seminars and training workshops can also count towards CPD.

DRUM – Dispensing Review of Use of Medicine

These are consultations between patients and dispensers in a dispensing GP practice to assess how a patient is taking their medication and if they are experiencing any problems.

Feedback from patients

Most people working in GP surgeries and community pharmacies, and indeed the patients, agree that asking the patients for their opinions on how the services are run is a good idea in theory but that current patient questionnaires often fail to elicit useful feedback. Often, we think, this is due to poor questionnaire design and delivery. Questionnaires need to be delivered over a reasonable time period (approx. 1 month) to make sure enough people complete the questionnaires. Also the time of year the questionnaire is delivered needs to be considered; where possible questionnaires should be delivered every 6 months to get a variety of respondents.

Careful consideration needs to go into writing the questionnaires – what exactly do you hope to gain from each question? How could you use the responses to improve service? It is also important to include sufficient space on the questionnaire to allow respondents to give their comments, which may highlight areas not picked up on in the questions.

Feedback can also be obtained using interviews with patients or providing a ‘comments box’ for patients to post in their written feedback.

Results from questionnaires/interviews/comments should be fed back to ALL staff in the Practice; the best care is delivered by cohesive, supportive teams with a strong patient-oriented ethos and one way to help promote such a team ethos is to recognise that all staff (team) members have a role to play in improving care. As such, positive feedback from the questionnaires is also important to share with all staff.

Formulary

A list of medicines and appliances that are stocked or can be obtained by the Practice. It does not include all drugs available.

Locum

A pharmacist or GP who temporarily works in a pharmacy/GP practice, for example, to cover the usual practitioner's holiday leave.

Manchester Patient Safety Framework (MaPSaF)

A tool developed for use by primary healthcare providers to help them understand and assess their progress in developing a safety culture. The MaPSaF is designed to be used as a reflective learning exercise for the whole team

MURs – Medicines Use Reviews

These are consultations between a pharmacist and patient and are similar to DRUMs in that they assess the patient's understanding and use of medicines. They identify ways to improve the patient's medication plans to make them more effective, easier to comply with and less wasteful.

Mystery shoppers

Mystery shoppers or simulated patients are individuals trained to visit a Practice to test a specific service and then provide feedback on their experience (e.g. how quickly were they seen to, were the staff friendly?) Staff are not aware that the person is assessing them. Mystery shoppers are usually unknown to the Practice but can be regular patients recruited for example by an external body. Mystery shoppers could be trained to a level that they would be able to handle ad hoc interaction (i.e. not be preoccupied with a tick-box scoring system). Mystery shoppers might engage in single visits or a series of visits (2-3) to the practice over a period of time. A key role for the mystery shopper would be providing prompt feedback and, as such, they would be trained in how to do this. The aim would be to give constructive feedback and support so the Practice could improve (the shopper could give ideas of how other practices work) immediately after the final visit.

Near-misses

An error that has been made in the dispensing process but is noticed and fixed before the medication is handed out to the patient.

Pharmaceutical service

In this study we are taking pharmaceutical services mainly to mean the dispensing and distributing to patients/carers of prescription medication. These services include activities such as providing advice on the use of medicines, dispensing medicines and providing general health advice, for example on healthy eating or stopping smoking.

Protocol

An official set of procedures to be followed for carrying out a task

Spot checks

These are quick assessments, of which staff have not been informed in advance, to check whether protocols are adhered to in everyday practice. They can be carried out by any member of staff, not necessarily the most senior member. The emphasis should be on maintaining high standards and highlighting potential problems before they become serious issues, rather than trying to 'catch someone out'. Records of spot checks should be kept, detailing what was checked, when and by whom, the staff members being checked (if applicable), and whether or not protocols had been adhered to. Feedback is an important aspect of spot checks: if the SOPs were not adhered to all staff should be informed of this and of what the correct procedure is, then a further spot check conducted in a couple of weeks' time.

Standard Operating Procedures (SOPs)

These are documents providing detailed instructions on how to carry out each procedure involved in providing pharmaceutical services. SOPs help to ensure consistency in practice and common understanding among staff. Locums and new staff should be able to follow the Practice's methods simply by adhering to the SOPs. The documents should be reviewed regularly (at least twice a year) and staff encouraged to reflect on them in order to ensure all team members are continuing to adhere to the SOPs.

Appendix 5. Key messages from PAG meeting

Project Advisory Group meeting

Key messages

Fundamentals

- Patient safety is the primary concern – patients assume that what they are prescribed is appropriate and that the medications/appliances they are dispensed will not cause them harm.
 - The most essential aspect of quality in pharmaceutical services therefore is ensuring patient safety by stocking only in-date drugs, double checking prescriptions, preventing errors, maintaining a well organised and hygienic dispensary etc.
- Staff qualifications – there was a concern that the NVOs for dispensing assistants and technicians may not be sufficient to enable prescribing errors (as distinct from medication accuracy errors) to be identified. With regard to prescribing errors, a ‘blame culture’ still exists in pharmacy which hinders the development of robust systems for preventing future errors.
- At present assessments of pharmaceutical services may place too much emphasis on procedures and process and not enough on outcomes - this may lead pharmacy/dispensary staff to focus more on adhering to regulations and less on the actual patient (a ‘tick-box’ mentality). Current quality assurance schemes are not well policed and are mostly reliant on self-report by individual practices.
- Quality needs to be balanced against cost and whether the additional cost provides good value.

Customer service

- Good customer service is key to ensuring patient satisfaction and, with the advent of internet pharmacies, is essential to gaining patients’ loyalty.
- Basic aspects of customer service included: friendliness of staff; informing patients/customers of waiting times; providing comfortable waiting areas.
- ‘Going the extra mile’ to meet patients’ needs will distinguish an exemplary practice; for example home-delivering medications to patients less able to travel (especially if out-of-hours), advising patients of new services that may benefit them even if they are not provided at that particular practice/pharmacy, ordering drugs/appliances for a patient even if they are not usually stocked or finding the nearest place where the patient could obtain the drug/appliance. This will be reflected in a ‘patient-oriented’ ethos, where staff members try their utmost to help patients.
- From both a customer service and a safety perspective there is a need for staff to tailor medicine information to the needs of the patient: to ensure that patients understand

their prescription labels as the prescriber intended; taking time to talk with patients to ascertain their needs (e.g. language, large print) and, if required, explain prescription information in a way that the patient can understand (e.g. distil information).

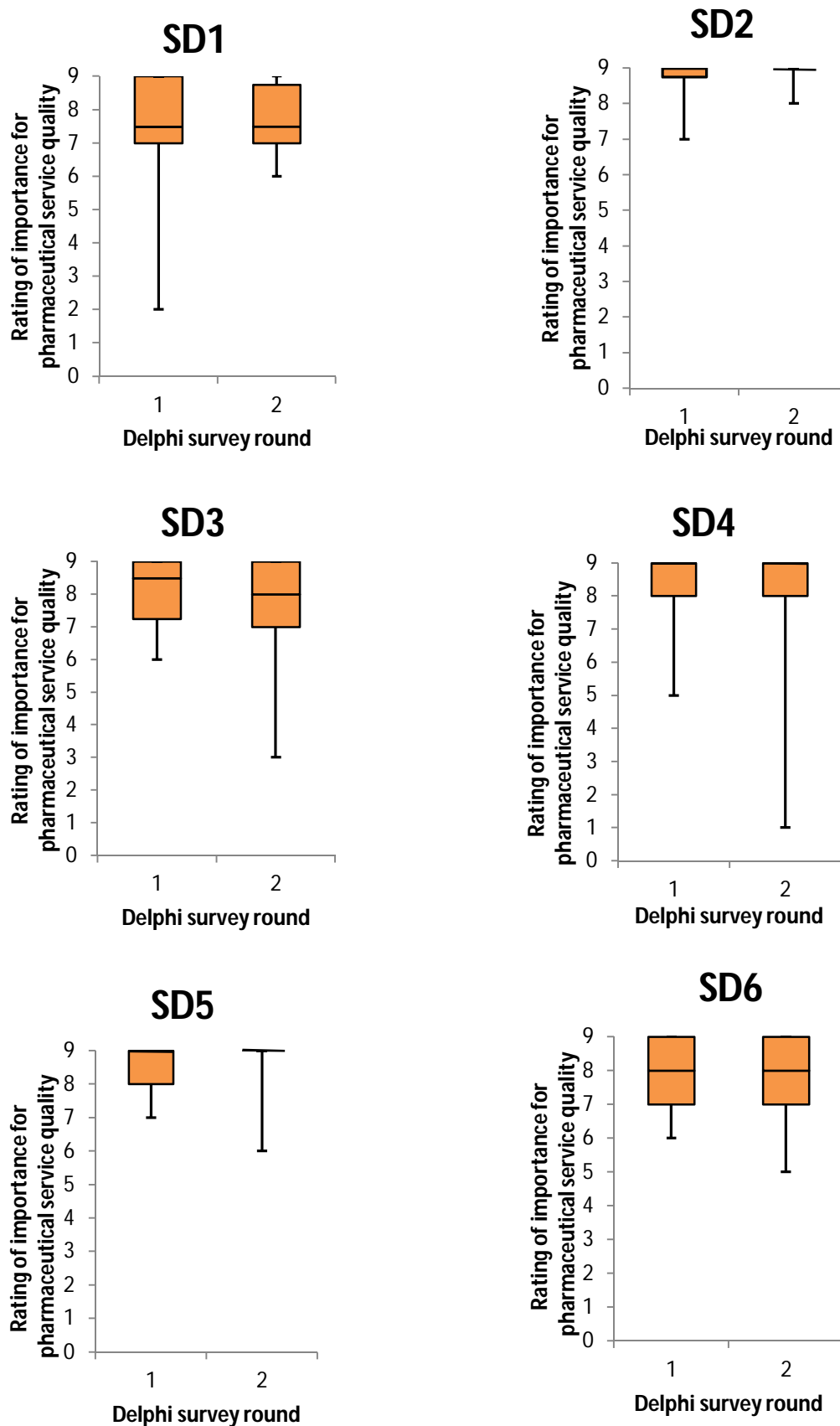
- The patient questionnaire (used in pharmacy) needs to be improved.

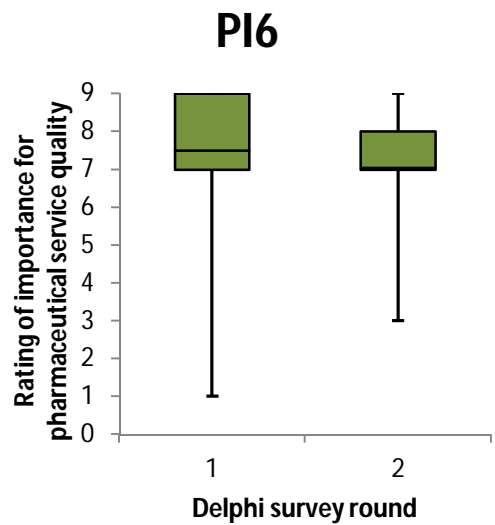
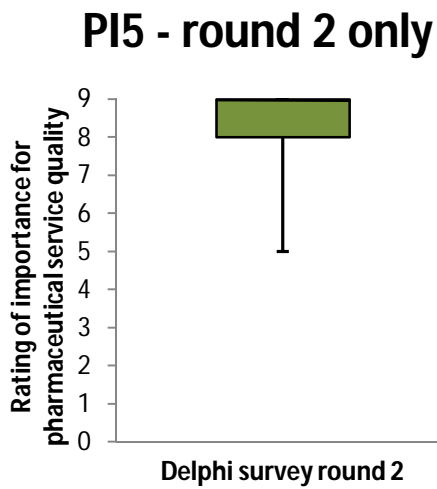
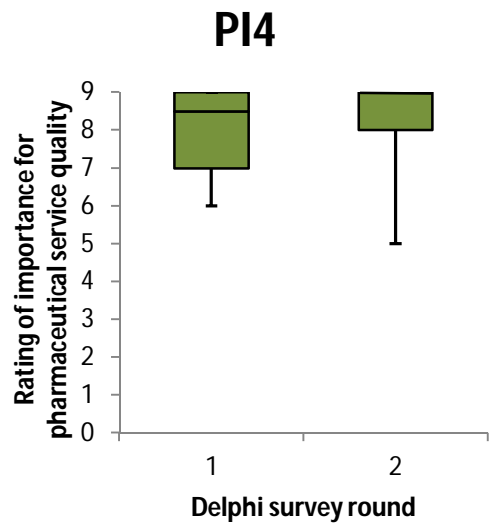
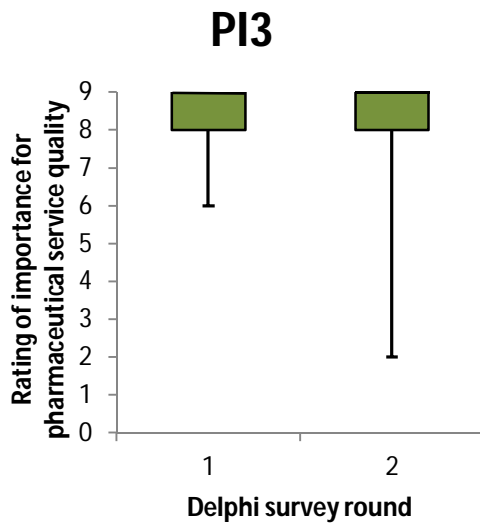
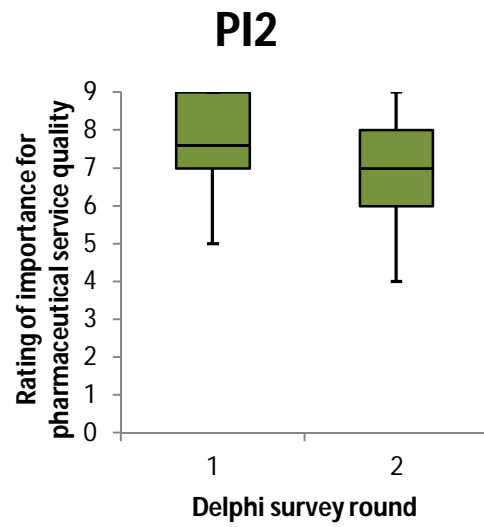
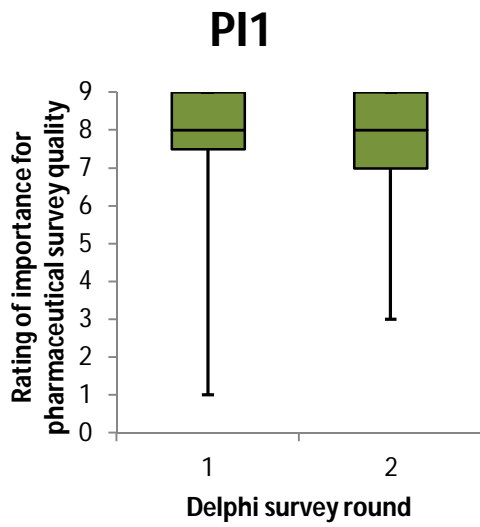
Population needs

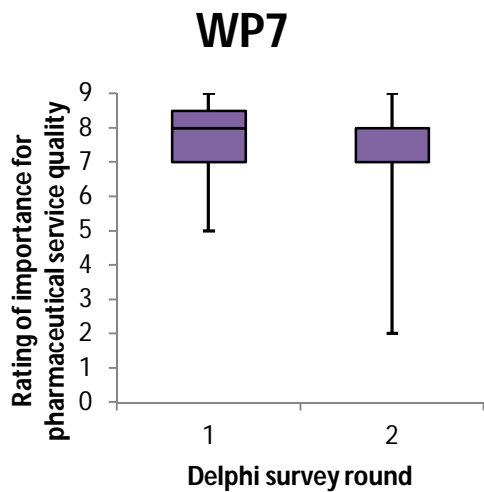
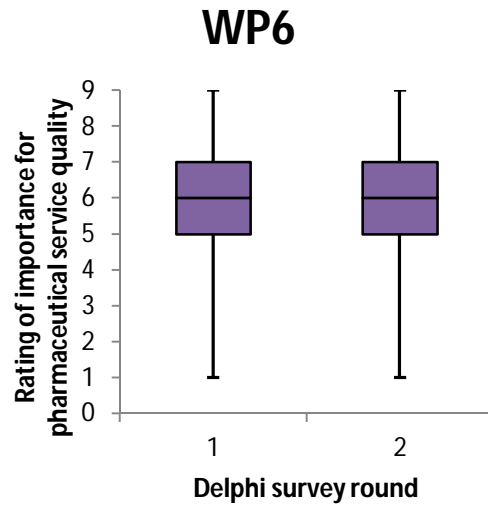
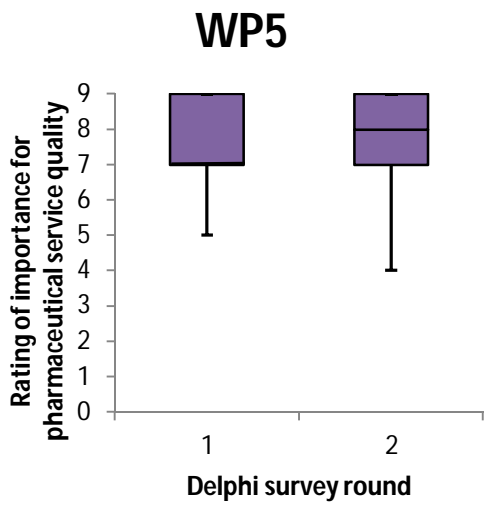
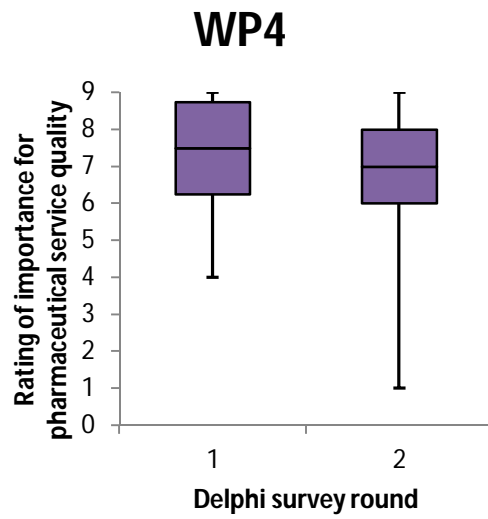
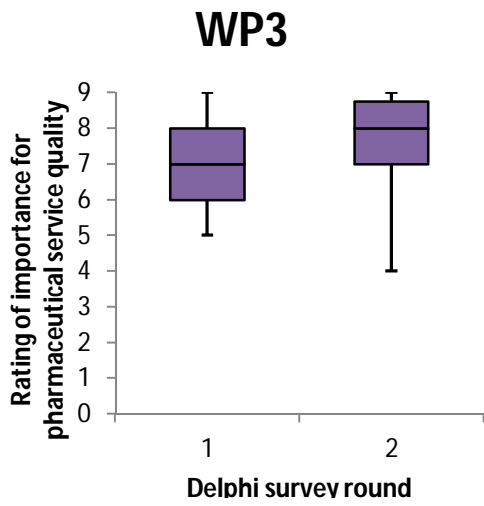
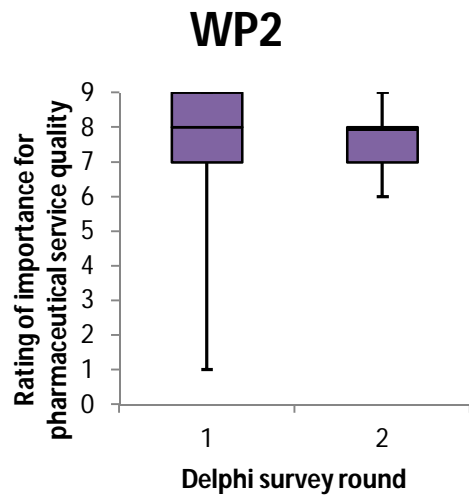
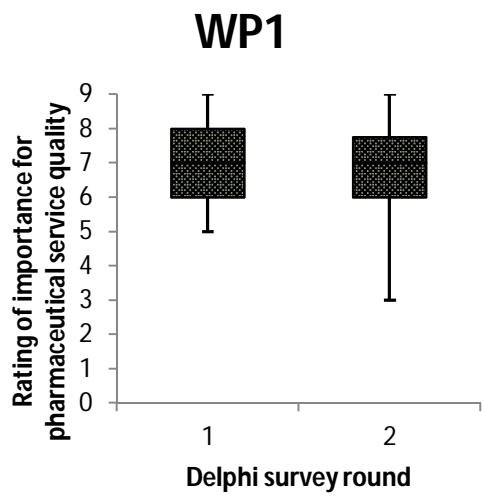
- How to access medicines outside normal dispensary/pharmacy opening hours needs to be actively publicised.
- Exemplary practices/pharmacies will demonstrate innovativeness by trying new methods of service delivery to meet their local population's needs.
- There is scope for better promotion of the services provided by both community pharmacies and dispensing GPs – better communication between GP practices and pharmacies could help by ensuring the health care providers know what services are available to their patients in their local area.
- MURs and DRUMs may not provide much added value. Other advice services are not recorded so their value is not recognised and staff may feel less encouraged to provide such spontaneous advice.

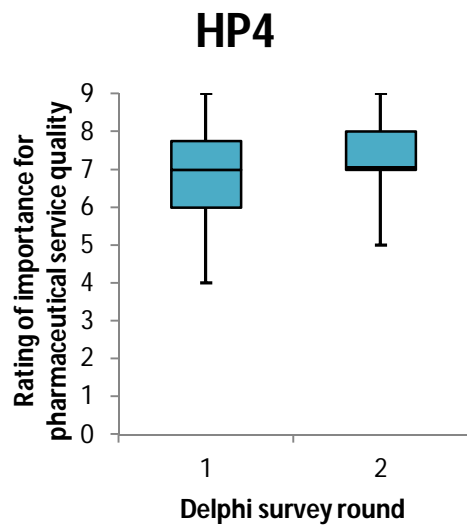
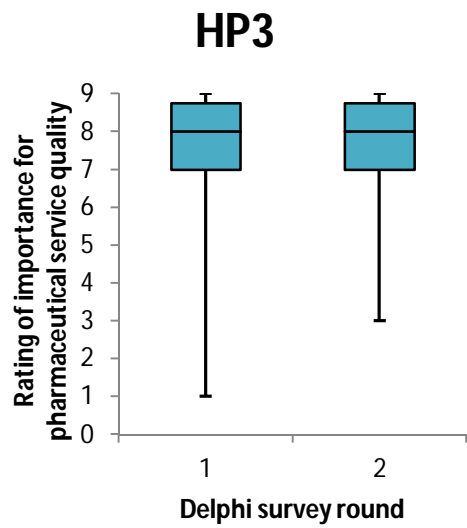
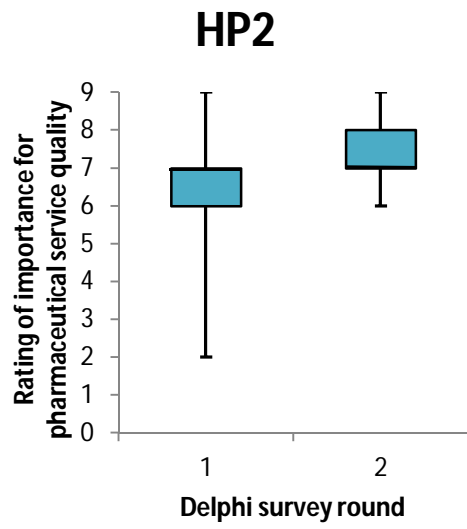
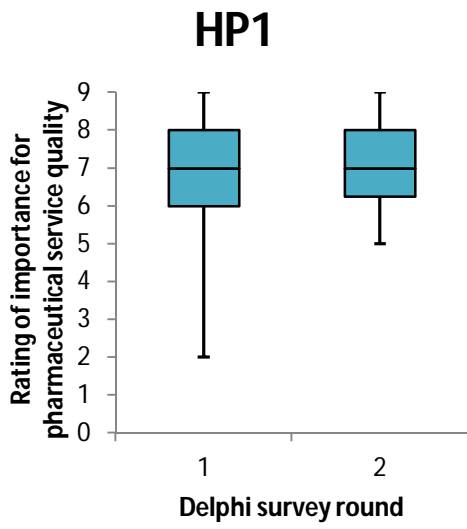
Appendix 6: Delphi survey box plots

Box plots showing the distributions of ratings across the two Delphi survey rounds for each quality dimension









Appendix 7: Final list of quality dimensions

This is the final list of quality dimensions for pharmaceutical services and ways in which they could be implemented in community pharmacies and dispensing doctor practices. Within each group dimensions are given in order of importance, as rated in the Delphi survey.

Safety and dispensing (SD)

- 1. Dimension:** There is a clear culture of safety in how the dispensing process is managed.

Description: All staff members are involved in ensuring that the practice prioritises patient safety and are encouraged to reflect on the safety of current processes.

Evidence: Staff use a tool such as the Manchester Patient Safety Framework, on an annual basis, in order to reflect upon the safety of internal procedures.
- 2. Dimension:** The Practice has clear procedures for both second checking of prescriptions by another person (double checking) and second checking of one's own work (single checking).

Description: It is not always feasible for two members of staff to check an item before it is given to the patient and there are times when both single and double checking would be used. There is research evidence for how both single and double checking can be done safely. Local checking procedures should incorporate this evidence into their single and double checking processes.

Evidence: SOPs for both single and double checking that incorporate processes to address safe checking procedures. Random spot checks to ensure adherence to SOPs.
- 3. Dimension:** Standard operating procedures (SOPs) align with actual staff practice; they are reviewed annually and all staff understand and sign up to the importance of these procedures.

Description: SOPs are comprehensive and reviewed and reflected upon each year by all staff members involved in the dispensing process (including medicines counter assistants and dispensary receptionists); this will also act as a refresher exercise. Records are kept of when each member of staff last reviewed each SOP. All staff members understand the purpose of SOPs and also understand their value for new and locum staff. All staff are involved in updating SOPs and developing new ones.

Evidence: Self or external assessment of whether SOPs cover all dispensing procedures (one way to think about this might be to ask 'from the SOPs alone would a new member of staff be able to find out what services we provide and all the processes that contribute to providing them?').

4. Dimension: The Practice recognises the importance of patient safety in the dispensing process and tries to ensure that dispensing staff are not interrupted in the middle of dispensing a prescription.

Description: Dispensers/pharmacists have a quiet area available in the dispensary, where distractions are kept to a minimum. All staff at the Practice (not just those in the dispensing area) are aware that dispensers/pharmacists should not be interrupted when dispensing/checking a prescription and will wait until the dispenser/pharmacist has finished the current prescription (or reached a suitable point in the process to break from it) before approaching them. Where staff may feel uncomfortable if a patient crosses the boundary into the dispensary working area (e.g. in open-plan practices where the boundary is virtual), there are clear signs asking patients to respect this (e.g. asking them not to lean through the hatch or step behind the counter).

Systems are in place to help minimise the effect of unavoidable interruptions, for example coloured cards are made to identify unfinished prescriptions and these cards are easily available so that one can be placed with a prescription before attending to the interruption.

Evidence: SOP on how to handle interruptions when dispensing, including protocol for approaching a member of staff when they are dispensing. Spot checks to ensure SOP adhered to, followed by feedback to staff. Clear signs to patients if boundary to dispensary is virtual.

5. Dimension: The Practice has clear SOPs for handling near-misses and dispensed errors. There is an easily accessible error/near-miss log, which is regularly reviewed and discussed among all dispensing staff.

Description: Staff members have a common understanding of what constitutes a near-miss and a dispensed error. Both are recorded in a way that encourages the staff member(s) involved to reflect on how a similar error could be prevented in future. Error records give a clear, comprehensive report of what occurred and how it was dealt with.

There are regular reviews of error records, where the errors are discussed among all staff and they are encouraged to pool their ideas as to how practises/systems could be changed to prevent further errors. There is a no-blame culture – the names of those members of staff involved in errors need not be recorded in the communal error log.

Evidence: SOPs for handling and reporting both dispensed errors and near misses. Spot checks to ensure all staff members know and understand the SOPs. Minutes kept of regular team meetings to discuss errors and evidence of changes made to practice as a result of reflective discussions.

6. Dimension: Consideration is given to the optimal design of available space in the dispensary. Systems are in place to ensure efficient processing of prescriptions, taking in to account space restrictions and staff schedules.

Description: The amount of worktop space available for dispensing and checking is maximised and kept tidy/clear. If prescriptions are left on the dispensary worktop (e.g. prior to checking or if waiting for extra items), different prescriptions are easily distinguishable (e.g. baskets are used to keep different prescriptions' items separate).

There are coding systems to distinguish different types of prescriptions (urgent antibiotics, repeat prescriptions etc.). For example, colour-coded baskets could be used or separate areas of worktop are demarcated for placing different types of prescriptions. These coding systems are understood and employed by all staff and written down (in SOPs/on noticeboard) for locums and new staff and as reference for permanent staff.

Evidence: Spot checks to verify that coding systems are adhered to and check that it is clear why any items currently on the counter top are there.

Visits by staff to other pharmaceutical service providers could give ideas on how dispensary space can be most effectively organised.

Patient-Provider interaction (PI)

1. Dimension: The practice demonstrates an ethos of patient centred care, committed to "going the extra mile" for the patient. This ethos is clearly demonstrated to all new members of staff.

Description: Staff try to ensure that patients never leave without having their prescriptions filled or knowing where/when they can obtain the required items. For example, if the Practice is unable to immediately fill a prescription, staff make every effort to locate the required items by telephoning various suppliers. If necessary other pharmaceutical service providers are contacted on behalf of the patient (with prior permission) to reserve stock, so that the patient knows they will be able to obtain what they need.

Staff endeavour to make it as easy as possible for patients (particularly those less able) to obtain their prescription medication, for example by delivering medication to local patients who are temporarily finding it difficult to travel.

Evidence: Practice mission statements describe the emphasis on patient care and an appropriate induction programme for new staff to ensure this ethos is passed on to them. (Over time new staff should pick up the ethos from the actions of existing staff.)

Unfilled prescriptions and the reasons for them being unfilled are audited. Audit of all prescriptions received on a randomly selected day, and outcomes.

Mystery shoppers assess the Practice ethos and willingness to “go the extra mile”.
Patient feedback.

2. **Dimension:** Staff ensure that all patients (and/or carers) understand why they should take their medicines, how to take them and any precautionary information.

Description: Staff keep up-to-date with guidelines and evidence about medications to ensure the advice and information they provide for patients is accurate. Patients are always asked if they would like or require information on their prescription medications and staff always check that the patient understands how to take their medicines correctly.

Evidence: Mystery shoppers and patient feedback specifically on the medication guidance given.

3. **Dimension:** The Practice has effective and customer service-oriented methods of communicating with patients in one-to-one interactions.

Description: Staff communicate well with patients: they are friendly and take time to listen and explain things in a way that patients find easy to understand. Staff have training on how to deal with patients, which has involved practical work (e.g. role-playing) as well as theoretical work; these training sessions are held every two years to act as a reminder. Patients find staff to be approachable.

Evidence: Individual staff portfolios with records of training sessions attended and brief accounts of what has been learnt. Patient feedback and mystery shoppers.

4. **Dimension:** Each staff member demonstrates excellent customer service. There is a team approach to defining and implementing good service.

Description: Staff have regular customer service training, involving practical exercises as well as theory. SOPs are in place for acknowledging patients and keeping them informed of the progress of their prescriptions. For example if a dispenser is having trouble locating their prescriptions or if the pharmacist has a query about the prescription and wants to talk to the prescriber, the patient is kept informed. On the telephone, patients are not left on hold for more than a minute; if needed, messages are taken and phone calls returned as soon as possible. Staff are aware of how tasks should be prioritised during busy periods.

Staff engage with patients and take time to listen to any concerns that are raised, they recognise that for some, particularly elderly patients, they might be the only human contact that patient has that day. Relevant information gleaned from regular patients is passed on to all members of staff (for example if a patient’s family member has recently died).

Evidence: Mystery shoppers, patient feedback followed by minutes from staff meetings discussing the feedback. Individual staff portfolios with records of training sessions attended and brief accounts of what has been learnt.

- 5. Dimension:** Staff are always aware of and acknowledge waiting patients.
- Description:** Systems are in place to ensure staff are aware of any waiting patients, for example a bell is on the door to alert staff when a patient enters the shop/dispensary waiting area. There is a SOP for times when staff are unable to immediately deal with a patient (e.g. looking at patient and saying 'I'll be with you in a minute') to ensure that patients know they will be attended to as soon as possible.
- Evidence:** SOP for times when staff are unable to immediately deal with a patient; spot checks/audits to ensure this happens. Patient feedback on their waiting times before they are acknowledged.
- 6. Dimension:** Practices conduct MURs / DRUMs in a way that maximises patient benefit, and only with those patients who are likely to benefit from them.
- Description:** MURs/DRUMs are only conducted with patients who staff believe will gain in understanding as a result, for example, if the patient seems uncertain about aspects of their prescription or there is reason to believe that the patient is not taking their medication properly. Staff fully understand the purpose and scope of MURs/DRUMs.
- Evidence:** SOP for identifying suitable patients for MURs/DRUMs. Peer review sessions (which could be internally organised in large practices or organisations) could be held to discuss a selection of recent DRUMs/MURs to help staff reflect on their purpose and improve their future practice and the findings from these sessions recorded. Patients are asked for their opinions on the usefulness of DRUMs/MURs and if/how they could be improved.

Workplace culture (WP)

- 1. Dimension:** The Practice demonstrates effective methods of internal staff communication.
- Description:** There are agreed methods for communicating different types of messages (e.g. new protocols will be listed on a noticeboard for all staff to sign when they have read them; issues that cannot be resolved that day concerning a particular prescription are to be noted in the diary for next staff etc.). These methods are documented in a SOP and, if appropriate, the SOP is also displayed as a poster in the dispensary for the benefit of locum/new staff. Regular practice review meetings should be held with all staff present or receiving minutes. Staff feel that they are listened to by their colleagues. Staff are required to reflect on how effective the communication systems are within the team at least annually.
- Evidence:** SOP for communication, detailing how various messages are communicated to all staff. Spot checks by appointed members of staff to ensure these communication protocols are adhered to.
- 2. Dimension:** There is a culture of encouraging staff to improve internal procedures.

Description: All staff members feel valued by their colleagues and are able to make suggestions to their colleagues about how the running of the practice could be improved. Staff are encouraged to learn about other ways in which pharmaceutical service providers can operate and reflect on how they compare with their own practice. One way of doing this could be to establish links with local practices to allow staff members to visit them and compare/reflect on how things are done differently.

Evidence: External observation of a team meeting and interviews with staff to find out to what extent they feel able to make suggestions and whether they feel the team listens to their ideas.

There are regular audits of service (e.g. of unfulfilled prescriptions, queries to prescribers) and internal assessments (e.g. random spot checks). Portfolio of audits and reports of how issues identified have been dealt with.

Minutes from practice meetings show that the team have reflected on their current practice. Records/evidence of visits that have been made by staff to other practices, individuals' reflective reviews of the other practice.

- 3. Dimension:** The Practice facilitates training for all staff. All staff have access to, and know how to use, online information sources and training resources.

Description: Senior/more qualified staff support their colleagues in training (e.g. reviewing any written exercises, explaining things that have not been understood). Time is allocated for staff to train/study and receive training support from colleagues. Staff are motivated to improve the quality of their work and feel encouraged to continue learning. All staff are aware of and make use of online support/information websites (for example on customer service training) and journals that the Practice has access to. On-site team training and revision sessions take place regularly. A record is kept of staff training that has been completed detailing the date, which staff attended, any qualification type awarded and date of qualification expiry (if applicable) – this will enable the Practice to see when refresher courses might be needed. Individual staff members keep portfolios of all training they have undertaken with brief accounts of what has been learnt.

Evidence: Staff portfolios and Practice records of staff training. Regular staff appraisals.

- 4. Dimension:** The Practice makes an effort to develop and maintain relationships with other local health care providers.

Description: Staff (particularly pharmacists) make efforts to communicate with other local health care providers (GPs, other pharmacies, private healthcare professionals, district nurses etc.). For example, new practices/staff members introduce themselves to neighbouring practices, messages are sent to update neighbouring practices if, say, a change is made to their formulary or if a drug is out of supply. It

might be more practical for some practices to have one or two designated members of staff for liaising with other practices.

There is a SOP detailing how to handle messages from other practices (i.e. how and where to record the message, who should be informed). Records are kept of communications that are made and received.

Evidence: There is a SOP for communicating with other practices (both initiating communication and receiving/processing messages). There is a readily accessible list of contact details for local practices in the dispensary. A record of attendance at local inter-professional meetings is kept along with details of decisions made at them.

5. **Dimension:** Staff take a mature approach to Continuing Professional Development (CPD) and recognise it as a valuable learning opportunity.

Description: Staff endeavour to gain as much as possible from mandatory CPD (rather than an attitude of 'just something to be done as quickly as possible'). CPD exercises are discussed among the team, reflecting on how the topics covered relate to their practice.

Evidence: Individual staff CPD records kept, spot checks to see how well CPD learning has been retained, records/minutes of staff meetings on CPD material.

6. **This dimension relates to community pharmacy only.**

Dimension: The pharmacy ensures that locum pharmacists are able to uphold the good working relationships between the pharmacy and local healthcare providers

Description: Community pharmacies that have a high level of locum use (especially where there is no consistent use of the same locum) ensure that locums are made aware of local healthcare providers that might be in contact and have available information about these providers, for example a folder giving contact information for each provider, names of practice staff, common issues raised etc.

Evidence: Folder of information about local GP practices and healthcare providers with whom the pharmacy regularly has dealings is kept in the dispensary and locum pharmacists are directed to it on initiation.

7. **Dimensions:** Practices link up to run discussion groups/seminars on relevant issues – for dispensers/technicians as well as pharmacists and GPs.

Description: Sharing experience and knowledge among local practices is incorporated into training. All staff spend time in different practices, both CPs and DDs, to see how they operate (local primary care provider groups could set this up as a regular exchange each year to encourage practices to continue to reflect on their own systems/organisation).

Evidence: Records/minutes from multi-practice meetings. Brief, reflective summaries of time spent in other practices are kept by staff in their training portfolios.

Health promotion (HP)

1. **Dimension:** Staff in Practice are well equipped to provide essential public health advice.

Description: All Practice staff with patient contact know what health information materials are available (on site and online). Staff seek out up-to-date information on services. Staff readily help patients locate information and have had training to be able to pick up on patients' cues that they need advice. Staff have a good basic knowledge of the topics in current health promotions at their Practice.

Evidence: Spot checks or mystery shoppers; any given member of staff can advise on what information leaflets they have available (e.g. on diabetes care) or know where to access information for patients. Records of staff training on giving health advice.

2. **Dimension:** Patient waiting areas are comfortable and good use is made of these areas for health promotion/patient education.

Description: Seating is available to patients while they wait; if necessary these seats are clearly signed and staff notify patients as to their location. These areas are comfortable and attractive with information leaflets and health promotions clearly laid out and accessible. Lighting is bright enough for patients to be able to read the information materials.

Evidence: Patient feedback and use of mystery shoppers to provide feedback and support for change.

3. **Dimension:** Practices proactively engage in health promotion.

Description: Health promotion displays are creative and eye-catching. Displays are regularly changed to maintain regular patients' interest.

Evidence: Mystery shopper or Patient feedback on health promotion displays. Audit of how many people read the displays. Records of staff training on health promotion.

4. **Dimension:** The services offered by the Practice are clearly displayed.

Description: Notices of what services are available at the practice are clearly visible to patients, they should not have to rely on staff telling them which services are offered. There is a specific noticeboard or area for advertising a practice's services (as opposed to various signs in different places).

Evidence: Patient feedback and mystery shoppers