

The Pharmacist in Primary Care – An Introduction

Project Report

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Overview

An NHS Education South West funded project to design, develop, deliver and evaluate a programme of continuing professional development study days for registered pharmacists who wish to develop their knowledge and skills for potential extended roles in primary care.

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The Pharmacist in Primary Care – An Introduction

Executive Summary

The future of NHS Primary Care is likely to involve new models of delivering care, with an increasing emphasis on multi-disciplinary teamwork. Pharmacists are seen as an underdeveloped and underutilised resource within the NHS, and the Department of Health has the vision for pharmacists to be integrated in the wider health and social care system. This vision of further integration into primary care offers potential to relieve pressure on GPs and Accident and Emergency Departments. In order to achieve this, pharmacists are likely to need to enhance their clinical skill-set. The National Pilot: Clinical Pharmacists in General Practice, provides funded development and education, in the anticipation of an additional 1,500 pharmacists working in general practice by 2020. Market forces will demand that training programmes are short for rapid production of primary care pharmacists, whilst at the same time ensuring competence, preparedness for the role and acceptance by primary care teams.

This report documents the design, development, delivery and evaluation of a continuing professional development (CPD) training course targeting motivated pharmacists, and explores whether such additional training affects their confidence and perceived competencies for potential roles in new models of primary care.

Design

The aim was to design a continuing professional development course, which built on, and extended the knowledge, skills and attitudes of pharmacists for practice-based roles in new models of care.

In order to scope the relevant curriculum content of the CPD course, a training needs analysis was conducted through consultations with stakeholders, pharmacy organisations and pharmacists working, or intending to work in primary care.

The findings from these consultations, literature reviews and professional guidance resources highlighted the need for training to include skills development alongside knowledge acquisition.

This led to the design of a framework of six curriculum domains on which to base training. These included communication and clinical skills training, medicines optimisation, long-term condition care and professional practice skills such as leadership in prescribing quality improvement activities.

Development

Having designed the curriculum content, the aim was to develop a training course, which would be of interest and value to registered pharmacists considering or working in primary care roles.

Clear marketing and recruitment methods enabled selection of a cohort of pharmacists with motivation, experience and career plans involving developing extended roles in primary care.

The CPD programme was developed as a one day per month course from February 2016 to July 2016 to give a total programme duration of six days, supplemented by personal preparation and the offer of primary care practice-placements for interested participants.

Royal Pharmaceutical Society (RPS) accreditation of the training programme was granted in February 2016, endorsing the quality of the intended training programme.

Delivery

Delivery of the training programme adopted principles of adult learning theory, collaboration with multi-disciplinary experts and an evidence-based approach to patient-centred practice. Learning activities included discussion of problem-based cases, participation in live patient interviews and analysis of long-term condition care consultations.

Clinical skills training, within the context of The University of Exeter Medical School (UEMS), was a major feature in the delivery of the course. Utilisation of experienced clinical tutors, access to specialised resources and the availability of volunteer patients ensured high-fidelity simulated skills practice.

An introduction to general practice IT systems and processes occurred within a GP surgery setting using practice databases and test patient records.

An e-learning platform designed in conjunction with an educational technologist gave participants the option for blended learning and access to a web-based discussion forum to encourage a community of practice.

Evaluation

Evaluation of the course occurred using a mixed methods approach. Participants completed written feedback forms at the end of each study day. Their responses comprised global and session-specific rating scores, along with written replies to open-ended questions to encourage free text comments.

A medical knowledge multiple-choice test based on course content was administered to the participants, pre- and post-course. Analysis of results showed an increase in participant knowledge from a group mean score of 57% to 85%.

Semi-structured interviews were conducted with participants pre- and post-course. Participants were asked to comment on the course, on their perception of pharmacists' roles in primary care, on the competencies needed for these roles and on their own preparedness for these roles.

Findings

This project highlighted the following points: -

- There is considerable local and national interest in the development of pharmacists' further integration into primary care. This was demonstrated by the involvement of the stakeholders, the number of enquiries about this course and the engagement of the participants on the course.
- A specialist medical educational provider, such as The University of Exeter Medical School, brings unique resources (E.g. clinical tutors, expert speakers, access to patients, access to training environments etc.) to developing and delivering postgraduate healthcare training.
- Pharmacists have characteristics of adult learners and using these in designing teaching activities, enhanced peer-to-peer learning and professional networking.

- All participants spoke positively regarding the course. The clinical skills teaching was by far the most highly valued element for all participants.
- Small group teaching is suitable for delivering communication and clinical skills training so that tailoring to previous experience, receiving feedback on performance and repetition of practice can occur.
- Training in Primary Care IT systems and administrative processes, including using test patient records and referencing local and national guidance, was facilitated by delivery in a GP practice setting.
- The CPD course was shown, by way of pre- and post-course testing, to improve the medical knowledge of participating pharmacists in the areas covered in the curriculum.
- Pharmacists expressed concerns about the lack of clarity of their developing role, and in the training requirements and career pathway of pharmacists in general practice roles.
- Pharmacists expressed concerns about gaining competence for extended roles in primary care, access to work-place support and having adequate indemnity provision.

Recommendations

- Further tailored training provision, for the individuals' roles and needs, is required to support pharmacists to consider undertaking, performing and developing clinical roles in new models of integrated primary care.
- Formal training qualifications for practice-based roles needs to include acquisition of independent prescribing status to fully utilise pharmacists' skills and professional quality assurance.
- Accredited qualification training programmes for practice-based pharmacists need to include supervised work placements and assessments.
- Further work at a national level is needed to define the required standards and competencies, and on the role definition of pharmacists in general practice. This would bring them in line with guidance provided for other healthcare professionals.
- Further work at a national level is required to outline pharmacists' career pathways, progression structures and requirements for revalidation of pharmacists in primary care, in accordance with other NHS structures.
- Review of pharmacy undergraduate and pre-registration training needs to occur, in view of the developing clinical roles of pharmacists
- Opportunities need to be created to develop practice-based pharmacists as teacher-practitioners to contribute to pharmacy educational programmes.
- Further research is needed to measure the impacts that pharmacists make when contributing to the skill-mix in primary care teams and in particular the effect on workload and patient outcomes.

- Ensuring provision of indemnity insurance of allied healthcare professionals is essential for the future integration of pharmacists into primary care roles.
- Promotion of the roles of pharmacists in general practice needs to occur so that primary care teams, patients and commissioners understand the expertise pharmacists bring to clinical care.

Introduction

Background

Data from the UK Centre for Workforce Intelligence has recently identified developing concerns in respect of primary care workforce provision. Based on pilot data, it is estimated that 54.1% of GPs over the age of 50 suggest they may leave their patient care role within five years¹. The National Institute of Health Research (NIHR) 'ReGROUP' project is currently under way within the University of Exeter, examining the reasons for GPs quitting direct patient care or taking career breaks, with the aim of developing policy or procedures which might be of relevance nationally <http://medicine.exeter.ac.uk/research/healthserv/regroup/>. The future of NHS Primary Care is likely to involve new models of delivering care²⁻⁴, with an increasing emphasis on multi-disciplinary teamwork.

Pharmacists are an underdeveloped and underutilised resource within the NHS, and the Department of Health has the vision for pharmacists to be integrated within the wider health and social care system⁵. The University of Exeter Collaboration for Academic Primary Care (APEX), in conjunction with the South West Academic Health Science Network (AHSN), and with funding from Health Education England (SW) agreed to undertake a project which would investigate the potential for this integration of pharmacists into general practice, and thus contributing to relieving workforce pressures in the South West. The project would also inform curriculum development for further training of pharmacists for an extended role in primary care.

In order to practice, pharmacists must be registered with the General Pharmaceutical Council (GPhC). GPhC registration requires successful completion of a four-year Master of Pharmacy (MPharm) degree (or UK-recognised equivalent qualification), 52 weeks of pre-registration practice training and successful completion of a registration assessment conducted by the GPhC, in the form of a licensing examination. Beyond registration, a pharmacist must commit to lifelong learning and to continue career and personal development. This project investigated whether a focussed training programme affects the confidence and perceived competencies of registered pharmacists for roles in new models of primary care.

Rationale

The Department of Health vision to further integrate pharmacy into primary care offers potential to relieve pressure on GPs and on Accident and Emergency Departments. Such a role would also support medicines management and optimisation leading to better value for money for the NHS, and to safer and more effective prescribing, in all likelihood associated with better patient outcomes⁶. A developed pharmacist role may also help to support the promotion of healthy lifestyles and the prevention of ill health, as well as contributing to the delivery of seven-day healthcare services.

In order to achieve the goals of this vision, pharmacists will need to enhance their clinical approach to practice, irrespective of the pharmacy sector in which they work (community, hospital, practice-based etc.). As clinical practice in this sector develops and against an increasing prevalence of multimorbidity⁷ and polypharmacy⁸, pharmacists are likely to offer leadership potential in respect of medicines optimisation. By putting patients at the centre of decisions on medication, with regular

monitoring and review processes, potential benefits are likely to include safer and more effective prescribing⁹.

Having pharmacists work within primary care practice teams, and with the ability to prescribe, offers potential to support GPs and nurses in providing better healthcare for patients, and in preventing ill-health. Care homes may benefit from clinical pharmacists working with staff and residents in optimising medicines use, and in ensuring their safe and appropriate administration within these care settings. Patients who require urgent answers to medication problems could access the skills of a clinical pharmacist on the phone, or via the internet in the provision of out-of-hours services such as the 111 service. Hospital pharmacy has always aspired to high levels of clinical pharmacy practice and robust medicines optimisation¹⁰. The wider pharmacy profession has the opportunity to embrace and utilise this high level of clinical pharmacy expertise and extend it into primary care.

Reviewing clinical outcomes¹¹, conducted a systematic review of English language randomised controlled trials that reviewed the effectiveness of pharmacist services in general practices, followed by a meta-analysis. They concluded that pharmacists co-located in general practice clinics delivered a range of interventions, with favourable results being reported in various areas of chronic disease management and appropriate prescribing of medicines.

Clinical Pharmacists in General Practice - National Pilot

In January 2015 NHS England (NHSE), Health Education England (HEE), the Royal College of General Practitioners (RCGP), and the British Medical Association (BMA) GPs Committee (GPC) released 'Building a Workforce – A New Deal for General Practice'¹², agreed a ten point plan to address issues within general practice, proposed the first steps towards building a workforce fit for the future, and outlined a move towards new models of care. Action point eight of the plan, entitled 'New ways of working', stated that the NHSE, HEE and others should work together to identify key workforce issues that are known to support general practice. The plan suggests such support could come from a variety of healthcare professionals, including clinical pharmacists. These commissioning and professional bodies agreed to invest in pilots which would trial new ways of working to support safe and effective clinical care for patients.

In response to point eight of this initial ten point plan, NHSE, HEE, RCGP and BMA reported on 'Clinical Pharmacists in General Practice'¹³. This document acknowledged the experience of existing general practices which have already started to include clinical pharmacists as part of their teams. Evidence from these practices suggests that patients and practice teams have seen significant benefits from developing pharmacy involvement. It also announced the launch of a pilot in July 2015, consisting of 40 to 50 senior clinical pharmacists and approximately 200 clinical pharmacists working in general practice across England. In November 2015, this number, with additional funding, was further increased to a target of 470 clinical pharmacists in over 700 practices. These pharmacists would be employed by, and work with, practices or clusters/federations of practices. A pre-requisite of the pilot is that all pharmacists participating in the pilot must undertake a programme of development and education currently provided by the University of Manchester's Centre for Postgraduate Pharmacy Education (CPPE). Remuneration of these clinical pharmacists will be part funded by NHSE on a sliding scale over 36 months. Beyond the pilot, these posts will be wholly funded by the practice/cluster/federation or other NHS bodies. Evaluation of the pilot is ongoing¹⁴,

and will contribute to the learning and development of the role of the clinical pharmacist in primary care.

The General Practice Forward View

In April 2016, NHSE in collaboration with the RCGP and HEE, launched The General Practice Forward View³. The report delivered a promise of investment in primary care to 2020/21. The document acknowledged pressures within general practice and identified practical steps to address key areas. These proposed solutions were divided into specific, funded steps; investment, workforce, workload, infrastructure and care redesign. Chapter two of the document focused on workforce where NHSE proposes to 'expand and support GPs and wider primary care staffing'. Besides the promise of an extra 5,000 additional doctors in general practice by 2020, the NHSE also delivered the assurance of a minimum increase of 5,000 other staff to work in general practice by 2020/21. Envisaged, within this workforce expansion, was additional pharmacist support. As stated earlier, a pilot of 470 pharmacists was funded by investment of £31m. #GPFV stated that this investment will be extended by a further £112m, leading to an additional 1,500 pharmacists working in general practice by 2020, with the ultimate vision of most GP practices having access to a clinical pharmacist within this timescale. There was a high level of interest and uptake of the initial pilot posts. Evaluation of the pilot¹⁴ will inform where clinical pharmacists might integrate into the primary care multi-disciplinary team. Early indications from the pilot #GPFV suggest possible roles for clinical pharmacists in streamlining practice prescription processes, medicines optimisation, minor illness and long-term condition management. The Department of Health will introduce a Pharmacy Integration Fund⁵, allocating £20m in 2016/17 rising to £300m by 2020/21. It is envisaged that this fund will help to further transform how pharmacists, their teams, and community pharmacy work together as part of wider NHS services. Proposals for the use of the fund are likely to include better support for GP practices, for care homes, and for urgent care services.

These important steps show that NHS England intends to integrate the pharmacy profession further into primary care. Whilst the political and economic imperatives are stated, there are other considerations. Market forces anticipate that training programmes are short for fast production of role-ready pharmacists yet there may be tensions with ensuring competence, preparedness for the job and acceptance by primary care teams. In addition, training pharmacists for extended roles are further complicated by a lack of clarity as to what these roles entail. Tailoring education and work experience for specific career role does not necessarily happen quickly. However, what cannot be denied, and therefore gives justification to these plans, is that pharmacists have much to offer primary care services. Simply put, they are medication experts in a world where there is increasing polypharmacy. The skill-mix of general practice has been enhanced by the expansion of nurses in primary care¹⁵ and the current call is for pharmacists to have a place in the practice –based primary care team. At this point in time, for this to happen, pharmacists will need extra training, which fits with the overall aim of this project of designing, developing, delivering and evaluating a training opportunity targeting qualified pharmacists interested in developing competencies for working in new, integrated models of primary care provision.

Design

Introduction

Since 1967, pharmacy has been an all-graduate profession. As with any graduate profession, many pharmacists qualify with ambition and skills which can lead to innovative development and changes to practice. These changes often influence everyday practice, requiring legislative and regulatory changes such as the introduction of non-medical prescribing, the latter being introduced following the Crown report (1999)¹⁶. In 1986, an influential Nuffield Report¹⁷ concluded that pharmacy could play a 'unique and vital role' in the provision of healthcare in the community. The report recommended that pharmacists and medical practitioners should collaborate to improve the effectiveness and efficiency of prescribing. A more recent Nuffield Trust report in 2014¹⁸ goes further, highlighting the need for pharmacists to work in integrated local care provider networks, and embracing new models of care.

In these times of skill shortages and the challenges of recruitment and retention in general practice, the question of whether pharmacy can help to fill the gap remains. The evolution of the current role of pharmacists, particularly in secondary care, beyond that of being the traditional supplier of medication to that of a more clinically qualified healthcare professional, has required professional commitment to training. Perhaps the challenge now is for the profession to review the undergraduate training as well as tailoring postgraduate opportunities to meet evolving learning needs for increasingly clinically orientated roles.

The Primary Care Pharmacists Association (PCPA) in collaboration with the Royal College of General Practitioners (RCGP) recently gave advice on employing a practice pharmacist¹⁹. This document suggests that pharmacists embarking on a career in general practice may need some foundation training in areas such as the use of IT facilities, the contribution of the quality and outcome frameworks, clinical coding etc. Further research in this area²⁰ has shown that pharmacists in patient facing roles state their training needs to be in the CPPE National Learning Pathway for Developing Clinical Pharmacists in General Practice themes of Clinical Assessment, examination and monitoring; Long-term conditions; Common ailment management; and Leadership and Management.

To deliver this project, a partnership (The Advisory Group) was established involving local GPs and pharmacists coordinated by the University of Exeter Collaboration for Academic Primary Care (APEX), the South West Academic Health Science Network (AHSN), Health Education England South West, and local Clinical Commissioning Groups (CCGs). The Advisory group considered it essential that the design of any course aimed at preparing pharmacists for an integrated, extended role in primary care must remain focused, relevant and achievable. Curriculum is defined as the statement of the intended aims and objectives, content, experiences, outcomes and processes of an educational programme²¹. Designing a curriculum for this project would entail consideration and development of all of these components.

Aims and Objectives

The aim was to design a curriculum for registered pharmacists that builds on and extends their knowledge, skills and attitudes for practice-based primary care roles in new models of primary care.

The objectives of this phase of the project were to:

1. Conduct a needs analysis and incorporate the resulting findings into curriculum design.
2. Identify and incorporate relevant learning and professional practice theories into curriculum design.
3. Identify and incorporate relevant evidence from literature into curriculum design.

Method

Various approaches [Appendix 1] were used to scope, analyse need and inform the design of the curriculum of a continuing professional development (CPD) course for postgraduate pharmacists. The goal was clear from the outset; to build on established skills and prepare pharmacists for potential new extended roles in primary care in the South West. In addition, specific aims for the training programme were developed [Appendix 2].

Initial bid

In early 2015, The University of Exeter Collaboration for Academic Primary Care (APEX) completed a successful, 'Request for Funding from the Health Education South West Membership Council Innovation Fund 2015/16', application for funding of the project [Appendix 3]. This document stated plans for the target audience and learning outcomes. These were used as a reference in the initial project planning stages of course design.

Advisory group

A meeting of an Advisory Group was held in August 2015 with stakeholders from the South West region. The discussions were recorded and covered initial planning of the whole project, including referral to suggested curriculum design and content material for training practicing pharmacists.

Telephone survey

At the beginning of October 2015 and with the support of the Advisory Group, Devon Local Pharmaceutical Committee and Local Clinical Commissioning Groups, we obtained names and contact details of seventeen pharmacists who currently work, or intend to work, in a primary care setting. We initially invited these pharmacists by email to participate in a telephone interview to scope their current workplace roles and to establish their views on potential curriculum content for postgraduate study relevant to primary care.

Working knowledge of pharmacists' education provision and working roles

Curriculum content was also informed from knowledge of pharmacists' background, current continuing professional development opportunities and the range of pharmacists' workplace clinical roles.

Working knowledge of primary care services

Knowledge and experience of primary care processes relating to the Quality and Outcomes Framework²² and common work streams in primary care also fed into the design of the curriculum content. Essentially, we sought to identify some of the possible roles that a pharmacist may undertake in a GP practice would facilitate targeted training.

Professional practice theories

Theories of professional practice²³ were sourced and reviewed in order that professional standards and ethical practice were embedded within the course material.

Results

Advisory group

The Advisory Group meeting, August 2015, acknowledged the potential for peer-to-peer and multi-professional learning as a core component of the initiative. They saw course participants as a design cohort of a new course, which may go on to inform future training activities for pharmacists in primary care. A representative from the University of Bath also contributed to the meeting and offered the collaborative support of an established pharmacy department to co-deliver some course content. The group identified core elements for learning, and could see real potential for delivering these through a mix of learning methods. The importance of discussions with people already undertaking target roles within primary care was also emphasised by the group.

Telephone survey

Having consulted with the advisory group, we obtained contact details of pharmacists in primary care roles. Eight pharmacists agreed to take part in a telephone survey [Appendix 4]. The results of the interviews informed the design of the course by contributing to the development of a curriculum domains framework [Appendix 5], which in turn would inform the specifics of course content and teaching activities.

Literature informing curriculum design

Jorgenson et al reviewed 149 articles²⁴ on pharmacists integrating into primary care. They suggested that an ‘overarching theme regarding the importance of pharmacist assertiveness was identified’ as a facilitator to successful integration and went on to produce specific guidelines - see table 1. This paper informed our assumptions that pharmacists may lack confidence in entering practice based roles.

Table 1: Tips on successfully integrating into an existing primary care team²⁴

Pharmacists should:

- Determine the needs and priorities of the team and its patients
- Develop a pharmacist job description
- Educate the team about the pharmacist role
- Educate themselves about other team members’ roles
- Ensure clinic infrastructure supports the pharmacist role
- Be highly visible and accessible to the team
- Ensure their skills are strong and up to date
- Provide proactive care and take responsibility for patient outcomes
- Regularly seek feedback from the team
- Develop and maintain professional relationships with other team members

Discussions with primary care staff

In November 2015, we presented the initial design of the project at a conference sponsored by NHS England South West focussing on GP workforce issues. This provided us with the opportunity for informal discussions with primary care staff, including GPs, practice nurses and practice managers. Their views, expectations and requirements of the primary care skill-mix contributed to further understanding of the potential future needs and directions of general practice team structures. They saw pharmacists potentially being involved in diagnostic work, medicines optimisation and complex long-term condition care. This, in turn, informed the design of the curriculum to remain focused,

targeted and relevant to primary care. They also highlighted the need for pharmacists to have adequate support at work, primary care teams to accept pharmacists and for pharmacists to have professional indemnity cover at a reasonable cost.

Discussion

The findings of the initial design-stage investigations were considered. It was evident that the role of the primary care pharmacist was still in development. In practice, extended pharmacists' roles had evolved organically through existing work relationships and had been developed to meet the local needs of practices and populations. Discussions with the advisory group and pharmacists did not reach a consensus on a definitive job description for a pharmacist in primary care. Therefore the challenge was to deliver focussed training for a currently, undefined role.

The needs analysis also found that stakeholders and the surveyed pharmacists between them described many potential training needs. They were all feasible suggestions and tended to reflect either the work background or the aspiration of an individual pharmacist, whilst stakeholders identified knowledge and skills which if developed in pharmacists could meet a particular clinical service need.

The stakeholders had also identified certain skills that would need to be developed in pharmacists for these extending roles in new models of care. With their experience of primary care, they stated that training needed to include expansion of leadership qualities, decision-making and management of risk. The literature reviews performed supported this and emphasised the need for the training to focus on these areas.

Strengths

The Advisory Group was a panel of multi-disciplinary professionals, representative of research, academia, primary care, pharmacy and commissioners from the South West. Their expertise and guidance was invaluable in the design stage which ensured the course remained focused on local needs in primary care from the outset.

We consulted with pharmacists, general practitioners, practice nurses and practice managers. This gave us the opportunity to scope experiences and expectations of a wide range of primary care practice team members, including established practice-based pharmacists. This informed the design of an initial, targeted course programme from which to work.

As well as local interest, there were widely debated national political and professional agendas on new models of practice, that were sources of reference.

Limitations

The recruitment of pharmacists for the telephone survey relied on Local Pharmaceutical Committees (LPCs) and Clinical Care Commissioning Groups (CCGs) providing names of pharmacists who may be interested in engaging in this early stage of the process. We do not know what criteria they used to identify these pharmacists, and there may have been some bias in their selection.

In planning the telephone survey of pharmacists, and from the initial 17 identified, only eight agreed to be interviewed. We do not know if these eight were representative of broader pharmacy opinion. A larger cohort of pharmacists from a wider background may have identified different training needs, in respect of any future course design.

Another limitation to the needs analysis for the CPD course was that there was no systematic approach to consult with general practice teams and their patients. Obtaining their views of the potential roles of pharmacists in primary care may have further informed the curriculum design.

Findings in Context

Corresponding to the varying perspectives of the potential roles of pharmacists in primary care, there was a large number of training areas that could inform course design. The quantity was such that prioritisation would need to occur to accommodate the limited delivery timeframe.

In order that there was clarity of purpose, realistic aims and manageable expectation, we decided that the CPD course title would be 'The Pharmacist in Primary Care – An Introduction'. Having designed the course domain framework and a vision to deliver a focussed, relevant course for adult learners, the next stage was to develop the curriculum and related processes supporting the delivery of the course.

Development

Introduction

Due to the timescales of the project, we needed to continue to develop the CPD course in parallel with adjustments and alterations to its design. In order to provide a targeted approach to the project, it was necessary for us to recruit course participants with appropriate experience, motivation and career aspiration for roles within GP practices. NHS England, HEE and others are working together to identify key workforce initiatives that are known to support general practice e.g. physician associates, medical assistants, clinical pharmacists, advanced practitioners, healthcare assistants and care navigators¹². From that list, this project would concentrate on the development of clinical pharmacists. Any clinical pharmacists looking to embark on a career path of integration into these new models of care would hope to be given the chance to participate in, and contribute to, the development of a training programme designed to improve their skills and competencies. Therefore, it was important to recruit suitably motivated pharmacists onto the CPD course, in order for them to make collaborative contributions to the project. The branding, marketing and professionalism of the training course and project would need to portray the appropriate image to attract high quality, motivated pharmacist candidates.

Participants on the course would also contribute to the continuing curriculum development. They would be invited to give constructive feedback on the course content and delivery. Thus, the development of the course would remain iterative. Feedback from any part of the course would inform its ongoing development together with that of any possible future training programmes.

As well as using the participating pharmacists for development of the design, curriculum content and delivery of the course, it would also be important to adopt a multi-disciplinary approach to how a pharmacist might be integrated into general practice offering additional skills to the team. For this reason, we would look to collaborate with local clinicians, nursing colleagues, educational institutions, and health commissioners. The development of a course would lead to the effective training of a pharmacist who has hopefully developed the relevant competence and confidence (at least initially) to possibly become an essential member of the primary care team.

Aims and Objectives

The aims were to continue the development of a training course which is of interest and value to registered pharmacists considering or working in primary care roles.

The objectives of this phase of the project were to: -

1. Market and recruit participants that demonstrate motivation, have relevant previous experience and have future career plans for practice based primary care roles.
2. Iteratively develop the curriculum and training programme in response to continuing work and feedback.
3. Develop collaborative working relationships with stakeholders and related discipline professionals.

Method

Marketing

We started the marketing and branding of the project in mid-October 2015, and we gave the proposed CPD course the title 'The Pharmacist in Primary Care – An Introduction'. We created a promotional webpage and flyer for distribution to recipients via electronic communication during the recruitment process. Both the webpage and flyer contained embedded hyperlinks whereby any recipient could access to the course content and application form.

Meanwhile we created a database of pharmacy contacts in the South West, including pharmacy sector leads, and pharmacy organisation leads. We obtained the contact details, of pharmacies, pharmacists and pharmacy technicians who receive the NHS England weekly newsletter by email, throughout the South West. In total, a database of 1050 email contacts was created in order to facilitate the recruitment of suitable pharmacists onto the course. We sent a webpage link, (<http://goo.gl/ibiPxF>) to pharmacy leads for onward distribution to known pharmacists within their organisations and/or employment. We sent the flyer as a personal invite to individual pharmacists known to have interest in, or already working in, a primary care role. We designed the flyer as an HTML document which would appear in a complete format within the email.

Between Tuesday 17th November 2015 and Thursday 26th November 2015, we sent the email communications to the contacts. We also undertook additional promotion of the course on Twitter® within this period.

Recruitment

Using these methods of marketing, we sought to recruit a cohort of registered pharmacists. We decided that work experience and possession of postgraduate qualifications would not be selection criteria however questions on motivation, experience and career plans in primary care were included. We designed a detailed application form which explored these criteria, and applicants were invited to submit their application by Thursday 10th December 2015. We asked applicants to return their forms by email or post, and we created a database of candidates in chronological order of receipt. We ensured that a transparent application and assessment process was followed and recorded [Appendix 6]. Three project team members independently scored the written applications. Individual applicants' marks were combined and collated. Places were offered to the sixteen applicants with the highest scores. All applicants were kept informed of application outcomes throughout.

CPD Course

We designed the CPD programme as a one day per month course over six months from February 2016 to July 2016 to give a total of six days. We chose term-time dates and avoided any weeks with a bank holiday. We also made sure that definite dates for the programme were fixed, to allow pharmacist participants to arrange leave from work in advance. We designed an initial course programme in conjunction with availability of resources such as clinical skills resources centre bookings, external speakers and training rooms. Numbers of participant places were decided as sixteen.

Participants were registered as University of Exeter students for a period of nine months allowing them access to Library and IT resources.

We seconded an educational technologist from The University of Exeter Medical School onto the team. With his help we created an e-learning platform on a Google® Site [Appendix 7]. We developed and populated an interactive site from which the course participants could view the whole six-month programme. Within each section of the site participants had access to uploaded course resources, references and videos. As an addition to the e-learning platform we created an interactive discussion platform where participants could upload their own resources, make comments on the CPD course, and communicate with colleagues on the course; in essence to form an online community of practice²⁵.

We decided to give the 'The Pharmacist in Primary Care' course an identifiable brand. For this, we created two logos for the course which we used on course material and in the production of the e-learning platform.



We developed the learning material further by creating intended learning outcomes for each day and dividing the day into sessions. We then decided which sessions could be delivered in-house and which would need external tutors. For those that would be delivered by the Co-leads, we created material in a variety of ways such as primary care scenarios, topics for discussion, PowerPoint® presentations, small group tasks and picture quizzes. As material and learning activities were developed we remained focused on the domains framework, intended learning outcomes and theories of adult learning.

We designed a feedback form for each day in order to gather immediate reactions from the participants. After each study day the feedback forms were collated and Co-leads added their reflective comments (tutor notes). We distributed specific feedback to external speakers where it related to their session.

Collaborations

Royal Pharmaceutical Society (RPS) accreditation is for organisations that have developed and provided resources and initiatives to support general workforce development in pharmacy. They accredit training programmes, published materials and editorial content and training events. By seeking accreditation with the RPS, training providers are able to demonstrate their commitment to the delivery of high quality professional development to RPS members and healthcare associates²⁶. In January 2016, we submitted an application for RPS accreditation of 'The Pharmacist in Primary Care' course.

Marketing of the course, and awareness of the project in the South West, also attracted interest from general practices and GP organisations. Before commencement of the CPD course, we were approached by a GP from a Devon practice, wanting more information on the potential role(s) of a clinical pharmacist in primary care. A similar interest was shown by Exeter Primary Care Limited (EPC), an organisation representing several GP practices in the South West. We conducted two presentations, one in a lunchtime meeting at the practice and a further one to a representative of the organisation, with an overview of the project. These meetings also provided us with the opportunity to scope the thoughts, ideas and expectations of medical and nursing colleagues.

These collaborative discussions would provide some evidence considering whether pharmacists can contribute to an effective, efficient and sustainable solution to practice pressures. The meetings with

general practice staff enabled us to explore the acceptability of pharmacy clinical services in general practice.

On Thursday 26th November 2015, one of the Co-leads attended a course hosted by GP Update Red Whale, in London. We were able to observe how an education company delivers training to pharmacists at a national level. We were also able to get some idea of the level of interest in CPD courses aimed at pharmacists in primary care and up-to-date evidence-based clinical information.

Results

Marketing

We sent direct email invites to 22 pharmacists. We sent 43 emails to community leads, hospital leads and organisation leads, requesting them to target pharmacists who may be interested in primary care. We sent a further 985 emails to pharmacies, pharmacists and pharmacy technicians within the South West and we created a database of 1050 email contacts.

Recruitment

Promotion and marketing of the CPD course through direct and cascade emailing, and through the use of social media highlighted substantial interest in this initiative. This led to an over-subscription to the course. From the start of marketing on 17th November 2015 to the closing date of 10th December 2015, we received 38 completed application forms. We completed assessment of all 38 application forms by 14th December 2015. The process resulted in the successful recruitment of 16 pharmacist participants by Friday 8th January 2016. We produced a full report of the marketing and recruitment process [Appendix 8].

CPD course

The initial course programme content [Appendix 9] was developed for the six days and included long-term conditions, minor illness, clinical skills training and medicines optimisation. The development of learning material continued in line with the intended learning outcomes. An example of sample material has been collated [Appendix 10]. We populated the e-learning platform with full details of each day with a total of 17 videos, 28 websites and 32 electronic documents.

We produced the study day feedback form [Appendix 11] with sections to rate the day on organisation, relevance and quality as well sections to rate each session. We specifically decided to ask about any highlights or 'lightbulb moments'.

Collaborations

We were granted RPS accreditation of the training programme on 24th February 2016. RPS reviewers made reference to the study days providing a good introduction to the role of a pharmacist in primary care, as well as providing comments on the targeting and relevance of the programme.

Presentations to NHS stakeholders and GP practice representatives in the South West identified a lack of clarity of the role of a pharmacist in primary care by some medical and nursing colleagues. At their request, and with feedback, a document was produced as guidance for GP practices on the potential roles for pharmacists in primary care [Appendix 12]. The list of potential roles was not definitive; however, it did ensure development of the training programme content continued to be adjusted to relevance in practice. The meeting with a GP practice team also forged our relationship with Judith Magowan, a teacher-practitioner practice nurse who delivers long-term condition

reviews within a practice, as well as lecturing at The University of Plymouth, School of Nursing. Judith went on to present as a guest speaker on three of the study days, providing invaluable inter-professional learning. The meeting with the GP organisation led to several practices offering placements to the pharmacists participating on the project.

Attendance at the Red Whale® Pharmacist Update course in London enabled us to experience a model of professional training on a national level. As a delegate, delivery of the study day appeared to require substantial investment in resources including teaching staff, corporate administration and an IT infrastructure. To deliver training to an audience of two hundred pharmacists, the company adopted a didactic approach, with access to post-course printed and online learning resources. This is appropriate for clinical knowledge transmission to a large audience, however for teaching skills on a small-scale programme with interactive learning techniques, alternative modes of delivery would need to be developed.

Discussion

Databases in existence, along with use of local contacts, facilitated the effective marketing of the course by enabling e-communication with pharmacists across the South West. The number of enquiries and applications to the course created an oversubscription for places. This was an indication of the level of interest and enthusiasm amongst pharmacists to work in primary care role particularly within the applied timescale.

The recruitment process was designed to attract pharmacists who would be committed to training and had aspirations for career progression into extended roles in primary care. The written responses on the application forms and the scoring system used, differentiated the applicants to enable the selectors to achieve a consensus on whom to offer a place. This was done to ensure the process was transparent, open and fair. All pharmacists who were offered a place and were able to commit to attending all of the six study days, accepted.

The initial course content resulted from prioritisation of the topics that arose in the initial learning needs assessment. Investigations into roles of pharmacists in primary care further aided this process so that relevant material could be covered. The teaching material and activities were developed to mirror the integrated nature of primary care, for example cases were written to include clinical, professional and primary care systems knowledge rather than it being learnt separately. Images were used where possible as many learners have a preference for learning in a visual modality²⁷. The e-learning platform was used as advised by the educational technologist for its functional qualities and ease of use. It was important that participants would have access to resources pre- and post-course for review.

The feedback forms were designed with simple rating scores, and asked several open questions requiring free text responses. This was to increase the possibility of rich explanatory data. Asking about any 'learning highlights' was designed to capture transformative learning²⁸. This type of learning can challenge a person's assumptions and beliefs which may be needed if they are to reshape their view of pharmacists' professional identity in terms of taking on new roles in primary care.

Strengths

Having the support from local stakeholders, e-communication and social media was conducive to the recruitment process in terms of marketing the course to a large number of pharmacists.

Delivering the course within an established university medical school gave significant advantages. There was expertise in marketing, educational technology and clinical skills training on which we could draw. The existing website platform and access to medical images with usage rights, enabled us to quickly develop and upload an internet page to advertise the course. Working within the primary care research department (APEX) enabled collaborative working with researchers, access to library services and IT software.

RPS accreditation endorsed the quality of the proposed CPD training programme and confirmed the direction chosen by the project team to be targeted and relevant. They also provided suggestions for course development by recommending that the course included topics such as medication reviews, polypharmacy and de-prescribing.

Collaborations were specifically sought with the practice nurse community for their experience of multi-disciplinary primary care working, their long-term condition care expertise and to represent their profession. The nurse teacher-practitioner provided useful contextual insights for participating pharmacists, as the nursing profession itself, has experienced role extensions within primary care.

Limitations

The short marketing and recruitment timescale did not allow for all pharmacists and pharmacy technicians within the South West to be contacted.

A longer lead-time would have enabled a more comprehensive database of pharmacists and technicians to be compiled, as well as a more quantitative analysis of the level of pharmacy interest in primary care.

Collaboration with additional GP practices across the South West may have gathered extra information on the experiences and expectations of pharmacy clinical services in general practice.

Findings in context

The initial stages of the project identified a broad spectrum of potential learning needs; however, the next stage required targeted selection of curriculum content. Along with this, the applications to the course surpassed the number of available places. Transparent recruitment occurred to select suitable pharmacists. From the background of the selected participants, it was apparent that the group were diverse in terms of work experience. This diversity, the huge amount of potential material and the undefined job description of primary care pharmacists, posed a challenge to deciding specific course content. This was required for course delivery and was achieved by balancing the needs of the pharmacists, input from the collaborators and knowledge of illness and disease prevalence in primary care. We were aware at this stage that the learners and their learning needs would be wide-ranging. Development and collaborations continued to prepare for the six days of delivery.

Delivery

Introduction

In recent years, there has been an increase in participation in lifelong learning amongst pharmacists, both formally and informally. Formally, in the vocational context, this is due in part to the increase in continual professional development requirements from regulatory bodies. In order to practice in Great Britain, pharmacists must be registered with the General Pharmaceutical Council (GPhC). They need to renew their registration every year, which involves completing a declaration stating that they meet all GPhC professional, fitness to practise and ethical standards.

(www.pharmacyregulation.org) Patients, the public and government have a right to expect that every pharmacy professional maintains their professional capability throughout their career. The GPhC therefore requires that every pharmacist must make a minimum of nine CPD entries per year which reflect the context and scope of their practice as a pharmacist. The style and content of these CPD entries are not regulated, and pharmacists are left to formulate their own learning. At the beginning of this project, a small cohort of primary care pharmacists informed the design and development of the CPD course. In response to being asked about current CPD resources, all of the respondents stated using The University of Manchester's Centre for Postgraduate Pharmacy Education (CPPE) online learning, together with self-directed learning via journals etc. Many pharmacists in the survey see the e-learning model as not conducive to learning, and most only completed the mandatory CPPE courses requested by commissioners.

All professionals required to commit to lifelong learning are part of a cohort of adult learners. It has been widely written that adult learners bring a set of characteristics to learning environments²⁸. They are often internally motivated, have a need for learning to be relevant to their vocational tasks, and bring knowledge from previous experiences. Theories of adult learning discuss these skills further in the context of the learning cycle. This is a model which describes that for learning to be successful, learners need to go through stages of activity, reflection, theorisation and pragmatism²⁹. Furthermore, the Adult Learning Pyramid³⁰ ranks methods of teaching according to how much learning is retained. This model shows that teaching strategies with the participants being most interactive, have the highest learning retention rate.

Other theories that were borne in mind in the delivery phase were the Vygotsky's zone of proximal development (1978) and scaffolding³¹. The zone of proximal development has been defined as: "*The distance between the actual developmental level, as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers*". This gave credence to the plan that interactive group learning would be productive. Scaffolding learning occurs when a large amount of support is given initially and is then gradually withdrawn as learner competence and confidence increases. This approach to learning was envisaged to be vital in areas that may be very new to the participating pharmacists.

Aims and objectives

The aims of this phase of the project were to deliver the course and to receive feedback from participants on the training programme.

The specific objectives were to: -

1. Use a variety of learning activities that are in line with adult learning theories.
2. To source and collaborate with appropriate external teachers with relevant experience.
3. To obtain feedback from course participants on the training programme.

Method

Production and delivery of course material

The course was designed as a series of six days over six months supplemented by self-directed learning of approximately 0.5 days per month in participants' own time. Participants were expected to commit to all six study days in order to build a community of learning and to enable learning to have a longitudinal, cumulative element. Material for course delivery was developed in accordance with:

- The intended learning outcomes
- The intended teaching method of the sessions
- Available evidence-based material such as Nice guidance on the specified topics
- A variety of learning styles

Delivery of the course occurred in conjunction with participants receiving a resource pack and access to the course e-learning platform.

A debate with a guest panel was arranged on the final day. Senior pharmacists were invited to form a panel of experts which included a pharmacist who is a primary care equity partner, a CCG pharmacist and one of the advisory committee, and the lead pharmacist of a community healthcare provider. They were chosen to represent differing viewpoints and to be seen as role models to the participants. The topics of debate were given to the participants and panel in advance for consideration. They were: -

'Do pharmacists and the pharmacy profession in 2016 have the necessary competence and confidence to undertake a role in practice based primary care?'

'Will patients and practice teams integrate, accept and fully utilise practice based pharmacists?'

It was decided that one of the Co-leads would chair the discussion, the project administrator would take brief minutes and the Co-leads would write post-discussion notes.

Use of The University of Exeter Medical School resources

From the telephone survey at the outset and the initial written bid, clinical skills training would feature on the course. Discussions occurred with the UEMS clinical skills team to collaborate on using their expertise and resources in this area. Course sessions were designed and existing UEMS undergraduate BMBS course resources were modified for use in course delivery. In order to ensure authenticity and professionalism, volunteer patients known to one of the Co-leads were recruited to the final clinical skills training session for participant clinical skills examination practice.

Researchers within the APEx team that had expertise in the topics outlined in the curriculum were invited to deliver sessions on the course. Members of the core team met with them prior to delivery

to discuss the vision of the course so that they were aware of the target audience needs and the intention for learning to be active.

Use of external resources

Some areas of the course needed an external tutor. Along with this, we were keen to have representation from primary care allied healthcare professionals to mirror the multi-disciplinary approach in practice. Long-term condition care was identified as an area in which the course would benefit from an external resource. Contact was made through the local network with NHS England's South West General Practice and Community Nursing Development Programme Lead. Through her networking, we were contacted by an experienced nurse practitioner with whom we collaborated and co-delivered several sessions. This collaboration led to her being video-recorded conducting several long-term condition care reviews as part of her working day. This was arranged to produce real-life teaching material for the course. On the same day we arranged a meeting with the practice partners to discuss pharmacists extending their roles in primary care teams.

Other external speakers recruited included a General Practitioner with a special interest (GPSI) in ear, nose and throat medicine (ENT) and a practice administrator with experience of recording and using IT data and systems in primary care.

Collaboration developed with The University of Bath, Department of Pharmacy and Pharmacology from the initial contact we had with the Advisory group. The Co-leads fostered this working relationship further by visiting colleagues in the postgraduate teaching department in Bath to discuss co-delivery of a Medicines Optimisation study day. After intellectual property of the developed content was clarified, further collaboration occurred electronically and the day was co-delivered as planned.

Placements

Through collaboration with GP colleagues and EPC, medical practices offered to host a pharmacist for work placements. All participants were given the opportunity to spend a day in a GP practice to obtain experience of practice structure and systems. Mutually convenient dates and locations for pharmacists and practices were arranged. Those pharmacists who took up the offer of a placement reported their experiences during the post-course interviews. Host practices were contacted after the pharmacists had attended the placement.

Iterative development

Observations and verbal contributions of the participants during the teaching activities, networking in breaks and the written feedback from the participants on each day were used to develop the content and delivery of the programme. Timings of activities and perceived achievement of the intended learning content were also informative.

Results

Production and delivery of course material

Delivery of the course occurred mainly on UEMS sites. There was one training session, on the topic of primary care IT system, which was delivered in a general practice setting.

Attendance was high on all the study days. One participant withdrew after three months for personal reasons and one participant had to prioritise study leave for the National Clinical Pharmacist in General Practice Pilot training.

The delivery involved a brief induction to the programme including an introduction to the e-learning platform and course wiki from the UEMS educational technologist. Other materials produced were PowerPoint® presentations, cases for discussion, picture quizzes and videos of long-term conditions. Resources that were included in the participants' file included models such as Cambridge-Calgary Model³², national guidance on minor illness³³ and cancer referral guidelines³⁴. Ethical issues of using real patient data were considered for the session held in the general practice setting. The computer system and data were only used for teaching, once participants had signed a confidentiality agreement. Small group sessions were designed that allocated specific pharmacists to specific groups to ensure that pharmacists more experienced in primary care worked with less experienced ones.

The debate on the final day occurred with the guest panel in attendance. A wide range of topics were discussed and summarised [Appendix 13]. These included professional identity of pharmacists, career pathways, integrating into general practice and how pharmacists can contribute to quality medical care.

Use of University of Exeter Medical School resources

The clinical skills training programme [Appendix 14] occurred over two mornings of the course and topics included; measurements of vital signs, manual blood pressure measurement and examination of eyes, ENT and respiratory system. A 'Communication & clinical skills quick reference guide' [Appendix 15] was produced and provided to course participants as an A5 folded leaflet for use in practice. Videos of clinical skill demonstrations were posted onto the e-learning platform so that participants could view these before practicing in the 'flipped' style of teaching³⁵.

A leading expert on hypertension within the APEx team delivered a session on this topic with real-life patient case examples and time for question and answers.

Another expert on lifestyle interventions facilitated a session on motivational interviewing for behaviour change with a role-play session that encouraged the group to add to consultation techniques in this area.

Use of external resources

The GPSI in ENT delivered a presentation on common ENT issues in primary care and Judith Magowan designed and delivered teaching on asthma and diabetes with a specific teaching session on examination of the diabetic leg.

The Director of Taught Postgraduate Programmes at Bath Pharmacy School and a pharmacy teacher-practitioner from Bath came to Exeter for co-delivery of the Medicines Optimisation day using simulated learning activities.

Placements

Six pharmacist participants accepted work experience in general practices. Six practices hosted one pharmacist for a day during June and July 2016. One of the project Co-leads followed up the practice placement with interviews of practice team members. A report of the responses of the GP practices

to the placements was compiled [Appendix 16]. The six pharmacists who took up placements were all working in community pharmacies and had little or no experience in primary care. Not all of the participating pharmacists who worked in a primary care environment took up the offer of a placement in a GP practice.

Iterative development

It was realised from the running of sessions that the volume of content planned overran the allocated time. Modifications to scale this down needed to occur throughout to keep within time frames. This was perhaps most obvious in clinical skills where the range of ability was diverse; for example, some participants had never taken a blood pressure while for others this was a routine task. It was realised that development of psychomotor skills required an approach similar to the four stage method³⁶ and that explanation, demonstration and scaffolded, repetitive practice would be needed. The second clinical skills session training was modified to reflect this.

Discussion

Attendance on the course was high. The course was fully-funded and many of the participants were supported to attend with paid study leave; the rest using days off or annual leave to attend. The dates of the study days were within school term-time dates. Participants had to make their own travel arrangements to UEMS with some participants having journey times of over two hours each way. This demonstrated either their motivation to attend, the perceived usefulness of the course or the lack of local provision of similar training.

The aims of the course were paramount in considering the delivery. Interactivity and participation in the sessions were important to increase peer-to-peer learning, retention of material and participants' satisfaction. Authenticity of case material and relevance to role were imperative as the course had the specific aim of delivering focussed training for extension of pharmacists' roles in new models of care.

The study days were part of a research project and provided an opportunity to experiment and trial teaching activities. Therefore, several innovative learning sessions were designed and delivered, such as role-play, problem-based learning, live patient interview, practice placements etc.

From the literature, it is known that pharmacists' confidence is a facilitator to success when integrating into primary care³⁷. The final day debate with a guest panel was designed to specifically allow a forum for pharmacists to discuss issues and share opinions. This was hoped to increase their confidence and verbally express what the changing landscape would mean to them and the pharmacy profession.

Collaborators on the course delivery were chosen for their clinical expertise and their primary care experience. Working closely with the teacher-practitioners ensured that their material and learning activities were presented at an appropriate level with a learner-centred approach.

Strengths

There was a wide range in the participants' length of time working as a pharmacist and work experience. For example, some had been registered pharmacists for a couple of years while other had over 25 years' experience. This produced much peer-to-peer learning, informal networking and professional discussion.

A major strength of the delivery was the course location being in a medical school with access to expertise and resources designed for education, especially clinical skills training.

A tutor on the course was able to contact patients to invite them to attend training sessions on long-term conditions and clinical skills training.

Clinical contacts and knowledge of GP IT systems meant that a session could be co-designed and co-delivered in a GP practice setting.

The provision of GP practice placements was a unique element of the programme. As well as enabling participants to experience a primary care environment to augment and contextualise learning from the course, it also gave GP practice teams the opportunity to explore the skills and potential roles for pharmacists in their practice.

Limitations

The main limitation was participants' contact time on the course. There were six study days and yet the needs analysis gave content that would far exceed this. Whilst trying to be comprehensive, the initial study day content overran the time allowed and topics had to be removed or reduced. Iteratively, we decided to cover fewer topics in more detail on subsequent days.

Another limitation of the delivery was that synchronous experiential work-based learning²⁹ did not occur. The voluntary GP practice placements were scheduled towards the end of the programme. Some participants required additional encouragement before accepting a practice placement. Those already working in GP practices expressed no perceived benefit to them while others in non – practice roles cited an inability to be released from work as a barrier.

An online community of practice²⁵ developed with some contributions on the discussion forum, however these were not regular and postings were limited. Encouragement, prompting and responding to comments by tutors took place yet the participants explained engagement was difficult during busy work routines.

Contact occurred with a NHS trust pharmacy manager to involve the hospital community of pharmacists. We had hoped to recruit a teacher-practitioner pharmacist with a special interest in diabetes. Unfortunately, one was not in post at the time of asking and we did not know of a community pharmacist in this field.

Working with the clinical skills tutors and adapting the BMBS undergraduate learning materials needed to occur to fit the timescales of this course. However, with only a short amount of training, it was evident that there was insufficient practice time to develop skills to a starting role level in all participants.

Informal feedback was received from a stakeholder that participants had found the course 'intense'. It was hoped that the qualitative interviews post-course would provide further insight.

The pharmacists already working in GP practices (n=8) did not take up the practice placements offered to all participants. Their attendance may have encouraged them to explore roles outside their current job descriptions.

Findings in context

The pharmacists, as adult learners, were motivated to learn and discuss. They were willing to voice their uncertainties and share experiences. They enjoyed professional networking on the course and expressed that there was often little opportunity for this in their current roles.

Obtaining ongoing feedback on the study days and the tutors writing reflective field notes ensured that the delivery plans remained open to modification. In this way we were able to tailor teaching activities to the needs of the group.

The debate on the final day enabled pharmacists to discuss their vocational aims and aspirations. This appeared empowering and profession-affirming. They showed a passion for change and a willingness to develop their professional skills further.

Having designed, developed and delivered a CPD course for pharmacists, the final stage was to evaluate the programme. It is hoped the outcomes of the evaluation may inform any decisions in regard to future training of pharmacists in primary care roles.

Evaluation

Introduction

Administrators, educators, and other key personnel must often make choices regarding the design, delivery, and development of teaching programmes that take place at their institutions. Educational evaluation is a data-driven strategy to aid decision-makers in determining the most appropriate features of a programme³⁸.

There are increasing numbers of educational programmes aimed at extending the skills of allied health professionals which would benefit from evaluation. The success of an iteratively developed training course can be measured by evaluation, such as its impact on participants' skills and knowledge and how it relates to future provision of primary care.

Kirkpatrick (1977)³⁹ developed a hierarchical model with which to evaluate training programmes such as this one. The evaluation model is divided into four parts. Starting from the lowest going upwards, they are reaction, learning, behaviour and results. 'Reaction' involves how satisfied the participants are with the programme they attended. 'Learning' evaluates the extent to which the knowledge, skills or attitudes was acquired. 'Behaviour' evaluates the extent to which learning was transferred to the workplace by changes in practice. 'Results' evaluates the extent to which the educational intervention makes an impact on healthcare outcomes.

This project aims to provide information on the training needs, perceptions and expectations of pharmacists extending their roles in primary care. Evaluation occurred using a mixed-methods approach, targeting the levels of reaction and learning of the participants set out by Kirkpatrick. Participants' satisfaction and qualitative data on responses to learning activities were obtained. Measures of knowledge acquisitions were performed along with pre- and post-course qualitative interviews to explore pharmacists' perceptions.

In order to participate in the evaluation of the project, it was necessary to obtain the consent of course participants. An application was made to The University of Exeter Medical School Research Ethics Committee and a Certificate of Ethical Approval was obtained. Participants were asked to sign a consent form [Appendix 17] where they agreed to engage in the evaluations.

The evaluations will be described and discussed in three sections; the study day feedback, the multiple-choice question assessment and the semi-structured interviews.

5.a Study day feedback

Aims and objectives

To obtain, analyse and use, in iterative development, participating pharmacists' written feedback from the study days

The specific objectives of this phase of the project were to: -

1. Develop a study day feedback form.
2. To administer the feedback form to the participating pharmacists for completion.

- To collate, analyse and iteratively use the feedback to inform development of the curriculum.

Method

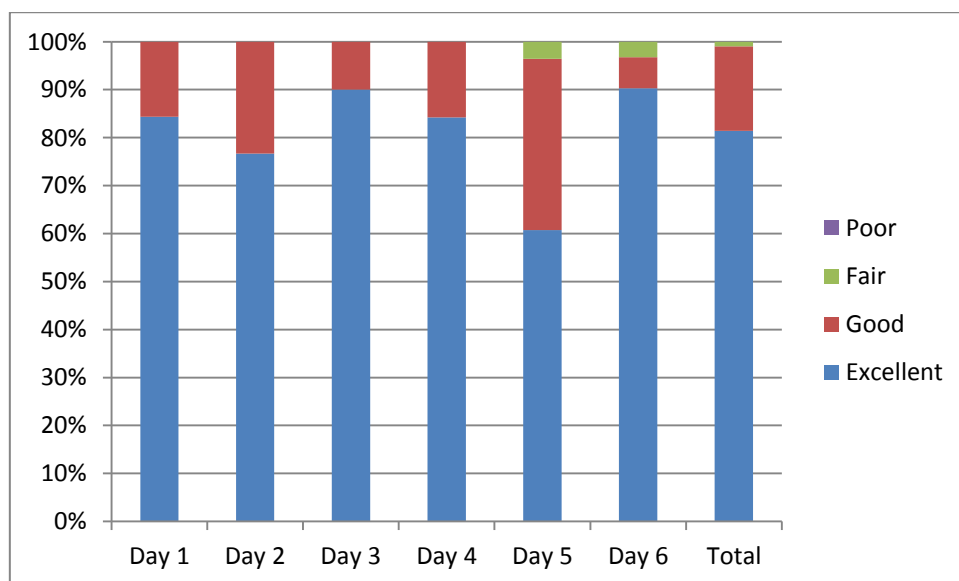
A feedback form was created. The form was designed as a two-sided sheet for ease of completion. On the front of the form, participants were invited to rate the overall day and each session of the day. The rear of the form explored positives and negatives of each day and allowed the participants to make additional comments and suggestions for course development.

The timings of each day of the CPD programme included thirty minutes of protected time at the end of the day for summary and feedback. During this time, participants were requested to complete a feedback form; rating the overall day, rating each session and giving individual comments. These forms were collated [Appendix 18]. A report of each day of the CPD course was compiled [Appendix 19] and included notes on tutor reflections.

Results

The study days received positive feedback with every day receiving a rating of Fair or higher. 95% of participants rated the days as Excellent or Good. (See Figure 1: Overall Day Scores)

Figure 1: Overall Day Scores of participants



Individual teaching sessions never scored less than Fair.

80% of participants scored all sessions, including the medical knowledge test, Excellent or Good.

The qualitative data obtained from the open questions on the feedback forms showed that that the participants enjoyed the course.

‘Thank you for such a great day! I feel very privileged to be part of this course.’

There was a realisation that there was much to learn though team working would support them in this.

'Realising we won't be flying solo in general practice and its ok to face a steep learning curve.'

Some pharmacists were considering that an extended role might encompass more patient-centred skills and wrote that they would use these most in practice.

'Trying to not always look too much at the meds and look at the holistic issues as well.'

'Communication skills was the part that I found potentially most useful and will start to utilise tomorrow.'

Participants recorded a number of highlights from the day. These included:

'Motivational interviewing – need to practise guiding rather than directing. Patient interview – need to always consider what is important to the patient and how feelings/emotions impact on health and adherence to meds.'

Areas that participants found the least useful depended on their current roles and experience.

'As I work in community pharmacy at the moment I've found the diagnosis and monitoring of BP least useful. However, I'm sure I will be able to use these skills in the future.'

Participants made additional comments or suggestions for future study days:

'Would have some parts of the course with pharmacists from different experiences and sectors, and other parts separate and aimed at more or less experienced.'

'Needs lots of patients and clinical skills, perhaps even repeated every session so competency can be assured.'

Additional responses and reports from the days are in the appendices previously listed.

Discussion

The participants were enthusiastic about the course and realised they were involved in an innovative project. The targeted nature of the course meant that they shared work aspirations and interests. This led to the development of a cohesive group; formally when learning and informally during breaks.

The positive feedback received from the participants was due, in part, to the design of the course allowing for interaction and professional networking. Many of the comments received for the whole course also indicated that the design and development of the course succeeded in remaining relevant and targeted.

Any future course design may benefit from involving a practice pharmacist in course delivery. Ideally, the pharmacist would be working at the fringes of competence, pushing the role forward. They would be a role model and have access to authentic case material to design simulated learning activities.

The wide range of topics covered in the curriculum achieved the objectives of providing participants with an introduction to the majority of areas of potential practice pharmacists' roles. This meant that some participants were receiving training in subjects in which they were already very experienced. Future training courses would need to be flexible to allow them to be tailored to individual pharmacists' needs.

Strengths

The feedback forms gave participants the opportunity to contribute to the iterative development of the CPD course. Honest feedback was encouraged by ensuring anonymity to the responding participant.

Throughout the six days of course delivery, the majority of responses received were positive which may have been an indication of the relevance of the chosen subject material.

Collecting global rating scores on the overall study days and on individual sessions within a study day provided quantitative data. Encouraging free text responses to open questions allowed for descriptive comments as well as explanatory ones. This provided rich qualitative data, particularly with regard to understanding whether learning was perceived to be transferable into practice. Furthermore, specifically asking for highlight learning points gave insight into whether learning may have been transformative⁴⁰.

Limitations

Participants received a fully funded CPD course over a period of six months. This may have influenced the rating of content and delivery. Pharmacists may have been more critical had they paid for the course.

The design of the feedback form did not fully establish whether the course had met the expectations of participants, as this would be explored further in the post-course interviews. The number of questions posed on the feedback form was limited. Statistical analysis on the results did not occur.

5b. Multiple-choice question assessment

Aims and objectives

To explore whether a CPD training programme was associated with changes in participating pharmacists' medical knowledge.

The specific objectives were:

1. To produce a multiple-choice question (MCQ) assessment written paper that was based on course content.
2. To administer the test to course participants before and after the training programme.
3. To collate the results of the MCQ assessment.

Method

A GP colleague who was independent of the project, designed and developed a medical knowledge test, in a MCQ format. The author of the questions had an insight into the CPD programme headings. However, the author did not have any knowledge of the detailed course content. Participants were invited to take the test at the beginning of the first day and at the end of the last day of the CPD programme. The same 16 questions were used in both the pre- and post-course tests [Appendix 20]; however, the order of questions and items in the post course test was changed. Scores were anonymised and recorded as a percentage pass rate. Participants were sent their individual scores at end of the project.

Result

The scores of individual participants were recorded as a percentage.

Table 2: Participants' pre- and post-course medical knowledge test results

Participant Number	Pre-Course Score	Post-Course Score
2	75.00%	85.71%
3	87.50%	
6	31.25%	78.57%
8	31.25%	71.43%
10	50.00%	85.71%
12	50.00%	71.43%
14	50.00%	92.86%
16	31.25%	78.57%
19	68.75%	85.71%
21	56.25%	92.86%
25	62.50%	92.86%
29	43.75%	78.57%
31	56.25%	100.00%
35	68.75%	
38	87.50%	78.57%
9	62.50%	100.00%
Mean	57.03%	85.20%

The average score of sixteen participants in the pre-course MCQ was 57%. The average score of fourteen participants (two participants had left the course by the final day) in the post-course MCQ was 85%.

Discussion

The results of the MCQ tests showed a marked increase over the six-day programme. Although the participating pharmacists would have been continuing in their work roles and general professional reading, the improvement in participants' knowledge would have, in part at least, have been due to attendance on the course.

Strengths

The use of an independent colleague for the development of a MCQ test avoided the possibility of the teaching material being developed solely for the purpose of improving test scores. No participant refused to take part in the MCQ evaluation. The MCQ tests provided quantitative data that enabled statistical analysis of results.

Limitations

A further MCQ test twelve months after course completion would inform retention of acquired knowledge which may be an indication of whether this knowledge was being used after the course. There were sixteen questions in each of the MCQs. More questions would have given a further

insight into the breadth of knowledge acquisition of participants on course topics. The questions were of short to medium length, and although partially case based they were not considered to be a measure of applied medical knowledge.

5c. Semi-structured interviews

Aims and objectives

- To explore pharmacists' expectations and their evaluations of a training programme designed to build their knowledge, skills and attitudes for practice-based primary care roles.
- To explore pharmacists' perceptions of primary care roles for pharmacists, including the greater integration of their profession into general practice and their perceptions regarding the potential of this role.

Method

Course participants were invited to participate in two, individual, confidential telephone interviews, one to take place before, and one after participation in the training programme. Applicants were asked to confirm their agreement to participate through return of a reply sheet, either online or by post.

Using the reply sheets, participants were asked to provide information including their current role, their past work experience and their qualifications, their motivation to attend the course and their future career plans. Purposive sampling of respondents was carried out by the research team to ensure variety in participants by level of experience, and by geographic location and type of workplace (e.g. community pharmacy or general practice).

Participants were contacted by the research team to schedule telephone interviews at a time suited to the participant. Written informed consent was obtained prior to undertaking semi-structured interviews. Pre-course interviews were conducted by AS in the month before commencement of the training. Post-course interviews were conducted by JB in the two weeks after completion of the course. It was not possible for the same researcher to conduct both sets of interviews due to time and workload constraints. Interviews were aided by topic guides, digitally audio-recorded, and transcribed in full. Field notes documented the interviewer's thoughts regarding emerging themes and were later used to aid coding. The topic guides [Appendix 21] were used flexibly, and participants were encouraged to discuss their own ideas in order to accumulate emergent themes⁴¹. Some of these new ideas became prompts for subsequent interviews, and were used as subheadings on the topic guide⁴². In addition, the initial post-course topic guide was reviewed by the research team following completion of the training programme. Questions were added in order to further explore topics that had arisen from other means of participant feedback e.g. course evaluation forms.

There were no predetermined variables for data collection as we used a constant comparative, inductive approach^{42 43}. Audio recordings were transcribed by an external company who signed confidentiality agreements. Audio recordings were listened to repeatedly by the researcher in order to check and improve the validity of transcriptions. Units of meaning were thematically analysed⁴⁴ using the computer software 'NVivo'. New fragments of coding were constantly compared with old data, in order to construct new common themes⁴³, and in order to make cautious propositional

statements. New codes were made to account for data that appeared contradictory to developing themes and this type of disconfirming evidence was actively sought. No new themes were emerging by the time of analysis of the final interview transcripts and thereby theoretical saturation was considered to have been achieved. An audit trail was available through saved audio-recordings, coded transcription and the researcher’s reflective notes.

Results

Of the 1,050 pharmacists contacted by email, 38 returned application forms and 16 were selected for the training programme (22 were excluded as a result of a transparent selection process). All of the pharmacists undertaking the training programme also agreed to participate in interviews. Four participants were not able to attend all of the training sessions: One missed three sessions due to family illness; another missed one session as they were completing a prescribing course; another missed one session because they were unable to organise a locum pharmacist to cover their work; another withdrew after the third session due to other work commitments. Some pharmacists took annual leave to attend sessions and the majority of these were community pharmacists. Others were supported entirely by their employers, with the CCG and GP practices appearing most supportive of pharmacists taking time out of their usual roles for training purposes. No participants formally withdrew from the interview study, however one participant could not participate in the post-course interviews because of personal commitments. Table 3 shows the characteristics of participants. Participants varied by age (mean 40, range 27–54). At the commencement of training, seven participants were community pharmacists, nine participants were employed by the CCG, and of these CCG pharmacists five were performing roles based within a general practice. By the end of training, two community pharmacists and two CCG pharmacists had moved into new primary care roles and were being employed by a general practice.

Table 3: Participant characteristics n=16

Gender	5
Male	11
Female	
Age	
21-30	3
31-40	4
41-50	6
51-60	2
Not given	1
Job role on course application	
Community pharmacist	7
CCG pharmacist working in General Practice	5
CCG pharmacists not directly working in General Practice	4
Postgraduate awards held	
Clinical diploma	5
Independent prescribing certificate	6
Other	6

Both pre-course and post-course interviews lasted between 30 and 45 minutes. There were no significant difficulties with contacting participants, no significant interruptions during interviews and

all interviews were completed. All interviews were fully transcribed and there were no concerns about the quality of transcription data.

There were three overarching themes that emerged from interview data: The first related to participant perceptions of the definition of a pharmacist's role within primary care; the second related to how participants' working backgrounds had influenced their experiences of the training programme, as well as their career aspirations within primary care; and the third was with regard to participants' evaluation of the course content.

Conceptualising the role of the primary care pharmacist

Prior to the training programme, participants varied in their reports regarding what they defined to be the role of a pharmacist working in primary care. Perceptions ranged from; general practice-based pharmacists with access to patient notes, running their own face-to-face clinics, conducting telephone consultations and carrying out home visits; to community pharmacists with 'over-the-counter' patient contact, providing written advice and guidance to a GP; to pharmacists employed by the CCG, running prescribing checks on practice databases, with or without patient contact. Many participants saw the role as a means to reduce the GPs' workload, to make the primary healthcare service more efficient and more effective for patient care. There was a common perception that pharmacists currently working in primary care have high levels of job satisfaction, which was thought to be associated with increased patient contact, taking a holistic approach to patient care, and subsequently gaining a feeling of "making a difference".

Participants reported that they sensed uncertainty from the training course facilitators with regard to the definition of the role of a pharmacist working in primary care. They suggested that this should have been clarified at the start of the course, however they understood the evolving nature of both the role and the training. Participants suggested that there might have been better clarity if pharmacists who were already working in primary care had been course facilitators. Participants recognised a need to be adaptable and flexible with regard to the uncertainty of their future roles. They viewed this as a challenge for a professional group who are used to following clear structures, processes and guidelines within their work. They also felt that GP practices were likely to have individualised views on the tasks that they expected pharmacists to undertake within their teams.

"I think if the government, the NHS, are serious about trying to manage the resources that they've got then there have to be changed roles for people; people coming out of their boxes and breaking down the barriers." Ph16

Participants discussed their expectations, and speculated regarding the future of their primary care roles. Some anticipated an increase in the numbers of pharmacists with independent prescribing skills and the likelihood that these pharmacists would be running their own clinics. Others saw themselves becoming a gate-keeper, liaising with community pharmacists over medication queries, and using their access to patient notes to avoid the involvement of a GP. Several speculated that in future they might manage their own time and workload, allocating more time per patient encounter and ensuring better continuity of care than is currently possible for a busy GP, using a mixture of face-to-face and telephone appointments. Pharmacists with experience of primary care acknowledged logistical factors that limited these ideal circumstances however, including potential shortages of clinic rooms affecting the subsequent availability of appointments.

Participants had high expectations of their future roles with regard to patient and practitioner outcomes; predicting improvements in job satisfaction, in patient health and satisfaction with healthcare, as well as in greater patient enablement for self-management and reductions in costs to the NHS. A common perception amongst participants was that their primary care role was to fulfil public health agendas, to ensure government standards regarding health checks for example, and to reduce polypharmacy; particularly in respect of vulnerable groups such as older patients and those with multimorbidity. Patient education and empowerment was discussed in the context of a holistic approach to care in respect of these patient groups.

Participants recognised the importance of being part of a multidisciplinary team. They drew clear distinctions between themselves and other practitioners but discussed how they might complement each other's roles. Many felt that pharmacists were more careful prescribers than other healthcare practitioners because of their refined and specialist knowledge of medicines. They felt that they were more likely to address the practicalities for patients when taking their medicines, by making changes to medication packaging or to how many times a day a patient might need to take their medication for example. They felt best placed to reduce polypharmacy, which might otherwise lead to unnecessary hospital admissions, and to reduce the incidence of prescribed medications that could otherwise lead to adverse events such as acute kidney injury. Some felt that pharmacist clinics could be particularly useful for patients on higher risk medications, requiring regular monitoring. In addition, participants felt that, in comparison to other practitioner prescribers, that they would be more likely to meet government guidelines and prescribing agendas; by maintaining their knowledge of drug formularies and the availability of medicines, and by ensuring cost-effective prescribing.

“That’s very much what I see my role as; that I’m here to look after the GPs so that they can actually provide the function. Yes I do my own things - I run clinics, I see patients - but ultimately I’m here to facilitate them being able to do their role better. By doing that the whole service is improved.” ... “We are not little doctors, we are a completely different animal. [...] Ultimately in the same way as a nurse is still a nurse, an OT is still an OT, we are still pharmacists [...] we serve very different functions.” ... “The doctor had a view of the diagnosis and the nurse was very holistic in her approach towards the patient, I was very focused on the drugs, and the dietician had her perspective as well [...] so yes there were overlaps but our functions and our roles, erm, I think we’re better when we work together. I don’t consider us to be in competition.”Ph12

The majority of participants reported that there was a limit to the level of responsibility that they were prepared to hold however; being willing to take a proactive approach to medicines optimisation, incorporating the interpretation of biochemistry results and therapeutic drug monitoring, but wanting to pass on more complicated diagnostic decisions to the GP for example. Some participants discussed potential difficulties attaining management decisions, when addressing a whole team of GP partners for example, and the importance of maintaining good working relationships was reflected upon. Participants discussed the relevance of good written communication skills, via email or the patient's notes.

“The level of responsibility and accountability is different to what we’ve been used to. You’re really looking at the same coin from entirely the other side because we are used to constantly

checking what other people are doing and suddenly you'd be the person doing the doing, as it were, it's a very different role." Ph9.

Many participants reported that they valued the opportunity for team working within a GP practice, reflecting on the relative isolation from clinical care experienced in community pharmacy. Some felt that working in primary care brought a different type of isolation however; potentially working as the only pharmacist in a practice in comparison with a busy community pharmacy where they might have had other pharmacist colleagues.

Influences of the constituency of training participants

There was variability in participants' perceptions of the training course, as well as their perceptions of the primary care role, by working background of the pharmacists. Participant's work circumstances are summarised in table 2.

Prior to the training, those participants who were soon to be starting new roles in primary care felt that the course was perfectly timed to address their learning needs and they hoped that it would allow them to evolve their role, becoming a valued member of the general practice team. Those already working in primary care hoped that the course would inspire them to become more proactive within their roles, to gain some independence with prescribing for example, taking on more of the workload of other healthcare practitioners. Some had high aspirations; wanting to become leaders in their field, helping to address government targets for clinical care, and inspiring others to work within the primary care environment. A few participants, not imminently working in primary care, hoped that the course would stand them in good stead for future job opportunities. Participants recognised that there were current gaps in their knowledge that needed addressing but those not yet working in primary care did not always find it easy to identify what their specific learning needs were, or to understand the level of knowledge that they would be expected to have. One of the participants already working within primary care acknowledged this:

"Within community pharmacy, my observation is that the pharmacists there aren't really familiar with their limitations. They feel that they've got a bigger role because they've had such an extensive training but they don't realise the gaps in their knowledge, don't know what they don't know [...] and most pharmacists actually don't know what goes on in a GP surgery. They don't know what the actual function of the GP is." Ph12.

Having completed the training, there was variability which appeared to relate to pharmacists' current working roles in terms of how useful they found certain elements of the course. Community pharmacists who were hoping to work in primary care in the future reported that all aspects of the training were both useful and relevant to them. Those who were soon commencing, or had recently started new roles in primary care, reported that the course complemented this, particularly the examination skills teaching. However, those who had been working in primary care for a while, and some of those working for the CCG, found some aspects less valuable: Whilst the clinical skills training was positively received by all, pharmacists with more experience of primary care reported that the session on IT systems, and some of the teaching around medications, had not taught them anything new. These pharmacists also reported that the course had little impact on their attitudes towards their role and that it had not changed the way that they practice. Participants reported some disappointment regarding this.

Participants varied in their reports of confidence in their abilities to carry out a role working in primary care. Reports broadly reflected the degree of experience and qualifications that participants held, and appeared to directly influence the level of responsibility that they were willing to accept in respect of patient care. Having completed the training, those who had reported less confidence said that the course had improved this, and that they planned to make use of the knowledge, skills, and contacts gained on the course.

When asked about perceived barriers to working within primary care several community pharmacists, and some who were new to a primary care role, expressed concerns about patient perceptions and expectations. They worried that patients, who may perceive pharmacists as “over-the-counter medicines dispensers”, would not have trust in their clinical decision-making, or in their knowledge, when encountering them in a clinical environment. They felt that a degree of public promotion of the role was necessary, in order for patients to accept them as part of the primary care team. Participants also voiced concerns about the way they were perceived by other healthcare practitioners. Some primary care pharmacists discussed examples of negative experiences with GPs, where they felt that their opinion had been rejected. Some felt that the degree of GP acceptance of the pharmacist’s role could be influenced by the GP’s age and experience. They also acknowledged that the expansion of the pharmacist’s role was also a new concept to the rest of the primary care team, who they felt might require an explanatory introduction.

“We’ll be working with GPs and it’s quite nice and encouraging to hear it from a GP’s mouth. Does that make sense? To hear that actually we want you, we need you and there’s room for you guys. That it’s not going to be that we’re threatened that you’re going to take over our jobs and take our money [...] I think in the past that was the fear, especially with the whole initiative for pharmacists to start prescribing. A lot of GPs were very anti that. It’s funny because when I started my course this wasn’t a done deal, it was just talking about the future [...] the GPs’ attitudes have changed enormously.” Ph6

“I think there are a lot of people who will need to be brought over to our side to realise what our potential is; what we are capable of doing; what we are experts in; and what we can really offer to improve their outcomes.” Ph35

The subject of salary and funding was discussed in relation to incentivising the primary care role. Participants highlighted that for many experienced community pharmacists, the ‘banding’ that they had seen offered in advertised primary care posts would mean a drop in salary. When compared to hospital posts however the salary was seen to be relatively on par. It was felt that community pharmacy managers saw no financial benefit in allowing their pharmacist employees to work in a GP practice part-time. There was a recognition that pharmacists employed by the CCG often had different job descriptions than those employed privately by GP practices, and that there were also differences in salaries. Pharmacists perceived differences in the ‘cost-effective vs. clinically-effective’ priority weightings of their workload by these different employers.

“Although I’m based in the practice, I’m funded by the CCG, so obviously I have to do what they want me to do, not just what the practice wants me to do.” Ph2.

Participants had varied perspectives on how they saw their personal careers unfolding within primary care. Overall, it appeared that community pharmacists, and those just beginning new roles

in primary care, were open to acquiring new skills in order to extend their roles into minor ailments, triage and clinical examination for example. However, those who had been established in primary care roles for some time were much less willing to extend their skills. The latter felt that they could provide effective relief of GP workload pressures by using the medicines management and medicines optimisation skills that they had been trained for at undergraduate level, and they felt that these skills should be fully utilised in primary care before considering whether to extend the scope of their role. Only one of these experienced pharmacists expressed that their views had been changed by the course, and that they could now visualise how they might apply examination skills, and manage minor ailments, within primary care. Experienced primary care pharmacists reported huge variability in how they were currently being utilised by different GP practices however. All participants agreed that a clearer vision for the future was required and that it needed to be communicated widely amongst their professional group.

“I feel quite strongly that we shouldn’t be trying to develop skills that we don’t have in terms of, in areas that we are not experienced. So medicines are our training, that is what we know, so we should be trying to do everything we can to make sure medicines are prescribed safely and appropriately, not trying to diagnose musculoskeletal pain.” Ph38

Expectations and evaluations of the course content

All participants spoke positively regarding the course. Many participants expressed enjoyment in learning and in continuing professional development. However, they described a lack of availability of courses targeted specifically at pharmacists working in primary care. Some felt that the available modules from the UK Centre for Pharmacy Postgraduate Education (CPPE), such as “an introduction to primary care”, were too basic and that online training was insufficient to teach practical competencies effectively. In the pre-course interviews participants therefore expressed excitement at the prospect of this course.

“It was the first time something’s been offered to primary care pharmacists that I know of. It was just good to find something that I could do because I can’t go on nurses’ courses, I can’t go on GP courses, and CPPE and the LPC tend to do more community.” Ph10.

Participants discussed some of the knowledge, skills and attitudes that they expected to be taught on the course. They also hoped that the course would enable them to gain transferable skills, and to utilise their existing knowledge, within the context of primary care. Effective communication skills were deemed important, both for effective consultations with patients but also in order to work well within a team. Ophthalmology, dermatology and minor ailments were all viewed as important within primary care roles, particularly by those currently working in community pharmacy. The interpretation of blood test results and clinical examination skills were areas in which several participants expressed less confidence prior to commencing the training. Problem solving skills were mentioned frequently, most often discussed in the context of medicines optimisation: sourcing medications using community pharmacy contacts; considering how to reduce polypharmacy; avoiding medication side effects; searching for cost-effective prescribing alternatives; and switching from tablet to liquid formulations. In addition, participants acknowledged the need to apply their problem solving skills holistically, and they expected teaching regarding patient-centred approaches to a consultation. Safe practice was a common topic when discussing learning needs, with the words “red flags” and “safety netting” often being used. Specialist areas, such as respiratory medicine and

hypertension, were mentioned in the context of medication reviews, as participants envisaged becoming involved in chronic disease clinics within primary care. Participants were hoping to learn more about the logistics of primary care, for example how IT systems work in relation to chronic disease monitoring, with examples of how to process prescriptions, and the relationship between primary and secondary care providers. For some, uncertainties around how to write and record patient notes appropriately generated a degree of anxiety. Participants were enthusiastic about “on the job” examples and discussion of case scenarios to allay their concerns.

“I run a hypertension clinic and I had actually very little support setting it up. I had basically just been told “get on with it”. And I’ve dealt with hypertension medicines for my working life and suddenly I’m dealing with it. I’ve not had a tremendous amount of support and most of the skills for it I have learnt on the job, but I’ve never really, or nobody’s ever really been able to talk me through various aspects. And so to actually have (I can’t remember who it was but) the chap who was the expert, to actually explain why you do various things, why you’re listening for sounds not just the click of the needle, and I don’t know, answer all those silly little questions that crop up. I just came away from that really buzzing.” Ph 12

Participants reported several particularly valued aspects of the course. The clinical skills teaching was by far the most highly valued element for all participants; with reports that both the setting (within the medical school’s clinical skills laboratory), the teachers, the content, and the equipment, both met their learning requirements and exceeded their expectations. Several participants had already used the basic examination skills in practice by the time of post-course interviews; examples included otoscopy in a community pharmacy setting and blood pressure measurement within primary care. Participants said that the course might have been improved if there had been more clinical skills training, and more discussion of clinical case scenarios. Several participants also reported that teaching on motivational interviewing was a particularly helpful aspect of the communication skills training. The teaching session delivered by practice nurses, regarding the management of long-term conditions, was discussed positively. The session on hypertension was also received particularly well, with several participants reporting that they valued its delivery by an ‘expert in the field’; an academic GP with a special interest in hypertension.

“Like with looking in ears for example... for doctors they say it’s ‘see one, do one, get on with it’, but for me I need a few more ‘do ones’!” Ph2

Participants also hoped that by attending the course they would be able to ‘network’; to acquire knowledge by sharing experiences with other pharmacists who were also developing their careers within primary care, and to acquire contacts for the future. Following the course, many participants felt that their expectations had been met with regard to networking opportunities, reporting that those currently working in primary care had enabled others to put the training into context and to motivate them towards a future career in primary care.

As part of the training, participants were offered a day’s placement in a GP surgery. Three of the community pharmacist participants attended placements and they reported mixed views about these days. Whilst they valued the opportunity to observe what went on in a GP surgery, they felt that the surgeries were not prepared for their visits and two participants reported that the surgeries did not seem to understand their potential roles within primary care, having not had a pharmacist working with them before. They felt that shadowing a primary care pharmacist could have been

more suited to their training needs. However, participants also felt that placements could be used as an opportunity to “sell themselves” and to outline the skills that they might bring to a GP practice that was without a primary care pharmacist.

Participants discussed how the course had influenced their attitudes towards the primary care role of a pharmacist. Having completed the course and reflected on their learning, several participants acknowledged a characteristic “risk averse” approach that they felt pharmacists applied to their work; where they would be likely to seek help from a GP if a patient’s presenting problem could not be fitted into a recognised protocol. They discussed the need to learn to manage uncertainty within clinical care and to use critical appraisal, within the bounds of their clinical competence, to flexibly manage situations that could not always be approached according to guidelines. Some reported that the course had given them the confidence to do this, particularly because of the motivational way in which the course content was delivered, especially that delivered by a GP facilitator.

Participants were asked about their thoughts regarding a suitable accreditation for this type of training course. Most felt that they would be perceived to be more employable by GP practices if they had a formal, standardised qualification in primary care. Several also felt that this was a necessary means of securing indemnity cover for their clinical practice. Some participants reported that they would be willing to pay for this type of course in future if they could gain a meaningful qualification from it. However, one participant felt reluctant to be trained in skills that might then make their indemnity payments significantly higher.

“They would like something that says ‘I am competent to deal with these five minor ailments, I have done a 6-day training programme specifically on eyes, ears, chests, throats, noses’, or whatever it is ‘I have looked at 16 case scenario’s, I’ve had an 80 percent success in my multiple choice question paper that says that of all these issues that I can come across, I knew them, and I now feel competent”. Ph10

Participants found it very difficult to comment on how much they would be willing to pay for this type of training course and many chose not to comment. However five of the participants offered a figure of £500-£600. Three of these pharmacists felt that the course was worthwhile enough that they would have funded it themselves. Many discussed avenues by which a pharmacist might seek funding for training; from their employer (community pharmacy or GP surgery), the local Clinical Commissioning Group, or the Royal Pharmaceutical Society. The availability of paid study leave was an influential factor in determining funding sources.

Overall, participants perceived the course to be best suited to pharmacists starting a new role within primary care. They reported that it had been a useful introduction to primary care, with an overview of the knowledge, skills and attitudes required for the role, and a valuable opportunity to network and learn from ‘experts’ in the field as well as their peers. However they felt that further training would still be needed in order to achieve the full competence and confidence that they perceived to be required to begin working within a general practice. Some participants were concerned that newly qualified pharmacists might not have enough experience of the primary care environment to justify choosing primary care as a career path or to apply for this type of course however.

“I’m not sure, if I was a community pharmacist, I would then think “oh right, that’s it I’ve done all the training. I can go be a pharmacist in a GP practice. I think it was a good

introduction to make you think about where your role could lie and what you could be involved in, but I'm not sure if it was enough – and then you're done and ready to go ahead and start taking clinics and things like that. I think that would be a bit of a shock" Ph14.

"I guess the course kind of encouraged me not to be afraid to dream big because anything is possible in this age we're in. But I would definitely like to progress in primary care." Ph 6

Discussion

Summary

Participants varied in their experience of working within primary care, and in their current working role. Therefore there was wide variability in their definitions of the role of the pharmacist within primary care. All participants recognised challenges and uncertainties regarding the future direction of the role and their degree of experience influenced their confidence for this type of work. There were also several perspectives regarding the skills, knowledge and attitudes required for a role in primary care, as well as the potential outcomes that might be achieved. However, all participants appeared willing to contribute to the relief of workload pressures on GPs and on the primary care team.

The most junior pharmacists, and those with less experience of working in primary care, appeared the most willing to engage with training and career opportunities for extended roles within primary care. All participants agreed that the training programme was best suited to pharmacists who were soon to be, or who had recently started working in a GP surgery.

By far the most well-received aspects of the training course were: the clinical skills teaching sessions; the opportunity to network with, and learn from, more experienced colleagues who were already working in primary care; and the motivational way in which the course was delivered, which was reported to have encouraged positive attitudes and improved confidence levels for those with previously little experience of primary care.

Strengths and limitations

This study uses qualitative methods to understand pharmacists' perceptions of a novel training programme to aid the integration of pharmacists into general practice roles. Our findings can be used to inform the development and delivery of future training programmes designed for this purpose. We also contribute to the currently sparse literature on pharmacists' perceptions regarding the integration of their profession into general practice in the UK, and we have explored their perceptions regarding the future direction of pharmacists' primary care roles.

The sample size is comparable to previous studies using similar methodologies⁴⁴ and was considered sufficient to have achieved saturation⁴⁵. There was heterogeneity in the sample by age, type of employment, and previous level of qualification.

We recognised different perceptions regarding what constitutes "primary care" amongst our participants during early interviews. Therefore, as the interviews progressed, the interviewer sought to clarify the context that participants were referring to when answering questions.

There was an element of opportunistic and speculative application to this training programme, driven by the excitement of new opportunities for pharmacists within primary care. Whilst opportunistic attendance appeared apparently beneficial, and even inspiring, to those with little

previous concept of the primary care role, it might also explain why some, who seemed overqualified for the training, had also attended the course.

The possibility of findings being geographically specific, with participants only being recruited from Devon and Cornwall, was considered. However, many of the pharmacists had either trained or worked in other locations from around the UK and they reflected upon these experiences during interviews. This adds to the generalisability of our findings and the heterogeneity of our sample (by age, level of qualification and previous general practice experience) allows the applicability of emergent themes to be considered in a wider context ⁴⁶.

Post-course interviews, along with all of the analysis, were conducted by JB who is a General Practitioner. Participants were not informed of this unless they explicitly asked and this occurred on only one occasion, at the end of the post-course interview. Consideration was given to how the researcher affected the analysis and positional reflexivity was demonstrated through reflective notes and critical discussion between authors ^{47 48}. However, JB's ability to interpret interview content from a clinical practice perspective was useful when considering the relevance of our findings within the context of general practice.

Findings in context

Changes in the skill-mix and in the delegation of duties between primary care practitioners has previously been seen in the UK, most notably during the introduction of nurse practitioners to general practices ⁴⁹. There have been few previous studies specifically investigating the integration of pharmacists into general practice roles however, and much of the available evidence comes from overseas.

Our participants expressed uncertainty regarding the definition of a pharmacist's role within primary care. In Canada, Jorgenson et al. used qualitative methods to identify that a pharmacist's lack of clarity about, or knowledge of their primary care role, negatively affected a pharmacist's integration into the primary care team. They also highlighted that difficulties with patients' access to the pharmacist, influenced by resources and funding, could also have a negative impact ⁵⁰. These difficulties were similarly reported by our more experienced participants.

Several of our participants who had little or no experience in primary care were concerned about how they might be perceived in this new role by other members of the primary care team. Jorgenson et al. identified that a pre-existing relationship between the pharmacist and the general practice in which they will work; and the primary care team's perceptions of the pharmacist's confidence, assertion, and visibility within the team could have a positive influence on their successful integration; whereas perceived resistance by doctors to accept or to trust the pharmacist in their new role, and a lack of managerial support, had a negative impact. An Australian study additionally emphasised that having time to build trust in a pharmacist was of importance from the perspective of both practice staff and patients ⁵¹. Our participants also felt that continuity with patients and maintaining frequent communication with other members of the primary care team was important.

Several core competencies for a pharmacist working in primary care have been outlined by a Canadian Delphi study; these relate to communication, collaboration and professionalism, with an emphasis on direct patient care ⁵². Our participants discussed the skills, knowledge and attitudes

that they had gained from the course in respect of these competencies, as well as reflecting on the relevance of the training to direct patient care within a general practice surgery.

The clinical skills training was highly valued and was reported to have exceeded participant expectations in terms of the knowledge gained. It was delivered with the aim of providing pharmacists with the skills to manage minor ailments, including basic examination skills. Pharmacy-based UK minor ailment services are thought to be a cheaper alternative to consulting with a GP, however a systematic review failed to determine the impact on GP workload⁵³. In Scotland, a retrospective review of routine data reported that 13% of minor ailment consultations across two general practices could potentially have been managed by pharmacists⁵⁴.

The training also covered the knowledge and skills required to run chronic disease clinics and these sessions were discussed enthusiastically by participants. Many of our participants were optimistic about the potential positive health outcomes for their patients when applying these skills in practice. Internationally, pharmacist involvement in the management of long-term conditions in primary care has been well documented to improve clinical outcomes, including: Glucose control⁵⁵, medication adherence⁵⁶, and diagnostic screening⁵⁷ in diabetes care; medicines optimisation in cardiovascular disease⁵⁸; patient acceptance of chronic pain-related outcomes⁵⁹; and medication adherence in the management of epilepsy⁶⁰. The Australian 'Pharmacists in Practice' study reported that pharmacist-led medication reviews, for the management of chronic disease, enhanced patient care overall, and the appropriateness of prescribing was also seen to improve⁶¹.

Some of our participants, particularly those already working within primary care, felt that their role should focus on their expertise in medicines management and medicines optimisation. They reported that they did not gain any additional knowledge from the course on this topic. Consultations with a pharmacist regarding medications, within a general practice setting in the UK, have previously been reported to be rich in content, acceptable to patients, and perceived by pharmacists to be an amenable way to extend their role⁶². A UK analysis of audio-recorded consultations about medications, between patients and pharmacists in general practice, concluded that pharmacists were patient-centred, and responded positively and effectively to patient's emotional cues and concerns⁵¹. Our participants recognised the importance of a holistic, individualised approach to patient care and they valued the communication skills training on this course. Communication skills was an area in which several participants identified a gap in their knowledge and a lack of confidence.

A work placement within a general practice was thought to be a potentially valuable aspect of this type of training by our participants, however they felt that it had been under-utilised in this pilot course. The IMPACT project⁶³ emphasised the importance of pharmacists spending time in general practices during their training, particularly highlighting the relevance to the development of pharmacists' identity within primary care settings.

Our participants were very aware of safe practice, and were seeking to ensure that they were working within the boundaries of their own clinical competence. They discussed the implications of extended roles on their indemnity cover as well as in the context of salary. To date, no studies of pharmacist interventions in primary care have indicated either improvement or worsening in patient safety outcomes. Indemnity companies are working to finalise fees relating to the specific roles that

a primary care pharmacist might undertake. GP practices vary in the salaries paid to current primary care pharmacists.

Implications for research and practice

From the findings of this study, we suggest that future training programmes such as this one should seek to target pharmacists who are soon to be commencing new roles within general practice surgeries. The use of experienced primary care pharmacists as course facilitators would be well received by trainees. Courses should include: clinical skills training, including those skills applicable to the management of minor ailments and to chronic disease clinics; spending time shadowing and practicing skills within a general practice environment; receiving teaching from other primary care practitioners; and a discussion of the attitudes and professional values required for the role. The course should be delivered with a motivational approach and should be set in context through the use of clinical case scenarios.

Further research is needed to measure the impact of training interventions designed to aid the integration of pharmacists into a primary care team. Tools such as the Australian Pharmacist Frequency of Interprofessional Collaboration Instrument (FICI-P) could be a useful approach to understanding inter-practitioner relationships for example ⁶⁴. The 2015 NICE guidance for Medicines Optimisation highlights several potential research outcomes for consideration when evaluating interventions. These include: patient outcomes such as medication adherence, satisfaction with care, clinical outcomes and quality of life measures; medication-related adverse events including prescribing errors and safety incidents; and service use. In addition, further research is needed to assess the impact on GP workload of effectively training pharmacists to work in primary care roles within general practices. Further qualitative work could usefully assess pharmacists' experiences of a general practice role having recently completed a primary care training programme such as this.

There is enthusiasm and willingness amongst pharmacists for new, extended roles based within primary care. Promotion of the role amongst pharmacists, primary care teams, patients and commissioners is likely to encourage uptake of this type of training programme; to reduce uncertainty regarding definitions of the role, and to fuel pharmacists' primary care-based career aspirations. A working definition of the role, with clear examples of the knowledge, skills and attitudes required should be made readily available to pharmacists, primary care teams and the general public. This would enable standardised payment bandings and indemnity fees to be developed and applied nationally across primary care.

The findings from this study have the potential to inform the successful integration of pharmacists into primary care roles, working within general practices in the UK, in order to relieve the current workload pressures on GPs.

Conclusion

Design

The national agenda for primary care development has political and economic backing. This project has shown that there is significant local interest to engage with the planned integration of pharmacists in new models of primary care. This interest was demonstrated by the involvement of the stakeholders, the numbers of enquiries about this course and the engagement of the participants on the course.

The course content was designed to cover areas identified in consultative discussions, interviews and literature reviews. Clinical, communication and leadership skills were seen as key areas of additional training for pharmacists in primary care roles; however, the applied timescale of the course restricted the in-depth coverage of all suggested topics. A framework of six core curriculum domains was designed to ensure training was integrated. These domains could be used to inform the design of future training content.

Development

The range of pharmacists' work-based experience posed a challenge to the development and delivery of universally beneficial teaching activities. Participants working in primary care and CCGs found some aspects of the course less valuable. Meanwhile those pharmacists less experienced in primary care appeared to find the course more demanding.

A specialist medical educational provider, such as The University of Exeter Medical School, brings unique resources (clinical tutors, expert speakers, access to patients, access to training environments etc.) to developing and delivering postgraduate healthcare training.

Clinical and communication skills' training was identified as highly desirable in the design of the training programme. We concentrated on skills most relevant to potential roles of pharmacists in general practice rather than other settings. Attention was given to ensuring that skills were taught with a patient centred approach and a regard for ethical practice. These sessions were rated highly by participants and were successful in providing simulated, confidence-building skills training.

Participating pharmacists had characteristics of adult learners and teaching activities were developed to use them beneficially during delivery. Subsequently peer-to-peer learning and professional networking were enhanced. This enabled pharmacists to put the training into context and motivate them towards a future career in primary care through discussions with colleagues.

Delivery

The motivational way in which the course was delivered was reported to have encouraged positive attitudes and improved confidence levels for those with previously little experience of primary care.

Small group teaching was suitable for course delivery, in particular skills training, so that tailoring to previous experience, receiving feedback on performance and repetition of practice could occur. The clinical skills teaching was by far the most highly valued element for all participants and they would have preferred more practice of clinical skills throughout the course. An opportunity for repetition of practical skills may have given pharmacists more confidence to use them in a work setting.

A work placement within a general practice was thought to be a valuable adjunct to the training and there was the opportunity of a day's GP placements for each participant. Participants felt that it had been under-utilised in this pilot course, however there were barriers to the uptake of this option. Future courses would benefit from more practice contact providing primary care teams and participants to further explore the potential roles for pharmacists.

Evaluation

Participants' pre-course expectations and motivation for the course

Participants described a lack of availability of courses targeted specifically at pharmacists working in primary care. Participants who were soon to be starting new roles in primary care felt that the course was perfectly timed to address their learning needs. They hoped that it would allow them to evolve their role, enable them to recognise transferable skills, and to utilise their existing knowledge, within the context of primary care.

Those already working in primary care hoped that the course would inspire them to become more proactive within their role while those not imminently working in primary care, hoped that the course would stand them in good stead for future job opportunities.

Participants' pre-course expectations of course content

Communication skills were deemed important by the participants for effective consultations with patients and in order to work well within a team. Ophthalmology, dermatology and minor ailments were all viewed as important within primary care roles, particularly by those currently working in community pharmacy. The interpretation of blood test results and clinical examination skills were areas in which several participants expressed less confidence prior to commencing the training.

Problem solving skills were mentioned frequently, most often discussed in the context of medicines optimisation. Participants acknowledged the need to apply their problem-solving skills holistically, and expected teaching on patient-centred approaches to a consultation. Safe practice was a common topic when discussing learning needs, with the words "red flags" and "safety netting" often being used. Specialist areas, such as respiratory medicine and hypertension, were mentioned in the context of medication reviews, as participants envisaged becoming involved in chronic disease clinics within primary care. Participants were hoping to learn more about the logistics of primary care, for example how IT systems work in relation to chronic disease monitoring, with examples of how to process prescriptions, and the relationship between primary and secondary care providers.

Knowledge acquisition

Participating in the CPD course was shown, by way of pre- and post-course testing, to be associated with increases in the medical knowledge of pharmacists in the course content topics. Future courses would need to assess application of knowledge by assessing competency in simulated tasks or real-life work-place based assessments.

Course evaluation

All participants spoke positively regarding the course. Overall, pharmacists perceived the course to be best suited to pharmacists starting a new role within primary care

Community pharmacists who were hoping to work in primary care in future reported that all aspects of the training were both useful and relevant to them. Participants soon commencing, or had

recently started new roles in primary care, reported that the course complemented this, particularly the examination skills teaching. Participants who had been working in primary care for a while, and some of those working for the CCG, found some aspects less valuable.

Having completed the training, those who had reported less confidence said that the course had improved this, and that they planned to make use of the knowledge, skills, and contacts gained on the course. Many participants felt their expectations had been met with regard to networking opportunities, reporting that those currently working in primary care had enabled others to put the training into context and to motivate them towards a future career in primary care.

Evaluation of course content

Well-received aspects of the training course included the clinical skills sessions, the network opportunities and the motivational way in which the course was delivered. This was reported to have encouraged positive attitudes and improved confidence levels for those with previously little experience of primary care.

The clinical skills teaching was by far the most highly valued element for all participants. Participants said that the course might have been improved if there had been more clinical skills training, and more discussion of clinical case scenarios. Participants also reported that teaching on motivational interviewing was a particularly helpful aspect of the communication skills training as was having expert guest speakers.

Participants' perception of the definition of a pharmacist's role in primary care

Prior to the training programme, participants varied in their interpretation of the role of a pharmacist in primary care and experienced primary care pharmacists reported huge variability in how they were currently being utilised by different GP practices. General practice-based pharmacists' roles were envisaged as having access to patient notes, running their own face-to-face clinics, conducting telephone consultations and carrying out home visits.

Participants reported that they sensed uncertainty from the training course facilitators with regard to the definition of the role of a pharmacist working in primary care.

Participants' perception of barriers to integrating into extended primary care roles

When asked about perceived barriers to working within primary care, several community pharmacists, and some who were new to a primary care role, expressed concerns about patient perceptions and expectations.

Participants also voiced concerns about the way they were perceived by other healthcare practitioners. They also acknowledged that the expansion of the pharmacist's role was also a new concept to the rest of the primary care team, who they felt might require an explanatory introduction.

Pharmacists' willingness to extend their professional role

Community pharmacists and those just beginning new roles in primary care were open to acquiring new skills in order to extend their roles into minor ailments, triage and clinical examination for example.

Participants established in primary care roles for some time were much less willing to extend their skills. They felt that they could provide effective relief of GP workload pressures by using the medicines management and medicines optimisation skills acquired at an undergraduate level, and that these skills should be fully utilised in primary care before considering whether to extend the scope of their role.

Pharmacists' perception of training for role development

Participants felt further training would still be needed in order to achieve the full competence and confidence, that they perceived to be required, to begin working within a general practice. Some anticipated an increase in the numbers of pharmacists with independent prescribing skills and the likelihood that these pharmacists would be running their own clinics. This view was supported by comments received from practice team members, when interviewed after practice placements. Any pharmacists employed in general practice in the future is likely to need independent prescriber status.

Pharmacists' perception of issues relating to employment

Most participants felt that they would be perceived to be more employable by GP practices if they had a formal, standardised qualification in primary care.

The subject of salary and funding was discussed in relation to incentivising the primary care role. There was an expectation that remuneration for a practice pharmacist would be comparable with current salary levels in other pharmacy sectors.

Within the discussions on the course, concern was expressed by participants about having adequate indemnity provision for extended roles and viewed it as mandatory for practice.

All participants agreed that a clearer vision for the future was required and that it needed to be communicated widely amongst their professional group.

Future

Pharmacists' training

Further tailored training provision, for the individual pharmacist's roles and needs, is required to support pharmacists to consider undertaking, performing and developing clinical roles in new models of integrated primary care.

Formal training qualifications for practice-based roles needs to include acquisition of independent prescribing status to fully utilise pharmacists' skills and for professional quality assurance. This was not a component of this present course. There are diploma courses offered at other institutions that have the option to include the independent prescribing training as a module. In addition, accredited qualification training programmes for practice-based pharmacists need to include supervised work placements and assessments so that experiential and situated learning can occur.

In view of the developing clinical roles of pharmacists, review of pharmacy undergraduate and pre-registration training needs to occur so that relevant clinical and communication skills for patient-facing roles has more of an emphasis.

Pharmacists' role development

Further work at a national level is needed to define the required standards and competencies, and on to define the role of pharmacists in general practice. This would bring them in line with guidance provided for other healthcare professionals. Furthermore, development at a national level is required to outline pharmacists' career pathways, progression structures and requirements for revalidation of pharmacists in primary care, in accordance with other NHS structures.

Ensuring provision of indemnity insurance of allied healthcare professionals is essential for the future integration of pharmacists into extended primary care roles. This could be achieved by negotiating with providers to include pharmacists in practice cover, by offering reasonable packages for individuals or by having NHS employer indemnity.

Opportunities need to be created to develop practice-based pharmacists as teacher-practitioners to contribute to pharmacy educational programmes.

Integration in primary care teams

Promotion of the roles of pharmacists in general practice needs to occur so that primary care teams, patients and commissioners understand the expertise pharmacists bring to clinical care. This is likely to occur as the roles gain further clarity and longevity.

Possible research

There have been few previous studies specifically investigating the integration of pharmacists into general practice roles and much of the available evidence comes from overseas. Our findings can be used to inform the development and delivery of future training programmes designed for this purpose. We also contribute to the currently sparse literature on pharmacists' perceptions regarding the integration of their profession into general practice in the UK.

Further research is needed to identify the training needs of pharmacists extending their roles and to evaluate interventions designed to aid the integration of pharmacists into a primary care team. Qualitative research could usefully assess pharmacists' experiences of a general practice role having recently completed a primary care training programme and the experiences of practices in having a pharmacist integrated into the team.

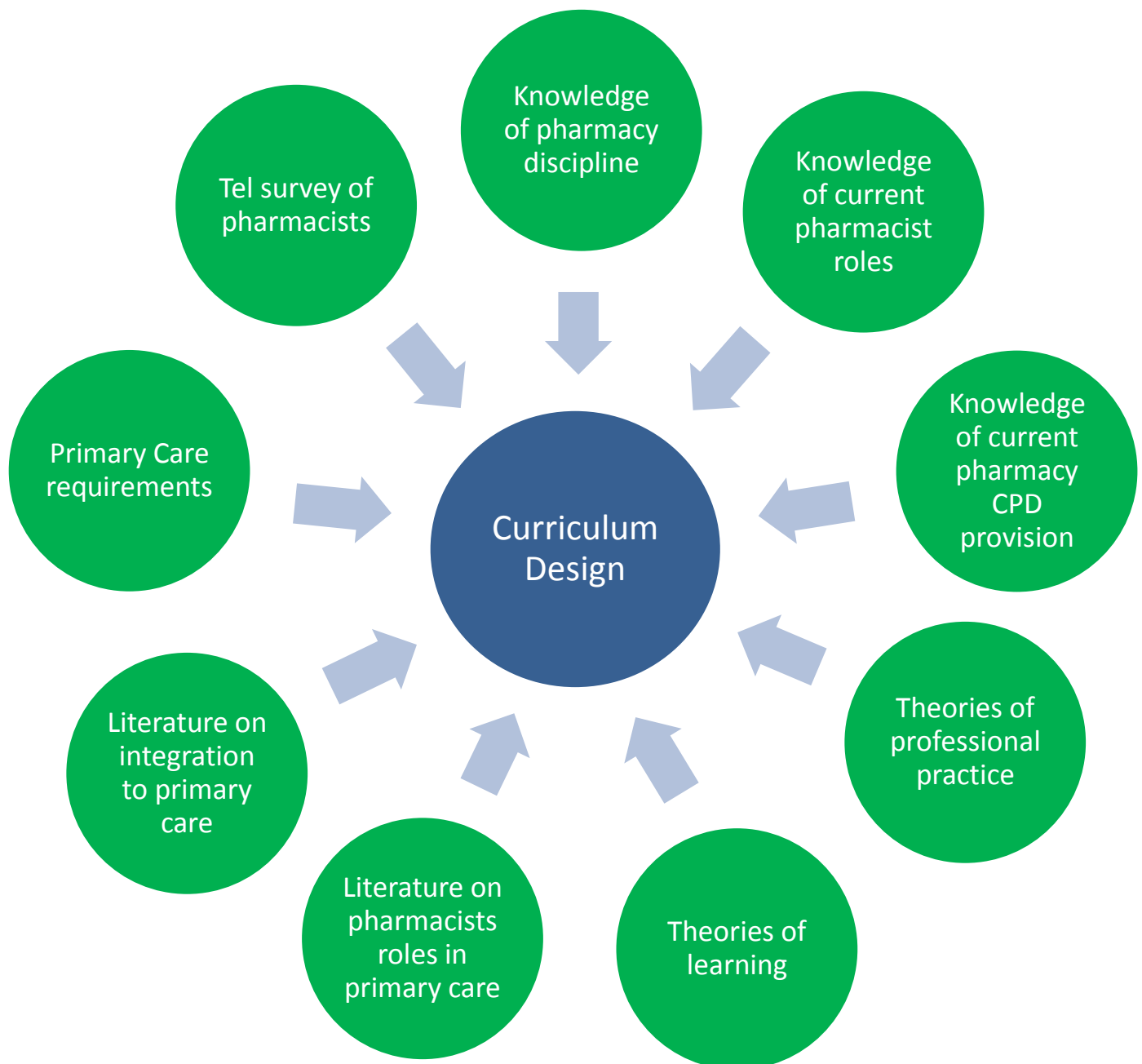
Further research is needed to measure the impacts that pharmacists make when contributing to the skill-mix in primary care teams and in particular the effect on workload and patient outcomes. To date, no studies of pharmacist interventions in primary care have indicated either improvement or worsening in patient safety outcomes.

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APPENDIX 2: Educational aims of the programme

1. To deliver and develop a quality training programme to registered pharmacists for potential roles in primary care
2. To engage the participants in a way that encourages them to extend their knowledge, skills and attitudes to be confident for integration into primary care teams
3. To introduce the participants to the primary care organisation of patient care, the systems in place and the roles of team members
4. To develop the communication and clinical skills of pharmacists to perform clinical assessments
5. To extend knowledge and skills in managing relevant common clinical conditions
6. To explore how knowledge and experience of medicines and prescribing is transferred for utilisation in primary care settings
7. To illustrate concepts with patient cases and practice examples to mirror the complexities of practice so that necessary assessments, actions and strategies are considered
8. To develop professional practice skills such as ethical values, team working, leadership skills and continuing professional development for transfer into primary care situations
9. To encourage participants to identify learning needs, reflect on progress and set future learning goals
10. To evaluate the training programme to inform future training



APPENDIX 3: Bid Document

Request Form for Funding from the Health Education South West Membership Council Innovation Fund 2015/16

Title of Project:

A fresh approach to supporting and developing the South West Primary Care Workforce through pharmacy education for integrated care and medicine optimisation, in general practice.

Person & Organisation submitting proposal:

Professor John Campbell, Professor of General Practice and Primary Care, University of Exeter Collaboration for Academic Primary Care (APEX), Smeall Building, Magdalen Road, Exeter EX 1 2LU john.campbell@exeter.ac.uk 01392 722741

with Professor Jean McEwan, Vice Dean Education, University of Exeter Medical School, and Education lead, APEX J.McEwan@exeter.ac.uk

description and scope of project:Description of Project

This innovative project will investigate the potential of the integration of pharmacists and pharmacy technicians into general practice, to relieve capacity pressures in general practice in the South West, and to inform curriculum development for pharmacist training for a new role in primary care. Pharmacists are increasingly becoming part of general or family practice teams and their integration has resulted in improved health and economic outcomes. However there are few interventions linking minor illness and medication optimisation in general practice and this project would provide robust evidence considering whether pharmacists can provide an effective, efficient and sustainable solution to practice pressures. The experiences of general practice staff, pharmacists and patients will also be explored regarding the acceptability of pharmacy clinical services in general practice.

To deliver the project we have established a partnership involving local GPs and pharmacists coordinated by the Exeter Collaboration for Academic Primary Care (APEX) in conjunction with the South West Academic Health Science Network (AHSN), and with wider representation from within the University of Exeter Medical School and the Universities of Bath and Plymouth. In addition, input and engagement with the HESW and local CCGs has been agreed via appropriate representation in the Pharmacy Workforce Development Group. The group has met over the past 8 months, and initiated detailed discussions with a range of lead local pharmacy professionals.

Evidence of Need

Recent data from the UK Centre for Workforce Intelligence, along with data from the University of Manchester, has identified the developing and imminent crisis in respect of primary care workforce provision. An estimated 54.1% of GPs over the age of 50 suggest they may quit patient care within five years. Whilst the government has called for an increase in the number of GPs (with Labour and Conservative representatives presenting somewhat differing proposed numbers), the ability to attract to general practice careers is presently a challenge. English training boards conducted a third round of GP recruitment (2014/15), with postgraduate GP placements still under-recruited at that time. The prospect of attracting between 5,000 and 8,000 new GPs is challenging.

Context for pharmacy education

Recent months have seen the development of a joint initiative between the South West AHSN and the University of Exeter (APEX) with a project, funded jointly between the two organisations exploring reasons underpinning difficulties observed in respect of the recruitment, retention, and return to work following career breaks of general practitioners. That work ("ReGROUP") is presently under way and involves a survey of 1200 local GPs, modelling of potential anticipated pinch points at practice level taking account of GP workforce pressures, and qualitative research undertaken with GPs who are at risk of quitting patient care either through retirement or failing to return to the GP workforce following career breaks. The current HESW proposal will build on this research to develop and test a support framework for integrated pharmacy provision as a potential clinical professional resource to relieve pressures on GP practice.

Pharmacists represent an important clinical professional group, many of whom are based in primary care/community settings. Within this professional group, newly-qualified pharmacists

have particular interests and skills which are of direct relevance to general practice/primary care. Not all

pharmacists, however, are trained non-medical prescribers, although extended roles for pharmacists are now widely recognised and implemented. These roles encompass such areas as the management of minor illness, medicines use reviews (MURs) and other enhanced services that aim to improve patient adherence to medicine – these activities often being delivered via High Street pharmacy settings.

Workforce development proposal

The scope of a structured programme combining these two elements will be considered by the UEMS and University of Bath in an attempt to address this gap in knowledge through taught sessions. From earlier research we have identified a number of pressures where support is needed including (i) the management of minor illnesses in primary care settings; (ii) structured care of patients with long-term conditions and multimorbidities; (iii) medicines management and streamlining within general practice settings; (iv) medication prescribing. Each of these areas represents a potential area of interest and opportunity for training, the majority of which remain under-exploited. We will use multi-professional groups to test and design curriculum content and will draw together stakeholders from across the locality.

APEX has great potential to foster change through its strategic partnerships, and development of educational initiatives, identifying allied health providers to meet pressures in primary care. Current data suggests there is an over-provision of pharmacists in training, and this is where the project will initially focus. We see this as a tremendous opportunity for primary care development, rather than a threat.

Experiential learning and numbers impacted

The project will pilot and scope and test training with multi-professional teams of community pharmacists, pharmacy technicians, nurses, practitioners (including secondary care) aimed at reshaping delivery to relieve the pressures in GP practice. Involving general practice and secondary care will provide additional benefits through sharing knowledge on medication management and discharge procedures to provide information to the patient's community pharmacy, with the patient's consent. We anticipate that approximately 20 pharmacists from across the primary and secondary care system will participate in this year-long project. We will additionally register this learning for CPD as this will increase value to volunteer participants, and in return participants will feed back and inform the design of the formal education programme. The learning will have the option of ultimately being managed through the UEMS flexible Master programme, currently under development, or embedded into Masters programmes at the University of Bath or Plymouth University. The inaugural and multi-professional cohort will engage in peer-learning to identify common problems, implement solutions and transfer that learning to others in the workplace.

Partners

We have developed initial discussions with potential partners from the University of Bath, South West AHSN, and local CCGs. Preliminary expressions of interest have been assured and we are confident these partners will engage with these developments. We are conscious of the need for rapid progress and partnership with the University of Bath will allow for early delivery of workshops and action learning sets to scope and test content (potentially Summer 2015).

Outcomes, Benefits and Risks:

Outcomes

We will design and pilot taught elements encompassing such issues as (i) clinical skills training, (ii) presentation and management of acute, self-limiting illness in primary care, (iii) an understanding of primary care morbidity profile and presentation, (iv) evidence-based clinical practice, (v) the assessment, management and structured care of individuals with long term conditions and multimorbidity in primary care settings, (vi) pharmacology, therapeutics and prescribing of relevance to primary care health professionals, (vii) the organisation, structure and delivery of general practice based primary care, including the quality and outcomes framework and (viii) the importance/value of patient experience as a key metric of primary care service delivery. These areas are only indicative – further development will be undertaken in conjunction with local primary care practitioners, pharmacists, commissioners, and health managers from

across the South West. The project will be co-led by a Pharmacist and General Practitioner, who will scope the need, design the first iteration of short programmes and placements. They will recruit colleagues with the necessary expertise from the three partners universities and from the regional NHS community, including APEX -partner GP practices, to lead, test and deliver the teaching, with central administration. The funds requested will offer appropriate and modest honoraria and meet travel costs of both teachers and participants.

Evaluating the potential for the learning intervention

There are an increasing number of educational programmes to extend allied health professional roles, but they are rarely formally evaluated. Their impact needs to be robustly examined before they are disseminated. This project will also pilot evaluation of the learning tools that will eventually recommend. We are likely to propose assessing whether participant attitudes, knowledge and skills have improved as a result of taking part using Kirkpatrick's 4-level model to assess: 1. Reactions of the participants; 2. Learning (increase in knowledge or capacity); 3. Behaviour change (or capability improvement and application); 4. Results for the organization.

Benefits

In addition to the design of education and training components we will also assess the impact for pharmacy participants undertaking clinical placements in primary care settings. Although these will be largely focussed on general practice, we will have the opportunity to explore a wider range of settings, for example in respect of prison healthcare, primary mental health care, outpatient settings, and community based pharmacy settings. Due consideration will be given to achieving a balance of urban, rural and inner-city placements. The final outcomes of a successful pharmacist development programme will be wide ranging and will include

- Developing primary care initiatives that are based on local/regional priorities
- Capacity and capability building through engagement of community pharmacists and private healthcare providers, to improve the quality primary and secondary care
- Embedding minor illness and medication management principles across professional boundaries and within integrated care systems
- Value for money because the intended outcomes have been designed to influence directly patient experience and the quality, safety and cost-effectiveness of care provided.

Risks

There are several examples of community pharmacy studies combining medication and minor illness management in this way, but the training needs which optimise the opportunities have not been fully addressed. The main risk to the proposal is non-engagement by pharmacy providers, but the collaborative group approach involving a range of NHS and academic partners will minimize this risk. A report will be published and disseminated widely reporting the outcomes of this project.

Value for money:

Delivery of the project will dovetail with the Pharmacy Workforce Development Group which has high level representation from the AHSN (Roberts, Klueggens), South Devon CCG (Watson), HESW (Thomas), Pharmacy representatives (Bearmann, Stone), and University of Exeter Medical School (Campbell, McEwan). It is thus in a unique position to foster change in models and ensure efficient and effective use of the project costs and resources. High level collaboration with academic partners also avoids unnecessary duplication of effort and streamlines resource utilisation.

Funding and additional costs

Resource Description:	Estimated Cost £
Admin support 0.5 FTE 1 year	£10k
Pharmacist 0.5FTE 1 year	£35k
General practitioner 0.5FTE 1 year	£50K
Honoraria to teachers/ speakers/facilitators, advertising/publicity	£20k
Room and venue rental and catering and travel	£25k
Total Cost	£140K

Please keep the application form to a maximum of 3 sides of A4 using Arial 11 font. Please return your proposal to: nick.jupp@southwest.hee.nhs.uk by Thursday 2 April 2015.

Page 3 of 3 *Very Best Care – Excellent Training & Development*

The Pharmacist in Primary Care - An Introduction

Report of pharmacist consultations to inform developments

November 2015

Healey M, Sims L, Sansom A, Campbell J

Aims

The overall aims of the project are to:

- Design, deliver, and evaluate a training opportunity for pharmacists
- Target qualified pharmacists interested in developing a skill base suitable to a primary care setting
- Develop new, integrated models of primary care provision

Background

Pharmacists were consulted to help inform the content and structure of a training course for pharmacists currently working, or who intend to work, in a primary care practice. Consulting with existing pharmacists was identified as an important early step in the development of the curriculum, specifically to help ensure that the course structure and curriculum is relevant to, and meets the needs and expectations of future primary care pharmacists. This report details the findings and implications of those consultations.

Method

Recruitment

Local Pharmaceutical Committee (LPC) and Clinical Commissioning Group (CCG) contacts were approached for details of pharmacists in the South West who currently work, or intend to work, in a primary care setting. These pharmacists were each sent an email with information about the project [Appendix 1], and an invitation to participate in an individual, confidential, telephone interview.

Interviews

A structured interview schedule was developed through discussion with the project team [Appendix 2]. Key questions covered:

- current place of work
- length of time working in current roles
- current roles
- Non-Medical Prescriber qualification
- experiences and opinions regarding pharmacists in general practice
- topics and skills expected for pharmacists to work in primary care, and specifically in general practice
- further training needed for pharmacists to work in general practice
- any barriers or difficulties perceived or experienced in the role of clinical pharmacist in primary care

Written notes were taken by the interviewer during the telephone interviews. These notes were typed up by the interviewer immediately after each interview, and a record of each interview was stored electronically.

Prior to interview, interviewees were informed that their answers would be kept confidential and that their responses would be made anonymous prior to reporting. All of the interviews were conducted by MH and took place during a three week period (from 15 October 2015 to 5 November 2015).

Analysis

The responses to each question were re-read and drawn together under key categories to help compare responses between interviewees. Common answers were collated to give an indication of frequency of occurrence [see Appendix 2].

Results

The LPC and CCG contacts provided email addresses of 17 pharmacists consisting of 10 community pharmacists, 4 CCG pharmacists, and 3 practice pharmacists. Eight pharmacists responded to the initial invitation, all of whom agreed to be interviewed. A reminder invitation was not sent. The length of interviews ranged from 17 to 30 minutes (mean = 22 minutes). Interviewee characteristics are shown in Table 1 below.

Table 1: Demographic and professional role characteristics of interviewees (n=8)

Pharmacist characteristics	n=8
Gender	
Female	2
Male	6
Non-Medical Prescriber qualification	
Yes	3
No	3
Working towards	2
Setting of Pharmacy Practice	
Community	4
General practice	3
CCG	1
Length of time in current role	
<5 years	2
5-10 years	3
11-15 years	1
>15 years	2

Pharmacists' roles

The community pharmacist role included:

- dispensing
- over the counter (OTC) minor ailments advice and treatment
- advanced services such as: Medicines Use Reviews (MURs); New Medicine Service (NMS); patient group directions (PGDs); emergency hormonal contraception (EHC), chlamydia screening.
- Pharmacy First Services (Winter Ailment, Minor Ailments, Emergency Supply), Private and NHS Flu Vaccination service.

One pharmacist had had area manager status, but was no longer involved in solely management roles.

The general practice pharmacist role included:

- conducting minor illness and long term condition (LTC) clinics
- telephone consultations

- liaising with community and hospital colleagues
- training nurses and nurse non-medical prescribers (NMPs) in conducting routine chronic disease management
- pain medicines optimisation clinics

All three practice pharmacists were involved in repeat prescription management, clinical medication reviews, safety and quality of the practice and practice performance. They were responsible for prescribing audits, analysis of drug information and drug safety alerts.

The CCG pharmacist role included:

- prescribing management planning for eight surgeries in an area
- practice audits
- practice prescribing compliance to formularies and guidelines
- reconciling any prescribing problems with GPs
- overseeing 'script switch' within the surgeries

Pharmacists' training and learning

The interviews explored pharmacists' training expectations: What skills and knowledge they expect any pharmacist working in primary care should have, as well as their personal learning needs to develop their career path, current CPD methods, and areas for learning development.

Pharmacists' expectations of training for primary care roles

General practice infrastructure: Five pharmacists identified the need to understand how a GP practice functions, IT, GP contract, and practice priorities, as well as CCG structures and roles.

Communication skills: Four pharmacists felt that further training would be required in communication skills in a GP practice setting, as these differ from a community pharmacy environment.

Clinical conditions and clinical skills: Four pharmacists identified further training in minor illness, LTCs, together with clinical skills such as examination and diagnosis of patients in appropriate conditions, and when to refer (eg. Red flag symptoms).

All pharmacists were aware of their roles in medicines optimisation and polypharmacy. However further training needs were identified in:

Medicines optimisation: Three pharmacists thought that additional medicines optimisation training in multi-morbidity and polypharmacy would be useful.(incomplete sentence).

Critical appraisal: Three pharmacists felt that pharmacists may need additional support in the critical appraisal of resources available to prescribers.

Independent prescriber status: Two pharmacists saw being an independent prescriber status as being essential to the role of a pharmacist in primary care, both of whom were practice-based pharmacists.

Postgraduate qualification: One pharmacist believed a Postgraduate Clinical Diploma in Pharmacy essential to the role.

Role/job shadowing: One respondent mentioned shadowing as an expected method of training for pharmacists, although it was felt that may create more, rather than less, work for GPs.

Team working skills: One respondent, with 11 years' experience as a practice pharmacist, suggested that pharmacists would need training for the behavioural adjustment from working as a stand-alone problem solver in a

community pharmacy to working as part of a team where problems are shared and solved, effectively the mental shift of working in a team where colleagues can give input.

Current CPD Resources

All respondents used the Centre for Postgraduate Pharmacy Education (CPPE) online learning for most of their CPD, together with self-directed learning via Journals etc. However many pharmacists see the e-learning model as not conducive to learning, and most only completed the mandatory courses requested by commissioners.

Two pharmacists attended CPPE and LPC workshops, but again only those required to provide commissioned services and PGDs, eg. NHS Flu, emergency hormonal contraception, minor ailments service etc.

Two practice pharmacists use GP Update book and courses.

One pharmacist used the Royal Pharmaceutical Society (RPS), as CPD resources.

Learning development

Respondents were asked what topics or skills they would be interested in developing. Key areas identified included:

- improving clinical skills and knowledge (n=7)
- Improving skills in differential diagnoses and red flag symptoms for referral to clinicians (n=7)
- developing consultation skills particularly in a GP practice setting (n=5)
- training in practical interpretation of blood results (n=5)
- improving their triage skills in both telephone and face to face patient consultations (n=5)
- improving knowledge in the management of minor illnesses, common conditions (n=4)
- training in other LTC areas e.g. Diabetes, mental health, respiratory etc. (n=3) (NB Pharmacists who undertake the independent prescriber course must identify one LTC as a specialism)

In addition, two practice based pharmacists stated that any pharmacist who works in primary care must develop skills in managing risk, use resources such as NICE guidelines, pathways of care, prescribing guidelines, and effective critical analysis of data.

Further, three community pharmacists identified repeat prescription management as a learning need. This was emphasised as a learning expectation by practice-based pharmacists, who also noted that the use of IT systems and understanding general practice structure would be useful in this role.

In summary:

- Community pharmacists who were thinking of moving their careers to primary care had the most learning expectations and needs. They also saw more barriers and problems to achieving their goals.
- CCG pharmacists were confident in medicines management roles and GP structure, but had training expectations and needs in areas of clinical skills, minor illness, consultation skills and conducting LTC clinics.
- The practice-based pharmacists had similar expectations of training needs of practice pharmacists in general. However their personal training needs were directly reflected in their experience. The three practice pharmacists had 1, 5 and 11 years of experience in their posts. The pharmacist with the least experience felt they needed more training in clinical skills, LTCs and consultation skills. Whereas the two more experienced practice pharmacists felt they need ongoing improvement in all their skills and knowledge.

Barriers or problems

Respondents were asked whether they had encountered any barriers or problems in their role as clinical pharmacists in primary care.

The majority reported GP resistance as a barrier and problem working, or attempting to work, in a GP practice. Specific GP barriers included:

- a lack of knowledge of what a pharmacist can do (n=4)
- pharmacists not perceived as being able to add value (n=2)

Resistance to the pharmacist role and presence had been experienced by practice based pharmacists. Three of these pharmacists recalled that early GP resistance, whereby they felt that the GPs lacked trust in the pharmacist's competence. All agreed that this trust had built over time. Four pharmacists also experienced resistance from other surgery staff. This was felt not to be due to lack of confidence in ability, but rather due to tension where surgery staff felt their jobs were threatened by the pharmacist's presence. Three respondents also saw patient resistance as a problem, with all three agreeing that this was an early problem where patients were unsure of the role of the pharmacist and lacked trust in their abilities. Again, all three respondents worked as practice pharmacists and explained that these fears reduced with time, and the growth in patient appointments was a measure of growing trust.

Other issues identified included:

- Funding. Lack of financial incentive for GPs to act as tutors. Two respondents reported pharmacists as too expensive for practices. (n=3)
- The pharmacist role being temporary until a GP partner had been found (One pharmacist gave an example of a colleague losing their job in this way)

Discussion

The aim of the interviews with pharmacists was to inform the design and development of the CPD course curriculum. All eight pharmacists agreed on the majority of skills and training required for pharmacists to contribute to the development of 'Core Themes of the Course'. A key issue identified was that pharmacists need to build confidence in their ability to develop and deliver new models of integrated primary care provision. There were no surprises or disagreements within the findings.

The majority of the pharmacists interviewed stated that they expected and required clinical skills training, together with extra training in consultation and communication skills. This appeared to be due to the lack of confidence in moving from a traditional OTC pharmacy setting into a general practice, consultation room setting. There was a theme of practical learning, sharing learning and group discussion work; this will have an ongoing impact on the course curriculum and delivery. The course may be pitched too high for some and too low for others, but even experienced clinical pharmacists felt that they need to refresh skills.

The results of the interviews informed the design of the course by developing the six core competencies of training for pharmacists to work in primary care, namely:

- Environment, systems and teams
- Professional practice skills
- Communication and clinical skills
- Prevent, assess and manage clinical conditions
- Complexity in practice
- Medicines management and optimisation

The results of the interviews informed the preferred teaching methods in delivering the course, including use of:

- Small group discussions
- Practical clinical skills training
- Group problem solving

The results of the interviews also informed the course curriculum:

- Primary care practice structure, systems and priorities
- Managing minor illnesses
- Differential diagnosis and red flag signs and symptoms
- Managing long term conditions
- Appropriate clinical skills
- Medicines optimisation in multi-morbidity and polypharmacy
- Communication skills training
- Critical analysis of documentation
- Managing risk in complexity of care
- Interpretation of blood results
- Improving triage skills

Strengths

The pharmacists who were interviewed were heterogeneous, with a range of different roles, and with varying years of experience.

All eight pharmacists were enthusiastic about participating in the interviews and engaged fully in all questions.

Telephone interviews were chosen as a pragmatic route to scheduling interview time with participants. The timing for interviews were chosen by participants and this made it easier for them to fit the interviews into their working day (thus reducing the burden on participants).

Limitations

The recruitment method relied on LPCs and CCGs providing names of pharmacists who may be interested in engaging in this early stage of the process. We do not know what criteria they used to identify these pharmacists, and there may have been some bias in their selection.

From the initial 17 identified pharmacists, only eight agreed to be interviewed. We do not know if these eight were representative of a broader pharmacy opinion. No hospital pharmacists' names were provided, so we are unable to comment on their training needs and preferences.

The interviewer took written notes during the interviews, but did not audio record them. Audio recordings of the interviews could have enabled verbatim quotes from respondents and more in-depth analysis.

Due to time constraints, only pharmacists were interviewed. The views of GPs and patients were not taken into consideration. The development of any future course would need to explore these two important areas of contribution.

Summary

Brief Interviews with local pharmacists provided a baseline for the development and design of a six day CPD course for those interested in improving their skill base for further integration into a primary care role.

APPENDIX 5: Curriculum domains framework

1. Environment, Systems & Teams in the primary care environment

Areas that will be discussed include patient access, the interface between primary and secondary care, clinical governance and use of IT systems along with roles of the primary health care team and practice organisation.

2. Clinical and Communication Skills

Consultation skills based on patient centred and medical models will give frameworks for structuring patient conversations as well as exploring how best to communicate in teams. Clinical examination training will include examination of the upper respiratory tract, ear and eye, and chronic disease monitoring.

3. Prevent, Assess and Management Clinical Conditions

The theme of managing minor illness and chronic disease will build on existing experience with development of diagnostic skills, recognising conditions that need onward referral and using local and national resources to ensure management is evidenced-based. Practice based systems used in delivering care to populations of patients with chronic diseases will be explored along with some public health medicine issues.

4. Professional Practice Skills

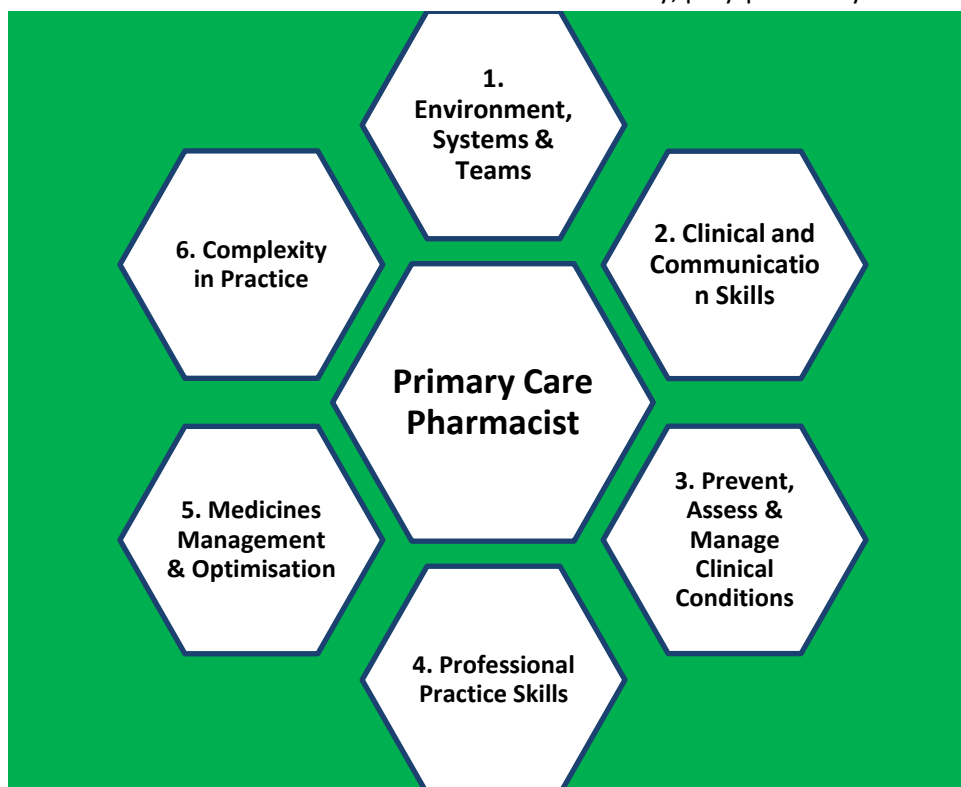
The study days will build on lifelong learning skills such as identifying learning needs, accessing resources and reflecting on progress. Patient cases will provide material for discussions around ethical practice, team working and leading on quality improvement activities.

5. Medicines Management & Optimisation

There will be opportunities to discuss how medicines optimisation and management principles can be applied to individual patients, practice systems and liaising with community and hospital pharmacy. Patient assessments that aid medication reviews and de-prescribing will also be covered.

6. Complexity in Practice

An introduction to the biopsychosocial model will form the basis for understanding holistic care. Complexity will be considered in patient cases that illustrate issues such as multi-morbidity, poly-pharmacy and managing risk.



APPENDIX 6: Application process record

No	Application received	Acknowledgement sent	Selected (Yes / No / Reserve)	Emailed	Accepted Place
1	17/11/2015	19/11/2015 email	N	14/12/2015	
2	17/11/2015	19/11/2015 email	Y	15/12/2015	Y
3	18/11/2015	19/11/2015 email	Y	14/12/2015	Y
4	18/11/2015	19/11/2015 email	N	14/12/2015	
5	19/11/2015	24/11/2015 email	R	14/12/2015	
6	20/11/2015	23/11/2015 email	Y	15/12/2015	Y
7	20/11/2015	23/11/2015 email	N	14/12/2015	
8	22/11/2015	23/11/2015 email	Y	14/12/2015	Y
9	23/11/2015	24/11/2015 email	R	14/12/2015 + 04/01/2016	Y
10	23/11/2015	24/11/2015 email	Y	14/12/2015	Y
11	25/11/2015	26/11/2015 email	N	15/12/2015	
12	25/11/2015	26/11/2015 email	Y	15/12/2015	Y
13	25/11/2015	26/11/2015 email	N	15/12/2015	
14	26/11/2015	26/11/2015 email	Y	14/12/2015	Y
15	26/11/2015	26/11/2015 email	N	14/12/2015	
16	26/11/2015	30/11/2015 email	Y	15/12/2015	Y
17	27/11/2015	30/11/2015 email	N	14/12/2015	
18	29/11/2015	30/11/2015 email	R	14/12/2015	
19	29/11/2015	30/11/2015 email	Y	15/12/2015	Y
20	29/11/2015	30/11/2015 email	N	14/12/2015	
21	30/11/2015	01/12/2015 email	Y	15/12/2015	Y
22	01/12/2015	01/12/2015 email	Y	15/12/2015	N - Declined
23	01/12/2015	01/12/2015 email	N	14/12/2015	
24	02/12/2015	03/12/2015 email	N	14/12/2015	
25	06/12/2015	08/12/2015 email	Y	15/12/2015	Y
26	06/12/2015	08/12/2015 email	N	14/12/2015	
27	07/12/2015	08/12/2015 email	N	14/12/2015	
28	07/12/2015	08/12/2015 email	R	14/12/2015	
29	07/12/2015	08/12/2015 email	Y	14/12/2015	Y
30	08/12/2015	08/12/2015 email	N	14/12/2015	
31	08/12/2015	09/12/2015 email	Y	14/12/2015	Y
32	08/12/2015	09/12/2015 email	R	14/12/2015	
33	09/12/2015	09/12/2015 email	N	14/12/2015	
34	09/12/2015	10/12/2015 email	N	14/12/2015	
35	09/12/2015	10/12/2015 email	Y	14/12/2015	Y
36	10/12/2015	10/12/2015 email	N	14/12/2015	
37	10/12/2015	10/12/2015 email	N	14/12/2015	
8	10/12/2015	10/12/2015 email	Y	14/12/2015	Y

APPENDIX 7: Course e-learning platform

Home Updated Apr 14, 2016, 10:04 AM

PHARMACIST *in* PRIMARY CARE


HOME OVERVIEW DAY 1 DAY 2 DAY 3 DAY 4 DAY 5 DAY 6 WIKI PLACEMENTS

Search this site

Welcome to the 'Pharmacist in Primary Care - An Introduction' CPD Course resource and collaboration space

The programme is designed so that knowledge and skills are developed in an integrated way with patient case illustrations to mirror the complexity of practice.

There are opportunities for clinical skills training, peer group work and sessions delivered by expert speakers. The days are facilitated by an experienced GP and a community pharmacist to ensure you optimise your learning.



Between contact days, you are encouraged to engage with recommended learning resources that are made available here and reflect on your practice to contribute to your CPD requirements.

Subpage Listing

- Day 1
- Day 2
- Day 3
- Day 4
- Day 5
- Day 6
- Overview
- Placements

The content of 'The Pharmacist in Primary Care - An Introduction' course is accredited by the Royal

08:04 09/08/2016

APPENDIX 8: Recruitment report

The Pharmacist in Primary Care - An Introduction

Report of pharmacist recruitment on to a CPD course

December 2015

Healey M, Sims L, Sansom A, Campbell J

Aims

The overall aims of the project are to:

- Design, deliver, and evaluate a training opportunity for pharmacists
- Target qualified pharmacists interested in developing a skill base suitable to a primary care setting
- Develop new, integrated models of primary care provision

This report documents the process of recruiting pharmacy participants onto the CPD training course.

The key aspects of the recruitment of a cohort of pharmacists onto the CPD course included:

- Marketing the CPD course to attract pharmacists with an interest in a primary care role
- Targeting as many such pharmacists in the South West as possible
- Following a transparent application process
- Assessing the level of interest of pharmacists in primary care
- Recruiting pharmacists with motivation, experience and career plans in primary care.

Introduction

A pragmatic decision was made to offer 16 places on the CPD training course. This maximum was determined mainly by resource availability (including practical working space in the clinical skills laboratory) plus optimum group sizes for training of this nature. The reference 'Adults Learning 4th Edition 2004; Jenny Rogers: p68-70' discusses optimum group sizes for adult learning. It states '*the ideal size for a learning group is between 8 and 12*' and '*increase the group much beyond 12 and you will inevitably find that it becomes difficult to draw everyone in*'. Therefore, the decision was made to keep the group size as large as possible whilst still maintaining a number of participants suitable for an optimal learning experience.

We sought to recruit pharmacists who:

- Were motivated to develop relevant skills and knowledge for a role in primary care.
- Would demonstrate experience or have a background relevant to primary care for contributing to collaborative learning on the course.
- Demonstrated evidence of an interest and understanding to develop a future role in primary care.
- Would commit to attend all six training sessions and participate in the course evaluation.

Method

Marketing and course promotion

Webpage and Flyer

- The CPD course was given a title 'The Pharmacist in Primary Care – An Introduction'.

- A webpage was created (Appendix 1) together with a flyer (Appendix 2). Both the webpage and flyer had hyperlinks within them where recipients could click to access the 'Course content' (Appendix 3) and a course 'Application form' (Appendix 4).
- A link to the webpage (<http://goo.gl/ibiPxF>) was sent to pharmacy leads for them to distribute to known pharmacists within their organisations and/or employment.
- The flyer was sent as a personal invite to individual pharmacists known to have interest in, or already working in, a primary care role. The flyer was designed as an HTML document which would appear in a complete format within the email (to give full visual impact).

Database and contacts

A database of pharmacy contacts in the South West (Devon, Cornwall, and Somerset) was created.

Table 1: Pharmacy contacts (n=1050)

This table shows the total number of contacts who received direct communication by email. However, as 985 contacts were identifiable only by email address, it was not possible to determine whether there was an overlap of contacts. Some contacts may therefore have received repeat communications.

Contacts	Number (n= 1050)
Community Pharmacy Leads	10
Individual pharmacists known to work or have interests in a primary care role	22
Hospital Pharmacy Leads	8
Known CCG Leads and CCG pharmacist employees	14
Organisation Leads (Professional bodies, Company leads, NHS leads)	11
Pharmacies, pharmacists, and pharmacy technicians who receive the NHSE weekly newsletter by email	985

Where available the details of individual contacts were securely stored as:

- Name
- Address & Postcode
- Email address
- Telephone details, mobile, work, home.
- Field of pharmacy

Where these details were not fully available, an email address list was made and safely stored.

Email communications

An email communication was sent, firstly to those contacts where full details had been collated. The remaining email only contacts were contacted a few days later due to the greater numbers involved:

- On Tuesday 17th November 2015, the course flyer, embedded in an email, was sent to 22 individual pharmacists. This email was tracked using the University of Exeter CreateSend software which provides data on email openings, and email delivery.
- On Tuesday 17th November 2015, an email, containing the course weblink, was sent to 43 pharmacy leads, employers, and organisations. This email requested the distribution of the course marketing material to as many pharmacist colleagues as possible. Contacts were asked to provide numbers of pharmacists who were forwarded the course details.
- On Thursday 26th November 2015, an email with the course weblink was sent to 985 pharmacies, pharmacists, and pharmacy technicians who receive a weekly NHS newsletter.

Twitter

In addition to the email communication, the social media platform Twitter was chosen as an additional method of promoting the course to as many South West pharmacists as possible.

- On Thursday 19th November 2015 the following tweet was posted via the University of Exeter Collaboration for Academic Primary Care (APEX) twitter account:

NEW funded Pharmacist in Primary Care CPD course for SW Pharmacists #GPPharmacists @rpharms @devonlpc pls RT <http://goo.gl/ibiPxF>

- On Tuesday 24th November 2015 the following tweet was posted via the APEX twitter account:

SW Pharmacists interested in #primarycarepharmacy - click <http://goo.gl/ibiPxF> for Exeter Medical School 2016 CPD Course @UKcpa @TheGPhC

Application process

Application form for potential pharmacist participants

- An application form (Appendix 4) was designed to gather personal and professional details of the pharmacist applicants, and their experience, career plans and motivation for a role in primary care.
- A closing date for applications was decided. The course webpage and flyer carried the following statement:

Priority is given to applications received before 5.00 pm Thursday 10th December 2015. Successful applicants will be informed by Friday 8th January 2016.

- Applicants were invited to submit their application electronically (by email) or by post.
- Completed applications were entered into a database which listed applicants in chronological order of the dates applications were received (by email and/or post).
- Applications were printed, numbered and stamped with the date of receipt by email and/or post.

Assessment of completed applications

- All applicants were sent an email acknowledgement of receipt of their completed application form.
- A standard selection criteria template (Appendix 5) was used for assessment of each completed application.
- Each application was assessed and scored individually, and independently, by the three project leads.
- A Summary Score spreadsheet was created which recorded score totals for experience, career plans, and motivation. These scores were also listed against regional location and current role of each applicant.
- Assessment of completed applications by the three project leads was finalised by Monday 14th December 2015.
- All scores, location and role were listed.
- No applications received after 5pm on Thursday 10th December 2015 were considered.
- Applicants were not interviewed.

Alerting applicants to outcome of assessment

Applicants were sent an email during the week commencing 14th December 2015 informing them of the outcome of their application. Applicants were placed into three categories.

- Successful – offered a place on the CPD course and a participant in the evaluation of the project
- Reserve – not offered a place on the course due to limitation of numbers, but asked to remain as potential participants in the event of cancellation or refusal
- Unsuccessful – not offered a place on the CPD course on this occasion, but remain as a contact for any future course developments

Results

Marketing and course promotion

Individual email flyer invites

The University of Exeter CreateSend email tracking facility, within the day range Wednesday 18th November 2015 to Wednesday 25th November 2015, provided the following information:

- Total number HTML flyers sent by email (n=22)
- Number of recipients who opened the email (n=12), 54.5%
- All recipients opened the email
- Number of emails which could not be delivered (bounced) (n=10), 45.5%

Pharmacy leads and organisation leads URL distribution

43 emails were sent to community leads, hospital leads and organisation leads. The email asked if it would be possible to report back with the numbers of pharmacists who they had forwarded the email to. No response was received; consequently no data are available on the numbers of pharmacists contacted beyond the stated contact list.

Pharmacies and pharmacists URL email only

- 985 emails were sent to pharmacies, pharmacists and pharmacy technicians.
 - A read receipt request was added to emails (n=985)
 - Emails returned as undeliverable (n=3), 0.3%
 - Emails returned as read (n=97), 9.85%
- The email list was obtained from a NHS weekly pharmacy newsletter communication which is in the public domain.

Webpage

A Google analytics report was obtained which gave some indication of how many times the course webpage was viewed over the period; Monday 23rd November 2015 to Wednesday 9th December 2015.

- Total number of times the webpage was viewed (n=343)
- Number of unique page views by individuals (n=276)
- Unique page views from exeter.ac.uk website and therefore assumed not potential applicants (n=15)
- The average time spent on the webpage for each view was 5 minutes 40 seconds.

Application process

Completed application forms

Initial analysis of the completed application forms:

- First completed application form received on Tuesday 17th November 2015
- Completed application forms were received by 5pm Thursday 10th December 2015 (n=38)
- Completed application forms returned by email (n=34)
- Completed application forms returned by post (n=3)
- Posted and emailed a scanned copy of their completed form (n=1)
- Pharmacy technician applications received (n=0)

Table 2: Demographic results of completed application forms (n=38)

Regional location of applicant within The South West	N = 38
Bristol	1
Cornwall	6
Exeter	6
Plymouth	4
North Devon	5
Somerset	1
South Devon	15
Current pharmacist role listed on application form	N = 38
Clinical Commissioning Group Pharmacist	10
Community Pharmacist	23
General Practice Pharmacist	1
Hospital Pharmacist	3
Role not stated	1

Assessment of the completed application forms

Assessment by the three project leads, of 38 application forms was completed by 2.00pm Monday 14th December 2015

- The maximum score for each applicant by individual assessors was 15/15.
- The maximum total for all three assessors for each applicant was 45/45.
- A score from each project lead, role and location were recorded against the applicant ID number on a Summary Score Sheet (Appendix 6)
- The top 16 scores were identified as the successful applicants (Appendix 7)
- The record of role and location enabled a check on a fair demographic spread of participants across the South West
- A further five applicants were identified as potentially successful if any cancellations or refusals were received; these five formed a reserve list.
- The remaining applicants were considered unsuccessful on this occasion, but were invited to remain as contacts for any future course developments at University of Exeter Medical School.

Alerting applicants to the outcome of the application process

Three email templates, successful, reserve and unsuccessful, were developed to alert applicants to the outcome of the application process.

- On Monday 14th December 2015, successful applicants were alerted by email that they had secured a place on the CPD course (n=16)
- They were asked to confirm their acceptance by email before the end of December
- On Monday 14th December 2015, reserve applicants were alerted that they could not be offered a place on the course but may be contacted in the event of any cancellation or refusal of a place (n=5)
- They were asked to contact the team if they would prefer not to remain on a reserve list
- The email explained that any contact with reserve participants would be made in the first working week of January 2016
- On Monday 14th December 2015, unsuccessful applicants were alerted by email that they could not be offered a place on the CPD course (n=17)
- They were offered the option to be informed of any future course developments.

Discussion

The aim of the recruitment process was to market the CPD course to a maximum number of pharmacists in the South West, using the most effective methods available and within the applied timescale. The branding of the promotional material was designed to attract pharmacists in the South West with a particular interest in, or a view to working in, a primary care role. The application process was structured and transparent. The application form enabled the project leads to identify pharmacists' level of motivation, experience, and career plans in a primary care role.

The pragmatic method of approaching a cohort of suitable pharmacists (n=1050) identified that there is interest and enthusiasm for pharmacists to work in a primary care role.

All pharmacists who completed and returned an application form (n=38) showed motivation and career plans for a role in primary care.

Strengths

Within a short timescale (October 12th 2015 to November 26th 2015) a significant number of pharmacists (n=1050) were contacted by email via various routes. As a result of those emails the webpage was viewed by a large number of individuals (n=261).

The recruitment process resulted in over-subscription of the course (n=38) which resulted in development of a fair, open and transparent recruitment selection process. The spread of location and roles of the South West pharmacists who applied for the course demonstrated that the marketing process stretched across all pharmacy disciplines and regions of the South West.

Limitations

Ideally all pharmacists in the South West across all pharmacy disciplines would have been contacted by email and/or post. Time constraints did not allow for a freedom of information request being made to The General Pharmaceutical Council (the only professional body to hold a definitive list of registered pharmacists).

A longer lead time would have enabled a more quantitative analysis of the numbers of pharmacists interested in a primary care role:

- A more comprehensive database of South West pharmacists would have been created
- That database would include additional details such as age, date of registration, and current area of practice
- IT tracking methods would have been implemented before sending communications

Summary

Promotion and marketing of the CPD course through direct and cascade emailing, and through the use of social media highlighted substantial interest in this initiative, and led to an over-subscription to the course and successful recruitment of 16 pharmacist participants.

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The Pharmacist in Primary Care - An Introduction

- An innovative programme of CPD study days
- For registered pharmacists who wish to develop their knowledge and skills
- Designed to cover areas related to potential roles in primary care

Learning Outcomes

- To understand the skills that pharmacists bring to primary care with their knowledge of medicines and prescribing
- To be able to apply medicines management and optimisation concepts to individual patients and populations
- To outline the principles of chronic disease management and gain practical skills for annual health checks
- To increase knowledge/skills in managing patients with minor illnesses of the eye, ear, upper respiratory tract and skin
- To know about high risk medication reviews/audits and interpretation of relevant blood test results
- To understand how a pharmacist can contribute to quality improvement activities in primary care



Learning clinical skills for practice

The Programme

Dates	
Tuesday 9th February 2016	Valuing the primary care pharmacist Managing the patient with eye symptoms
Tuesday 8th March 2016	ENT assessment in adults Chesty coughs & Asthma/COPD reviews
Tuesday 12th April 2016	Chronic disease principles: Hypertension reviews Cardiovascular risk & lifestyle modification
Tuesday 10th May 2016	Medicines optimisation & management in practice
Tuesday 7th June 2016	Common dermatological conditions High risk medications, rheumatoid arthritis, osteoporosis & blood test interpretation
Tuesday 5th July 2016	Diabetes annual checks Developing the primary care pharmacist role

More details can be found on the [course programme](#).

The programme is designed so that knowledge and skills are developed in an integrated way with patient case illustrations to mirror the complexity of practice. There will be opportunities for clinical skills training, peer group work and sessions delivered by expert speakers. The days will be facilitated by an experienced GP and a community pharmacist to ensure you optimise your learning. Between contact days, you will be encouraged to engage with recommended learning resources and reflect on your practice to contribute to your CPD requirements.

These study days are part of a project which will be exploring the learning needs of pharmacists, the potential roles in primary care for pharmacists and ideas for future education and research.

Commitment:	To attend six CPD days over six months (Feb 2016 – July 2016) and to participate in the course evaluations
Funding:	Places are limited to 16 and are fully funded by Health Education South West
Location:	University of Exeter Medical School, Smeall Building, St Luke's Campus, Exeter, EX1 2LU. Directions to the St Luke's Campus

To apply please complete an [application form](#) and send to Ellie Kingsland at the above address or by email (see below).

Priority is given to applications received before 5.00 pm Thursday 10th December 2015. Successful applicants will be informed by Friday 8th January 2016.

Contact Details

Programme Co-ordinator: Ellie Kingsland

Email: pcpharmacy@exeter.ac.uk


Phone: +44 (0) 1392 722821

This is a joint project between University of Exeter Medical School and the [Collaboration for Primary Care \(APEx\)](#) and is funded by [Health Education South West](#).


Development Team

Professor John Campbell, Professor of General Practice in Primary Care
 Mr Mark Healey, Community Pharmacist
 Dr Laura Sims, GP

Web Version | Contact preferences | Newsletter
28/11/2016



The Exeter Collaboration for
Academic Primary Care (APEX)



'The Pharmacist in Primary Care - An Introduction'

Dear Pharmacist,

Please find below details of our exciting new CPD Programme on offer through the University of Exeter Medical School.

'The Pharmacist in Primary Care - An Introduction'

- **An innovative programme of CPD study days**
- For registered pharmacists who wish to develop their knowledge and skills
- Designed to cover areas related to potential roles in primary care

Learning Outcomes

- To understand the skills that pharmacists bring to primary care with their knowledge of medicines and prescribing
- To be able to apply medicines management and optimisation concepts to individual patients and populations
- To outline the principles of chronic disease management and gain practical skills for annual health checks
- To increase knowledge/skills in managing patients with minor illnesses of the eye, ear, upper respiratory tract and skin
- To know about high risk medication review / audits and interpretation of relevant blood results
- To understand how a pharmacist can contribute to quality improvement activities in primary care

The Programme

Dates:

Tuesday 6th February 2016
Valuing the primary care pharmacist
Managing the patient with eye symptoms

Tuesday 6th March 2016
ENT assessment in adults
Chronic coughs & Asthma/COPD reviews

Tuesday 12th April 2016
Chronic disease principles
Hypertension reviews
Cardiovascular risk & lifestyle modification

Tuesday 19th May 2016
Medicine optimisation & management in practice

Tuesday 7th June 2016
Common dermatological conditions
High-risk medications, rheumatoid arthritis, osteoporosis & blood test interpretation

Tuesday 5th July 2016
Diabetes annual checks
Developing the primary care pharmacist role

More details can be found in the [course programme](#)

The programme is designed so that knowledge and skills are developed in an integrated way with patient case illustrations to mirror the complexity of practice. There will be opportunities for clinical skills training, peer group work and sessions delivered by expert speakers. The days will be facilitated by an experienced GP and a community pharmacist to ensure you optimise your learning. Between contact days, you will be encouraged to engage with recommended learning resources and reflect on your practice to contribute to your CPD requirements.

These study days are part of a project which will be exploring the learning needs of pharmacists, the potential roles in primary care for pharmacists and ideas for future education and research.

Commitment:
To attend six CPD days over six months (Feb 2016 – July 2016) and to participate in the course.

Funding:
Places are limited to 16 and are fully funded by Health Education South West.

Location:
University of Exeter Medical School, Szebell Building, St Luke's Campus, Exeter, EX1 2LU.
[Directions can be found here.](#)

To apply please complete an [application form](#) and send to Ellie Kingsland at the above address or by email (see below).

Contact Details:
Programme Co-ordinator: Ellie Kingsland
Email: peatformary@exeter.ac.uk
Phone: +44 (0) 1392 723321

This is a joint project between University of Exeter Medical School and Academic Primary Care in Exeter (APEX) funded by Health Education South West.

Development Team
Professor John Campbell, Professor of General Practice in Primary Care
Mr Mark Healey, Community Pharmacist
Dr Laura Sims, GP

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University of Exeter Medical
School
St Luke's Campus,
Szebell Road,
Exeter,
Devon EX1 2LU
Email: peatformary@exeter.ac.uk

The Pharmacist in Primary Care An Introduction

Course Programme

Tuesday 9th February 2016

Valuing the primary care pharmacist

- The skills and role of the primary care pharmacists in a primary care team
- Leading on prescribing quality improvement changes

Managing the patient with respiratory infections

Managing the patient with eye symptoms

Tuesday 8th March 2016

Clinical skills training 1- Clinical skills resource centre, Heavitree Hospital ENT & Asthma / COPD annual reviews

Tuesday 12th April 2016

Principles of chronic disease management

Hypertension annual reviews

Cardiovascular risk & lifestyle modification

- Using CVS risk profiling in practice and preventative prescribing
- Communication skills for encouraging lifestyle changes

Tuesday 10th May 2016

Medicines management & optimisation in practice

- Medicines management and patient enquiries
- Quality improvement of prescribing practice and systems
- Applying optimisation principles in polypharmacy and multi-morbidity
- Assessments to aid medication reviews & deprescribing

Tuesday 7th June 2015

The diabetic annual review

Common dermatological conditions

High risk drugs, rheumatoid arthritis, osteoporosis & blood test interpretation

- Rheumatoid arthritis annual reviews and osteoporosis medication
- High risk drug reviews, audits and interpreting blood results

Tuesday 5th July 2015

Clinical skills and communication training 2 – Clinical skills resource centre, Heavitree Hospital Developing the primary care pharmacist role

- Successful integration of pharmacists in primary care roles
- Local networks and continuing professional development



Application Form for 'The Pharmacist in Primary Care – An Introduction' CPD 2016

Please complete this form by typing directly into the fields and return as an attachment by Email to: pcpharmacy@exeter.ac.uk or send a hard copy of the form by post to: Ellie Kingsland, Smeall building, University of Exeter Medical School, St. Luke's Campus, Heavitree Road, Exeter, EX1 2LU.

For help or further information, please contact Ellie Kingsland by Email (as above) or telephone: +44(0) 1392 722821

1. Personal Details	
Surname:	Forename:
Title: (Dr/Mr/Mrs/Ms/Other)	Previous Surname: (if applicable)
Gender: Male/Female (delete as appropriate)	Date of Birth:
Email address: (for programme communications)	
Postal Address:	
Postcode:	
Mobile phone number*:	
Full daytime phone number*:	
Full evening phone number*:	
* Please indicate preference should we need to contact you urgently during your time on the programme	

2. Current Roles	
GPhC Registration Number:	
Place of employment:	
Roles and responsibilities:	

3. Postgraduate Qualifications	
Please give details of any postgraduate qualifications held (e.g. ClinDip, Prescribing Course)	
Qualification	Date of Award

4. Educational Qualifications				
Please give details of your main qualifications. (e.g. BPharm; BSc; MPharm; PhD)				
Qualification Title	Grade or Class	Name of Institution	Awarding Body	Date of Award

5. Employment History			
Please give details below of employment including current employment and last two previous positions.			
Name and address of employer	Title and duties of post	Dates	
		From	To

6. Continuing Professional Development
Please tell us if you are currently studying for further academic or professional qualifications and if so the name of the award/qualification and the educational institution.
Looking to the future in what subject areas would you like to see new courses developed?

7. Experience

On this programme you will work collaboratively with peers on a series of integrated themes that relate to developing clinical skills relevant to primary care. Please would you share with us your experience in this area?

8. Future Career Plans

Please outline your future career plans and interests.

9. Motivations

Please outline the motivation for your application for this training opportunity.
(Max 200 words)

10. Disability Disclosure

Please tell us if you have any requirements with regards to us helping to support any needs you may have (e.g. accessibility, learning support, known allergies, specific dietary requirements, etc.)

Yes I agree to relevant information about my disability and/or support needs being disclosed to those lecturing and staff who have a need to know. In the event that I do not take up a place I understand that this information will be destroyed in line with the Data Protection Act.

Signature:

Date:

No I do not agree to disclosure about my disability and understand that this may limit the support I receive. I agree to inform Disability Assist Services if I reconsider this decision.

Signature:

Date:

11. Declaration

I confirm that, to the best of my knowledge, the information given in this form is correct and complete. I understand that the decision to offer me a place rests solely within the University of Exeter Medical School and is not subject to appeal. I understand that if I am offered a place on the programme I agree to abide by the rules and regulations of the University of Exeter Medical School.

Applicant signature:

Date:

Please indicate how you first found out about this programme.

Colleague HESW Website UEMS Website Other (please specify)

Thank You

Applicant Number				
Regional Location				
Current role				
	Score /5			
	JC	LS	MH	Totals
Motivation <i>Provides evidence of motivation to develop applicable skills and knowledge for a role in primary care.</i>				
Experience <i>Demonstrates experience or has a background relevant to primary care for contributing to collaborative learning on the course.</i>				
Career Plans <i>Shows evidence of an interest and understanding to develop a future role in primary care.</i>				

Appendix 6: Summary Score Sheet – Screening Applications

ID NO.	Score A	Score B	Score C	Total		Role	Location*
1	8	7	6	21		Comm	1
2	11	12	11	34		GPP	2
3	14	15	15	44		CCG	4
4	12	5	10	27		Comm	1
5	10	9	11	30		CCG	2
6	12	11	14	37		Hosp	2
7	6	10	11	27		Hosp	3
8	13	11	10	34		Comm	3
9	13	9	11	33		Comm	4
10	13	10	11	34		CCG	2
11	2	5	3	10		Comm	3
12	11	11	15	37		CCG	2
13	10	6	10	26		Comm	2
14	13	12	11	36		CCG	2
15	9	9	11	29		CCG	2
16	14	11	9	34		Comm	1
17	8	8	7	23		Comm	5
18	13	10	9	32		Comm	2
19	14	12	14	40		Comm	4
20	10	6	10	26		Comm	2
21	14	10	12	36		Comm	3
22	15	12	11	38		Comm	5
23	9	7	8	24		Comm	2
24	12	7	8	27		Comm	2
25	14	11	15	40		CCG	5
26	12	8	9	29		Comm	1
27	8	5	9	22		Comm	2
28	12	9	10	31		Comm	2
29	15	11	13	39		Comm	2
30	7	6	6	19		?	6
31	14	13	14	41		CCG	5
32	10	9	11	30		Comm	1
33	11	8	10	29		Comm	5
34	2	6	5	13		Comm	7
35	14	11	13	38		Comm	4
36	8	7	7	22		Comm	3
37	9	8	11	28		Hosp	3
38	15	14	14	43		CCG	5

*The numbers 1 – 7 represent seven locations across the South West (in no particular order): Exeter, Plymouth, North Devon, South Devon, Cornwall, Bristol, Somerset.

Appendix 7: Successful Applications

ID NO.	Score A	Score B	Score C	Total	Role	Location*
3	14	15	15	44	CCG	4
38	15	14	14	43	CCG	5
31	14	13	14	41	CCG	5
19	14	12	14	40	Comm	4
25	14	11	15	40	CCG	5
29	15	11	13	39	Comm	2
22	15	12	11	38	Comm	5
35	14	11	13	38	Comm	4
6	12	11	14	37	Hosp	2
12	11	11	15	37	CCG	2
14	13	12	11	36	CCG	2
21	14	10	12	36	Comm	3
2	11	12	11	34	GPP	2
8	13	11	10	34	Comm	3
10	13	10	11	34	CCG	2
16	14	11	9	34	Comm	1
9	13	9	11	33	Comm	4
18	13	10	9	32	Comm	2
28	12	9	10	31	Comm	2
5	10	9	11	30	CCG	2
32	10	9	11	30	Comm	1
15	9	9	11	29	CCG	2
26	12	8	9	29	Comm	1
33	11	8	10	29	Comm	5
37	9	8	11	28	Hosp	3
4	12	5	10	27	Comm	1
7	6	10	11	27	Hosp	3
24	12	7	8	27	Comm	2
13	10	6	10	26	Comm	2
20	10	6	10	26	Comm	2
23	9	7	8	24	Comm	2
17	8	8	7	23	Comm	5
27	8	5	9	22	Comm	2
36	8	7	7	22	Comm	3
1	8	7	6	21	Comm	1
30	7	6	6	19	?	6
34	2	6	5	13	Comm	7
11	2	5	3	10	Comm	3

*The numbers 1 – 7 represent seven locations across the South West (in no particular order):
Exeter, Plymouth, North Devon, South Devon, Cornwall, Bristol, Somerset.

Tuesday 9th February 2016

Valuing the primary care pharmacist

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Managing the patient with respiratory infections

Managing the patient with eye symptoms

Tuesday 8th March 2016

**Clinical skills training 1- Clinical skills resource centre, Heavitree Hospital
ENT & Asthma / COPD annual reviews**

Tuesday 12th April 2016

Principles of chronic disease management

Hypertension annual reviews

Cardiovascular risk & lifestyle modification

- Using CVS risk profiling in practice and preventative prescribing
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Tuesday 7th June 2015

The diabetic annual review

Common dermatological conditions

High risk drugs, rheumatoid arthritis, osteoporosis & blood test interpretation

- Rheumatoid arthritis annual reviews and osteoporosis medication
- High risk drug reviews, audits and interpreting blood results

Tuesday 5th July 2015

Clinical skills and communication training 2 – Clinical skills resource centre, Heavitree Hospital

Developing the primary care pharmacist role

- Successful integration of pharmacists in primary care roles
- Local networks and continuing professional development

A receptionist tells you in the corridor that a patient is demanding to see a doctor today. The patient has a bad sore throat and is having difficulty drinking. The receptionist is looking stressed as there are no available GP appointments today and also remarks that this often happens. She has found a free appointment with a very experienced health care assistant and asks you if that would be ok for the patient to see her.

Discuss the issues that this case presents?

Outline the roles of primary care in UK and the team members?

What do you know about patient access to healthcare?

You are seeing a man for his annual QoF blood pressure review after he was sent 3 reminder letters. You notice that he is taking 80mg of simvastatin and 10mg of amlodipine. You remember reading a MHRA alert a couple of years ago that this combination of medication increases the risk of myopathy and/or rhabdomyolysis. You change the patient to atorvastatin as you know this is on the Joint Formulary now. You notice the prescription for simvastatin was started by the patient's GP 18 months ago. You recall seeing this medication combination before being prescribed by this GP

Discuss the issues that this case presents?

What could you do from here?

a) What is the diagnosis?



b) Who is prone to this?

c) How would you treat this?

d) When would you investigate or refer?

APPENDIX 11: Study day feedback form sample



The Primary Care Pharmacist – An Introduction

Day 1 – Tuesday 9th February 2016

Smeall Building JS07

Please rate overall day:	Excellent	Good	Fair	Poor
Quality of training				
Relevance to primary care practice				
Programme content				
Organisation & administration				
Venue & facilities				

Please rate each session	Excellent	Good	Fair	Poor	Comments
Introductory presentation					
Evaluation					
Small group discussions					
Common eye conditions					
Adult respiratory infections					

Continue overleaf

Considering what you have covered in the course today.....

1. What did you find most useful and why?

--

2. What did you find least useful and why?

--

3. What can you see yourself using in practice?

--

4. Were there any specific highlights or lightbulb moments and if so, what were they?

--

5. Are there any other comments you wish to make?

--

Thank you for your time in completing this form

APPENDIX 12: Guidance for GP practices on potential roles for pharmacists

A primary care pharmacist is a distinct role from a community or CCG pharmacist and for them to be attractive to primary care, they will need to help with the workload, as they are an expensive employee.

Different GP practices will have different needs depending on their models of care and population and GPs will have different thoughts as to what they are prepared to delegate.

Pharmacists will need to build confidence in a primary care role. Similarly, GPs and their teams will need to build confidence in the pharmacist.

Registration as a pharmacist requires a 4 year undergraduate degree to Master's level, followed by a one year pre-registration year in practice, currently mainly Community Pharmacy and/or Hospital Pharmacy. Those who remain in hospital go on to undertake a further two or three year Diploma in Clinical Pharmacy followed by a one year Independent Prescriber (IP) course in some cases. Many community pharmacists and pharmacists employed by CCGs are now beginning to follow that post-graduate qualification route, with increasing numbers achieving IP status.

Pharmacists, therefore, build a huge amount of medication knowledge and clinical expertise. Any clinical skills are currently acquired by practical experience.

This project hopes to increase the confidence and training in clinical skills suitable for a pharmacist to take on a primary care role.

Suggested roles which pharmacists may, or may already, perform are:

- See patients with minor illness (chesty coughs, earache, red eye etc.) Dealing with minor ailments and triaging patients appropriately.
- QoF Chronic disease checks, asthma, BP, IHD checks first and then in time perhaps DM/ COPD checks as confidence builds.
- The pharmacist having an in- tray would be good for GPs to forward any letters - any new meds started in hospital, changes after admission, eg. if they need bone protection after a fracture etc.
- GPs could think about handing over all the high risk drug audits / reviews to pharmacists and making them the practice prescribing lead - making them income generators such as optimising schemes.
- GPs may want all the patients with medication queries e.g. pain management, to get dealt with by the pharmacist - you could schedule in an hour per day of phone calls for this or a few appointments (receptionists would need to be clear about who can see the pharmacist).
- Pharmacists could sign all scripts and re-authorise repeats etc.
- Practices could eventually decide to use the pharmacist for reviews of patients on, eg 10 to 15 medications with a view to de-prescribing.
- Whilst many home visits require GP input, pharmacists could be useful in identifying medication waste/hoarding and refer patients appropriately.
- Care Home visits for medication reviews
- Rheumatoid Arthritis checks
- Management of skin conditions such as psoriasis, eczema, acne etc.
- Management of substance misuse patients
- Clinical medication reviews which also address public health and social needs of patients in the practice.

- Patient education on medication, reducing medicine related hospital admissions and/or readmissions.
- Interface with community pharmacists on medication changes, supply issues etc.
- Interface with hospital pharmacy colleagues to ensure safe prescribing on discharge.
- Implement drug withdrawals and alerts eg. MHRA safety alerts
- Provide medicines information and training to practice healthcare professionals and admin staff.
- Review daily pathology results for patients on known medication.
- Medicines information for all the practice team and patients. Doses, side effects, adverse effects, alternative e.g. when medicines are out of stock.

Within the course 'The Pharmacist in Primary Care – An Introduction', the design and content tries to cover topics it is believed the pharmacist can do and also what will really help GP's workload, as well as contributing to practice income.

This course is:

- Not part of the national primary care pharmacist pilot
- Aimed at giving pharmacists a good starting point to develop a role in primary care
- A research project. Evaluation of participants before and after the course will inform any future projects.

A measure of the success of the course will be how pharmacists perform in practices. Hopefully the 16 participants will be given the opportunity to have a voluntary placement in a GP practice. It would be useful for practices to give pharmacists an overview of how the practice functions, an introduction to the team involved, and possibly arrange for them perform a task, such as an audit in the practice, observe a clinic etc.

APPENDIX 13: Summary points from Day 6 debate

A summary of a range of views that were expressed and discussed during the debate on the final day.

Perceptions of pharmacy training and profession

- Some believed that skills training is lacking in pharmacy training; that pharmacists need to stand up for themselves, get better with managing risk and decision making.
- It was said that pharmacists are by nature cautious and that they have this characteristic as drug errors have the potential to do harm.
- It was felt that a blame culture exists within pharmacy rather than the team culture within primary care and that this is reflected in a lack of solidarity in the profession.

Perceptions of pharmacist' career pathway

- The pharmacists expressed concerns and uncertainties around training provision and expectation. They felt that the funding structure for them is not as clear as for other health professionals. They would like clearer career options and progression pathways. There was a feeling that there is an expectation of personal investment in training, without clear direction.

Perceptions of pharmacists integrating into primary care

- There were views that pharmacists are 'adaptable beasts' with a useful skill set. The future is about bringing the pharmacist skill set into primary care. It was said that there is hope that integration into primary care will happen given time.
- There was thought that a 'leap of faith' by pharmacists and practices is needed although a wide variation in expectations makes this difficult. Pharmacists would like clarity of practice roles and support from practices was acknowledged as a vital element. Relationship building by pharmacists with GP practices was also deemed vital to take the role forward.
- One of the panel members thought that confident pharmacists will succeed in primary care and that medicines governance is a good area to offer skills to a practice. Conducting a learning needs analysis at the beginning was advised and there is a need for self-directed learning by pharmacists getting out and practicing. This would see a development in their own competencies; enable a holistic approach and more to offer to GP practice.
- Some pharmacists had concerns over conflict of roles with other health professionals e.g. nurse practitioners. Pharmacists still lack confidence in themselves as valued members of a primary care team. They feel they would be stepping on the toes of nurses. Others believe that pharmacists are complimentary to other health professionals and need to be seen as such. Pharmacists in primary care need to fill the hiatus between primary care and community pharmacy.
- There was a feeling that this is yet another change and there was hope and optimism about this one going somewhere and being the beginning of something new.

Perceptions of patient views of pharmacists

- It was said that working with patient groups and dissemination of information through leaflet and posters were ways to educate patients to alter their perceptions of the role of the pharmacist in primary care. Panel members with experience of patient facing roles had found that patients are very responsive to pharmacist consultations.

Perceptions of the potential impacts of pharmacists in general practice

- Another of the panel members said that there was a 'massive requirement' for medications reviews to reduce costs including hospital admissions and that pharmacists, can offer this skill. They said that we are living in a changing world and pharmacists have a large role in this. Some believe that pharmacists could make 'GP's lives worth living again by taking work off them like a nurse and receptionist does'. One pharmacist enquired, 'How about taking some of the work load into community pharmacy rather than into GP practice?' The lack of access to patient notes was a concern for some with this option.
- Some highlighted the existence of strong evidence around adherence, polypharmacy adverse events, and medication errors that has been known for years and that this contradicts the resistance for pharmacists to be more integrated in teams.
- The group felt that practice pharmacists can bring much to the interfacing relationship with community pharmacists. Many pharmacists realise they are the medication experts in the primary care team i.e. they know they know more about medicines than GPs. The feeling was that pharmacists may have to prove worth to a Practice by publicising their skills more, particularly their unique skills. Pharmacists feel they could add extra value to long-term condition consultations, if given the opportunity.

The Pharmacist in Primary Care – An Introduction

Clinical Skills Training 1

Pre-course preparation

Review Cambridge-Calgary model

Watch CSRC otoscopy examination video

Watch CSRC blood pressure measurement video

Watch Eye examination on YouTube: <https://www.youtube.com/watch?v=lwBEjEbU-Yw>

Tuesday 8th March 2016

9.30: **Vital signs in adults**

- Pulse rate, respiratory rate, temperature, blood pressure, oxygen saturations

10.15: **ENT examination / throat swab**

- External ear
- Otoscopy
- Nasal examination
- Throat examination & swab
- Cervical lymph nodes

11.00: **Coffee**

11.15: **Communication training Part 1**

- Initiating the session
- Building rapport
- Gathering information

12.15: **Eye examination**

- Visual acuity
- Visual fields
- Examination of pupil
- Eye movements
- Examination of external eye
- Eversion of eyelids

The Pharmacist in Primary Care – An Introduction

Clinical Skills Training 2

Pre-course preparation

Watch CSRC respiratory examination video

Reflect and practice previous clinical skills from Day 1

Identify any areas of clinical skills requiring further practice

Tuesday 5th July 2016

9.30: Respiratory system examination briefing and structure of session

9.45: Respiratory examination demonstration

- Inspection
- Palpation
- Percussion
- Auscultation

10.15: Respiratory examination practice

11.00: Coffee

11.30: Clinical skills practice stations

- Vital signs
- ENT examination
- Eye examination
- Diabetic leg examination

12.30: Finish

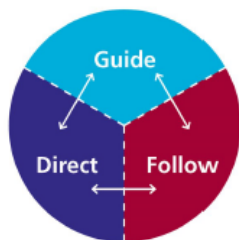
APPENDIX 15: Communication & clinical skills quick reference guide (provided as an A5 leaflet)

BEHAVIOUR CHANGE / LONG TERM CONDITIONS

BEHAVIOUR CHANGE

THREE COMMUNICATION STYLES

Decide which is best in certain circumstances



GUIDING STYLE

Good for behaviour change conversations

Collaborative - asking rather than telling

Accept that the patient is the one who decides how they live their life

Guiding helps to draw out motivations and possible solutions from the patient

OARS

Open questions

Patient should do most of the talking

Start questions with How, Why, What ...?

Affirmative

Use genuine statements of support

Acknowledge positive behaviour changes

Reflective listening

Repeating or rephrasing

Paraphrasing (say what they mean)

Reflection of feeling (paraphrase with emotional dimensions)

Summarising

Broad summary of conversation so far "so where does that leave you?"

RESISTANCE

Avoid arguing for change

Agree or reflect "roll with resistance"

Emphasise personal control

Affirmation "it's your choice"

Reassess readiness

Is this change important?

LONG TERM CONDITIONS REVIEWS

PREPARATION

Pre meeting tests/gather data

Review of medical records

AGENDA NEGOTIATED

Patient to identify desirable issues

Clinician to identify essential issues

Agenda of consultation agreed

INFORMATION GATHERING

Patient shares experience of living with long term conditions

Self-management strategies of patient and support available to them

Biopsychosocial assessment

Assess risks, ability to manage and patient engagement

SHARED DECISION MAKING

Patient prioritises areas to focus on using preferences and values

Practitioner supports with evidence based options and risk:benefit discussions

ACTION PLANNING

Patient decides and commits to any achievable change

Practitioner implements changes to clinical care

COMMUNICATION

Document notes in medical records, care plan etc

Liaise with team members if needed

SUMMARY

Patient summarises action

Agree follow up plans if needed

Acknowledgement: Some content has been adapted from PCMD: A guide to the clinical method

PC²
+

COMMUNICATION

INITIATING THE SESSION

Ensure a safe and appropriate environment

Establish initial rapport (shake hands)
Introductions

Demonstrate respect and interest

Ensure patient's physical comfort and privacy

Identify the reason(s) for the consultation

Use appropriate opening question

Listen attentively without interruption

Confirm list and negotiate agenda

GATHERING INFORMATION

Explore patient's problems

Let the patient tell the story

Use open question first

Move to closed questions later

Listen

Encourage responses verbally and non-verbally

Pick up verbal and non-verbal cues

Periodically summarise

Use concise, easily understood language

Clarify statements

Establish dates, times, days, places

Use symptom framework

Understand the patient's perspective

Ideas, concerns and expectations

Effect on the patient's life

Encourage expression of the patient's feelings

STRUCTURING THE CONSULTATION

Summarise at the end of a specific line of inquiry

Signpost next section

Structure interview in logical sequence

BUILDING THE RELATIONSHIP

Use appropriate non-verbal behaviour

Eye contact, facial expression

Posture, position & movement

Vocal cues e.g. rate, volume, tone

Ensure note writing unobtrusive

Develop rapport

Be non-judgemental

Empathy, acknowledge feelings and predicament

Be sensitive to embarrassing and disturbing topics, pain

Involve the patient

Share thinking with patient

Explain rationale for questions

During physical examination, explain process/ask permission

PROVIDING INFORMATION

Assess patient's starting point

Discover what other information would help

Use visual methods e.g. leaflets, drawings, diagrams

AIDING RECALL AND UNDERSTANDING

Organise explanation

Use repetition and summarising to reinforce

Use concise, easily understood language

Check patient's understanding of information

SHARING UNDERSTANDING

Incorporating the patient's perspective

Relate explanations to the patient's illness framework

Give opportunities/encourage patient to contribute

Elicit patient's response to information

SHARING DECISION MAKING

Share own thinking

Explore management options with patient

Involve patient in decision making

Encourage patient to contribute

Negotiate a mutually acceptable plan

Check with patient

CLOSING THE SESSION

Forward planning

Safety net with specifics

Ensuring appropriate point of closure

Summarise session briefly

Clarify plan of care

SYMPTOMS

SYSTEM SYMPTOM FRAMEWORK

Timing	Onset Duration Pattern Progression Previous
Position	Origin Radiation Localisation Posture Movement
Severity	Severe Moderate Mild
Character	Patient's description
Aggravating factors	What makes worse?
Relieving factors	What makes better?
Associated factors	System related symptoms
Risk factors	Genetic Behavioural Environmental
Effect of symptom	Personal Family and carers

BACKGROUND HISTORY

PC: Presenting complaint
SH: Social history and personal including occupation, lifestyle, commitments, smoking, alcohol, sexual, drugs
HPC: History of presenting complaint
PMH: Past medical history
DH: Drug history (inc OTC)
Sensitivity/allergy
FH: Family history

Females:
Obstetric
Contraceptive
Gynaecological

SYSTEMS REVIEW

GENERAL

Tiredness Malaise
Fever, sweats, rigors Sleep
Skin

CARDIOVASCULAR

Chest pain Palpitation
SOB on exertion Ankle swelling
Orthopnoea, PND Claudication

RESPIRATORY

Cough Sputum
Chest pain Wheeze
Shortness of breath Haemoptysis

GASTROINTESTINAL

Appetite/weight Jaundice
Dysphagia Abdominal pain
Heartburn/indigestion Bowel habit
Nausea/vomiting Stool

GENITOURINARY

Haematuria Incomplete emptying
Pain voiding Urinary system
Frequency Lower urinary tract symptoms
Incontinence Pelvic pain
Urgency Sexual function

MUSCULOSKELETAL

Pain Deformity
Swelling Daily living activities
Stiffness Functional assessment

NERVOUS SYSTEM

Headaches Weakness
Fits, faints, blackouts Gait problems
Dizziness/vertigo Abnormal movements
Paraesthesia Memory loss
Visual disturbances Confusion
Hearing Other senses, e.g. smell



MENTAL HEALTH & PHYSICAL EXAMINATION

MENTAL HEALTH HISTORY

KEY SYMPTOMS OF DEPRESSION

Persistent sadness or low mood; and/or
Marked loss of interest or pleasure

Other Symptoms

Disturbed sleep
Decrease/increase appetite and/or weight change
Fatigue or loss of energy
Agitation or slowing of movements
Poor concentration or indecisiveness
Worthlessness or excessive/inappropriate guilt
Suicidal thoughts or acts - refer GP

KEY SYMPTOMS OF ANXIETY

Restlessness
A sense of dread
Feeling constantly "on edge"
Difficulty concentrating/irritability

GENERAL APPEARANCE

Behaviour Body language

FACIAL APPEARANCE

Eye contact Level of tension

MOVEMENTS

Spontaneity and initiation Slowness
Tremor Restlessness

SOCIAL INTERACTION

Social withdrawal Social disinhibition

SPEECH

Spontaneity Amount
Rate Continuity

MOOD

Manic (high) Depressed (low)

PERCEPTION

Abnormal beliefs Hearing voices

COGNITION

Orientated to time, place, person Memory short/long term
Concentration

INSIGHT

The patient's understanding of their illness
Recognition that the condition requires treatment

PHYSICAL EXAMINATION

GENERAL

Colour Distress and/or pain
Hands and nails Nutritional status
Lymphadenopathy Temperature
Breast Thyroid

CARDIOVASCULAR

Pulse (rate, rhythm) HS I and II and murmurs
Blood pressure Peripheral pulses
JVP Oedema (ankle/sacral)
Apex beat

RESPIRATORY

Chest inspection Auscultation—breath and added sounds
Respiratory rate, pattern, depth, etc. Tactile fremitus and vocal resonance if indicated
Tracheal position
Percussion

GASTROINTESTINAL

Oral cavity and breath Distension
Abdominal wall — scars and hernias Enlarged liver, kidney or spleen/masses
Movement, tenderness, guarding and rigidity Bowels sounds
Genitalia and PR

NERVOUS SYSTEM

Cranial nerves Sensation
Tone Speech, cognition, mini-mental examination
Power Level of alertness
Reflexes Abnormal movements
Co-ordination Abnormal movements
ENT Retinoscopy and eyes

MUSCULOSKELETAL — look/feel/move

Gait Legs
Arms Spine

SKIN

Rash: Site, distribution, extent Type(s) of lesion
Hair and nails
Mucous membranes

EYE

Visual acuity Movements
Fields External eye
Pupil

APPENDIX 16: GP practice placement report

The Pharmacist in Primary Care - An Introduction

Report of placement host practice interviews

August 2016

Aims

The key aims of the post-placement interviews of host practices was to capture the thoughts and experience of practice staff in practices which hosted a participant pharmacist including:

- Experience of hosting a pharmacist for a placement
- Perception of the professional roles or skills of a pharmacist
- Possible integration of a pharmacist into the practice team
- Any barriers to a pharmacist becoming part of the practice team

Introduction

A key advantage of The University of Exeter Medical School (UEMS) conducting the delivery of a CPD course aimed at training pharmacists for a potential role in primary care was the access to general practice contacts within the South West.

We were keen to use these valuable links to primary care practices, to offer work placements to pharmacist participants on the course. Many pharmacy schools offer postgraduate qualifications in clinical pharmacy, but very few appear to have access to practical work experience in GP practices.

A practice placement would provide pharmacists with an insight into:

- The primary care environment, systems and teams
- Introduction to the skill mix within a practice
- Practice IT systems including prescribing
- Observe the roles of administration and clinical team members

It would also give a practice the opportunity to:

- Meet a pharmacist interested in extending their role within primary care
- Understand the knowledge, skills and experience that pharmacists have developed
- Explore how pharmacists may contribute to the skill mix of a practice

Method

Organising host practices

In our meetings with practices and general practice organisations, we were able to secure the interest of six practices within the South West, who offered to host one or two pharmacists for a

day's work experience. From our experience with pharmacists on the course, we were able to identify their expectations and suggest a structure for the day to practices.

The budget for the project allowed us to offer a gesture of appreciation for the practices' valued support of; £100 for hosting one pharmacist for one day or; £150 for two pharmacists for one day.

In April 2016, an email was sent to four practices identified by Exeter Primary Care Limited, and two practices that had shown interest in our project to train pharmacists for a primary care role. Practices were asked for their availability in June, July and August 2016, for a pharmacist to spend a day in their practice.

Offering practice placements

As part of the course, we wanted to offer a practice placement to participants. This involved the pharmacist visiting a GP practice for a one day introduction. In order that all participants receive a similar experience, we created a suggested itinerary, which could be adapted to suit the working day of the practice.

In April 2016 all pharmacist participants were offered the opportunity to take up a practice placement. The last day of the CPD course was Tuesday 5th July 2016. Participants were offered placements during June, July and August 2016.

Arranging practice placements

Once we had received replies from potential host practices, we asked for suggested suitable dates which would be convenient for them to have a pharmacist for a day. Interested pharmacists were then emailed with the names and locations of the host practices, along with proposed dates.

Post placement interviews

On completion of a pharmacists' placement, we wanted to capture the thoughts and experience of the practice. We designed a post-placement interview schedule (APPENDIX 1). A representative from the practices was contacted by telephone within two weeks after the pharmacist had spent the day in the practice. The interviewee was asked whether they would consent to the interview being recorded. The interviews were then recorded and transcribed for analysis of the responses.

Results

Organising host practices

The itinerary we suggested covered areas of training from the CPD course:-

MORNING
Introduction to Practice Manager and team members
Introduction to the Practice IT system and medical records
Observe GP consultations
Repeat prescriptions and prescribing systems
AFTERNOON

Observe a Long Term Condition reviews
Observe practice nurse consultations
Quality improvement activities
Telephone consultations

All six practices provided us with convenient dates in July and August, where they had the capacity to host a pharmacist for a day.

Offering practice placements

At the beginning of the CPD course, there were sixteen pharmacist participants. By the end of the course fourteen pharmacists had completed all six days of the course. Two participants had to leave the programme, one for personal reasons, and the other due to their enrolment on the National Clinical Pharmacists in General Practice Pilot.

Of the fourteen remaining pharmacists, eight were employed in some capacity within a GP practice. The remaining six pharmacists had little or no experience of general practice, and were mainly employed in community pharmacy.

Fourteen pharmacists were offered the opportunity to spend a day in a practice. Any pharmacist who accepted a placement did so voluntarily. The placement was not mandatory.

Six pharmacists chose to spend a day visiting a GP practice.

Arranging practice placements

The six participants chose one of the six practices offering a placement and were given the dates suggested by the individual practices. The pharmacists, and practice, were then left to liaise with the practice managers to arrange a mutually convenient day for participants to attend a day of work experience.

The six pharmacist participants who accepted placements were those with no or little experience of general practice. The remaining eight pharmacists declined the offer of a practice placement.

All six practice placements were completed between June 13th 2016 and July 26th 2016

Post placement interviews

All six post-placement interviews were completed by August 10th 2016. The telephone interviews were kept as short as possible to ensure interviewees were not inconvenienced within a busy working day. We contacted interviewees by email prior to the interview, for them to provide a convenient time for the telephone conversation to occur.

Five practices nominated one representative to be interviewed, and one practice provided two team members. In total, seven interviews were recorded and transcribed. Four GPs, two practice managers, and one practice nurse were interviewed individually. We asked the same four questions to all seven interviewees.

Themes from the interviews were captured in a brief analysis of each question.

Tell us about how it has been having a pharmacist at your practice for a day?

All practices reported that they enjoyed hosting a pharmacist, with responses such as *'pleasure to work with'*, *'it was interesting and stimulating'* and *'it was quite enjoyable'*.

Two clinicians described the experience as useful to exchange ideas with a professional from another discipline. Comments from each of them were, *'it was interesting sort of sharing of minds'* and *'stimulating discussing cases with a fellow professional, particularly a professional who comes from a slightly different perspective to another doctor'*

Did hosting a pharmacist open your eyes to the skills and experience that pharmacists have?

All the practices have had some experience of a pharmacist working in their practice at some point. The roles of those pharmacists tended to be very similar, with Clinical Commissioning Group (CCG) responsibilities which included, looking at medication cost savings, and medicines management issues. Both practice managers referred to these CCG roles as the skills and experience that a pharmacist has and both made comments *'looking at medication costs savings and writing to patients about these.....medication queries from prescription clerks and for the GPs'*.

A practice nurse initially found pharmacists to be a possible threat to her role. As a nurse prescriber, she referred to her experiencing some hostility from pharmacists at beginning of that role. However, having spent a session with a participant on the CPD course, she was able to discuss these emotions and was reassured that she could work with a pharmacist. Comment from her included; *'he was certainly able to give me a completely different perspective, and perspective that I wouldn't have the skills to do ...'*, *'he could nail down and look at some of the drug related issues, that was really interesting and something I would never get round to doing'* and *'It was really, really, good, that collaboratively kind of working, but not trying to do the same job'*.

The four clinicians who were interviewed referred to the medication knowledge of the pharmacist. One GP said *'we were beginning to get a sense of the role they could play, but it has helped cement some of those thoughts we were having'* and followed on to say *'seeing how confident and competent he was dealing with his knowledge around medication issues, so that gave us some confidence that what we've been thinking the pharmacist could do, gave us confidence that they could actually do that'*. Another GP commented how he was able to *'bounce a couple of ideas'* and that the pharmacist *'was able to come up with some side effects that I may have overlooked so that has definitely opened my eyes up'*. The GP also commented *'that certainly he clearly has the knowledge there and was very useful to me have him there on one of those consultations'*

How do you see the role & skills of a pharmacist developing in your practice team?

The two practice managers mentioned that their practices already had access to a pharmacist via the CCG, and whilst one of them saw no role for a pharmacist beyond that, the other said that their CCG pharmacist's role was *'gradually broadening partly due to her undertaking a 6 month prescribing course but also as we are getting to know what she can do and how she can help us'*.

The practice nurse could see a role developing within her practice, mainly around medication knowledge and medicines optimisation.

Two of the clinicians interviewed had already been thinking about how the role of pharmacist might develop within the practice. One of the GPs said that his practice had been successful in appointing a pharmacist via the National Clinical Pharmacist Pilot scheme. Another practice has been actively exploring the role of a pharmacist in their team and said *'that thought process of starting with the concept of having a pharmacist in practice and then ending up with a very defined worked up job description, I think we're still along that pathway, I don't think we're at the end of it yet'*

All clinicians mentioned potential roles for pharmacists within their practice including repeat prescribing, medication reviews, long term condition clinics, management of high risk drugs, discharge medication reconciliation etc.

Can you see any problems, barriers, or resistance to a pharmacist coming into your team?

Four of the interviewees referred to funding as an issue in the developing role of a pharmacist in primary care. One quote from a GP was *'But can we afford to employ somebody to do things that are already being, either aren't being done, or are being done ok by somebody else at the moment. But that's the challenge I guess as much as in an environment where money is limited'*

Patient acceptance of a pharmacist in general practice, was identified by two of the interviewees with one GP saying that within his practice *'I think the patients would be a bit, initially I think would be like, I want to see a doctor, I don't want to see a pharmacist'*. One practice manager said *'I think it would be how much use we would get out of them and how much the patients would accept them. It would take a lot of patient education'*.

Two interviewees highlighted professional indemnity as a potential barrier to employing a pharmacist within a practice, with one GP saying *'Who's going to carry the can, I'm not sure how that's organised at the moment, but if someone was working in the building, would they have their own medical indemnity, or would we have to provide it'*.

Discussion

The provision of a practice placement pharmacist to practices for a day enabled members of the practice teams to begin to explore the potential roles of a pharmacist within general practices.

The seven practice team members could all identify various roles for a pharmacist, with most of them having some experience of a CCG pharmacist in their practice.

Some practices have started to look at the possibilities of employing a pharmacist. One GP interviewee said *'we were beginning to get a sense of the role they could play, but it has helped cement some of those thoughts we were having'*. There appears, currently, to be no clearly defined potential role for pharmacists in primary care practices. With practices beginning to look at possibilities, it may be that any roles will evolve within each practice to meet the individual needs of the practice.

Strengths

We were able to interview practice team members and capture their thoughts and experiences of hosting a pharmacist for a day.

Limitations

The cohort of practice team members interviewed was small. A wider range of practice members would have provided a greater variety of responses which may have provided a deeper insight into the potential for pharmacists to become part of the increased skill mix of a practice.

Summary

The interviewing of seven interviewees from six practices in the South West provided an insight into how primary care envisages a potential role for pharmacists in the future. Further scoping of general practices may be worthy of continued research into the development of potential roles for pharmacists in primary care.

Appendix 1 -The Pharmacist in Primary Care – Post-Placement Feedback from hosting GP practice

Topic	Question	Prompts
Experience of hosting a pharmacist for a placement	Tell us about how it has been having a pharmacist at your practice for a day.	<i>What did you prepare? What did the pharmacist do?</i>
Perception of professional roles/skills of pharmacist	Did hosting a pharmacist open your eyes to the skills and experience that pharmacists have?	<i>What did you learn about them that you didn't know?</i>
Integrating a pharmacist into the team	How do you see the role & skills of a pharmacist developing in your practice team?	<i>If so what roles might they be? Eg. Medicines Info, LTCs, Medicines Reviews, Minor Illness, Care Homes Have you got more ideas/thoughts about having a pharmacist in the team?</i>
Barriers to a pharmacist becoming part of the team	Can you see any problems, barriers, or resistance to a pharmacist coming into your team?	<i>What are they? Team acceptance Patient acceptance GP acceptance Nurse acceptance</i>

APPENDIX 17: Participant consent form



PARTICIPANT CONSENT FORM

Title of project: The Pharmacist in Primary Care – An Introduction

Principal Investigators: Professor John Campbell, University of Exeter Medical School
Dr Laura Sims, University of Exeter Medical School
Mark Healey, University of Exeter Medical School

		Please <u>initial</u> in the box
1.	I have read and understood the Information Sheet (dated 6.05.16) for the above-named research project. I have been given a copy to keep.	<input type="checkbox"/>
2.	I have had the opportunity to consider the information and ask questions. I have had satisfactory answers to all of my questions.	<input type="checkbox"/>
3.	I understand that my participation is voluntary and that I am free to withdraw at any time from any part of the research project, without giving any reason, and without my training or legal rights being affected.	<input type="checkbox"/>
4.	I know that data (audio-tapes and test papers) will be retained in secure storage on encrypted password University computers or in locked cupboards in University buildings.	<input type="checkbox"/>
5.	I understand that relevant data collected during the course evaluation / research may be looked at by other members of the Pharmacy Education Development Team. I give permission for these individuals to have access to my data.	<input type="checkbox"/>
6.	The results of the project may be published but my anonymity will be preserved.	<input type="checkbox"/>

Consent for participating in interviews		
7.	I give my permission for a researcher from the Pharmacy Education Development Team to contact me to arrange pre and post project interviews for the purpose of evaluation when these are due so that I can be interviewed. I agree to take part in the interviews.	<input type="checkbox"/>
8.	I grant permission for the data collected from the pre and post interviews to be used as part of the research evaluation by the project team.	<input type="checkbox"/>
9.	The interviews have some open-questions. In the event that the line of questioning does develop in such a way that I feel hesitant or uncomfortable, I can decline to answer any particular question and also that I may withdraw from the project at any stage without any disadvantage.	<input type="checkbox"/>
Consent for participating in applied medical knowledge test		
10.	I agree to take the applied medical knowledge tests when administered on the project and I grant permission for the results to be used as part of the research evaluation by the project team.	<input type="checkbox"/>

PLEASE SIGN BELOW TO CONFIRM YOUR CONSENT

.....
Name of participant (BLOCK CAPITALS)	Date	Signature
.....
Name of researcher (BLOCK CAPITALS)	Date	Signature

PLEASE RETURN THIS COMPLETED FORM TO:
Dr Anna Sansom, University of Exeter Medical School, Smeall Building, St Luke's Campus,
Magdalen Road, Exeter EX1 2LU

This project has been reviewed and approved by the
University of Exeter Medical School Research Ethics Committee
UEMS REC REFERENCE NUMBER: Jun16/B/089

APPENDIX 18: Collated participant feedback and tutor notes

Day 1

The Pharmacist in Primary Care – An Introduction

Day 1 – Tuesday 9th February 2016

Smeall Building JS07

Totals from forms	Excellent	Good	Fair	Poor
Organisation & administration	16			
Venue & facilities	15	1		
Programme content	12	4		
Relevance to primary care practice	13	3		
Programme material & resources	12	4		
Quality of presentations	13	3		

Totals from forms	Excellent	Good	Fair	Poor	Participant Comments
Introductory presentation	10	5	1		<ul style="list-style-type: none"> • Interesting but didn't necessarily need to know • Not sure we needed to know in as much details about the project
<p>Tutors comments: Timings went well although participant introductions were short and no sharing of motivation or expectations of course. Demonstration of wiki was hurried. Being introduced to JC & researcher well received. Observations – one participant arrived late, all others on time. Several expected coffee on arrival. Good initial interactions. No questions or interactions during introduction. One pharmacist commented - What happens at the end of the course? Will they be able to keep in touch?</p>					
Evaluation	7	8	1		<ul style="list-style-type: none"> • Interesting but didn't necessarily need to know • Slightly scary • Not sure we needed to know in as much details about the project

Tutors comments: Introducing participants to MCQ on first day without warning appeared to shock some people though they had the option to leave name off of answer sheet. Participants applied themselves well and timings adequate. There was good interaction and networking during the coffee break.					
Small group discussions	12	4			<ul style="list-style-type: none"> • Very different levels of knowledge • Good for group interaction
Tutors comments: This was their chance to talk with each other. Participants really enjoyed this session. Lots of energy in the room and having to present back to the group focused the discussions. They presented back in pairs, appeared confident to speak publically and the discussions were informal, relevant and informative. Group rapport was already forming. Much of the discussion came from pharmacists who are already working in primary care. This was quite an eye-opening session for the less experienced community pharmacists. Pharmacists tended to default back to knowledge of prescribing practice and systems. Apparent that some pharmacists had little knowledge of primary care organisation. Small group discussions have gone towards the development of teaching material and tutor notes. The subject of Indemnity Insurance for practice pharmacists became an early negative in discussions.					
Common eye conditions	12	4			<ul style="list-style-type: none"> • Felt like this was half the story – need to do the skills too.
Tutors comments: Well received. Pharmacists enjoying walking around the room and naturally worked in small groups collaborating. The visual images used in the session worked well and the practical aspect of the teaching i.e. case based was successful. Easy to communicate definite red flags. Pharmacists acknowledged they are not used to touching patients. Some realisation of the responsibility of making clinical diagnosis and when would they be competent to practice. Apparent that shifting their mind-set may be needed if roles are to be extended. Community based pharmacists appeared more at ease with diagnosis whereas practice based were much more concerned about missing serious conditions.					
Adult respiratory infections	9	7			<ul style="list-style-type: none"> • Would like information about wheeze and creps
Tutors comments: This was a combination of consultation skills and adult respiratory infections. More time needed. Exposed wide difference of experience in group. Some had extensive past training in this and some had received very little. Generally though, the group seemed under-confident in this area when talking about diagnostic consultation skills. The group said they were good at explaining medication to patients. Good to have shown video though would have preferred to show a real consultation with a less stereotypical health care professional. Video was of excellent quality in terms of production and quality and group discussed for half an hour. PowerPoint on respiratory infections was a little dry and seeing how the group enjoyed talking, if repeated again then case examples or more real-life videos would work well. Group were very averse to role play, video well received.					
Overall day* <i>*One left blank</i>	12	3			<ul style="list-style-type: none"> • Good

Tutors comments: Very good start to the course. Engaged, motivated participants. Wide range of experience makes it difficult to stretch everybody at times although appears so much peer learning occurring. Group has said they are delighted to have a day to meet other pharmacists and network. Expressions from group that they wish to bond and use this opportunity to collaborate. They have been encouraged to use the wiki forum and tutors will prompt if needed. Indemnity issues kept occurring all day and the uncertainty about how models of primary care may develop was discussed in the form of what does extended primary care mean. Some of the topics that we are covering may not be relevant at all to their current roles. Many of the group seemed to expect clinical skills training throughout the day, and from the outset.

Considering what you have covered in the course today.....

6. What did you find most useful and why?	
1.	I found the eye examination very useful, as it will help me in community pharmacy to differentiate different eye conditions.
2.	Clinical Skills sessions on eye and RTI
3.	Eyes and respiratory. Refresher, but need real life patient stuff like the video.
4.	Group discussions of case studies – very useful to hear other pharmacists’ comments/views. How safety audits can evolve from an individual patient medication issue.
5.	Recognise respiratory infections and manage patient expectations. How to identify and implement audits/QOFs.
6.	Looking and identifying different eye conditions and what would need referral. Listening to pharmacists from different backgrounds, especially those already in 1° care. Case study discussions and respiratory RED flags.
7.	Eye and respiratory clinical presentations and hearing from people in different sectors.
8.	Eye conditions v. useful. More confident re: referral criteria and self-help.
9.	Talking to other colleagues about their role as a pharmacist and how they contribute to practice/primary care.
10.	The eye presentation was highly informative and greatly improved my knowledge.
11.	Eyes section because made me aware of my limited knowledge.
12.	The eye session.
13.	Networking. Learning about eye diagnoses.
14.	Eye conditions session was useful and made me think about broad range of eye conditions [I] may see.
15.	Eye conditions – commonly presented with them.
16.	Eye dx – lots of information I did not know – opp for further CPD.

7. What did you find least useful and why?	
1.	I think everything was useful. I will probably not use everything as I’m limited in community pharmacy (no access to patient history etc.) but I might use it in the future.
2.	No Comment
3.	Selfishly – discussions about areas already learnt to such a varied range of pharmacists.
4.	Not currently involved in triage/prescribing so found some of the diagnosis is not relevant at present. However, RED Flag markers are very useful to know with regards to by occasional work in community pharmacy.
5.	Nothing.
6.	No comment

7. Didn't understand the tech guy – I am a bit of a technophobe!
8. N/A
9. No comment
10. Introduction to history taking and consultation skills – too brief.
11. IT presentation. Although important I didn't feel I could go home and navigate through the WIKI.
12. No comment
13. I think there will be difficulty running one course for the variety of backgrounds. Aside from the eye diagnostics, much of the other content has been covered by previous diploma and prescribing course – especially consultation skills.
14. Adult resp infection section – only because have seen TARGET case studies and NICE CG69 as part of AMR workshop because I lead on antibiotics in CCG.
15. N/A
16. None – all useful.

8. What can you see yourself using in practice?

1. I will use the consultation skills when it comes to customers approach in the pharmacy and I will use my new knowledge on eye diagnosis and red flag symptoms.
2. Consultation skills
3. Limited due to insurance – but ready to help support with background assessment of patients OR better referral to GP etc.
4. Not currently involved in long term management of conditions, but certainly would use consultation skills in future.
5. History of how to identify red flags. Symptoms – CENTOR. Discuss how QOF etc is used in practices.
6. Looking at eyes and identification of possible diagnosis and referring appropriately. Self-care in eg sore throat +/- cough and knowing referral pathways, red flags, warning signs.
7. Clinical information and QOF understanding.
8. Eye conditions – improved diagnosis and management in community.
9. Linking referrals from the pharmacy with the criteria that the GPs use.
10. Increased confidence in dealing with respiratory and eye conditions in presenting patients.
11. Consultation skills.
12. Consultation skills. ? Minor ailments – a long way off.
13. I wouldn't use the skills learnt today re: eyes as I don't think that the session alone today would deem me as competent.
14. Consultation skill section – will think more about phrases to use and practice.
15. Every aspect covered today.
16. Using eye/LRTI info in future clinics or adhoc in LTC clinics.

9. Were there any specific highlights or lightbulb moments and if so, what were they?

1. Eye conditions – I will probably not refer too many patients to GP by using knowledge.
2. Rusty on TARGET and CENTOR – need to revise
3. No comment
4. Consultation skills – some useful phrases
5. Ways in which patients could've referred to a pharmacist working in practice.
6. No comment
7. Realising we won't be flying solo in general practice and it's ok to face a steep learning curve.

8. Felt much more confident about what I can do in practice.
9. Looking at how us as pharmacists can add to minor ailment conditions.
10. The eye section was highly illuminating for me and has/will give me much more confidence in managing eye conditions in my pharmacy – probably (+hopefully) resulting in me referring less patients to GP practices.
11. The eye section highlights how little I know.
12. Enjoyed interactive nature of small group working and feedback.
13. No comment
14. Evaluation highlighted where I need to refresh/update my clinical knowledge.
15. Decision making tools e.g. when to prescribe Abx.
16. Eyes.

10. Are there any other comments you wish to make?
1. No comment
2. Need to consider if practices would find minor ailments etc. useful to be seen by me. Not currently seeing patients for this area.
3. For those community pharmacists who have not done the prescribing course – this must be very daunting. For those that have done it, a good starter refresher course – need to use it or lose it, knowledge wise.
4. Realised how limited my diagnostic skills are when looking at eye conditions.
5. Really enjoyed listening to Laura Sims and fellow pharmacists.
6. No comment
7. Excited about next time!
8. Very useful to work with such a skill mix!
9. I think there needs to be a focus on how community pharmacists can help GPs.
10. No comment
11. I enjoyed the day and found it very useful, practical informative and good for CPD.
12. No comment
13. Pharmacists in the room have different roles, backgrounds and experience. With relation to previous experience and qualifications, this could create repetition for some. Also, very heavy on the PowerPoint slides despite acknowledgement of the successful adult learning pyramid.
14. At the moment it feels quite daunting to think I could be seeing / assessing patients in practice. Feel like I have large gaps in clinical knowledge.
15. A really good day. Great listening to everybody's different experiences in practice.
16. Good start – thank you.

Day 2

The Pharmacist in Primary Care – An Introduction

Day 2 – Tuesday 8th March 2016
CSRC Heavitree & Smeall Building JS07

Please rate overall day:	Excellent	Good	Fair	Poor
CSRC Heavitree venue	12	3		
Quality of training	12	3		
Programme content	12	3		
Relevance to primary care practice*	10	4		
Programme material & resources*	10	4		

* One left blank

Please rate each session	Excellent	Good	Fair	Poor	Comments
CSRC – Vital Signs	10	5			<ul style="list-style-type: none"> • But the measure for the manual BP with the light on – not what we see in primary care, couldn't see needle bounce. • A good basic introduction • Need to practise • Need more timing practising!
Tutor comments – Keen, enthusiastic learners. CSRC space worked well with small group demonstrations and practise. Variation in degrees of experience. Demonstration involved communication skills which participants enjoyed. More time needed.					
CSRC - ENT	9	5	1		<ul style="list-style-type: none"> • Good to see the ear on the TV. • A good basic introduction • Slightly intimidating to undertake the ear section.
Tutor comments: Digital equipment to show tympanic membrane was invaluable. Time to practise					
CSRC - Communication	4				<i>11 did not complete as this session did not take place due to time restrictions</i>
Tutor comments: decision made early on to cut this session. Will incorporate somewhere in other learning days					
A comment regarding all CSRC sessions made by one participant: The nurses doing the training did not understand how we might be using these skills – they thought community pharmacy, did not realise in practice.					
CSRC - Eye	10	4	1		<ul style="list-style-type: none"> • A good basic introduction • Want to be taught what a normal retina looks like
Tutor comments: time allowed for demonstration of basic eye introduction.					
Asthma annual reviews*	8	6			<ul style="list-style-type: none"> • Would have liked to have been taken through a 'model' asthma review. • Case studies helpful • Need to review this

					<ul style="list-style-type: none"> • Need to include COPD
Tutor notes: Cases studies illustrated some useful points. Could have improved by discussing broad principles of care					
Common ENT Conditions	12	3			<ul style="list-style-type: none"> • Very good! – fast moving, but lots of information. • Excellent overview • Fascinating, but to fast! Wanted to take notes, but was missing stuff!
Tutor feedback: Agree with participant feedback, this was a fast run through of common ENT. Highlighted well the important symptoms / signs not to miss.					
Overall day	12	3			<ul style="list-style-type: none"> • Would have liked more time (although I know we overran. Also Lunch very good!
Tutor notes: Going into clinical skill centre was vital. Collaborative work with clinical skills tutors was productive. Think that the pharmacists that are not working in practice are having their eyes open to whole new job roles that I think may be overwhelming for them and they have not got the chance to practise the new skills.					

* One left blank

Considering what you have covered in the course today.....

1. What did you find most useful and why?
1. The practical examination skills as this is something I have never done before.
2. Learning how to measure blood pressure – never done before and think this will be useful. Asthma review session and ENT very useful too.
3. Asthma review workshop.
4. ENT session with Rob Daniels. Useful to know more info about red flags.
5. Workshop sessions – chance to discuss the different factors with experts and colleagues.
6. ENT talk – informative, good advice and danger signals. Asthma – informative and useful to hear other people’s views.
7. Recap of looking in ears and pupil reflex. ENT info in the afternoon.
8. The explanation of the practical element of the course, especially the palpitation of the cervical lymph nodes.
9. The vital signs, eye and ENT sections. These seem to bear most relevance to my current role.
10. All of it fascinating.
11. I found very useful the Clinical skills training in CSRC Heavitree. It was all very new for me and it was great to be able to practise the vital signs ENT and eye examinations.
12. All of it!! – So helpful because much useful in community pharmacy.
13. Clinical skills was excellent and can see how it will be used regularly.
14. CSCR – good introduction through would like more practise!
15. Actually doing clinical skills, eg: taking blood pressure measurement.
2. What did you find least useful and why?
1. N/A 😊
2. Possibly ENT examination as not immediately useful in my current role as CCG pharmacist.
3. Vital signs -> not new learning for me.

4. Asthmas session as good understanding to begin with. Staff in CSRC addressed skill for community pharmacists and talked about relevance to dispensing. Not what we all do!
5. No comment.
6. No comment
7. Taking BPs – but I do this in my practice anyway. Not sure I would use the visual field testing in my practice.
8. The BP reading and vital signs as they are quite easy to do and there was no reference to normal readings or levels, eg: BP, pulse, O ₂ sats etc.
9. The section on the ear – thought interesting, it's unlikely I'll use this in practice and I'd also need more practise at knowing what to look for.
10. Asthma section – maybe because I felt more comfortable with my knowledge in this area.
11. I think everything was useful. I would've liked to practise a little bit more but I understand the time limit.
12. Nothing – I run a hypertension clinic, but even that session was helpful.
13. All was useful.
14. N/A
15. No comment.

3. What can you see yourself using in practice?

1. Hopefully will get a chance to use all of the practical skills. The asthma tools/resources.
2. Asthmas review info – most relevant at current time, but really good background info on ENT.
3. Asthma review workshop within med review workshop.
4. Manual BP, pulse oximetry, pulse, ear examination but only with more practise.
5. Asthma review – if given sufficient additional training, experience and supervision.
6. Asthma reviews
7. Feel more confident with asthmas reviews on diagnosed patients – but it would be persuading nurses that I can do it. Possibly looking in ears/throat for minor ailments.
8. When patient present with eye conditions, needs reviews with eye drops and eye condition. Palpating of lymph glands when present with sore throats.
9. The vital signs and ENT sections.
10. All of it once I qualify as IP, eye exam and clinical ENT exams and understanding of red flags I'd uses in the community.
11. I will be able to recognise flag symptoms and refer patients to GP when necessary. Working in community pharmacy I will not be able to do examinations.
12. Currently possibly not looking in ears and up noses – however visual skills could be used now in community pharmacy, if not in practice.
13. Clinical skills, Asthmas review, potentially ENT, but not in current role.
14. CSCR, looking in ears, eye assessments. ENT.
15. Taking blood pressure measurements, asthma plan and patient resources, taking pulse and vital signs.

4. Were there any specific highlights or lightbulb moments and if so, what were they?

1. I really enjoyed the whole day. The morning was really fun! The afternoon was really useful for things to look out for in practice, eg: ENT symptoms and lateral thinking with asthma
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patients
2. No comment
3. Need to review knowledge on exercise induced asthma.
4. No comment
5. No comment
6. Yes – useful to see how all clinicians spoke to the patients/volunteers before consultation.
7. Parts of ENT talk in the afternoon and signs to look out for and treat adults with ear infections unlike children.
8. The ENT lecture was good as it make the information digestible. Pupil reflex is the same when you shine a light source in one eye.
9. No comment
10. No comment
11. No comment
12. ? could do with producing a single leaflet of key questions for asthma, eg: remembering cats/allergens/job change.
13. Clinical skills very useful.
14. Visuals of ear canal. CSCR reviews. Reviewing ENT red flags, signs, symptoms etc.
15. No comment.

5. Are there any other comments you wish to make?
1. Thank you!
2. Would like to practice doing BP measurements again.
3. Hoping to have some clinical skills training on listening chest/lungs. Especially in communication with asthma review workshop.
4. More enjoyable and relevant than session 1 – thank you!
5. No comment
6. Found it useful splitting up in to smaller groups. Having a seating plan to do case work made me mix with rest of group.
7. Found it enjoyable. Also facilities in Resource Centre were good.
8. No comment
9. An excellent day – with plenty to take away!
10. Last stage fascinating, but needed to be slower and louder and keep stopping to take Qs please so, so interesting but hard to follow!
11. No comment
12. This is what I want from the course, would like even more time to practice skills.
13. Very useful and enjoyable day.
14. No comment.
15. Nurses demonstrating clinical skills were excellent, but would be good to give them background as to how pharmacists are going to be using these clinical skills – as it appeared that they envisaged us using these skills in community pharmacies and not in GP surgeries.

Day 3

The Pharmacist in Primary Care – An Introduction

Day 3 – Tuesday 12th April 2016

Smeall Building JS07

Please rate overall day:	Excellent	Good	Fair	Poor
Quality of training	13	2		
Relevance to primary care practice	13	2		
Programme content	14	1		
Programme material & resources	14	1		
Tutor note: The feedback forms were distributed at the beginning of the day to encourage more reflective comments. This resulted in one form not being returned, and comments were no more detailed than previously. Day 4 feedback forms will be distributed at the end of the day.				

Please rate each session	Excellent	Good	Fair	Poor	Comments
BP measurement, diagnosis & monitoring	11	4			<ul style="list-style-type: none"> • Too much information in a short space of time
Tutor notes: Even though this presentation was didactic, it was still very interactive with pharmacists being encouraged to articulate their learning needs early on. As long as the presenter is informed beforehand that interaction will be encouraged, a time allowance can be made. The pharmacists enjoyed hearing from an expert on the subject. The detail of the presentation was pitched at an appropriate level. Hypertension is a very popular subject for pharmacists.					
Treatment of hypertension	12	3			<ul style="list-style-type: none"> • Too much information in a short space of time
Tutor notes: Revision on the practical elements from the clinical skills session was well received. With more time a revisit to practice BP measurements would have been useful.					
Case Discussions	13	2			
Tutor notes: Case studies are very well received. The case studies were very detailed, authentic and at an appropriate level.					
Communication Skills	14	1			

Tutor notes: Very interactive, positive session with practical suggestions for questioning for behaviour change. The subject of communication skills is proving to be very well received. Any future course should include a large element of teaching on communication.

Hypertensive patient interview.

14

1

• Very useful

Tutor notes: The patient perspective was a very important part of the day. Pharmacists enjoyed the opportunity to ask questions. A database of willing expert patients would be useful for any future course.

LTC Principles discussion

3

• This area was not covered. Participants were asked to complete this via the WIKI

Tutor note: Agreed to develop a discussion via the WIKI. We may still need to include in Day 5. Use the diabetes LTC review to underpin the principles.

Considering what you have covered in the course today.....

1. What did you find most useful and why?

1. All of it – best day so far, useful info and never felt rushed.
2. Patient experience – useful to actually hear their perspective.
3. Chris Clark’s talk in hypertension – very useful. Patient interview was excellent.
4. Minutiae of BP measurement.
5. Reviewing BP monitoring. ABPM + HBPM and Case studies – different types of HTN. Hearing a patient perspective. Revising motivational interviewing.
6. Found the whole day really useful.
7. Motivational questions. Patient.
8. Difficult to say as BP and motivational questioning etc was v. useful. Also useful to hear the patient’s point of view.
9. BP Measurement training. Identifying different diagnoses of hypertension/white cont syndrome/postural hypertension (have not covered this before)
10. BP measurements, diagnosis and monitoring. Case studies.
11. Motivational interview. Patient interview.
12. The HT lecture and seeing the patient with long term conditions.
13. I’ve found the communication skill really useful because I can use them when I do MURs, NMS and having conversations with my patients.
14. Dr Chris Clark’s session – very useful and relevant to my prescribing course at Bath Uni.
15. The whole day was excellent and a re ‘eye-opener’.

2. What did you find least useful and why?
1. All Useful
2. Still a little unsure about how to translate the perfect hypertension theory in to practical practice.
3. N/A All was useful.
4. No comment.
5. N/A
6. Nothing.
7. All useful.
8. No comment
9. Nothing
10. No comment
11. Hypertension – the bits on research – it was very useful, but least useful.
12. Nothing, it was all very interesting.
13. As I work in community pharmacy at the moment I've found the diagnosis and monitoring of BP least useful. However, I'm sure I will be able to use these skills in the future.
14. Nothing
15. None was 'least' useful!

3. What can you see yourself using in practice?
1. All of it. Hypertension work especially combined with MI principles
2. Explaining SPRINT.
3. Hypertension reviews. Communication skills
4. ↑ BP Measurement.
5. Motivational interviewing. Interpreting BP results from ABPM.
6. Management of hypertension – need to practice actually taking BP.
7. All of it – as I run an hypertension clinic.
8. Taking more notice of if recorded in notes about which arms to use for BP measurement – change templates? Revisit BP protocol with practice to see if improvements can be made.
9. Every aspect of the day – analysing ambulatory charts, measuring BP, motivational interviewing.
10. Motivational interview?
11. Motivational interview.
12. I can see myself building (?) my knowledge of minor ailments service pharmacy first and also daily activity of seeing patient in a GP setting.
13. I will be using the guiding style and motivating conversations when I talk to patients about lifestyles changes.
14. Every aspect of the day.
15. Communication skills was the part that I found potentially most useful and will start to utilise tomorrow.

4. Were there any specific highlights or lightbulb moments and if so, what were they?

1. Diurnal BP variation and importance of 10% ↓ nocturnal in risk evaluation.
2. The patient's aim to have a dog – the same as the Cornwall Living Well.
3. Patient communication on health issues – can be used for regular meds reviews.
4. ↑ knowledge about hypertension monitoring and treatment.
5. No comment.
6. Motivational interviewing – need to practice guiding rather than directing.
Patient interview – need to always consider what is important to the patient and how feelings /emotions impact on health and adherence to meds.
7. Reminding me about open questions – patient.
8. Different ways of asking open questions.
9. Listening to patient, Karen and her experience of healthcare was great. I'm so disappointed she had never been approached about her weight or feels that there has been little support up until recently.
10. Case studies in hypertension very useful.
11. Patient interview – useful to hear from patient's perspective.
12. About the diet and lifestyle effects on the BP vs the effect of drugs.
13. I think it was very useful to interview the hypertensive patient.
14. Case studies on Hypertension.
15. Complexity of management of hypertension in general practice.

5. Are there any other comments you wish to make?

1. Excellent structure and speakers
2. Might be useful to map everyone's experience prior to the course. Might be useful for all to understand the exposure you have when completing the prescribing course.
3. No Comment
4. Please don't underestimate the knowledge, experience and perspective of those of us in practice pharmacist roles. We have worked hard to develop the role – and to sell it to GPs.
5. No comment.
6. Actual patient case studies were good – some were complex but really useful to go through.
7. No comment.
8. No comment.
9. Thank you for such a great day! I feel very privileged to be part of this course.
10. No comment.
11. Hypertension powerpoint was very informative and useful especially because HT is a very common chronic condition. I think it should have been given longer time on the timetable.
12. No.
13. No comment.
14. No comment.
15. No comment.

Day 4

The Pharmacist in Primary Care – An Introduction

Day 4 – Tuesday 10th May 2016

Smeall Building JS07

Please rate overall day:	Excellent	Good	Fair	Poor
Quality of training	13	1		
Relevance to primary care practice	12	2		
Programme content	11	3		
Programme material & resources	12	2		

Please rate each session	Excellent	Good	Fair	Poor	Comments
Introduction – Tools for the day – Bath *	9	3	1		
Tutor notes – Introduction by PowerPoint, group quiet. Would have been good to have asked participants early what they wanted to get out of the day. Standard information setting the scene. Some got a couple of useful ‘tricks of the trade’. Group didn’t feel they could ask questions.					
Interface - Bath	12	2			
Nice practical session with excellent facilitation from Bath. Gave lots of information useful for community pharmacy. Could be extended from highlighting issues to what decisions would you actually make in practice. Errors planted into the case, which pharmacists enjoyed spotting. However, having spotted the errors there was no discussion on what the pharmacist in a GP practice would do. The session was very drug focussed.					
Enquiry - Bath	12	1	1		
Lots of useful resources to use in practice to answer medication enquiries. Experienced pharmacists genuinely learnt new material. Cases showed how solutions to enquiries are achieved, but didn’t empower pharmacists to act on the solution and take leadership for implementing a decision.					
Introduction to Problem Based Learning - UEMS	8	6			
None of the group had heard of, or had experience of, PBL. Pleased to have taken a risk to try this. Some of the groups understood what was trying to be					

achieved and lightbulb moments 'OA can be treated with other things aside from drugs' 'we always tend to focus on the medication not the patient'. At least two had a lightbulb moment.

Some groups did not understand this and were commenting on patient case rather than framing questions to research for further learning.

Valuable exercise though cases needed to be simpler.

Would have been better with two groups rather than four. There was one facilitator on each of the four groups. Only two of the groups had a facilitator with understanding on PBL.

Multi-morbidity – UEMS**	4	5	1		<ul style="list-style-type: none"> Perhaps a little more direction
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The day had been long and the room very hot. Again there was so much material we could have covered. This was only covered briefly.

* One no entry

** Four no entries

Considering what you have covered in the course today.....

1. What did you find most useful and why?
1. Thinking about how to use a case study to structure future learning. Learning about info sources: drugs lactation, where to find info etc
2. Problem based learning. Asking question, not necessarily med based. Then researching answers. Case based discussion / feedback. UKMI Q&A.
3. Group Work (PBL)
4. Case studies and working in groups
5. Introduction to problem based learning – a new strategy for me.
6. Looking at structured enquiry answering and medicines reconciliation with hosp discharge.
7. Enjoyed the medicines reconciliation session a lot.
8. Sources of information – search function on emc, Medscape. Discussion of medicine reconciliation.
9. Nick's' session with Gwen Matthews was very though provoking. So much to cover – great also to look at "sources" for?
10. Talking through the case studies whilst doing MO and reconciliation.
11. Case studies were the most interesting.
12. Case studies were very useful. Introduction to PBL.
13. Learnt really useful tips on how to search for interactions etc. Discharge summary discrepancies.
14. I've found the sources of information very useful and the Problem Based Learning.

2. What did you find least useful and why?
1. Talking about meds reconciliation, but only because it was far out of my comfort zone from community pharmacy.
2. N/A
3. N/A
4. PowerPoint on medicine optimisation because I know it, but the PowerPoint was

informative.
5. Not relevant.
6. None.
7. The problem based learning – this seems to be how I work anyway, if I don't know something I look it up!
8. No comment
9. Last session could have done with a bit more direction especially after a busy day.
10. It was all really interesting.
11. No Comment
12. N/A
13. No comment
14. I don't do patient reconciliation at the moment in community pharmacy, but it will be very useful for me if I move to GP surgery.

3. What can you see yourself using in practice?

1. The info resources and thinking about how we answer questions.
2. Medicine related queries – resources. UKMI Q&A
3. All of it.
4. Medicine reconciliation.
5. Increased confidence in dealing with medicines issues in Community Pharmacy and re initiating change.
6. Structured enquiry answering, medicines reconciliation and problem based learning.
7. The meds rec process – using it as a point to review medicines or instigate a review date.
8. Applying medicines optimisation when carrying out medicine reconciliation on hospital discharges.
9. Sources of information. Problem based learning convert to CPD list.
10. Trying to not always look too much at the meds and look at the holistic issues as well.
11. No comment.
12. Medicines optimisation.
13. All the searches. Lab test online – tools recommended by fellow colleagues.
14. I will use the sources of information: UKMI website, UKTIS, etc. I learnt they have difference advantages and disadvantages, each source.

4. Were there any specific highlights or lightbulb moments and if so, what were they?

1. Fear moment: acknowledging how much I don't know re meds reconciliation having not worked in hospital.
2. Using advance search on EMC meds to, eg search a particular medicine that doesn't contain lactose.
3. The theory of PBL - examples.
4. Problem Based Learning because seen it used in practice without really knowing what it is.
5. Multi-morbidity section.
6. Remembering to clarify a question rather than taking at face value.
7. Advanced search on EMC.
8. Information – google – questions on UKMI. CKS information source.
9. No comment.
10. PRISMA 7, looking more holistically as I look at both, but after the medication. Learn to do holistic risk.
11. No comment.

12. No comment.
13. How to run advanced searches on EMC.
14. I'll ask patients non-medicine related question to understand patients' background in order to optimise their medication, give advice and reduce risks.

5. Are there any other comments you wish to make?
1. Respiratory assessment and ENT assessment again please in the final session.
2. Clinical Skills – respiratory assessment and looking in ears.
3. Excellent!
4. This is the best session/day out of all the ones we have had so far. I enjoyed the day. Thank you to the team.
5. No comment.
6. A really useful day! Thanks!
7. No comment.
8. No comment.
9. I would like to practice chests, ears and eye skills. RASHS ←Different types. RED FLAGS.
10. No comment.
11. Reminder of how to read spirometers.
12. No comment.
13. Like to know more about COPD.
14. No comment.

Day 5

The Pharmacist in Primary Care – An Introduction

Day 5 – Tuesday 7th June 2016

Smeall Building JS07

Please rate overall day:	Excellent	Good	Fair	Poor
Quality of training	8	6		
Relevance to primary care practice	10	4		
Programme content	8	5	1	
Programme material & resources	8	5	1	

Please rate each session	Excellent	Good	Fair	Poor	Comments
St Leonard's Medical Practice *	5	6	2		<ul style="list-style-type: none"> • Some useful points raised when recording in patient notes and using read codes. • Although Naomi was lovely and new what she was doing, no value to me as used 6 clinical systems including S1. • Good review • Need to experience use of SystmOne • The actual session was good, however not relevant to all members of the group i.e. I have extensive experience of SystmOne. Could be improved by enabling participants to use the computer system – learn by doing. • Session would be good if didn't already work in GP practice.

Tutor notes: Very helpful to be delivering in a GP surgery as gave some connection for the course to a workplace environment. System manager focussed on admin side of recording and medical records. Pharmacists seemed to like to talk about GP-pharmacy interactions around prescribing e.g. changing electronic prescriptions. 2nd half of session focussed on looking at notes clinically, shared care guidelines of methotrexate monitoring, what is required for a RA check.

Major downfall of session was no practice time on computer system for pharmacists and also that some participants knew system already. Could only reach 'Knows' on Miller pyramid. UEMS would benefit from a mock GP IT system.

Common skin conditions	8	5	1		<ul style="list-style-type: none"> • Good reminder • Interesting session, but I don't think this will change my practice – not enough knowledge for competence.
<p>Tutor notes: Very quick overview, really only enough to gauge their background level of knowledge. They were shown a few slides and asked a few questions to the group. Appeared that their level of confidence was low even when they did know something. I think the comment about not being competent raises the point that this participant thinks you need to know it all to be competent whereas in reality it is not like this e.g. you may know much about eczema although there are cases that you need to refer for advice. Illuminated that confidence in assessing and managing minor skin complaints could be developed. Clear guidance was given to refer to GP any pigmented lesions or new growths with no diagnosis especially in older skin in sun exposed areas. The format of a small group quiz would have worked better (similar to the eye quiz of Day1).</p>					
Diabetes Annual Review Video*	5	7	1		<ul style="list-style-type: none"> • Good to see a 'live' review and supported with good follow-up. • Really interesting to review a real life and debate it openly.
<p>Tutor notes: The video had been edited down to 15 minutes without any compromise to the content (time to weigh pt, or discussion around appt times etc had been removed). Brought variety to teaching methods. Video was stopped at appropriate times so that discussion could occur on different stages of video. The nurse practitioner consultant was not in the room so discussion was unguarded. Comments immediately were criticising the consultation. Reflections after this session included wondering if pharmacists were experienced in formal feedback that is how to do it constructively, pointing out good things people had done. In this session they played out the stereotype of pharmacists be prone to picking up on errors. In any future course, feedback skills needs to be included as this would be vital to effective team working.</p>					
Drugs in Type 2 Diabetes	5	5	4		<ul style="list-style-type: none"> • Basic, but good to revisit • Quite basic presentation, didn't include all the drugs in NICE e.g. repaglinide • Needs to be totally up to date
<p>Tutor notes: Delivered by MH who was taking a lead on modelling the teacher-practitioner role as there is no hospital pharmacist in RDE that has diabetes as a specialism. I think this step for MH was not valued enough by the participants. Developing practitioners into teacher in the SW will be vital if the pharmacy community want to develop their roles. Do they?</p>					
Diabetic Leg Examination	9	5			<ul style="list-style-type: none"> • Good reminder • Good • Useful interesting review
<p>Tutor notes: Comprehensive review with clear explanations and visual aids. Demystified the whole examination so that pharmacists could begin to practice them. Again probably only reached 'Knows how' on Millers pyramid.</p>					
Diabetes Case studies	9	5			<ul style="list-style-type: none"> • Good to hear GP + PN views on what they would do. • Again, useful, but difficult when the group use different guidelines, recommendations

					and formularies!
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Tutor notes: We had put lots of thought into this to make it as practical as possible. Covered lots of ground without it feeling g exhausting. Cases used could have been more specific to really pinpoint which 2nd or 3rd line diabetic medication is chosen as felt a bit vague – e.g. ‘could use gliptin, glitazone etc’ – the risk benefit discussion could have been extended. Pharmacists need to develop leadership on drugs, and this would have been a good time to get them making those clinical decisions.

** one not completed*

Considering what you have covered in the course today.....

1. What did you find most useful and why?
1. Discussion of long term condition care – and template to follow created by Laura Sims.
2. Long term conditions management and SystmOne practise.
3. Diabetes sessions in afternoon with Judith
4. Covering SystmOne and learning how others use. Diabetic Case Studies. Review of skins conditions.
5. Section on diabetes was really good but would have liked longer to so more case studies.
6. The diabetic foot check because I check patients’ feet in practice.
7. Diabetic case studies. Rheumatoid Arthritis and Osteoporosis. Rheumatoid Arthritis Review.
8. Session on SystmOne and Diabetes case study.
9. Looking at SystmOne surgery systems – very useful to start to understand. Dermatological conditions were very useful.
10. Discussion over LTC.
11. Common skin conditions – it was good to run thro’ various conditions and discuss.
12. Skin conditions →learnt a lot. Diabetes annual review video → useful discussion in the room
13. I’ve found the common skin conditions and the diabetes case studies and drugs used in type 2 diabetes very useful.
14. Dermatology – lots of patients present. Diabetes – edges of my competency. Renal – definitely helpful to my practice.

2. What did you find least useful and why?
1. No comment
2. Dermatology – so much to cover in this field – needs more time!
3. Use of clinical system.
4. No comment
5. Focus on SystmOne as many of our practices use EMISweb and Microtest, but useful to see this as an example.
6. Parts looking at the GP System, the basics and having a look was very helpful, however, the details wasn’t relevant to in practice.
7. Diabetic leg examination – unlikely to use in role.
8. I found everything useful.
9. N/A I thought it was v. interesting and thought provoking.
10. Video.
11. Drugs in type 2 Diabetes – this was knowledge I already had.

12. Learning about SystmOne → only because not a personal learning need, session was good.
13. As I work in the community pharmacy at the moment, I've found that the morning session in St Leonard's wasn't very useful at this stage, but probably in the future. I think I would need to practice with the computer system.
14. SystmOne – don't use the computer system and already work in practice.

3. What can you see yourself using in practice?
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1. No comment
2. SystmOne
3. How to do foot checks in diabetes. RA r/vs.
4. SystmOne. Looking @ diabetic handbook and resources.
5. The algorithm for managing type 2 diabetes.
6. Yes
7. Blood tests interpretation.
8. SystmOne
9. Skin conditions. GP systems may help me to integrate.
10. Templates – QOF on SystmOne.
11. Discussing ley health in diabetics and more confidence with dealing with skin conditions.
12. Not currently in patient facing role.
13. I will be using the common skin conditions information and the common drugs in diabetes.
14. No 1 above (<i>Dermatology – lots of patients present. Diabetes – edges of my competency. Renal – definitely helpful to my practice.</i>)

4. Were there any specific highlights or lightbulb moments and if so, what were they?
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1. Discussion of long term conditions care – just exactly what I have to do when creating my treatment plan as part of the Independent Pharmacist Prescribing Course.
2. Getting examples of when we should refer and who to. Laura's LTC management slide was <u>very</u> useful for pharmacist in Primary care doing LTC reviews because Calgary Cambridge doesn't work!
3. Hadn't thought of doing RA r/vs for QOF.
4. No comment.
5. Didn't know about ACR/PCR in relation to CKD.
6. Looking at the slide lectures, also the diabetic foot checks, what they entail and how to incorporate it into the MUR.
7. Rheumatoid Arthritis Review. Shared care guideline – test result results interpretation.
8. Read code session during SystmOne talk.
9. Thought that viewing GP systems and gaining a basic understanding is something that I can gain an insight and take it back to practice.
10. No comment.
11. Nice guidance in Type 2 Diabetes.
12. No comment.
13. No comment.
14. ACR reminder → not sure we are testing, dipping etc. Low Hb 10.8 if low then HbA/C might not be accurate.

5. Are there any other comments you wish to make?
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1. No comment

2. Today was Fab!
3. No comment
4. No comment
5. No comment
6. No comment
7. Really useful. Will look at templates and reread notes.
8. Very productive day and useful to my practice.
9. N/A
10. No comment
11. No comment
12. Felt that some of the topics discussed were topics we already knew about e.g. drugs for diabetes. Good for context, but in a limited amount of time for the day, other topics may have been better covered e.g. NNT, POO, DOO for these drugs. Also enjoyed the session at the end from Laura on shared decision making.
13. No comment
14. Could do more on LTC – patients – great next time.

Day 6

The Pharmacist in Primary Care – An Introduction

Day 6 – Tuesday 5th July 2016

Smeall Building JS07

Please rate overall day:	Excellent	Good	Fair	Poor
CSRC Heavitree venue	13			
Quality of training	12	1		
Relevance to primary care practice*	10	2		
Programme content*	10	1	1	
Programme material & resources*	11		1	

* one left blank

Please rate each session	Excellent	Good	Fair	Poor	Comments
CSRC - Respiratory	11	1	1		<ul style="list-style-type: none"> Will need to practise routine of how to conduct a Resp exam
<p>Tutor notes – Real patients provided authenticity, pharmacists had to display professionalism to patients, and pharmacists were able to examine an older age group. Timings were accurate and morning kept to schedule. In a perfect world each group would have had a tutor available at all times. This led to some degree of unsupervised practice.</p>					
CSRC – History Taking	2	3			<p>Removed prior to session (8 left this blank)</p> <ul style="list-style-type: none"> Didn't complete Did we do this? Will need to practise Resp exam scenario. Don't think we covered this today N/A
<p>Tutor notes – Decision was made before the day to omit this from the schedule. A common theme for the CPD course is time constraint. Too much potential material for 6 days of CPD.</p>					
CSRC – Practice Stations	9	4			<ul style="list-style-type: none"> Needed to r/v eye exam/acuity
<p>Tutor notes - Practice sheets created before session worked well as prompts for participants. More instruction on encouraging pharmacists to examine patients rather than history taking. As usual more time would have benefitted participants.</p>					
MCQ Evaluation	1	6	2	1	<p>(3 left this blank)</p> <ul style="list-style-type: none"> Hard to rate Who knows! (it's a test!!) Some errors on paper – answers given for Q13 + Q14

Tutor notes – Answers to questions 13 & 14 inadvertently left on the MCQ sheet. These questions to be discarded and ignored in the final percentage scores. Pre & post MCQ scores to be sent to pharmacists as a percentage. The complete answers sheet will be posted on the Google site and Wiki.

Debate 1	7	3			(3 left this blank) • Excellent panel
Debate 2	6	4			(3 left this blank)

Tutor notes – Well received. Room layout of a formal meeting set the tone of the debate as a professional meeting. Boundaries were set at the beginning; maintain professional respect; one person speaks at a time; discussions in the room remain anonymous. Initial three minutes were slow to gather momentum; however after that a lively debate developed. All participants and panel members got a chance to speak at least once. Guests brought a different dimension to the group; realistic positivity; actively encouraged pharmacists; kept linking back to what happens in practice; examples given highlighted the need for pharmacists as part of the primary care team. It felt like pharmacists had ownership of the debates.

Considering what you have covered in the course today.....

1. What did you find most useful and why?
1. Clinic session – hypertension day. Debates.
2. Re-doing the clinical skills and trying to look at the equipment and process of the chest examination
3. Clinical skills was very good. Enjoyed “hand-on” and really helped to reinforce learning. Thought the debate was very interesting.
4. Respiratory session, having real patients was really useful.
5. Respiratory examination. It’s useful for respiratory annual reviews in GP practices.
6. The Q&A session this afternoon was very informative – to find the different viewpoints of panel and audience.
7. Getting patient’s perspective on seeing pharmacists in practice. Debates and other people’s view of the future.
8. Helpful to run through a respiratory exam, and have a chance to practice other clinical skills in the second half.
9. Foot pulses – never found them before.
10. Practising clinical skill on the real patients, e.g. BP, resp exam, diabetic foot etc.
11. Practising clinical skill on actual patients.
12. Debate afternoon session because it’s thought provoking and have taken a lot to reflect on.
13. Time to use equipment in the CSRC at Heavitree – now able to see eardrum using otoscope!! Also having trainers observe you doing examination of patient – really helpful having their feedback. Great chance to practise on real patients.

2. What did you find least useful and why?
1. Motivational interviewing – had a lot of training on this already.
2. I found the least useful (incomplete answer)
3. N/A
4. N/A

5. No comment
6. It was all useful!
7. No comment
8. No comment
9. MCQ – hate exams.
10. Nothing
11. No comment
12. I found all the sections very useful.
13. No comment.

Considering what you have covered in the past 6 months of the course.....

3. What parts of the course did you feel were most relevant to your practice?
1. Bath – answering sessions and blood tests. Practice visit day (Ide Lane). Asthma reviews, hypertension session excellent.
2. The lectures on the LCTs that I would see in the pharmacy and the practical skills gained. They help to compliment the minor ailments.
3. Clinical Skills.
4. Discussion with colleagues, peers and GPs on the course, to frame what the ‘pharmacist in general practice role’ actually is.
5. As a community pharmacist, I’ve found clinical skills relevant for my practice, such as eye examination, centor criteria, etc. I’ve also found it very useful the motivational consultations.
6. Practising examination skills and being taught red flags and systems examinations.
7. Ideas on how to expand practice.
8. Clinical and examination skills as may need to use these when running clinics in GP setting.
9. Hypertension session.
10. The clinical knowledge session, eg: hypertension, asthmas, ENT, dermatology etc. Also dealing with medication queries – used already in CCG role.
11. Revision of consultation skills. Listening to experienced clinicians about what they think about during a consultation. Clinical skills.
12. The section on consultation skills and clinical skills.
13. Discussion of management of long term condition ie: hypertension, COPD, asthma.

4. How has the course affected your practice, if so what changes have you made?
1. Have conducted asthmas reviews – overuse of inhaler reviews.
2. I have changed my approach to patients and now I try to apply the practical skills to patient care.
3. Hope to be able to use resp condition review in my day to day processes.
4. Currently in my CCG role I am not patient facing, but this course has given me interesting points to consider when doing my day job.
5. I’ve used the motivational skills to promote health in the pharmacy (advice on diet, exercise, etc) and clinical skills.

6. I get more involved in every aspect of my patients' care – OTC and long term conditions management and services (MUR/NMS)
7. Not sure yet waiting for feedback from GPs about expanding clinic roles.
8. Developed clinical / exam skills. Recap motivational interviewing. Questioning techniques and meds reconciliation.
9. Improved confidence in HT clinics.
10. Extremely relevant and useful because just started 1 day a week working in a GP practice.
11. <u>Slightly</u> more confident to expand area of competency.
12. Not at the moment but it will when I start working as a non-medical prescriber as the clinical skills will become valuable and give me a foundation to build my CPD on.
13. The course has supported me during my study on the pharmacist prescribing course.

5. What areas of the course would you add/remove/change?
1. COPD Review (how to step down treatment)
2. No comment
3. No comment
4. Would have some parts of the course with pharmacists from different experiences and sectors, and other parts separate and aimed at more or less experienced.
5. Nothing.
6. Some things felt a little rushed at time but I'm struggling to think of specific examples (sorry!)
7. No comment
8. No comment
9. Most of it. The course, as it stands, does not reflect what pharmacists actually do in practice. I suggest involving more current practice pharmacists in the design.
10. More time on each clinical area – or perhaps pre-reading would be useful. To be able to cover more clinical areas.
11. Needs lots of patients and clinical skills, perhaps even repeated every session so competency can be assured.
12. Add: - more debates, and I think the residential period with pharmacist going into practice should perhaps be with a surgery with practice pharmacist.
13. We are too critical of each other and other members of MDT – more guidance on leadership and ways to feedback in a positive way.

6. Are there any other comments you wish to make?
1. Really enjoyed whole course – would love for it to continue. Found it really valuable. Fantastic team – really motivated – enjoyed learning.
2. No comment
3. Really enjoyed the course – thanks.
4. I have really enjoyed the course – thank you!
5. No comment
6. The time in practice was very useful, time in the CSR was fab and time hearing from all the very different practitioners on the course has been so useful!
7. Tutors and admin have been lovely and approachable. Course has been very well run. I think some of the sessions should be split into experienced and less experienced as some of it has

	been of more use for community pharmacists rather than experienced primary care pharmacists. Still need session where altogether to enhance each other's learning.
8.	No comment
9.	I have enjoyed the course and really enjoyed the opportunity of being part of the first wave. I hope it will be possible to improve it and continue it. I would be happy to be involved, but as you know, I am outspoken!
10.	Would like to do some further similar learning and would be interested to find out about any masters or diploma courses.
11.	The role is getting bigger and bigger (illustrated with a doodle of expanding boxes in a circular formation)
12.	I have thoroughly enjoyed the course and meeting the other students. Many thanks to the course tutors (Mark and Laura), John and Ellie.
13.	To a certain extent the role of the primary care pharmacist is a blank canvas for us all to develop and evolve with in the future.

APPENDIX 19: Feedback Reports

Day 1

The Primary Care Pharmacist – An Introduction

Day 1 – Tuesday 9th February 2016

Feedback report

Introduction

All selected participants attended Day 1 of the course.

The day was evaluated by ranking the individual sessions and giving comments. Overall feedback of the day was obtained by written free text answering five questions.

Participants (n=16) were asked to score all sessions of the day, Excellent (E), Good (G), Fair (F), or Poor (P). The feedback obtained would be summarised to inform the development of further days of the CPD course.

Operational feedback

No participant scored the operational areas less than good. The organisation and administration of the course had 100% excellent (E) score. The venue and facilities were rated 94% (n=15) E.

Relevance to primary care practice and quality of presentation were both rated 81% (n=13) E and 19% (n=3) good (G). The programme content and material/resources scored 75% (n=12) E and 25% (n=4) G.

Programme content ranking

Session	Excellent	Good	Fair	Poor
Intro presentation	10	5	1	
Evaluation	7	8	1	
Small group discussions	12	4		
Common eye conditions	12	4		
Respiratory infections	9	7		
Overall day	12	3		

Introductory presentation

Professor John Campbell opened the course with a welcome and explanation of the Exeter Collaboration for Academic Primary Care (APEX). The team presented an overview of the project. These were both well received with one constructive comment; *'Not sure we needed to know in as much details about the project'*. The team educational technologist gave an explanation of the Google Drive online resources site which one pharmacist commented; *'IT presentation. Although important I didn't feel I could go home and navigate through the WIKI'*.

Evaluation

With one comment of; *'Slightly scary'*, introducing participants to MCQ on first day without warning appeared to shock, although they had consented to this and were aware the results were not for individual assessment and would have no adverse effects on their course participation.

Small group discussions

Participants enjoyed this session. They presented back in pairs, appeared confident to speak publically and the discussions were informal, relevant and informative. Much of the discussion came from pharmacists who are already working in primary care. This was quite an eye-opening session for the less experienced community pharmacists with useful peer learning.

Common eye conditions

Participants were given visual images of common eye conditions in the form of a quiz. They went round the room in small groups and engaged in discussions and decisions. The GP tutor then went through the conditions with a final slide on Red Flags. This session was very well received with 12 very positive comments such as; *'The eye presentation was highly informative and greatly improved my knowledge'*; *'Eye conditions v. useful. More confident re: referral criteria and self-help'*.

Adult respiratory infections

This was a combination of consultation skills (watching a video and discussing techniques) and teaching on adult respiratory infections. This session identified wide differences of experience in the group. Generally though, the group seemed under-confident in this area when talking about diagnostic consultation skills.

Responses to feedback and comments

The session on eye conditions received the most positive comments, and referred to as the most useful for practice.

Valuable leadership awareness was reported as being most useful - *'How to identify and implement audit/ QoF'* and *'How safety audits can evolve from an individual patient medication issue'*.

The least useful part of the day seemed to be the introduction which participants felt was too long and some parts were irrelevant, with the IT talk rushed.

Five participants specifically wrote that they would use the consultation skills.

Conflicting needs *'Introduction to history taking and consultation skills- too brief'*, while another comment said, *'Much of the other content has been covered by previous course – especially consultation skills'*.

Variety of attitudes of taking clinical risk when asked *'What can you see yourself as using in practice'* from *'I wouldn't use the skills learnt today....as I don't think the session alone today would deem me as confident'* to *'Every aspect covered today'*.

Highlights of the day included *'Realising that we won't be flying solo in general practice and it is ok to face a steep learning curve'* and *'The eye section was highly illuminating for me'*.

General comments included; *'Excited about next time!'*; *'Very useful to work with such a skill mix'* and *'It feels quite daunting to think I could be seeing / assessing patient in practice; 'Feel like I have large gaps in my knowledge'*.

Reflections from responses

- The group developed rapport and were engaged throughout.
- By observation the case discussions worked well with lively discussions and therefore keeping the teaching interactive will be important.
- The mixed abilities and experiences in the group are a positive and negative feature. It lends well for peer learning though there will be repetition for those who have covered similar topics before.
- The tutors have decided to allocate participants to specific groups to ensure a mix of experience is in each group and maximise the opportunity for peer networking and sharing of learning.

Day 2

The Primary Care Pharmacist – An Introduction

Day 2 – Tuesday 8th March 2016

Feedback report

Introduction

One participant was unable to attend due to a pre-existing commitment to attend a study day on The University of Bath prescribing course.

The day was evaluated by ranking the individual sessions and giving comments. Overall feedback of the day was obtained by written free text answering five questions.

Participants (n=15) were asked to score all sessions of the day, Excellent (E), Good (G), Fair (F), or Poor (P). The feedback obtained would be summarised to inform the development of further days of the CPD course.

Operational feedback

No participant scored the operational areas less than good. The Clinical Skills Resource Centre (CSRC), Heavitree, quality of training and programme content were all rated 80% (n=12) Excellent and 20% (n=3) Good. Relevance to primary care practice and programme material & resources were both rated 67% (n=10) Excellent and 27% (n=3) Good, with one participant leaving no rating.

Programme content ranking

Session	Excellent	Good	Fair	Poor
CSRC – Vital signs	10	5		
CSRC - ENT	9	5	1	
CSRC - Eye	10	4	1	
Asthma annual reviews	8	6		
Common ENT condition	12	3		
Overall day	12	3		

Clinical Skills Resource Centre, Heavitree

The morning in CSRC was a very practical session which pharmacists found useful for their future practice and potential roles in primary care. The proposed programme content for the day was, with hindsight, over ambitious as time pressures and group interactions were overestimated. During the morning the tutors took the decision to omit the communication skills element, which allowed more time for the practical skills. Eleven participants cited the session as the most useful of the day, with comments such as; *'I found very useful the Clinical skills training in CSRC Heavitree. It was all very*

new for me and it was great to be able to practise the vital signs ENT and eye examinations'; 'Clinical skills was excellent and can see how it will be used regularly'; and 'CSCR – good introduction through would like more practise!'

Asthma Annual Review

This session was delivered by Judith Magowan, a practice nurse and associate lecturer in nursing at Plymouth University. An initial group introduction to identify any learning needs was followed by a short presentation, with the majority of the session covered by four case studies. Groups of four discussed and presented back on cases which covered a spectrum of patients receiving an annual asthma review. Many of the pharmacists had extensive knowledge and experience of asthma reviews, and were able to contribute to valuable peer to peer learning. Some comments where asthma was listed as most useful were; *'Asthma – informative and useful to hear other people's views'; 'Workshop sessions – chance to discuss the different factors with experts and colleagues'*, and where asthma was referred to as useful in practice; *'Asthma review – if given sufficient additional training, experience and supervision'*. This session was rated 53 (n=8) E, 40% (n=4) G, with one participant leaving this blank.

Common ENT conditions

The last session of the day was delivered by Dr Rob Daniels, GP with a special interest in ENT. This was a didactic presentation where participants received detailed information on various ENT conditions, together with clearly defined red flags to look for when presented with common conditions. Very positive feedback from pharmacists showed the importance of using mixed methods of learning throughout the day. This session was rated 80% (n=12) E, 20% (n=3) G.

Responses to feedback and comments

The morning in CSRC received the most positive responses, and was seen as the most useful to pharmacists in primary care and most relevant to practice.

No individual session was identified as being of little use. Any comments of sessions being not useful, stemmed from pharmacists with experience in the topics covered, with comments such as *'Vital signs -> not new learning for me'* and *'Asthma section – maybe because I felt more comfortable with my knowledge in this area'*.

All areas of the day were mentioned at some point in the feedback form as being something which pharmacists could see themselves using in practice. When asked to identify what was useful in practice, pharmacists also referred to use of skills in possible future role with comments; *'All of it once I qualify as IP, eye exam and clinical ENT exams and understanding of red flags I'd uses in the community'* and *'Hopefully will get a chance to use all of the practical skills. The asthma tools/resources'*.

Highlights of the day included *'I really enjoyed the whole day. The morning was really fun! The afternoon was really useful for things to look out for in practice, eg: ENT symptoms and lateral thinking with asthma patients'* and *'Visuals of ear canal. CSCR reviews. Reviewing ENT red flags, signs, symptoms etc.'* One participant listed a lightbulb moment as *'Pupil reflex is the same when you shine a light source in one eye'*.

General comments included, *'More enjoyable and relevant than session 1 – thank you!'* Found it *useful splitting up in to smaller groups'*; *'Having a seating plan to do case work made me mix with rest of group'*. Together with constructive comments such as, *'Nurses demonstrating clinical skills were excellent, but would be good to give them background as to how pharmacists are going to be using these clinical skills – as it appeared that they envisaged us using these skills in community pharmacies and not in GP surgeries'*.

Reflections from responses

- Practical skills were extremely well received.
- Comments of *'Need more time practising'* identifies the challenge of the amount of material to cover in an introduction programme
- A comment *'Would have liked to have been taken through a "model" asthma review.'* prompted tutors to develop Long Term Condition template for the next CPD day.
- Several comments on the need for more time will be discussed in a meeting with CSRC in the planning of the Day 6 clinical skills morning.
- Case studies were well received, but need to be more challenging with clearer learning objectives.
- Barriers of putting skills learnt into practice seem to be participant perception that they are not competent and that they do not or could not extend their current role to incorporate these skills.
- Enthusiasm and need for course remains high.

Reflections from tutor observations

- Initial intro CSRC started at 9.30 which immediately put the timetable back by 15 minutes.
- Vital signs Pulse, Temp. Sats, Resp kept to time.
- Vital signs BP went over time for first group which added a further timetable reduction of 15 minutes.
- We should have had cases on a PowerPoint as well as on paper.
- More praise and thanks from tutors to the group at the end.

Day 3

The Primary Care Pharmacist – An Introduction

Day 3 – Tuesday 12th April 2016

Feedback report

Introduction

All participating pharmacists attended Day 3 of the CPD course. However, at the end of the course, only 15 feedback forms were completed.

The day was evaluated by ranking the individual sessions and giving comments. Overall feedback of the day was obtained by written free text answering five questions.

Participants (n=16) were asked to score all sessions of the day, Excellent (E), Good (G), Fair (F), or Poor (P). This report is compiled from the completed feedback forms (n=15). The feedback obtained would be summarised to inform the development of further days of the CPD course.

Operational feedback

No participant scored the operational areas less than good. The programme content and programme material & resources were rated 93% (n=14) E and 7% (n=1) G. The quality of training and relevance to primary care practice were rated 87% (n=13) E and 17% (n=2) G.

Programme content ranking

Session	Excellent	Good	Fair	Poor
BP measurement, diagnosis & monitoring	11	4		
Treatment of hypertension	12	3		
Case discussions	14	1		
Hypertensive patient interview	14	1		
LTC principles discussion	3			

BP measurement, diagnosis & monitoring

Dr Chris Clark, NIHR Clinical Senior Lecturer in General Practice, University of Exeter Medical School, delivered the morning sessions on hypertension. An initial overview of the morning and group discussion to identify learning needs was followed by a detailed presentation of the measurement, diagnosis and monitoring of blood pressure. Many of the participants had a special interest in the subject, and the majority of pharmacists asked questions and engaged in discussion throughout the morning. Where participants were asked to comment on what they found most useful, quotes included; Chris Clark's talk in hypertension; *'Dr Chris Clark's session – very useful and relevant to my*

prescribing course at Bath Uni'; 'BP Measurement training - identifying different diagnoses of hypertension/white coat syndrome/postural hypertension (have not covered this before)'. This session was rated 73% (n=11) E and 27% (n=4) G. With a large amount of material to cover, there was one comment of 'Too much information in a short space of time,' and a comment, 'Hypertension PowerPoint was very informative and useful especially because HT is a very common chronic condition. I think it should have been given longer time on the timetable'.

Treatment of Hypertension

The morning continued, after a break, with the treatment of hypertension. Dr Clark had prepared a detailed presentation. The earlier section of the subject exceeded the time allocation; therefore participants chose the most relevant points of the presentation. Both presentations were posted onto the online wiki forum, for future referral. 73% (n=11) of participants wrote positive comments about the hypertension session being most useful, with the same number saying they would use the learning in practice.

Case studies on hypertensive patients

As a summary of the teaching session on hypertension, Dr Clark prepared four case studies based on actual patients. Participants were divided into groups of four, each discussing and reporting back on each case. The first two days of the CPD course identified case studies as one of the preferred methods of learning. This was again reflected in the responses of participants with 87% (n=13) rating the session as excellent (E) and 17% (n=2) G.

Communication skills

Associate Professor Colin Greaves, deliver an interactive presentation to introduce participants to motivational interviewing of patients to encourage lifestyle change for the benefit of health. 93% (n=14) rated this session as excellent (E) and 7% (n=1) G. 73% (n=11) identified this session as being most useful in practice. Comments received included; *'Communication skills was the part that I found potentially most useful and will start to utilise tomorrow'; 'I will be using the guiding style and motivating conversations when I talk to patients about lifestyles changes';* and one participant recorded the following as a lightbulb moment; *'motivational interviewing – need to practice guiding rather than directing'.*

Hypertensive patient interview

A hypertensive patient was invited to be interviewed during the afternoon session. Dr Sims gave an introduction and overview of the patient. Participants were then invited to ask questions to gain insight into the patient perspective of living with a long term condition. The patient engaged extremely well with the group and handled the questions with confidence and honesty. This session was rated 93% (n=14) E and 7% (n=1) G.

Long Term Condition principles discussion

Due to time constraints, this area was not covered. Participants were asked to complete their contributions via the wiki online forum.

Responses to feedback and comments

The positive responses and comments to the whole morning session highlight hypertension as an area of practice where pharmacists feel they can contribute to in a primary care environment.

All sessions covered throughout the day received positive comments. There were no negative comments recorded about the course content and delivery. When asked to comment on what was least useful, eight participants recorded *'nothing'* or *'all was useful'*.

Fourteen participants recorded a highlight or lightbulb moment. All comments referred to various topics covered throughout the day.

Every participant identified and recorded something from the day which they could see themselves using in practice.

The long term condition session did not occur, due to an over run on a discussion around GP practice placements. Half of the group already work in a general practice and the other half work in a community pharmacy. The relevance of practice placements was discussed.

Whilst only six participants made a general comment, the overall response from the day was summarised in the comment; *'Thank you for such a great day! I feel very privileged to be part of this course'*.

Reflections from responses

- The overall positive responses from the day indicate the relevance of the chosen subject material.
- Whilst the content was set at a master's level of learning; it was not pitched too high.
- Some of the participants may have felt undervalued with two general comments; *'Might be useful to map everyone's experience prior to the course. Might be useful for all to understand the exposure you have when completing the prescribing course'*, and; *'Please don't underestimate the knowledge, experience and perspective of those of us in practice pharmacist roles. We have worked hard to develop the role – and to sell it to GPs'*.

Reflections from tutor observations

- Didactic teaching can be effective when made interactive.
- Participants respond well to speakers who are experts in their field of practice.
- Not having time to cover the last session on long term conditions identified a need to keep the volume of material to a realistic level.

Day 4

The Primary Care Pharmacist – An Introduction

Day 4 – Tuesday 10th May 2016

Feedback report

Introduction

One pharmacist has permanently withdrawn from the project, due to work/training time constraints and one participant was absent on the day for unknown reasons. Therefore only 14 pharmacists attended Day 4 of the CPD course. All participants completed a feedback form.

The day was evaluated by ranking the individual sessions and giving comments. Overall feedback of the day was obtained by written free text answering five questions.

Participants (n=14) were asked to score all sessions of the day, Excellent (E), Good (G), Fair (F), or Poor (P). This report is compiled from the completed feedback forms (n=14). The feedback obtained would be summarised to inform the development of further days of the CPD course.

Operational feedback

No participant scored the operational areas less than good. The quality of training was rated 93% (n=13) E and 7% (n=1) G. The programme material and relevance to primary care practice were rated 85% (n=12) E and 15% (n=2) G. The programme content was rated 79% (n=11) E and 21% (n=3).

Programme content ranking

Session	Excellent	Good	Fair	Poor
Introduction – Tools for the day – Bath	9	3	1	
Interface - Bath	12	2		
Enquiry - Bath	12	1	1	
Introduction to problem based learning	8	6		

Introduction – tools for the day

The theme of this fourth day of the CPD course was 'Medicines Optimisation'. The introduction focused on the resources required to support medicines information enquiries from prescribers, health care professionals and patients. This was delivered by Alison Alvey, a primary care teacher-practitioner and medicines information pharmacist, from the University of Bath. An overview of printed and online medicines information resources was presented and participants were guided through methods of obtaining answers to medication enquiries, accurately and efficiently. All

participants are involved, at some point in their working day, with medication enquiries. The introduction to resources was considered relevant to practice, which was reflected in responses when participants were asked to comment on what they could see themselves using in practice, where quotes included; *'I will use the sources of information: UKMI website, UKTIS, etc. I learnt they have different advantages and disadvantages, each source'*; *'The info sources and thinking about how we answer questions'*. This session was rated 64% (n=9) E, 21% (n=3) G and 7% (n=1) F, with one participant leaving no rating.

Enquiry – Bath

As an extension to the introduction to tools of the day for medicine information, Alison Alvey continued with some short case studies of medicines information enquiry examples. The case studies were preceded by a detailed presentation on the principles and theory of medicines optimisation. The presentation remained the intellectual property of the University of Bath and was therefore not posted onto the online learning platform. 57% (n=8) of participants recorded medicines information and optimisation as being used in their practice. The session was rated 85% (n=12) E and 15% (n=2) G.

Interface – Bath

The University of Bath continued with a further presentation on medicines reconciliation at the interface of primary and secondary care. This session was delivered by Nick Haddington, director of studies for the taught postgraduate programmes at the University of Bath. Participants remained in their four groups and were all given the same case of a patient's discharge from hospital. Participants were given the task of identifying areas of error and the potential of risk to the patient. Many of the participants use medicines reconciliation and optimisation in their practice which was reflected in the ratings of 85% (n=12) E and 15% (n=2) G. Comments on this session incited varying responses; *'Nick's session with Gwen Matthews (case study patient) was very though provoking; 'Fear moment: acknowledging how much I don't know re meds reconciliation having not worked in hospital'*. In response to 'What can you see yourself using in practice?' one participant wrote; *'Applying medicines optimisation when carrying out medicine reconciliation on hospital discharge'*; which appears to encompass the sessions delivered by the University of Bath.

Introduction to Problem Based Learning

Dr Laura Sims introduced this session with a presentation on the methods and principles of problem based learning (PBL). Before the presentation participants were asked whether they had experience of PBL. None of the participants had any knowledge or understanding of PBL, and it was therefore a new concept to the whole group. Following the introduction to PBL, the participants remained in their four groups, with a facilitator on each table. All participants were given the same multi-morbidity patient case study, from which they were asked to produce twenty questions, between them, which addressed a learning need. From these twenty questions, participants were asked to research one and feed their findings back to their group. As a new concept, this method of learning provoked a divisive response from participants, with one recording in the 'What did you find least useful?' section; *'Last session could have done with a bit more direction especially after a busy day'*; whilst one participant wrote in the section asking for 'were there any specific lightbulb moments?'; *'Problem based learning because seen it used in practice without really knowing what it is'*. Due to

time constraints and being introduced to a new method of learning, participants were asked to rate the PBL and multi-morbidity sessions as one. The combined rating for the session was 57% (n=8) E and 43% (n=6) G.

Responses to feedback and comments

All sessions covered throughout the day received an equal number of comments recorded in 'what did you find most useful and why?'

When asked to write comments on what was least useful, eight pharmacists chose not to leave any comment. The remaining comments referred to areas which they already felt they knew, or where they were taken out of their comfort zone.

All fourteen participants recorded something from the day which they could see themselves using in their practice. Different parts of the day were useful to community and practice based pharmacists.

Eleven participants recorded a highlight or lightbulb moment, with no topic standing out as a particular leading subject.

Participants were asked to mention any areas of learning they wanted to cover or revise, which some chose to record in the general comments section of the feedback form. These comments will inform the content and delivery of the final two days of the project. Three participants chose to leave positive responses covering the whole day; *'This is the best session/day out of all the ones we have had so far. I enjoyed the day. Thank you to the team'; 'Excellent'; and 'A really useful day! Thanks!'*

Reflections from responses

- The overall positive responses from the day indicates the relevance of the chosen subject material.
- The content of the day received differing responses from community and practice based pharmacists.
- PBL was a new learning concept for the whole group.
- Some participants would have liked more tuition on PBL before embarking on the case study.

Reflections from tutor observations

- PBL groups should have been eight participants.
- Not all facilitators assigned to each group fully understood PBL.
- PBL case could have been simpler, considering the short time available to research questions.
- Some participants are beginning to see the patient more at the centre of their thoughts rather than the drugs.
- Would have been useful to scope learning requirements from the group at the start of the day.

Day 5

The Primary Care Pharmacist – An Introduction

Day 5 – Tuesday 7th June 2016

Feedback report

Introduction

There are 15 participants remaining on the course. However one participant, the same absentee as last month, was unable to attend this day due to illness. Therefore, 14 pharmacists attended Day 5 of the CPD course. All participants completed a feedback form.

The day was evaluated by ranking the individual sessions and recording any comments. Overall feedback of the day was obtained by written free text answering five questions. Participants (n=14) were asked to score all sessions of the day, Excellent (E), Good (G), Fair (F), or Poor (P).

This report is compiled from the completed feedback forms (n=14). The feedback obtained would be summarised to inform the development of the final day of the CPD course, as well as any potential future course plans.

Operational feedback

Participants were requested to rate the overall operational aspects of the day. The quality of training for the day was rated 57% (n=8) E and 43% (n=6) G. 71% (n=10) of participants considered the relevance of the day to primary care as excellent with 29% (n=4) rating it as good. Programme content and programme material and resources were rated 57% (n=8) E, 36% (n=5) G, and 7% (n=1) F. Operational feedback was rated across both sites used throughout the day which does not allow comparison of venues, training and resources.

Programme content ranking

Session	Excellent	Good	Fair	Poor
At Leonard's Medical Practice visit*	6	6	2	
Common skin conditions	8	5	1	
Diabetes annual review video*	5	7	1	
Drugs in Type 2 Diabetes	5	5	4	
Diabetic leg examination	9	5		
Diabetes case studies	9	5		

*One not completed

Introduction

The aim of the day was to cover topics relevant to the potential role of a pharmacist working in primary care. Inclusion of a long term condition review, type 2 diabetes, was the main focus of the afternoon sessions. The morning at a medical practice sought to introduce participants to high risk drugs in rheumatoid arthritis and blood test interpretation, via a general practice IT system.

St Leonard's Medical Practice visit

The project team are very grateful to the partners and staff of St Leonard's Medical Practice, Exeter, for their willingness to accommodate the participants. Particular thanks to Naomi Gruitt, practice systems manager, for hosting the session. A detailed list of questions was designed to guide participants through an introduction to a practice IT system, administration of patient appointments, recording patient consultations, as well as the use of resources to conduct long term condition reviews and high risk medicine audits. Participants were also introduced to the use of 'read codes' in practice. At the beginning of the session, participants were asked to introduce themselves and their experience of practice IT systems. 35% (n=5) had no experience, 21% (n=3) considered themselves very experienced in this practice IT system, SystemOne[®], with the remainder, 44% (n=6) expressing some experience with SystemOne[®]. This variation in experience was reflected in the feedback with 28% (n=4) listing this session as their most useful, where one comment was; *'Looking at SystemOne[®] surgery systems - very useful to start to understand'*. When asked what the least useful part of the day was, 42% (n=6) mentioned the practice IT system in their feedback, as they either worked in a practice or it was not relevant to their practice. Examples of such quotes were; *'Focus on SystemOne[®] as many of our practices use EMIsweb[®] and Microtest[®], but useful to see this as an example'*; *'As I work in community pharmacy at the moment, I've found the morning session in St Leonard's wasn't useful at this stage, but probably in the future. I think I would need to practice with the computer system'*. One participant identified this session as a highlight or lightbulb moment; *'Read code session during SystemOne[®] talk'*. This session was rated 36% (n=5) E, 43% (n=6) G and 14% (n=2) F, with one participant leaving no rating.

Common skin conditions

Common skin conditions which may present in a community pharmacy were chosen. These conditions were placed into a slide presentation and displayed to participants. Participants were then asked to provide a description of the condition, any suggestions of diagnoses or differential diagnoses, and possible treatment options in each case. The presentation was conducted in a quiz format, which encouraged engagement of the audience. Other areas covered during discussion were, dermatology red flags and when to refer to a GP colleague. 21% (n=3) recorded this session specifically as being most useful and relevant to their practice; *'I will be using the common skin conditions information'*; *'More confidence in dealing with skin conditions'*; *'Dermatology-lots of patients present'*. One participant commented on this being their least useful of the day; *'Dermatology-so much to cover in this field – needs more time'*. This session was rated 57% (n=8) E, 36% (n=5) G and 7% (n=1) F.

Diabetes annual review video

During the design and development of the CPD course, the project leads had an opportunity to video a practice nurse conducting long term condition reviews with patients in practice, with a view to using them as teaching material within this course and/or in future UEMS teaching. An edited version of one of the diabetes annual reviews was used in this session. Participants watched a video of an annual diabetes review. Pre-determined times were chosen to stop the video, and discuss relevant practice and learning points identified by participants. The consultation with a patient was well received. Relevant comments from the feedback were; *'Good to see live review and supported with good follow-up'*; *'Really interesting to review a real life (consultation) and debate it openly'*. This session was rated 36% (n=5) E, 50% (n=7) G and 7% (n=1) F. One participant chose not to leave a response.

Drugs in type 2 diabetes

Mark Healey delivered a revision session on the drugs used in treating type 2 diabetes, with the emphasis on those most seen in primary care. The presentation was based on a summary of the NICE guideline NG28 (December 2015) – algorithm for blood glucose lowering in adults with type 2 diabetes. The fifteen minute presentation gave a brief overview of the modes of action of common drugs and the stepwise algorithmic approach to treating type 2 diabetes in primary care. The experience and knowledge of participants was reflected in the feedback, and examples of quotes from these were; *'Basic, but good to revisit; quite basic presentation, didn't include all the drugs in NICE eg. Repaglinide'*. One participant listed in response to the question 'What did you find least useful?'; *'Drugs in type 2 diabetes - this was knowledge I already had'*. In response to 'What can you see yourself using in practice?', two participants responded; *'The algorithm for managing type 2 diabetes; I will be using the common drugs in diabetes'*. This session was rated 36% (n=5) E, 36% (n=5) G and 28% (n=4) F.

Diabetic leg examination

Practice nurse, and lecturer in nursing, Judith Magowan (JM), led this session on how to examine a diabetic patients' leg during a diabetes annual review. JM gave a practical demonstration of the process of diabetic leg examination, including the use of monofilaments in assessing diabetic neuropathy. Participants were then encouraged to practice on each other. The practical session was followed by a presentation on the local diabetes foot care pathway. Learning by practice is a well-received method of learning by this group of participants which was reflected in the ratings of 64% (n=9) E and 36% (n=5) G. Comments from the feedback forms included; *'Good reminder; useful interesting review'*; *'Useful – the diabetic foot check because I check patients' feet in practice'*. Comments from 'What can you see yourself using in practice?', were; *'How to do foot checks in diabetes; discussing leg health in diabetics'*.

Diabetes case studies

This session was co-delivered by Dr Laura Sims and JM. Cases were used to discuss treatment of type 2 diabetes and the decision processes involved in managing diabetic patients. Case studies always encourage engagement of the audience. The session was rated 64% (n=9) E and 36% (n=5) G. 50%

(n=7) of participants made comments which identified the sessions on diabetes as being most useful. No participant identified this session as being least useful.

Responses to feedback and comments

All participants left comments in the section 'What did you find most useful and why?' The afternoon sessions on diabetes were divided into separate sessions on the feedback scores, however the comments in this and other sections of the feedback form tended to refer to type 2 diabetes as a complete topic.

What did you find least useful and why? – Two participants left no comment, and two participants commented that everything was useful. The remaining participants referred to sessions where they already felt competent or were unlikely to use in practice.

What can you see yourself using in practice? – One participant chose to leave no comment. All other comments in this section mentioned at least one of the sessions of the day.

Were there any specific highlights or lightbulb moment and if so, what were they? – Three participants left this section blank.

Participants have a wide range of experience, which is reflected in the responses received. This is particularly evident in the sessions on practice IT systems.

Reflections from responses

- The variation in participants' general practice experience was reflected in the responses.
- Diabetes long term condition reviews are relevant to the practice of primary care pharmacy, both in community and practice-based.
- Participants left more constructive criticism on the feedback forms than on previous days.

Reflections from tutor observations

- Learning of common skin conditions would have been more suited to small group quiz.
- Video of real life patient consultations is a good method of learning.
- Diabetic leg examination would have benefited from participants being able to practice more.
- Practice IT systems are difficult to teach with demonstration only.
- Any future course needs to work on developing pharmacists' leadership and shared decision making on drug treatment. Case studies are a good way to improve these skills.

Day 6

The Primary Care Pharmacist – An Introduction

Day 6 – Tuesday 5th July 2016

Feedback report

Introduction

One pharmacist has permanently withdrawn from the project, due to work/training time constraints, one pharmacist was absent due to long term ill health, and one pharmacist was unable to secure locum cover for the day. Therefore 13 pharmacists attended the final day of the CPD course. All participants completed a feedback form.

The day was evaluated by ranking the individual sessions and giving comments. Overall feedback of the day was obtained by written free text answering two questions. Overall feedback of the whole six month course content and design was obtained by written free text answering four questions.

Participants (n=13) were asked to score all sessions of the day, Excellent (E), Good (G), Fair (F), or Poor (P). This report is compiled from the completed feedback forms (n=13). The feedback obtained would be summarised to inform the development of any future course(s).

Operational feedback

The Clinical Skills Resource Centre (CSRC) venue was rated 100% (n=13) E. The quality of training was rated 92% (n=12) E and 8% (n=1) G. The programme material and relevance to primary care practice were rated 77% (n=10) E and 15% (n=2) G. The programme content was rated 77% (n=10) E, 8% (n=1) G, and 8% (n=1) F. The programme material and resources were rated 85% (n=11) E and 8% (n=1) F. One participant abstained from ranking the latter three operational sections.

Programme content ranking

Session	Excellent	Good	Fair	Poor
Clinical skills resource centre - Respiratory	11	1	1	
Clinical skills resource centre – Practice stations	9	4		
MCQ - Evaluation	1	6	2	1
Debate 1 – Pharmacists’ perception of role	7	3		
Debate 2 – View of patients’ and teams perception of role	6	4		

Clinical Skills Resource Centre – Respiratory examination

Feedback from the previous morning in CSRC informed the decision to concentrate on practical clinical skills. Therefore, a session on History Taking was removed from the course content. Six patients agreed and consented to attend the morning in CSRC, and be examined by participants. This provided authenticity and the opportunity to examine an older age group. Pharmacists also had to display professionalism to patients in a clinical environment. Initially, participants attended a briefing on the theory of respiratory examination. The participants were then divided into two groups for a practical demonstration of respiratory examination by the CSRC clinical skills team. The pharmacists then formed into five teams of two and one team of three. Participants were given a patient examination checklist to facilitate the practice and observation of the respiratory examination practice session. The pharmacists then examined the patients whilst being observed by their peers. Roles were then reversed. The GP tutor was available for guidance and feedback throughout the practice session. Ten participants wrote free text comments citing the clinical skills morning as being the most useful of the day. Quotes from the day included; *'Respiratory session, having real patients was really useful'*; *'Respiratory examination. It's useful for respiratory annual reviews in GP practices'*. When asked to comment on the whole six month course, seven participants mentioned clinical skills as being the most relevant to practice. When asked what they would change, one participant commented; *'Needs lots of patients and clinical skills, perhaps even repeated every session so competency can be assured'*. The session was rated 84% (n=11) E, 8% (n=1) G and 8% (n=1) F.

Clinical Skills Resource Centre – Practice Stations

Feedback from participants also informed the decision to revise previous clinical skills from Day 2 of the CPD course. Participants were divided into five teams of two and one team of three. They were then allocated to a patient. A revision of clinical skills sheet was created as a prompt and reminder of the session in March 2016. Each ward had a range of clinical equipment available which enabled the pharmacists to conduct a full clinical examination of real patients. Participants practised vital signs, ENT, eye, diabetic leg, and chest examinations. They were able to call on the GP tutor for any additional guidance on clinical skills examination techniques in practice. Comments received in the section on what participants found most useful included; *'Clinical Skills was very good. Enjoyed "hands-on" and really helped to reinforce learning'*; *'Time to use equipment in the CSRC at Heavitree – now able to see eardrum using otoscope!! Also having trainers observe you doing examination of patient – really helpful having their feedback. Great chance to practise on real patients; practising clinical skill on the real patients, e.g. BP, resp exam, diabetic foot etc'*. The session was rated 69% (n=9) E and 31% (n=4) G.

Multiple Choice Questions (MCQ) – Evaluation

On the first day of the CPD course the participants took part in an initial, unannounced MCQ evaluation. On this occasion participants had been informed by email two weeks before that there would be a closing MCQ section which would contribute to evaluation of the course content. Assessments are unlikely to receive positive feedback. When asked what was the least useful part of the day, one participant commented; *MCQ – hate exams*. Three participants declined to rate the session. The remaining ten participants rated the session 8% (n=1) E, 46% (n=6) G, 16% (n=2) F and 8% (n=1) P.

Debate 1 – Pharmacists’ perception of a primary care role

Three pharmacist experts in primary care pharmacy from the South West region were invited to participate in a debate on the future for pharmacists in this role. Mark Stone, practice pharmacist partner Tamar Valley Health, Sally Mayell head of clinical pharmacy services Livewell Southwest, and Jo Watson head of medicines optimisation South & West Devon CCG. The first debate for discussion was:

Do pharmacists and the pharmacy profession in 2016 have the necessary competence and confidence to undertake a role in practice based primary care?

The debate soon gathered momentum and quickly developed into a lively discussion in which it appeared that the pharmacists took ownership of the debate. The panel members provided a balanced and relevant contribution to the debate, together with motivation and encouragement for the participants to take a leap of faith into extended roles in primary care. The session gave everyone the opportunity to contribute to the discussions. Three participants declined to rate the session. The remaining ten participants rated the first debate 53% (n=7) E and 23% (n=3) G.

Debate 2 – View of patients’ and teams perception of a primary care role

The second debate for discussion was:

Will patients and practice teams integrate, accept and fully utilise practice based pharmacists?

There had been some overlap of discussions from both titles, however the debate continued at a lively pace. Participants and panel members were also encouraged to comment on the future of the profession and its role in primary care. The project tutors and administrator acted as chair, facilitators and scribes for both sessions. Three participants declined to rate the session. The remaining ten participants rated the second debate 46% (n=6) E and 31% (n=4) G.

When asked to comment on what the most useful part of the day was, five participants wrote free text responses which included the debates. Examples of quotes are; *‘Excellent panel; debate afternoon session because it’s thought provoking and have taken a lot to reflect on’*; *‘The Q&A session this afternoon was very informative – to find the different viewpoints of panel and audience’*; *‘Debates and other people’s view of the future’*.

Responses to feedback and comments

The morning in CSRC received the most comments recorded in ‘what did you find most useful and why?’ Clinical skills’ training for pharmacists was an important part of the CPD course. When asked to comment on the relevance of the whole course, seven participants mentioned clinical skills.

The debates gave participants the opportunity to share thoughts and ideas on the current and future practice of primary care pharmacy.

When asked to comment on ‘What did you find least useful and why?’, nine participants left no comment, two commented that it was all useful, one made reference to motivational interviewing from day 4 of the course, and one cited the MCQ as a negative.

Responses to feedback and comments on the content of the whole course

When asked what parts of the course were most relevant to practice, seven of the participants mentioned clinical skills, which might be considered a unique advantage of the course.

Clinical skills also featured in the comments received about how the course may have affected participants' practice. Consultation skills and the holistic approach to patient care were mentioned as areas where pharmacists are now concentrating on in practice.

Participants were invited to make suggestions of what they might change about the course. The only specific clinical area mentioned for addition was COPD. The course content was very broad which was reflected in the comments; *'Some things felt a little rushed at times, but I'm struggling to think of specific examples'*; *'More time on each clinical area – or perhaps pre-reading would be useful. To be able to cover more clinical areas'*.

When asked 'What areas of the course would you add/remove/change?', one participant wrote; *'Most of it. The course, as it stands, does not reflect what pharmacists actually do in practice. I suggest involving more current practice pharmacists in the design'*. However, when asked for any other comments the same participant wrote; *'I have enjoyed the course and really enjoyed the opportunity of being part of the first wave. I hope it will be possible to improve it and continue it. I would be happy to be involved, but as you know, I am outspoken!'*

Reflections from responses

- The overall positive responses of the day indicate the relevance of the course material to practice.
- The comments received for the whole course also shows that the design and development of the course succeeded in remaining relevant and targeted.
- Any future course design would benefit from the experience of a practice pharmacist working at the fringes of competence, who is pushing the role forward.
- Pharmacists feel that they would add value to the management of long term conditions in practice, especially with additional clinical skills training in practice.

Reflections from tutor observations

- Areas of risk management and leadership were not covered in the course. Pharmacists would benefit from training in these qualities.
- The debates aroused some ideas and aspirations and it felt like the beginning of something positive for pharmacists.
- Positive enthusiasm from the panel with two important quotes; *'Confident pharmacists will succeed in PC. Meds governance scheme is a good skill/area to offer to a practice. Conduct a Learning Needs Analysis at the beginning. Need for self-directed learning by pharmacists – get out and practice. Develop own competencies to enable holistic approach and have more to offer to GP practice'*; and; *'Massive requirement for meds reviews to reduce meds costs inc hospital admissions. Pharmacists can offer this skill'*.
- In the clinical skills morning each group would have benefitted from having a tutor each. The lack of tutors led to some degree of unsupervised practice.

- Pharmacists need encouragement to examine and touch patients, rather than just history taking.
- A pharmacist member of the panel suggested that pharmacy graduates should be able to undertake some, or all, of their pre-registration training year in a primary care environment.

APPENDIX 20: Multiple-choice question assessment



The Pharmacist in Primary Care – An Introduction

Multiple Choice Question Assessment

Pre-course paper 9th February 2016

Candidate Name:

Please circle your answers

1. Which of the following is true? Select ONE option only.
 - A. In mild/ moderate acute asthma, the wheeze is usually expiratory
 - B. In mild/ moderate acute asthma, the respiratory rate is usually decreased
 - C. In mild/ moderate acute asthma, a pulse rate of 90 is a “red flag” symptom
 - D. In chronic asthma, peak flow typically reduces between 6am and 12 noon
 - E. In chronic asthma, shortness of breath is an unusual feature

2. In a 45 year old man with a four day history of a painless red eye, which statement is correct? Select ONE option only.
 - A. Allergic eye disease is associated with redness which extends right up to the cornea
 - B. Steroid eye drops would be a good starting point in treatment
 - C. The diagnosis of sub-conjunctival haemorrhage would merit review by a specialist eye nurse
 - D. The drug history is critical
 - E. Persistent local reactions to cromoglycate drops are unusual.

3. Which is NOT part of an annual hypertension check? Select ONE option only.
 - A. Blood pressure
 - B. Retinal screening
 - C. Smoking status and alcohol consumption
 - D. Weight
 - E. Blood test

4. How do you assess blood glucose control at an annual diabetic check? Select ONE option only.

- A. Urine dip
- B. Fasting blood glucose
- C. HbA1C
- D. Capillary ketones
- E. Random blood glucose

5. For the box marked 'X', select the SINGLE most appropriate answer from the options below.

Medical Research Council Dyspnoea Scale
Not troubled by breathlessness except on strenuous exercise
Short of breath when hurrying or walking up a slight hill
Walks slower than contemporaries on the level because of breathlessness, or has to stop for breath when walking at own pace
Stops for breath after walking about 100 m or after a few minutes on the level
X

- A. Short of breath at rest
- B. Short of breath when lying flat
- C. Short of breath or nocturnal wheeze most nights
- D. Too breathless to leave the house, or breathless when dressing or undressing
- E. Productive morning cough

6. A 22 year old lady with asthma has been taking her salbutamol inhaler three times a week for the last four months. She also takes clenil modulite 100 micrograms two puffs twice a day. She is well in herself. On examination her chest is clear, peak flow is 92% of her best and inhaler technique is good. What is the most appropriate next step in management? Select ONE option only.

- A. Add salmeterol inhaler 50 micrograms twice a day
- B. Oral steroids
- C. Switch preventer to symbicort 200/6 one puff twice a day
- D. Refer to hospital
- E. Add montelukast

7. Which of the following is NOT part of a routine annual diabetic foot risk assessment? Select ONE option only.
- A. Measurement of calf circumference
 - B. Inspection of skin
 - C. Palpation of foot pulses
 - D. Testing of foot sensation
 - E. Inspection for deformity
8. A 57 year old lady comes to the surgery worried about her strong family history of cardiovascular disease. You check her blood pressure, do some bloods and calculate her cardiovascular risk. At what level of risk of cardiovascular disease would she benefit from starting a statin? Select ONE option only.
- A. 10-year absolute risk of 5%
 - B. 10-year absolute risk of 10%
 - C. 10 year absolute risk of 20%
 - D. 10-year absolute risk of 40%
 - E. 10-year absolute risk of 55%
9. Vital signs - which is NOT a normal value range? Select ONE option only.
- A. Heart rate: 60 – 100 beats per minute
 - B. Oxygen saturations: 94- 100%
 - C. Capillary refill time: <2 seconds
 - D. Temperature: 36.0-37.2°C
 - E. Respiratory rate: 21 – 25 breaths per minute
10. Which of these drugs has a high anticholinergic burden? Select ONE option only.
- A. Chlorphenamine
 - B. Trazodone
 - C. Fexofenadine
 - D. Gabapentin
 - E. Tramadol
11. Which is NOT a red flag eye symptom? Select ONE option only.
- A. Pain
 - B. Purulent discharge
 - C. Poor vision
 - D. Photophobia
 - E. Pupil abnormality

For each case below, select the SINGLE most appropriate management option. Each option may be used once, more than once or not at all.

12. A 73 year old lady presents with a cough for 4 days productive of green sputum. Examination findings: blood pressure 100/62, respiratory rate 29, SaO₂ 97%, mildly confused, crackles left lung base.
13. A 32 year old man presents with 10 days of a cough productive of green sputum. He is well in himself, with no past medical problems. Examination findings: afebrile, respiratory rate 13, heart rate 68, blood pressure 112/70, chest clear.
- A. Oxygen
 - B. Nebulised salbutamol
 - C. Reassure + safety net
 - D. Refer to GP
 - E. Formulary choice antibiotic
14. Which is NOT one of the Centor criteria? Select ONE option only.
- A. Loss of voice
 - B. Tonsillar exudate
 - C. Tender anterior cervical lymphadenopathy
 - D. History of fever
 - E. No cough
15. Which is a characteristic feature of psoriasis? Select ONE option only.
- A. Scaling
 - B. Crusting
 - C. Blistering
 - D. Swelling
 - E. Oozing
16. Which question is NOT one of the Royal College of Physicians' 'three-questions' for assessing symptomatic control of asthma? Select ONE option only.
- A. Have you had difficulty sleeping because of your asthma symptoms (including cough)?
 - B. Have you had your usual asthma symptoms during the day (cough, wheeze, chest tightness, breathlessness) ?
 - C. In the last week have you used your salbutamol (ventolin) inhaler?
 - D. Has your asthma interfered with your usual activities (e.g. housework, work/ school, etc)?

The Pharmacist in Primary Care – An Introduction

Multiple Choice Question Assessment

Post Course - 5th July 2016

1. Which is NOT part of an annual hypertension check? Select ONE option only.
 - A. Blood pressure
 - B. Smoking status and alcohol consumption
 - C. Weight
 - D. Blood test
 - E. Retinal screening

2. A 22 year old lady with asthma has been taking her salbutamol inhaler three times a week for the last four months. She also takes Clenil Modulite 100[®] two puffs twice a day. She is well in herself. On examination her chest is clear, peak flow is 92% of her best and inhaler technique is good. What is the most appropriate next step in management? Select ONE option only.
 - A. Add salmeterol inhaler 50 micrograms twice a day
 - B. Switch preventer to Budesonide/Formeterol 200/6 one puff twice a day
 - C. Oral steroids
 - D. Refer to hospital
 - E. Add montelukast

3. How do you assess blood glucose control at an annual diabetic check? Select ONE option only.
 - A. HbA1C blood test
 - B. Urine dip
 - C. Fasting blood glucose
 - D. Capillary ketones
 - E. Random blood glucose

4. Which of these processes is NOT part of motivational interviewing techniques such as OARS
 - A. Summarising
 - B. Advice giving
 - C. Reflective listening
 - D. Open questioning
 - E. Affirmations

5. Which is NOT one of the Centor criteria? Select ONE option only.
- A. Tonsillar exudate
 - B. Tender anterior cervical lymphadenopathy
 - C. Loss of voice
 - D. History of fever
 - E. No cough
6. Which of the following is NOT part of a routine annual diabetic foot risk assessment? Select ONE option only.
- A. Inspection of skin
 - B. Palpation of foot pulses
 - C. Testing of foot sensation
 - D. Inspection for deformity
 - E. Measurement of calf circumference
7. A 57 year old lady comes to the surgery worried about her strong family history of cardiovascular disease. You check her blood pressure, do some bloods and calculate her cardiovascular risk. At what level of risk of cardiovascular disease would she benefit from starting a statin? Select ONE option only.
- A. 10-year absolute risk of 5%
 - B. 10-year absolute risk of 10%
 - C. 10 year absolute risk of 25%
 - D. 10-year absolute risk of 40%
 - E. 10-year absolute risk of 55%
8. Vital signs - which is NOT a normal value range? Select ONE option only.
- A. Heart rate: 60 – 100 beats per minute
 - B. Oxygen saturations: 94- 100%
 - C. Respiratory rate: 21 – 25 breaths per minute
 - D. Capillary refill time: <2 seconds
 - E. Temperature: 36.0-37.2°C
9. Which of these drugs has a high anticholinergic burden? Select ONE option only.
- A. Trazodone
 - B. Paracetamol
 - C. Gabapentin
 - D. Chlorphenamine
 - E. Tramadol

10. Which of the following is true? Select ONE option only.
- A. In mild/ moderate acute asthma, the respiratory rate is usually decreased
 - B. In mild/ moderate acute asthma, a pulse rate of 90 is a “red flag” symptom
 - C. In mild/ moderate acute asthma, the wheeze is usually expiratory
 - D. In chronic asthma, peak flow typically reduces in the middle of the day
 - E. In chronic asthma, shortness of breath is an unusual feature
11. Which question is NOT one of the Royal College of Physicians’ ‘three-questions’ for assessing symptomatic control of asthma? Select ONE option only.
- A. Have you had difficulty sleeping because of your asthma symptoms (including cough)?
 - B. Have you had your usual asthma symptoms during the day (cough, wheeze, chest tightness, breathlessness)?
 - C. Has your asthma interfered with your usual activities (e.g. housework, work/ school, etc)?
 - D. In the last week have you used your salbutamol (Ventolin®) inhaler?
12. Which is NOT a red flag eye symptom? Select ONE option only.
- A. Pain
 - B. Poor vision
 - C. Photophobia
 - D. Pruritus
 - E. Pupil abnormality

For each case below (14 & 15), select the SINGLE most appropriate management option. Each option may be used once, more than once or not at all.

- A. Refer to GP
 - B. Oxygen
 - C. Nebulised salbutamol
 - D. Reassure + safety net
 - E. Formulary choice antibiotic
13. A 32 year old man presents with 10 days of a cough productive of green sputum. He is well in himself, with no past medical problems. Examination findings: afebrile, respiratory rate 13, heart rate 68, blood pressure 112/70, chest clear.
14. A 73 year old lady presents with a cough for 4 days productive of green sputum. Examination findings: blood pressure 100/62, respiratory rate 29, SaO₂ 97%, mildly confused, crackles left lung base.

15. Which is a characteristic feature of psoriasis? Select ONE option only.

- A. Crusting
- B. Blistering
- C. Swelling
- D. Scaling
- E. Oozing

16. Which condition is NOT associated with rheumatoid arthritis? Select ONE option only.

- A. Ischaemic heart disease
- B. Osteoporosis
- C. Pulmonary fibrosis
- D. Depression
- E. Eczema

APPENDIX 21: Interview topics guide

The Pharmacist in Primary Care - Interview Schedule

Thank you for agreeing to talk with me and for sending back your completed consent form.

I expect we will talk for about half an hour – do you need to be finished any earlier or by a certain time?

I have some questions to ask about your perceptions and expectations of the Pharmacist in Primary Care training course. There are no right or wrong answers; we are interested in your views and opinions.

I will be tape recording our conversation and take some notes as we are talking (so if I go a bit quiet it's just that I'm writing something down). Your answers will be made anonymous and kept confidential. And if there are any questions that you don't want to answer, or if you want to stop the interview at any time, please just let me know.

Do you have any questions before we begin?

PRE-COURSE

Topic	Question	Prompts
Background information	How long have you been working as a pharmacist?	
	What is your current role? How long have you been in that role?	<i>Are you full or part time? Do you have just one role or do you currently have a portfolio role?</i>
	What drew you to the Pharmacist in Primary Care training course?	<i>What do you hope to get out of it?</i>
	What do you hope to do as a result of the training course?	<i>What are your aspirations for the future?</i>
Clarity of role	Thinking about pharmacists working in primary care...	<i>Includes: GP surgery, Primary care centre, Community pharmacy + GP surgery</i>
	How would you describe the role of a pharmacist in primary care?	
	What are the main differences between a pharmacist in primary care and a GP?	<i>What unique skills or knowledge can a pharmacist offer to primary care?</i> <i>What complementary skills can a pharmacist bring?</i>

	What are the main differences between a pharmacist in primary care and a nurse in primary care?	
	How do you see the role of pharmacists in primary care developing in the future?	<i>What else might they offer? What changes might there be to how pharmacy sits within the team/organisation/primary care?</i>
Perception of competencies needed for a primary care role	Thinking about current pharmacist training (undergraduate and pre-registration), how well do you think this prepares a pharmacist for a role in primary care?	<i>What helps to prepare a pharmacist? What's missing from this training?</i>
	What other training or formal qualifications do you think pharmacists might need for a role in primary care? What level would this be at (certificate, diploma, MSc)?	
	Have you already completed any additional training to help prepare you for this role?	<i>What? When? Who with? What level?</i>
	Thinking about the training and experience you already have... What skills and knowledge do you already have to take into a primary care role?	
	What about any professional values or other attributes? What else do you already have that you could take into a primary care role?	
	What do you feel are the gaps in your current knowledge and experience – what would you like to know more about to enable you to move into a primary care role?	<i>What do you hope this course will cover/add to your knowledge and skills?</i>
Perception of preparedness for a role in primary care	What do you think might be most difficult for a pharmacist moving into primary care?	<i>What barriers might they come up against? E.g. GP resistance, lack of support from management, lack of role clarity, lack of opportunities. What gaps in knowledge/skills might they have?</i>
	How confident do you currently feel about starting a role in primary care?	

	(Expand)	
	Is there anything that you personally would feel anxious or concerned about in starting a role in primary care? (Expand)	
	If you were about to start a role in primary care, what would you be looking forward to the most?	
	Based on what you already know about this course (from the pre-course information), would you have been willing to pay to attend this course? Would your employer have paid for you to attend?	<i>The course is 6 full days – what would be an equivalent cost for this course?</i>
Any other questions or comments?		
Thank you		

POST-COURSE

Topic	Question	Prompts
The training course	Did you attend all of the training course days?	<i>If you were unable to attend, why was this? (e.g. personal, organisational) How easy/difficult was it to get the time for the course?</i>
	Did the course meet your expectations? Did it exceed your expectations or fail to meet them in any way? (Expand)	
	What was your favourite part of the course? Why? Any other “best bits”?	<i>Enjoyable vs. useful Most helpful, relevant, interesting, inspiring, useful... Includes: content, delivery, timing, location, group, tutors...</i>
	What was your least favourite part of the course? Why? Any other “worst bits”?	<i>Least helpful, relevant, interesting, inspiring, useful...</i>
	What is the number one thing you have taken away from this course? OR What are the main things you have taken away from this course?	<i>What makes this thing so important to you? Has it changed your thinking?</i>

	<p>On your evaluation sheet you commented on... Can you tell me a bit more about that?</p> <p>OR</p> <p>On your feedback sheet from Day XX you commented on....Can you tell me a bit more about that?</p>	<p><i>Use evaluation sheet ratings and comments</i></p> <p><i>Ask to elaborate on specific 'lightbulb moments'</i></p>
	<p>Has the course influenced the way that you do your job?</p>	<p><i>How has it influenced you?</i></p> <p><i>Competence/confidence/awareness</i></p>
Clarity of role	<p>Having completed the course...</p> <p>How would you describe the role of a pharmacist in primary care?</p>	<p><i>Includes: GP surgery, Primary care centre, Community pharmacy + GP surgery</i></p>
	<p>Was there anything that surprised you about the role of a pharmacist in primary care? What was that?</p> <p>OR</p> <p>Was there anything that surprised you about the roles of pharmacists in primary care?</p>	<p><i>Has the course changed your ideas about what happens in a GP practice?</i></p>
	<p>What would you say are the main similarities/differences between a pharmacist in primary care and a GP?</p>	<p><i>What unique skills or knowledge can a pharmacist offer to primary care?</i></p> <p><i>What complementary skills can a pharmacist bring?</i></p>
	<p>What would you say are the main similarities/differences between a pharmacist in primary care and a nurse in primary care?</p>	
	<p>How do you see the role of pharmacists in primary care developing in the future?</p>	<p><i>What else might they offer? What changes might there be to how pharmacy sits within the team/organisation/primary care?</i></p> <p><i>Have your thoughts about this been influenced by completing the course?</i></p>
Perception of competencies needed for a primary care role	<p>Now that you've completed this course...</p> <p>How has the course added to the knowledge, skills, or professional values that you need for a role in primary care? What are these?</p>	<p><i>Was there anything missing? Or superfluous? (Expand)</i></p>

<p>Perception of preparedness for a role in primary care</p>	<p>How confident do you currently feel about starting a role in primary care? (Expand) OR How confident do you currently feel about starting, (or extending – for those who already work in primary care) a role in primary care? (Expand)</p>	<p><i>Some already work in primary care/GP practice</i></p>
	<p>Is there anything that you personally would feel anxious or concerned about in starting a role in primary care? (Expand) OR Is there anything that you personally would feel anxious or concerned about in starting, (or extending – for those who already work in primary care) a role in primary care? (Expand)</p>	
	<p>Thinking back to before you started the course, and now, is there any difference in how prepared you feel to take on a role as a pharmacist in primary care? What is the difference? And what has influenced that?</p>	<p><i>Are there any aspects of the job that you do not feel prepared for? Is there anything that could be done to help you prepare for these? What might that be?</i></p>
	<p>What are your career plans now that you have finished the course? Are these the same as 6 months ago (before the course began) or different? What if they already work in a practice role?</p>	
	<p>Based on your experience of this course, would you have been willing to pay to attend this course? Would your employer have paid for you to attend?</p>	<p><i>What would be a reasonable fee for this course? What are the barriers that might stop you/employer being willing to pay for this course?</i></p>
<p>Any other questions or comments?</p>		
<p>Thank you</p>		