

A Training Needs Analysis of Clinical Pharmacists in General Practice



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1 Executive Summary

Background and aims

NHS England is funding a pilot to investigate the role of the clinical pharmacist in the GP surgery. Training will be provided to pharmacists to prepare them for this role. However, there will be GP practices that are not part of the national pilot who want to employ a clinical pharmacist. This is a project supported by the London and South East local teams of Health Education England. All four areas have the intention to support pharmacists working in general practice who are outside the national pilot, but in order to support the pharmacists and make the best use of resources, data on the numbers of pharmacists in general practice and their training needs is required.

The aim of the project is to determine the current numbers of pharmacists working in a clinical patient-facing role in general practice who are not enrolled on the national pilot and to scope and prioritise training needs to inform future commissioning intentions.

Objectives

- To survey pharmacists working in general practice to determine the nature of their role
- To compare the response rate to the survey with data on the current numbers of GP pharmacists obtained from a range of hard and soft intelligence sources (e.g. primary care workforce tool data, initial scoping for the national pilot, intelligence from networks such as CCG Heads of Medicines Management) in order to provide information on the current numbers of pharmacists working in general practice likely to require training for the role
- To determine the training needs of pharmacists currently working in a patient-facing role in general practice
- To determine how the training needs of pharmacists relatively new to the role compares with the training needs of more experienced pharmacists
- To prioritise the training needs of pharmacists currently working in general practice in order to inform future commissioning intentions

Methods

A questionnaire was designed to be completed by pharmacists already working in general practice in a patient-facing role. The questionnaire asked pharmacists to rate their current level of knowledge on a 5-point Likert scale against learning outcomes derived from the themes in the CPPE National Learning Pathway for Developing Clinical Pharmacists in General Practice. The scale was 1=I know nothing, 2=I know a little, 3=I know an adequate amount, 4=I know a lot, 5=I am an expert. The questionnaire was distributed to Heads of Medicines Management with the CCGs in the study area who were asked to forward it to the practice managers in all GP surgeries in their area and any individual practice pharmacists they knew of. Practice managers were asked to forward the questionnaire to any practice pharmacists with a patient-facing role.

Median scores were calculated for each of the themes and subthemes in the questionnaire. A median of 3 or below was taken to indicate a training need (3=I know an adequate amount).

Summary of Findings

32 pharmacists with a patient-facing role completed the questionnaire.

Demographic Information

- Level of experience was evenly split amongst the pharmacists (16 junior level and 16 senior level).
- Junior pharmacists were younger and had been on the pharmaceutical register for less time than senior pharmacists.
- Two thirds (20) of the pharmacists were employed by the GP surgery; the CCG employed 11 of the pharmacists; one pharmacist described themselves as a subcontracted company director.
- Pharmacists most commonly worked for one practice, with a median of two practices and a range of 1-10 practices.
- Two thirds (21) of the pharmacists spent less than 40% of their practice time in a patient-facing role.
- Community pharmacy was the most common sector for previous experience (22 pharmacists), followed by hospital pharmacy (14 pharmacists).
- 22 pharmacists reported working in another sector of pharmacy in addition to their practice role. Community pharmacy was the most common sector for other work.
- Pharmacists had between 0-19 years' experience as a practice pharmacist. Seven senior level pharmacists and 11 junior level pharmacists had less than three years' experience as a practice pharmacist.
- Twelve pharmacists were qualified independent prescribers. Only one of these was a junior level pharmacist.
- Senior level pharmacists were more likely to hold a PG Diploma than junior pharmacists.

Training Needs

An overview of the training needs can be found in table 11 on page 20 of this report.

- Based on the training needs analysis in the questionnaire, training needs for this group of respondents overall centred around themes 3, 5, 6 and 9. These were: Clinical Assessment, examination and monitoring; Long-term conditions; Common ailment management; and Leadership and Management.
- Junior pharmacists had significantly greater needs in Theme 7 than senior pharmacists (Medicines Optimisation, multimorbidity and polypharmacy).
- Junior pharmacists have significantly greater training needs than senior pharmacist in the following areas:
 - 2.1 Features of good quality prescribing
 - 7.3 Deprescribing
 - 7.4 Drug-related admissions
 - 8.5 Audit

- In an open response question asking about overall training needs, the most commonly reported were around understanding GP systems, becoming an Independent Prescriber and consultation skills.

An analysis of the open response questions within the questionnaire revealed the following key points for consideration:

- Pharmacists stated that the independent prescribing preparatory course provides more than just the legal ability to prescribe. It also trains pharmacists in the areas covered in Themes 2 (Person-centred, safe and quality prescribing), 3 (Clinical assessment and examination skills), and 4 (consultation skills). It also provides mentoring and support in the form of the designated medical practitioner (DMP).
- Some pharmacists found it difficult to stay up to date with changes such as in NHS structure, or in the evidence and evidence-based practice as they were not on CCG mailing lists. They found they were left out of circulation lists for educational events.
- Pharmacists wanted training that was specifically aimed at pharmacists.
- Pharmacists reported a lack of understanding about the role of the practice pharmacist within NHS trusts and MDT teams. There needs to be greater clarity between the roles and responsibilities of the practice pharmacist and the medicines management team.
- Peer support, coaching and mentoring was highly sought after.
- Lack of funding and lack of time were common barriers to accessing training.

Key recommendations from this report

- Funding for pharmacist in a patient-facing GP practice based role to train as Independent Prescribers should be prioritised.
- Consideration should be given to funding pharmacist to complete a PG Diploma that could incorporate the Independent Prescribing Preparatory Course and would cover other areas required for a role as a pharmacist in general practice. A PG diploma would provide appropriate and quality assured training. Offering a distance learning diploma could help overcome time barrier since pharmacists would not require time away from the practice to attend study days.
- Local peer support, coaching and mentoring schemes are needed.
- Work needs to be undertaken to increase the understanding of the practice pharmacist role within the NHS.
- Practice pharmacists need to be included in circulations for updates and training from CCGs.

A Training Needs Analysis of Clinical Pharmacists in General Practice Outside the National Pilot

Project and report by Dr Elizabeth Mills, Centre for Professional Development and Lifelong Learning, School of Pharmacy, Keele University. With thanks to Zehra Safdar, Yogendra Parmar and Atif Shamim for supporting the communications and data collection element of the project.

2 Aim

To determine the current numbers of pharmacists working in a clinical patient-facing role in general practice who are not enrolled on the national pilot and to scope and prioritise training needs to inform future commissioning intentions.

Objectives

- To survey pharmacists working in general practice to determine the nature of their role
- To compare the response rate to the survey with data on the current numbers of GP pharmacists obtained from a range of hard and soft intelligence sources (e.g. primary care workforce tool data, initial scoping for the national pilot, intelligence from networks such as CCG Heads of Medicines Management) in order to provide information on the current numbers of pharmacists working in general practice likely to require training for the role
- To determine the training needs of pharmacists currently working in a patient-facing role in general practice
- To determine how the training needs of pharmacists relatively new to the role compares with the training needs of more experienced pharmacists
- To prioritise the training needs of pharmacists currently working in general practice in order to inform future commissioning intentions

3 Background

In February 2015 the Royal Pharmaceutical Society (RPS) and the Royal College of General Practice (RCGP) released a joint statement announcing their belief that pharmacists working in GP practices could help relieve the pressure on the GP service and increase capacity to improve patient care¹. They pledged to work together to promote the use of pharmacists in GP surgeries. In July 2015 NHS England announced a three year pilot to test the role of clinical pharmacists working in general practice. The pilot is to support the work of the GP Workforce 10 Point Plan². In October 2015 NHS England announced an increase in the budget for this pilot from £15 million to £31 million. This money will part-fund 403 new clinical pharmacist posts across 73 sites covering 698 practices in England³. Pharmacists who are recruited to a clinical pharmacist post in a GP practice that is part of this pilot will have access to a training pathway funded through the pilot and delivered by the CPPE⁴. This training pathway includes a residential course, online and self-directed study, and mentoring by an experienced practice pharmacist.

There will be GP practices that are not part of the national pilot who want to employ a clinical pharmacist. Those pharmacists are likely to require some training to undertake the role. There are pharmacists who are already working in GP practices. There is currently a lack of data on those pharmacists, how many there are, their experience, the level of their role and their training needs.

Pharmacists working in general practice may be employed through a variety of mechanisms including:

- Through CCGs
- Through community pharmacies providing services to GP practices
- Employed directly by the practice
- Employed by secondary care but providing outreach services in practices

Data is available through the Primary Care Workforce tool on the numbers of pharmacists employed directly by practices. CCG Heads of Medicines Management will have data on the numbers of pharmacists employed by the CCG in a clinical role in practices in their area. There is no specific data available on the number of pharmacists employed through different mechanisms and working in general practice. This project aims to gather information on the numbers of pharmacists working in a patient-facing role in general practice in the London and South East local teams of Health Education England.

This is a project supported by the London and South East local teams of Health Education England. All four areas have the intention to support pharmacists working in general practice who are outside the national pilot, but in order to support the pharmacists and make the best use of resources data on the numbers of pharmacists in general practice and their training needs is required.

For the purpose of this project a clinical pharmacist in general practice is defined as a pharmacist with a patient-facing role as opposed to a pharmacist employed by a CCG, for example, whose role may not include seeing patients but rather focuses on medicines management.

4 Methods

Questionnaire design

A questionnaire was designed to be completed by pharmacists already working in general practice. Since the questionnaire was to be distributed via e-mail, it was designed using Google Forms. The questionnaire was split into four sections. The first section collected demographic data including information about the pharmacist's role in general practice, their level of practice, their previous experience and qualifications and training.

The second section focussed on the training needs of the pharmacists completing the questionnaire. The training needs were presented in 9 themes, corresponding to those defined in the national learning pathway for developing clinical pharmacists in general practice, developed by the CPPE⁵. Permission was sought from and granted by the CPPE to use the national learning pathway for this project. This national learning pathway formed the basis of the statements (defined as learning outcomes) within each theme. Pharmacists were asked to rate their knowledge about each learning

outcome on a five point Likert Scale ranging from 'I know nothing' to 'I am an expert'. At the end of the learning outcomes from each theme, pharmacists were able to provide some free text response. Respondents had to complete all questions in section 2 in order to move through the questionnaire.

The third section of the questionnaire included questions about the support available to the pharmacist for their development within their role as a practice pharmacist.

The final section asked if pharmacists were willing to be contacted regarding any follow up from the questionnaire. Completion of this section was optional. Therefore the responses to the questionnaire were anonymous unless the pharmacists chose to complete this section.

The questionnaire was reviewed by the project team and then piloted by four pharmacists working in general practices. Minor amendments were made to the questionnaire as a result of feedback from this pilot.

Distributing the Questionnaire

There is no defined list of pharmacists working in GP practices either nationally or locally. Therefore, accessing the target population required a different approach. Since the aim of the project was to target those pharmacists already working in general practices a sensible approach was to target the GP practices in the project areas.

This project took place across the four London and South East local teams of Health Education England. These were: South London, North West London, North East and Central London, and Kent Surrey and Sussex. The project team included a pharmacy representative from each of these areas with links to the Medicines Management teams within the local Clinical Commissioning Groups (CCGs). The local CCGs hold the contact details of all the GP practices within their area. In addition, the Medicines Management leads in the local CCGs may hold the contact details of some individual practice pharmacists. These contacts were utilised in the distribution of the questionnaire.

Figure 1 depicts the approach to distributing the questionnaire to ensure it reached as many practice pharmacists as possible. The project team member in each of the four areas contacted all the Head of Medicines Management (HOMMs) within the CCGs in their area via e-mail, with an explanation of the project. The HOMMs were asked to contact the practice managers of all the GP practices in their CCGs, and any individual pharmacists they knew to work in practices. They were provided with some suggested text to use for these e-mails and the link to the questionnaire. They were asked to inform the project team of the number of practices and individual pharmacists they had contacted. The practice managers in the GP practices were asked, in the e-mail from the HOMMs, to forward the e-mail to any pharmacists working in the practice in a patient-facing role. Appendix 1 shows the text of the e-mails used to distribute the questionnaire. There was a risk, using this approach, that some pharmacists may receive the questionnaire more than once; from the Medicines Management lead and from any practices they work in (pharmacists could potentially work in more than one practice). Pharmacists were instructed only complete the questionnaire once.

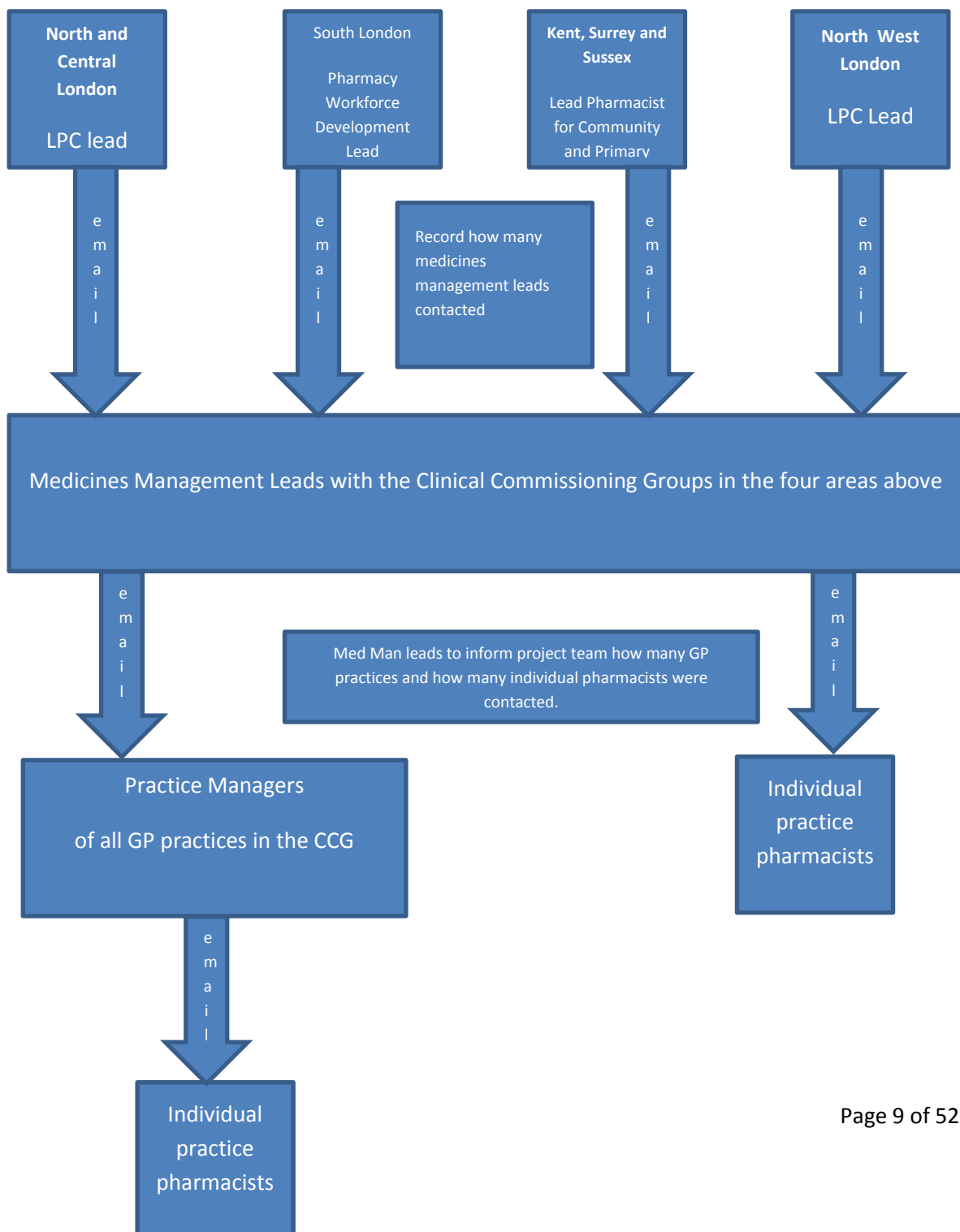
To ensure the maximum response rate a period of eight weeks was allowed between the initial e-mail being sent to the HOMMs and the cut off for responses to the questionnaire. This included the

Christmas period. Follow up e-mails were sent to the HOMMs as deemed appropriate by the project team and based on their initial response.

Gaining support for the project

Since distribution of the questionnaire relied on people outside of the project team, it was essential to gain their support for the project. The Head of Pharmacy for Health Education England (London and South East) introduced the project to the Heads of Primary Care for the CCGs prior to the project starting, and sent a personal letter to the Heads of Medicines Management in the project areas.

Figure 1 Distribution of Questionnaire



5 Analysis

Data from the survey was automatically collected in an Excel spreadsheet as respondents completed the questionnaire. Once the survey had closed data was exported to an SPSS database. The data were checked and cleaned in SPSS to ensure the integrity of the data.

Demographic data collected in section 1 was analysed using descriptive statistics. The survey items in section 2 were analysed within the nine themes from the CPPE National Learning pathway⁵. The items within each theme and each of the subthemes within it were subjected to reliability analysis to measure the theme or subtheme's internal consistency. (See table 1 for the themes and subthemes used in the analysis). A threshold of 0.7 for Cronbach's alpha was used to determine the reliability of the themes⁶. A median score was calculated for each theme and subtheme to enable comparison between the themes. The median scores maintained the Likert scale response categories which were 1=I know nothing, 2=I know a little, 3=I know an adequate amount, 4=I know a lot, 5=I am an expert. Where there was only one item in a subtheme, the score for that item was used. Themes and subthemes with a median score of 3 were considered a priority for training, 3 being 'I know an adequate amount', and scores of less than 3 were high priority (2=I know a little, 1=I know nothing).

In order to compare the training needs of pharmacists who were relatively new to the post with those who have more experience, pharmacists were grouped into 'Junior' or 'Senior' role based on their response to this question in the questionnaire. Responses were compared between the groups using the Mann U Whitney test. Responses to open questions were analysed for themes and these are reported with example quotes.

Table 1 Overview of themes and subthemes within the questionnaire used to analyse training needs

Theme	Subthemes
1 Fundamentals of General Practice	1.1 NHS Structure and general practice 1.2 Introduction to local general practice 1.3 Prescribing Data 1.4 Clinical information systems 1.5 Working with the multidisciplinary team 1.6 Working with community pharmacy 1.7 Professionalism 1.8 Public Health
2 Person-centred, safe and quality prescribing	2.1 Features of good quality prescribing 2.2 Antimicrobial stewardship 2.3 Safe and effective repeat prescribing
3 Clinical assessment, examination and monitoring	3.1 Clinical assessment 3.2 Physical assessment 3.3 Patient monitoring
4 Consultation and communication skills	4.1 Communication skills 4.2 Person-centred practice 4.3 Education and training
5 Long-term condition management	5.1 Long term conditions 5.2 Pathways of care 5.3 Prescribing for people with learning disabilities and dementia or prescribing review for priority conditions
6 Common ailment management	Common ailment management
7 Medicines optimisation, multimorbidity and polypharmacy	7.1 Medicines optimisation 7.2 Medicines review and polypharmacy 7.3 Deprescribing 7.4 Drug-related admissions 7.5 Medicines reconciliation 7.6 Care homes
8 Evidence based medicine and safety	8.1 Evidence-based medicine 8.2 Formularies, policies and guidance 8.3 Safety 8.4 Medicines Information 8.5 Audit
9 Leadership and management	9.1 Leadership 9.2 Management

6 Results

Responses were received from 52 pharmacists in total. Twenty of the respondents reported that they did not have a patient-facing role in the practice. Since this project aimed to determine the training needs of pharmacists currently working in a patient-facing role in general practice, these 20 respondents were excluded from further analysis. The number of respondents included in further analysis, therefore, was 32.

The distribution methods meant that it is not known how many pharmacists were sent the questionnaire; therefore it was not possible to determine a response rate. Table 1 shows the numbers of Heads of Medicines Management (HOMMs) contacted by the project team in each area, and the responses received from the HOMMs with details of the number of practices and individual pharmacists contacted. Not all HOMMs supplied this information, therefore Table 1 can only be used a rough estimate of how many pharmacists were sent the questionnaire. The estimation of the number of practice pharmacist in the area is based on hard and soft intelligence sources including the information supplied by the HOMMs, information from other local networks and the primary care workforce tool¹.

Table 2 Response to Questionnaire by LETB Area

Area	Number of HOMMs contacted	Number of HOMMs who confirmed that practices have been contacted	Number of GP Practices contacted	Number of Individual Pharmacists contacted	Estimation of number of practice pharmacists in the area	Number of respondents in area (n=31, one respondent did not know which LETB area they worked in)
South London	14	11	At least 60 but not all HOMMs supplied numbers	At least 7 but not all HOMMs supplied numbers	7	8
North West London	9	4	No numbers of practices supplied	At least 9 but not all HOMMs supplied numbers	9 + 1 about to be recruited	10
North East and Central London	13	5	No numbers of practices supplied	At least 3 but not all HOMMs supplied numbers	3 + 6 about to be recruited	5
Kent, Surrey and Sussex	23	8	At least 87 but not all HOMMs supplied numbers	At least 3 but not all HOMMs supplied numbers	12	8

Demographic Information

Summary of Demographic Information

- Level of experience was evenly split amongst the pharmacists (16 junior level and 16 senior level).
- Junior pharmacists were younger and had been on the pharmaceutical register for less time than senior pharmacists.
- Two thirds (20) of the pharmacists were employed by the GP surgery; the CCG employed 11 of the pharmacists; one pharmacist described themselves as a subcontracted company director.
- Pharmacists most commonly worked for one practice, with a median of two practices and a range of 1-10 practices.
- Two thirds (21) of the pharmacists spent less than 40% of their practice time in a patient-facing role.
- Community pharmacy was the most common sector for previous experience (22 pharmacists), followed by hospital pharmacy (14 pharmacists).
- 22 pharmacists reported working in another sector of pharmacy in addition to their practice role. Community pharmacy was the most common sector for other work.
- Pharmacists had between 0-19 years' experience as a practice pharmacist. Seven senior level pharmacists and 11 junior level pharmacists had less than three years' experience as a practice pharmacist.
- Twelve pharmacists were qualified independent prescribers. Only one of these was a junior level pharmacist.
- Senior level pharmacists were more likely to hold a PG Diploma than junior pharmacists.

Table 3 shows the age range of the pharmacists. Junior pharmacists were more likely to be in the younger age groups ($p=0.025$) and it therefore follows that there was a significant difference in the length of time junior and senior pharmacists had been in the pharmaceutical register ($t=2.750$, $p=0.01$, mean for junior pharmacists = 8.88 years, mean for senior pharmacists = 17.81 years).

Table 3 Age range of pharmacists

Age Range	No. of Junior Pharmacists	No. of Senior Pharmacists	Total
21-30 years	8	0	8
31-40 years	4	8	12
41-50 years	3	5	8
51-60 years	1	2	3
61-70 years	0	1	1

Eighteen pharmacists worked full-time, and fourteen part-time. The majority spent less than 40% of their time in practice a patient-facing role (table 4).

Table 4 Proportion of Time Spent Face-to-Face with Patients in the Practice

Time spent face to face with patients	Number of Pharmacists (n=32)
Less than 20%	11 (34%)
21-40%	10 (31%)
41-60%	3 (9%)
61-80%	6 (19%)
81-100%	2 (6%)

The pharmacists were asked how they would describe the level of their role in the GP practice. The responses were evenly split between entry level (junior) and advanced level (senior) with sixteen in each group. Junior practice pharmacists spent slightly less of their practice time face-to-face with patients than senior pharmacists, but this was not found to be statistically significant (13 junior pharmacists spent less than 40% of their time face-to-face with patients, compared with 8 senior pharmacists).

Twenty pharmacists reported being employed directly by the GP surgery. Eleven were employed by a Clinical Commissioning Group (CCG) and one described their employment as “subcontracted Company Director”. There was no difference in employer between junior and senior pharmacists.

Three pharmacists reported having a second employer in their practice role. The combinations of employers are reported in Table 5.

Table 5 Combinations of Employer (n=3)

Respondent	Employer 1	Employer 2
1	GP Practice	CCG
2	CCG	A Clinical Support Unit (CSU)
3	GP Practice	A secondary care trust

Pharmacists were asked the number of practices that they worked for in an average week. Responses ranged from 1 to 10 practices with a mode of 1 practice and median of 2 practices. There was no difference in the number of practices worked in between junior and senior pharmacists.

All pharmacists had worked in another sector of pharmacy prior to taking up practice work. Twenty-two of these had previous experience of working in one sector of pharmacy, five had worked in two different sectors, four had worked in three different sectors and one pharmacist in four sectors. Community pharmacy was the most common sector of practice for previous experience (table 6).

Table 6 Sector of pharmacy worked in prior to becoming a practice pharmacist

Sector	No. of Junior Pharmacists	No. of Senior Pharmacists	Total
Community Pharmacy	10	12	22
Hospital Pharmacy	8	6	14
Pharmaceutical Industry	0	2	2
Academia	0	3	3
Other Pharmacy-Related Role	0	6	6
Other non-Pharmacy Related Role	1	0	1

No significant difference was found between junior and senior pharmacists in terms of amount or sector of previous experience, with the exception of 'Other Pharmacy-Related Role' where senior pharmacists were more likely to have some experience in this role than junior pharmacists ($p=0.018$)

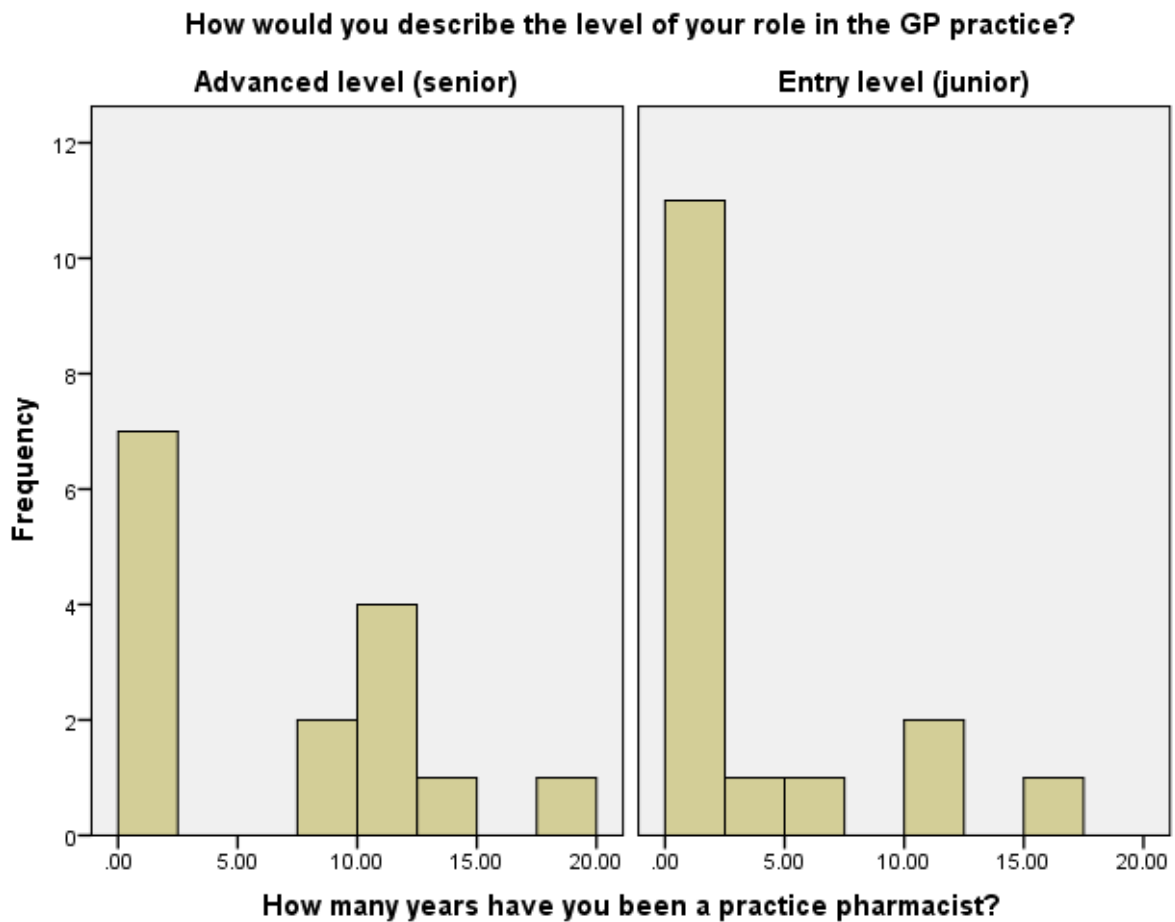
Twenty-two pharmacists reported still working in another sector of pharmacy, in addition to their practice work. This is shown in table 7. The difference between junior and senior pharmacist was significant ($p=0.039$) with senior pharmacists working in a wider variety of sectors. This is perhaps not surprising as senior pharmacists have more experience to draw on in order to take on different roles.

Table 7 Sector of pharmacy where pharmacists continue to work

Sector	No. Junior Pharmacists	No. Senior Pharmacists	Total
Community Pharmacy	10	3	13
Hospital Pharmacy	1	2	3
Pharmaceutical Industry	0	0	0
Academia	0	2	2
Other Pharmacy-Related Role	0	2	2
Other non-Pharmacy Related Role	0	2	2

Pharmacists had reported having worked as a practice pharmacist for between 0 to 19 years, with a mean of 5.3 years and a median of 2 years. Figure 2 shows the number of years in practice comparing senior and junior pharmacists. Surprisingly, any differences in length of time in practice between junior and senior pharmacist were not found to be significant.

Figure 2 Length of time in practice role compared with level of role



Nine pharmacists reported holding no postgraduate qualifications at all. The remaining pharmacists reported holding between one and four postgraduate qualifications. Table 8 shows the different types of qualifications held, with significant differences highlighted in bold. Senior pharmacists were more likely to hold a PG Diploma or a prescribing qualification. Of the twelve pharmacists who were qualified as prescribing pharmacists, nine reported prescribing less than 50 items each month; one reported prescribing less than 100 items; one less than 200; and one prescribed 200 or more items. The junior pharmacist who was a prescriber prescribed less than 50 items a month. Three pharmacists reported currently studying for a prescribing qualification: two senior pharmacists and one junior pharmacist.

Pharmacists described accessing training from a variety of sources in order to develop as a practice pharmacist, including postgraduate qualifications, conferences, CPPE learning packages, training organised by the CCGs and their own reading (Table 9).

Three pharmacists reported that the practice they worked in was part of the national pilot: two of these were senior pharmacist and one was a junior pharmacist.

Table 8 Postgraduate Qualifications held by senior and junior pharmacists

PG Qualification	No. of Junior Pharmacists	No. of Senior Pharmacists	Total
PG Certificate	3	7	10
PG Diploma	3	12 (p=0.004)	15
MSc	1	1	2
MBA	0	0	0
Doctorate	0	3	3
Prescribing (SP or IP or both)	1	11 (p=0.001)	12

Table 9 Training undertaken or currently being undertaken in order to develop as a practice pharmacist

<i>Training Previously Undertaken to Develop as a Practice Pharmacist</i>		Training Currently being Undertaken to Develop as a Practice Pharmacist	
General Description of Training	Example	General Description of Training	Example
<i>Conferences in relevant area</i>	<i>Clinical Pharmacy Congress</i>		
<i>Work shadowing/placements</i>		Work shadowing/placements	
<i>CPPE courses</i>	<i>Fundamentals of working in a GP practice</i>	CPPE Courses	Mentoring training
<i>Courses arranged by CCG</i>		Courses arranged by CCG	Diabetes Foundation Course
<i>Own reading</i>		Own reading	e.g NICE Guidelines
<i>PG qualifications</i>	<i>Asthma Diploma, MSc modules in prescribing support</i>	PG Diploma	
<i>Clinical Study days</i>	<i>Arranged by NPC Arranged by LPET Anticoagulation Vaccination Life Support training Resuscitation</i>	Clinical Study Days	Auscultation Course LPET Peer group sessions
<i>e-learning modules</i>	<i>Future Learn Adherence Course</i>		
<i>Independent Prescribing Course</i>		Independent Prescribing Course	
		Other Courses	Motivational Interviewing RPS organised courses BMA e-learning

7 Training needs analysis

Summary of Training Needs Analysis

- Based on the training needs analysis in the questionnaire, training needs for this group of respondents overall centred around themes 3, 5, 6 and 9. These were: Clinical Assessment, examination and monitoring; Long-term conditions; Common ailment management; and Leadership and Management.
- Junior pharmacists had significantly greater needs in Theme 7 than senior pharmacists (Medicines Optimisation, multiborbidity and polypharmacy).
- Junior pharmacists have significantly greater training needs than senior pharmacists in the following areas:
 - 2.1 Features of good quality prescribing
 - 7.3 Deprescribing
 - 7.4 Drug-related admissions
 - 8.5 Audit
- In an open response question asking about overall training needs, the most commonly reported were around understanding GP systems, becoming an Independent Prescriber and consultation skills.

Pharmacists were asked in an open response question to describe their main training need for their role as a practice pharmacist. A summary of their responses is shown in Table 10. Understanding GP systems, becoming an independent prescriber and consultation skills were the most common training needs described in the responses.

Table 10 Main training need for role as a practice pharmacist as described by the pharmacists

Training needs	Number of pharmacists stating this need
Diagnosis and assessment	2
Understanding laboratory tests and results	3
Physical examination skills	2
Immunisation	1
Understanding GP systems e.g. computer systems, QOF, the GP contract	6
Communication skills	1
Antibiotic prescribing	1
Becoming an Independent Prescriber	5
A Clinical Diploma	1
Consultation Skills	4
Referral pathways	2
Health Coaching	1
Training on specific disease areas	1
Medicines Management	1
Budget setting and finance	1
Masterclasses to keep up to date and network	1
How to use tools to capture data on prescribing	1

Reliability analysis was performed on the themes and subthemes within the questionnaire. Cronbach's alpha was greater than 0.7 for all themes and subthemes and so further analysis was carried out using the themes and subthemes as they were presented in the questionnaire. Appendix 2 details the results of the reliability analysis and also serves to provide information on the individual items within the themes and subthemes.

Table 11 presents the median scores for all pharmacists and then split by level of role. The themes and subthemes with a score of three or less are highlighted.

Table 11 Median scores for themes and subthemes. (Shaded boxes signify a training need; red text a priority training need; bold and italics a significant difference between the scores of senior and junior level roles)

Theme	Median Score (priority training needs highlighted)			Subthemes	Median Score (priority training needs highlighted)		
	All Pharmacists	Junior pharmacists	Senior Pharmacists		All Pharmacists	Junior pharmacists	Senior Pharmacists
1 Fundamentals of General Practice	3.5	3	4	1.1 NHS Structure and general practice	3	3	3.5
				1.2 Introduction to local general practice	3	3	4
				1.3 Prescribing Data	3.75	3	4
				1.4 Clinical information systems	4	4	4
				1.5 Working with the multidisciplinary team	3.5	3	4
				1.6 Working with community pharmacy	4	4	4
				1.7 Professionalism	4	4	4
				1.8 Public Health	3	3	3
2 Person-centred, safe and quality prescribing	4	3.5	4	2.1 Features of good quality prescribing	4	3	4
				2.2 Antimicrobial stewardship	3.25	3	3.75
				2.3 Safe and effective repeat prescribing	4	4	4
3 Clinical assessment, examination and monitoring	3	3	3	3.1 Clinical assessment	3	3	3
				3.2 Physical assessment	2	1.5	2.5
				3.3 Patient monitoring	4	3	4
4 Consultation and communication skills	3.5	3.25	3.75	4.1 Communication skills	4	4	3.5
				4.2 Person-centred practice	3	3	4
				4.3 Education and training	3.5	2.75	3.5
5 Long-term condition management	3	3	3	5.1 Long term conditions	3.75	3.5	3.75
				5.2 Pathways of care	3	3	3
				5.3 Prescribing for people with learning disabilities and dementia or prescribing review for priority conditions	3	2.5	3
6 Common ailment management	3	2.75	3	Common ailment management	3	2.75	3
7 Medicines optimisation, multimorbidity and polypharmacy	4	3	4	7.1 Medicines optimisation	3.5	3	4
				7.2 Medicines review and polypharmacy	4	3.5	4
				7.3 Deprescribing	3	2.75	3.75
				7.4 Drug-related admissions	3	2.5	4
				7.5 Medicines reconciliation	4	3.5	4
				7.6 Care homes	3	2.5	3.5
8 Evidence based medicine and safety	4	3.5	4	8.1 Evidence-based medicine	4	3.5	4
				8.2 Formularies, policies and guidance	4	3.5	4
				8.3 Safety	4	3	4
				8.4 Medicines Information	4	4	4
				8.5 Audit	4	3.25	4
9 Leadership and management	3	3	3	9.1 Leadership	3.25	3	3.5
				9.2 Management	3	3	3

Figure 3 below shows the median theme scores for all respondents. The median score was three for themes 3, 5, 6 and 9 suggesting that these are areas of training need for all pharmacists.

Figure 3 Median Theme Scores (see table 10 for key to the themes)

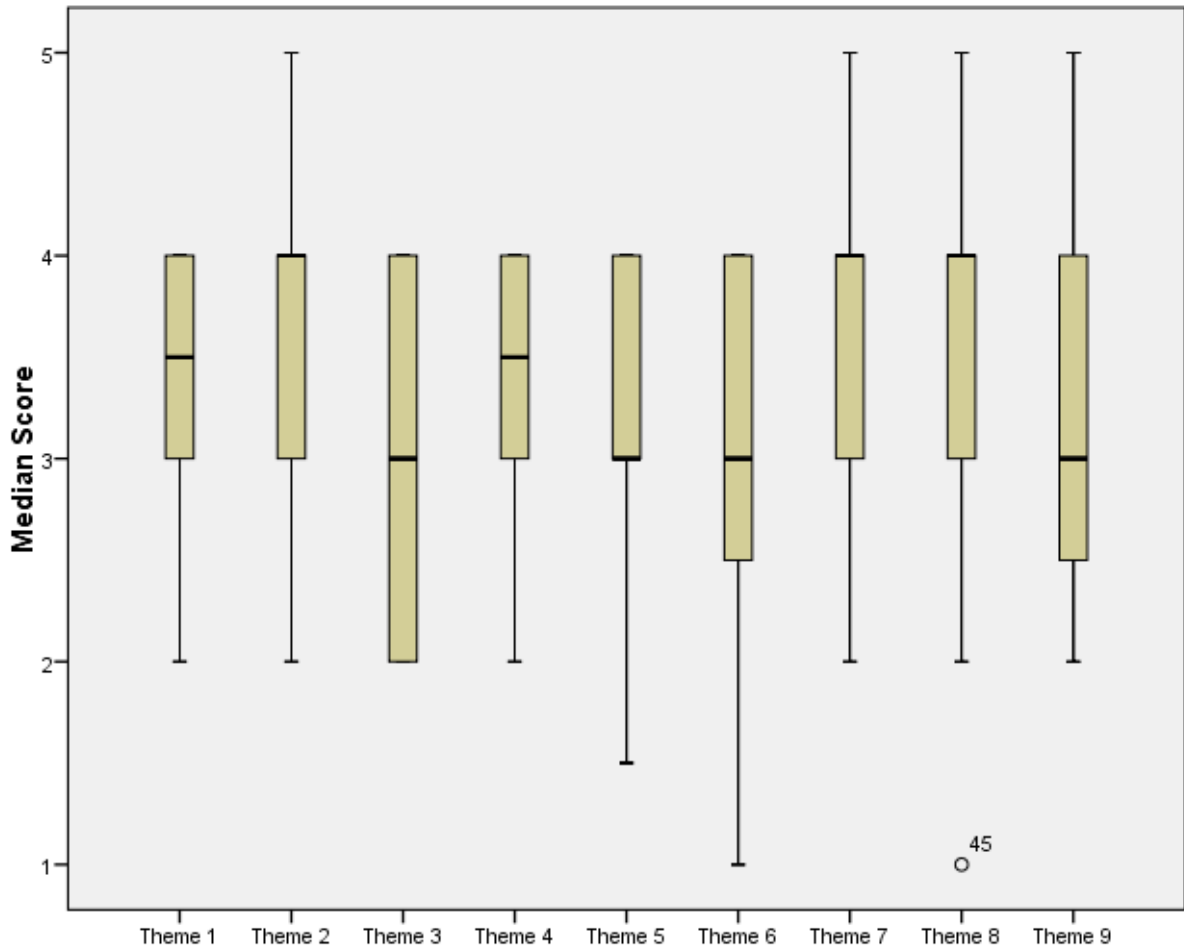
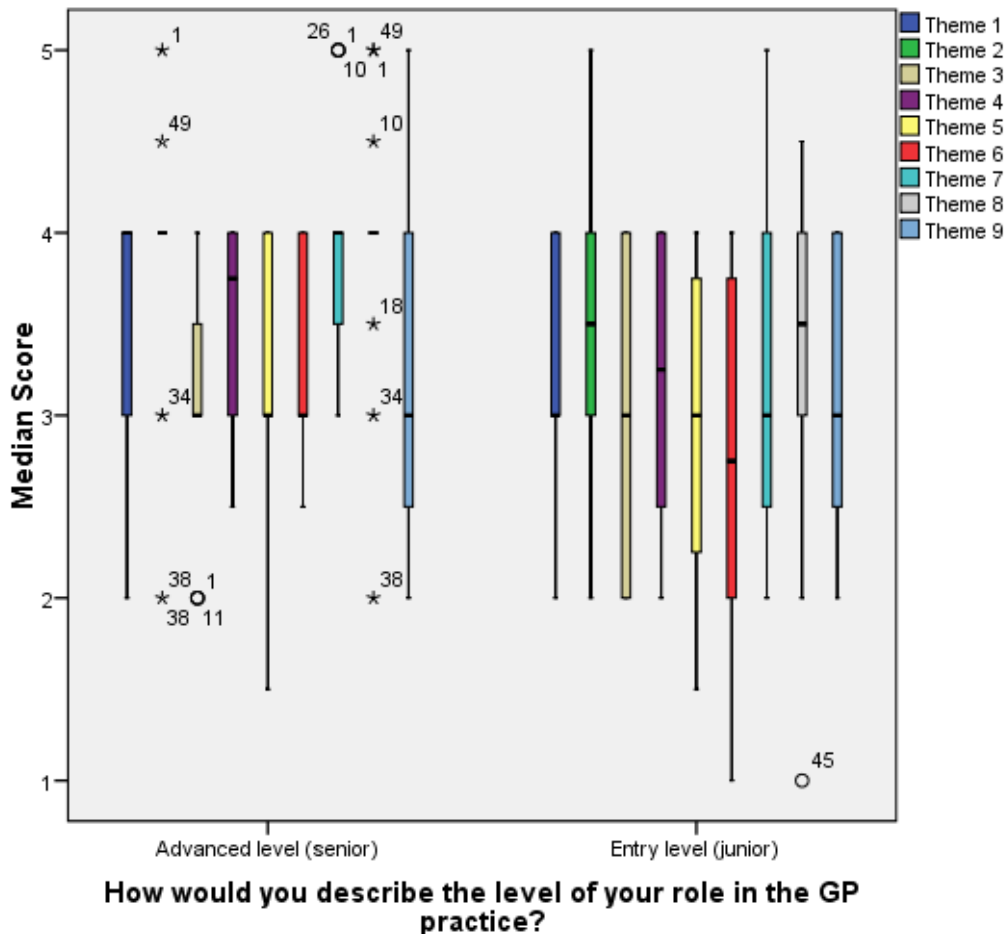


Figure 4 below shows the median scores for each theme by level of practice. There was a significant difference in theme score between senior and junior pharmacists in theme 7 ($p=0.047$). Junior pharmacists scored lower in this theme than senior pharmacists, thus highlighting learning needs around medicines optimisation, multimorbidity and polypharmacy.

Figure 4 Median Theme Scores by level of practice



Theme 1 – The Fundamentals for General Practice

Figures 5 and 6 below show the median scores for Theme 1, the fundamentals of General Practice. Using the median value of 3 as the threshold, figure 5 shows that the whole group of pharmacists had learning needs around themes 1.1, 1.2 and 1.8 (NHS structure and general practice, Introduction to local general practice and public health).

When comparing scores in the subthemes between senior and junior pharmacists (figure 6) no significant differences were found between the training needs of senior and junior pharmacists for Theme 1.

Figure 5 Median scores for all pharmacists Theme 1 – The Fundamentals of General Practice

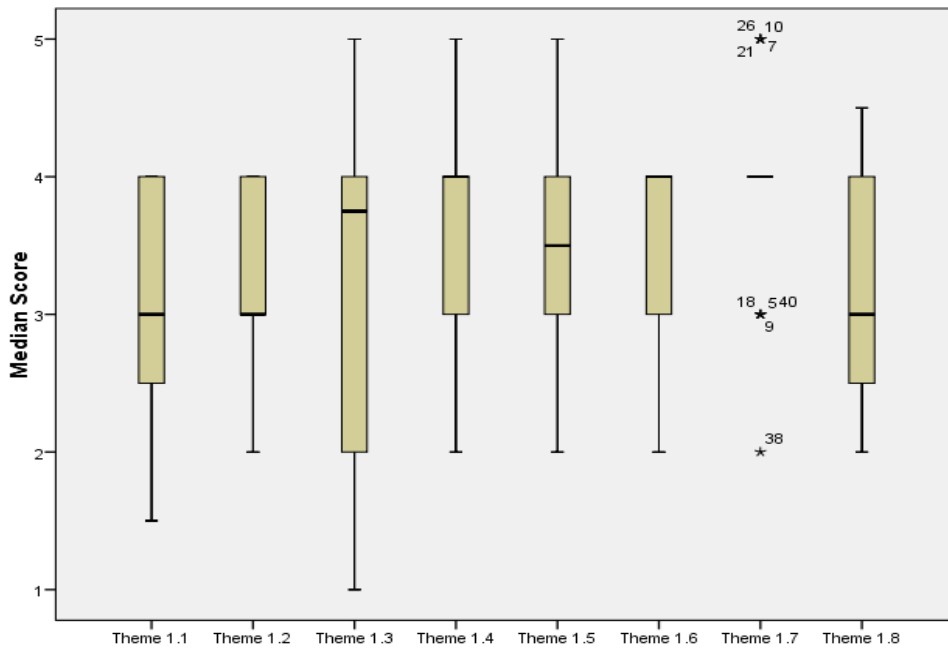
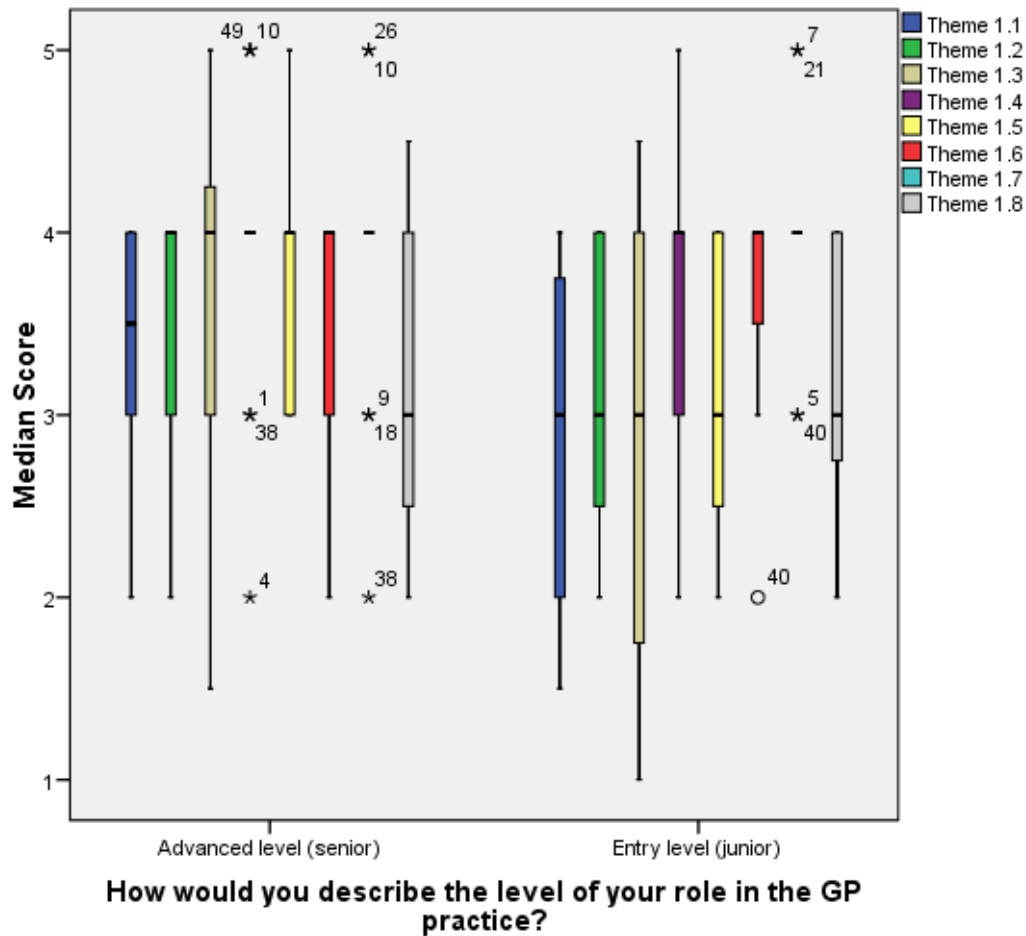


Figure 6 Median scores for Theme 1 by level of practice



Within this theme pharmacists specifically stated some learning needs in an open response question. In particular, pharmacists called for more training around the structure of general practice and the roles and responsibilities of each team member. One pharmacist suggested that a distance learning diploma specifically designed for pharmacists working in GP practices was needed.

'For GP Pharmacists a distance learning diploma specifically for their needs encompassing NHS Structures, GP partnership models, prescription management, medicines management and clinical care/therapeutics.'

Other training needs included ePACT and ECLIPSE training, understanding QOF and CQC, understanding and liaising with local services and referral pathways (including public health services), using GP surgery operation systems effectively, how better to support GPs and expand the role. One pharmacist specifically stated that since leaving PCT employment they had found it difficult to keep up to date with changes in NHS structure and the GP contract. They also found that they were left out of circulation lists for educational events. Lack of understanding and recognition of the role of the practice pharmacist with NHS trusts and MDT teams created barriers to effective working.

Theme 2 : Person-centred, safe and quality prescribing

Figures 7 and 8 show the median scores for Theme 2, Person-centred, safe and quality prescribing. When analysing all the respondents together (figure 7), the median scores for each subtheme are greater than 3.

When comparing scores in the subthemes between senior and junior pharmacists (figure 8), junior pharmacists scored significantly lower in subtheme 2.1 (Features of good quality prescribing) than senior pharmacists ($p=0.014$).

Within this theme one pharmacist called for greater clarity between the roles and responsibilities of the practice pharmacist and the medicines management team:

'Medicines optimisation and working with medicines management teams is another area which needs more integration. The roles may overlap and the roles and responsibilities need to be defined.'

Another pharmacist called for annual updates in this area, to include community pharmacists to promote communication across the sectors. One pharmacist stated that the Independent Prescribing Preparatory course they had just completed has enabled them to feel very much up to date with this area. Other training needs were around formal training on Emis and Vision and best practice when reviewing and coding clinic letters, and how to interpret and use clinical guidelines such as NICE and when it is appropriate to deviate from guidelines.

Figure 7 Median scores for Theme 2 – Person-centred, safe and quality prescribing

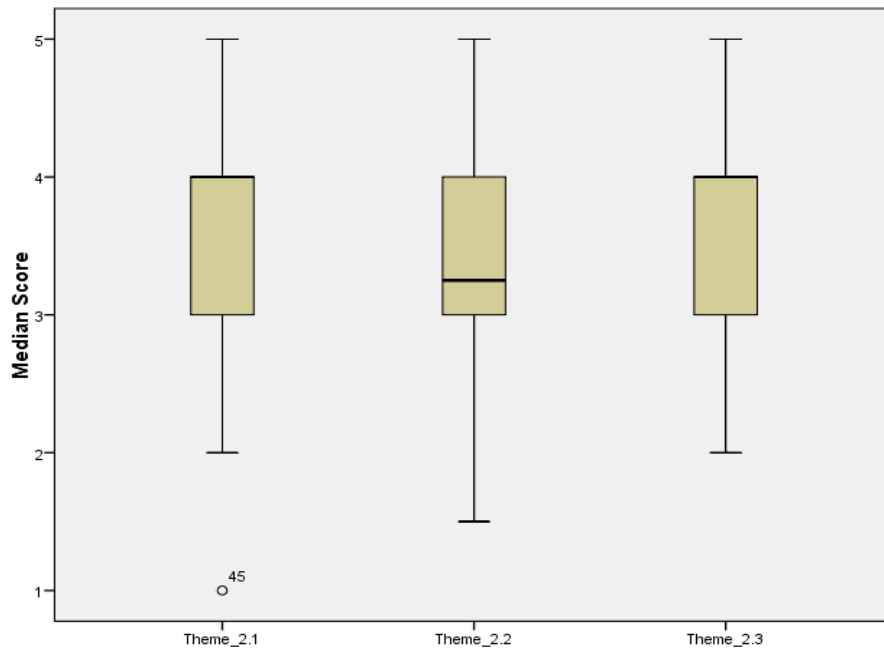
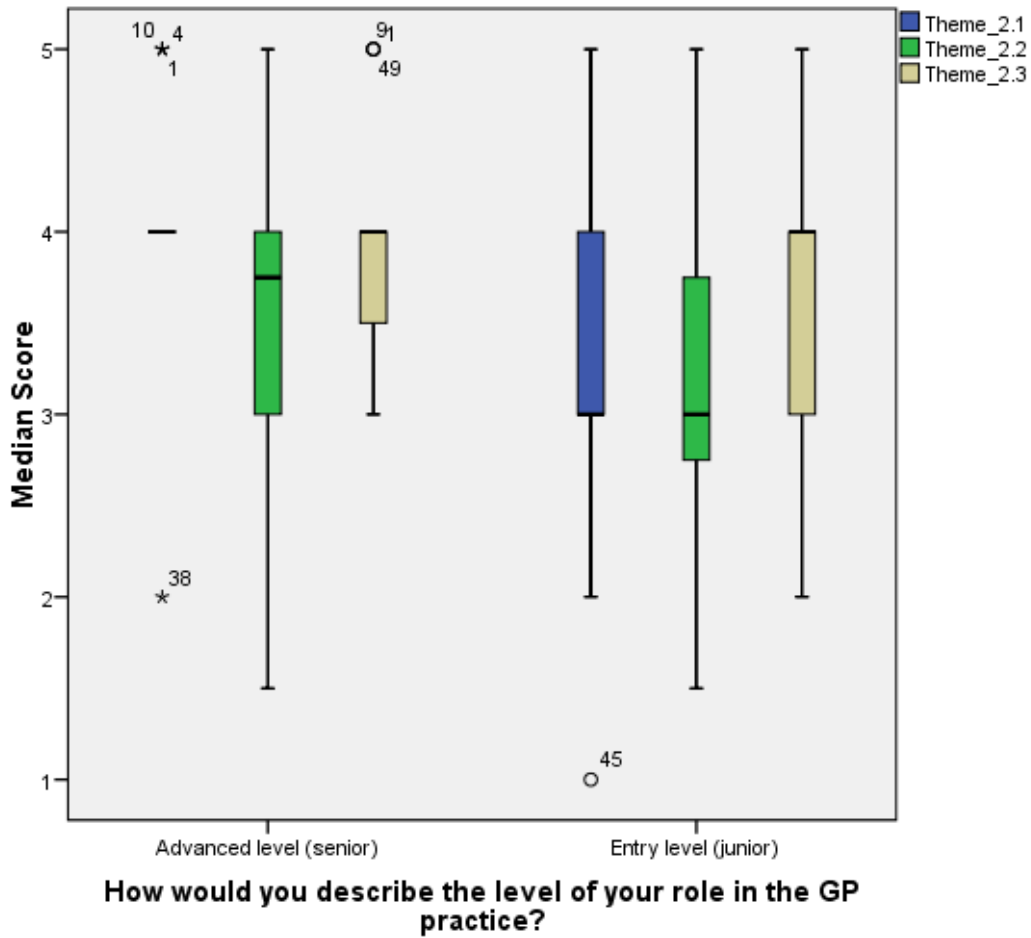


Figure 8 Median scores for Theme 2 by level of practice



Theme 3 : Clinical Assessment, examination and monitoring

Figures 9 and 10 show the median scores for Theme 3, Clinical assessment, examination and monitoring. When analysing all the respondents together (figure 9), training needs are identified in subthemes 3.1 (clinical assessment) and 3.2 (physical assessment).

When comparing median scores between senior and junior pharmacists (figure 10) no significant differences were found: training needs were identified for both groups in themes 3.1 and 3.2, and in junior pharmacists in 3.3 (patient monitoring).

In the open response question for this theme, pharmacists either stated that they had learnt these skills on the Independent Prescribing Preparatory course or were anticipating that they would be learning them when they started such a course. Some pharmacists stated that although they had learnt physical examination techniques during a prescribing course, they now felt deskilled in these areas through lack of practice. Some called for further training in these areas.

Figure 9 Median scores for Theme 3 - Clinical Assessment, examination and monitoring

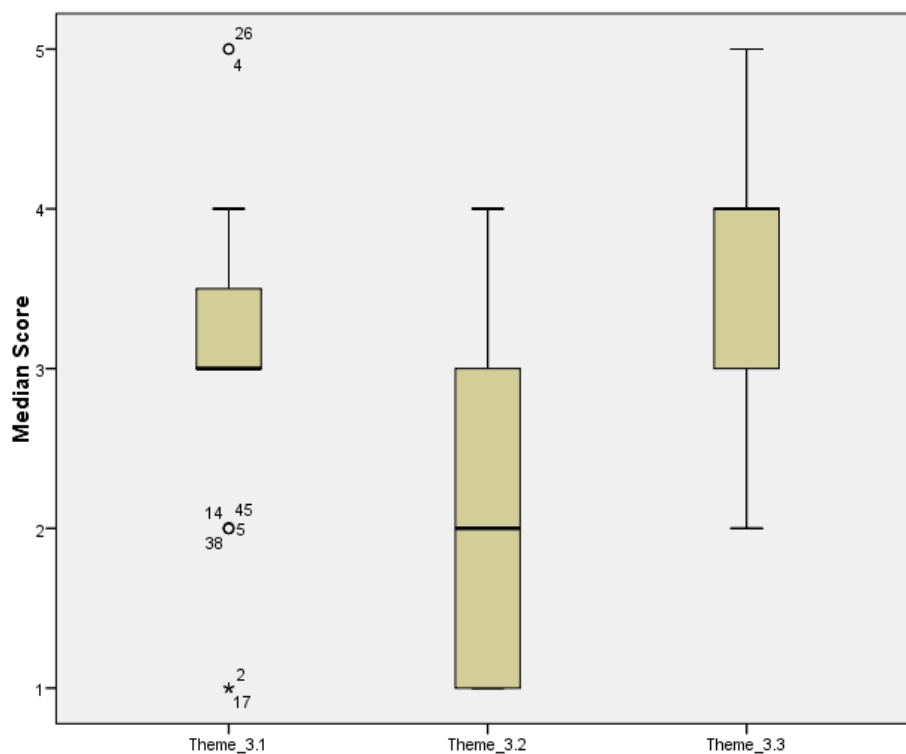
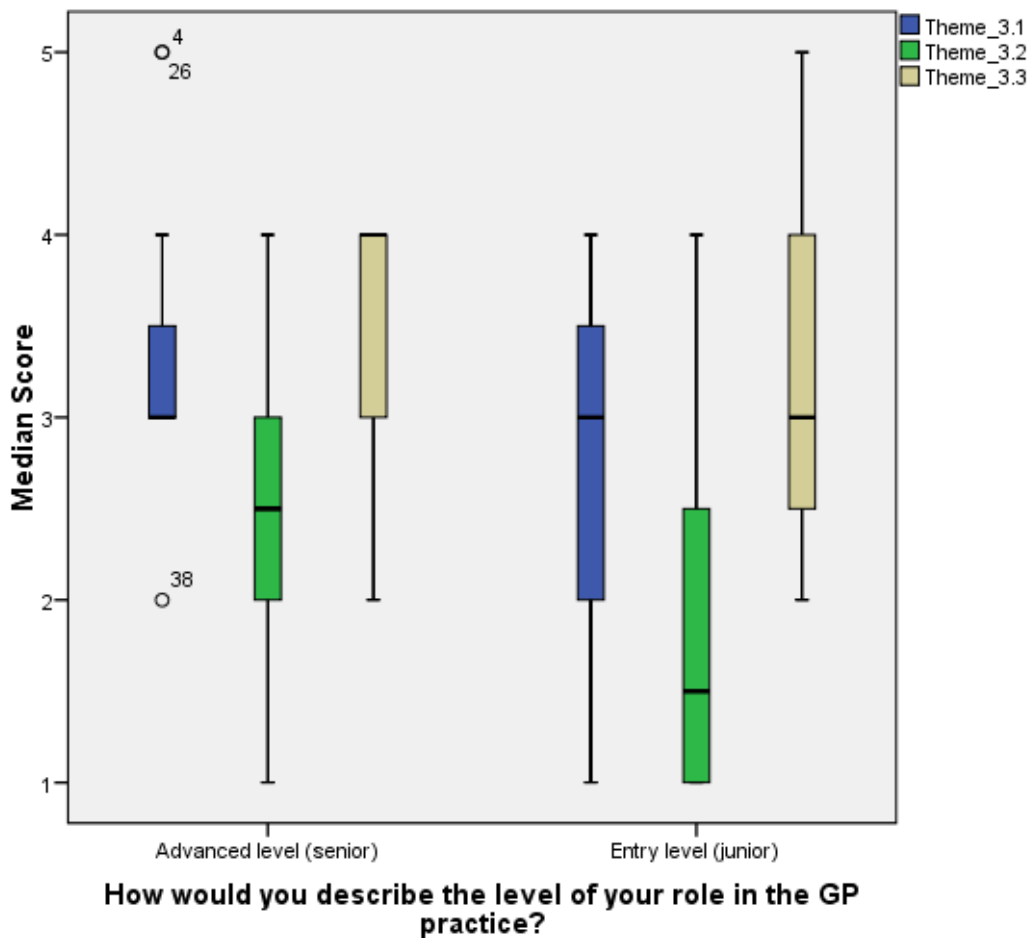


Figure 10 Median scores for Theme 3 by level of practice



Theme 4 : Consultation and communication skills

Figures 11 and 12 show the median scores for Theme 4, Consultation and communication skills. Figure 11 shows a training need for all pharmacists in theme 4.2, person-centred practice.

Figure 12 shows that junior pharmacists have training needs in subthemes 4.2 and 4.3 (education and training) but the differences between the junior and senior pharmacists were not found to be significant.

One pharmacist described how the Independent Prescribing Preparatory course had helped them to develop these skills and that other training courses need to include communication and consultation skills to help develop skills in practice. Another pharmacist suggested that they needed to be observed in practice by other healthcare professionals and also to observe GPs to learn from their consultation style. One pharmacist attended a course run by GSTT and supported by Southwark and Lambeth CCG to help improve long-term conditions. Much of this course centred on patient focussed care. They recommended that any pharmacist working in practice attend a similar course.

Figure 11 Median scores for Theme 4 - Consultation and communication skills

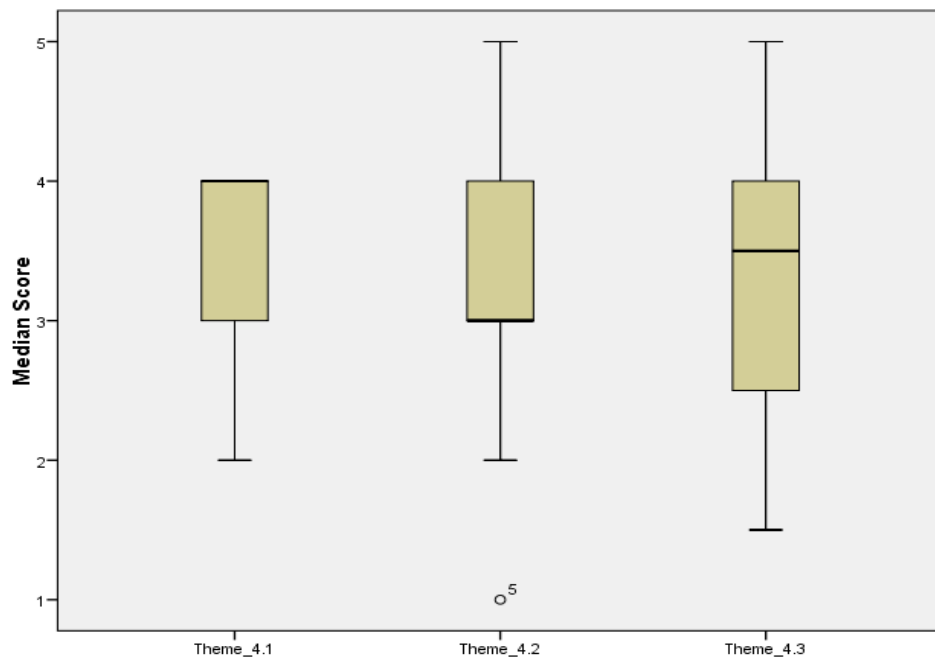
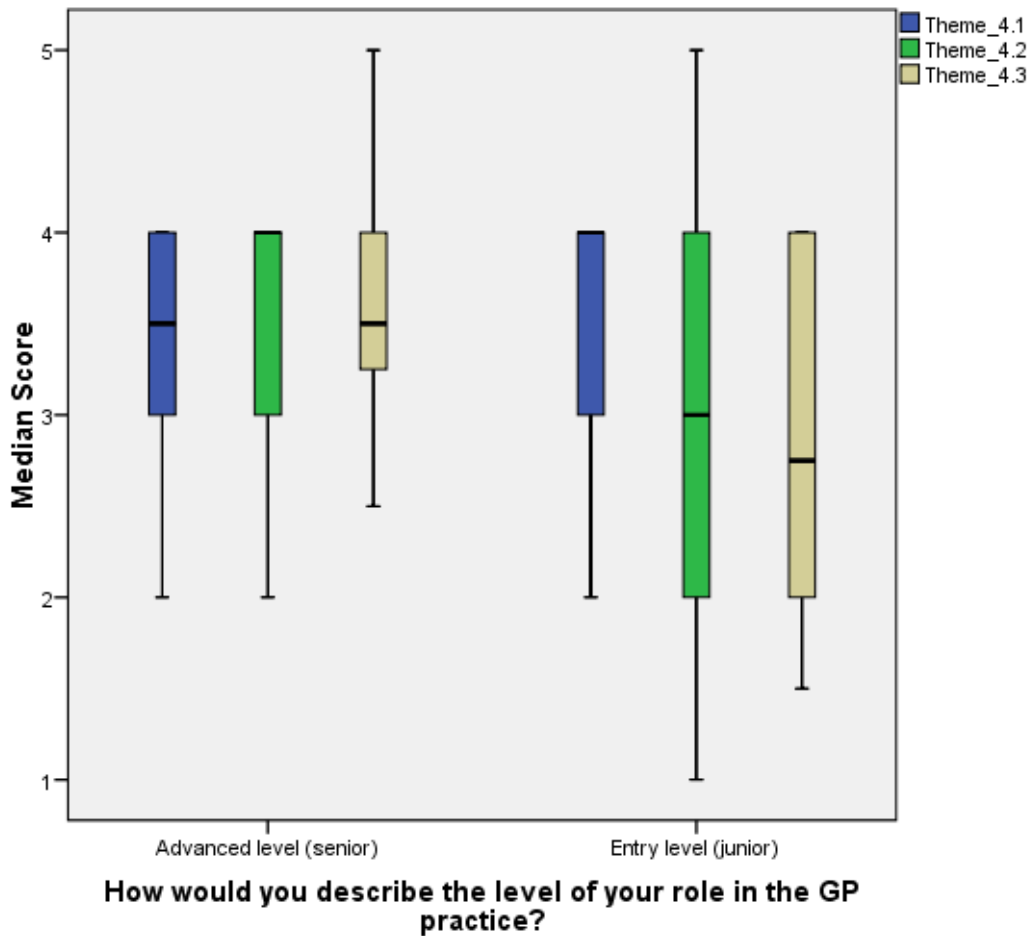


Figure 12 Median scores for Theme 4 by level of practice



Theme 5 : Long-term condition management

Figures 13 and 14 show the median scores for theme 5, long term condition management. This shows training needs for the whole group in themes 5.2 (pathways of care) and 5.3 (prescribing for people with learning disabilities, dementia or prescribing review of priority conditions). Both senior and junior pharmacists as individual groups showed learning needs in these two subthemes (Figure 14). No significant differences were found between the groups.

Pharmacists highlighted the management of patients with dementia, mental health and learning difficulties as areas for further training. Some felt confident to recognise when patients need further help and to refer but did not feel confident to manage the patients themselves.

Figure 13 Median scores for Theme 5 - Long-term condition management

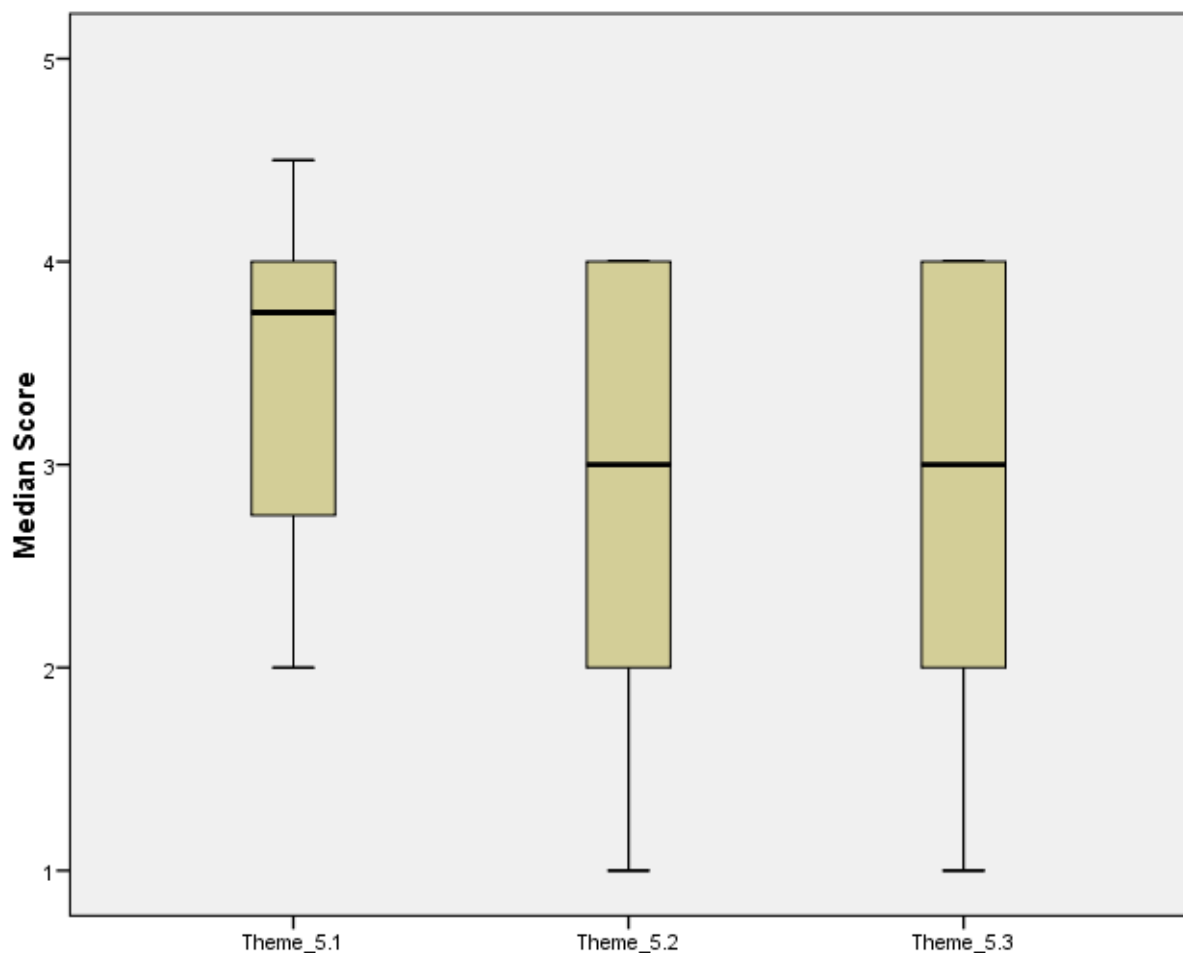
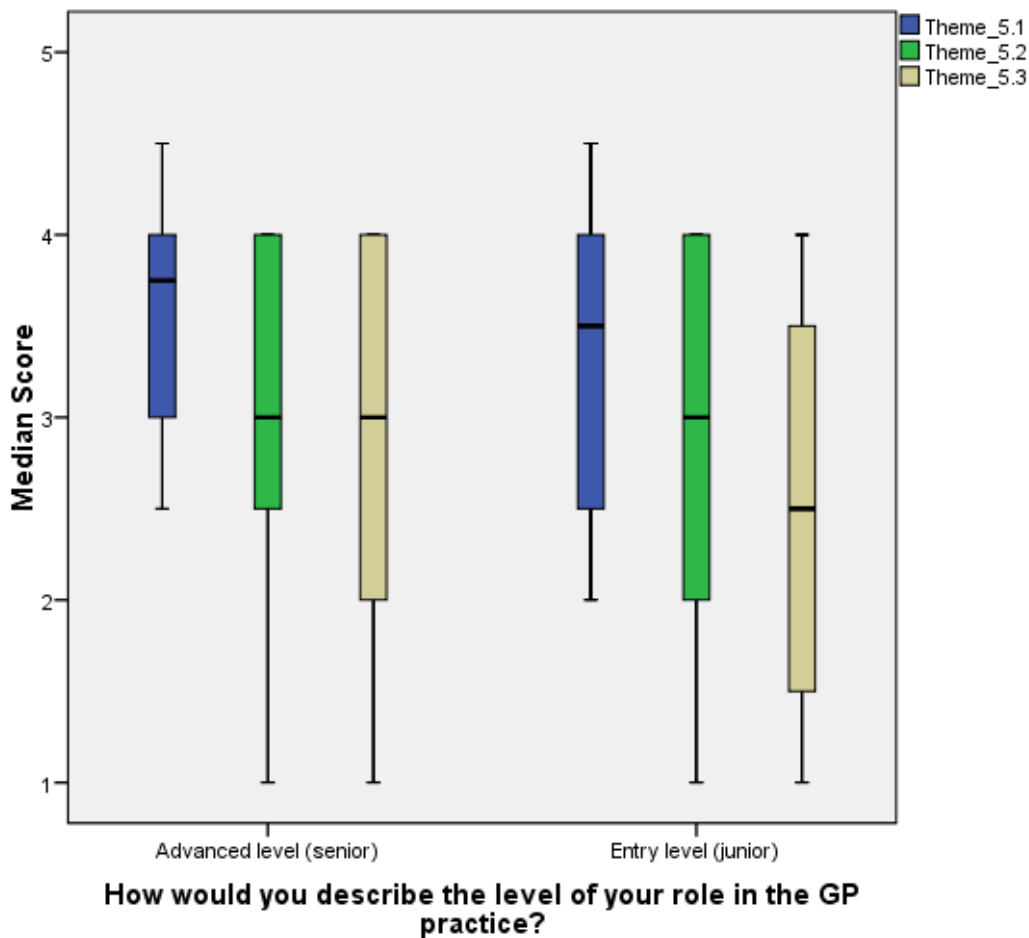


Figure 14 Median scores for Theme 5 by level of practice



Theme 6 Common ailment management

Theme 6 did not contain any subthemes and so the scores shown in figures 3 and 4 are the scores for this theme. All pharmacists and both individual groups showed training needs in this theme.

A number of pharmacists commented that the management of minor ailments in the community pharmacy was very different to management in the GP surgery and that this was a definite area in which they had some training needs. One suggested that the training need was in diagnostics and clinical assessment in order to identify red flag symptoms.

Theme 7 Evidence-based medicine and safety

Figures 15 and 16 show the median scores for theme 7, evidence-based medicine and safety. Figure 15 shows training needs for the whole group in subthemes 7.3 (Deprescribing), 7.4 (Drug-related admissions) and 7.6 (Care homes). Figure 16 shows that it is the junior pharmacists who have the most training needs in these areas and this was significant for subtheme 7.3 ($p=0.039$) and 7.4 ($p=0.026$).

Two pharmacists stated that their previous hospital experience has helped them to undertake medicines reconciliation and medicines reviews. Some pharmacists stated that strategies such as PINCER and STOPP/START are new to them and they require training in this area, together with other systems for medicines reconciliation and review. Some pharmacist identified care homes specifically as training need.

Figure 15 Median scores for Theme 7 - Long-term condition management

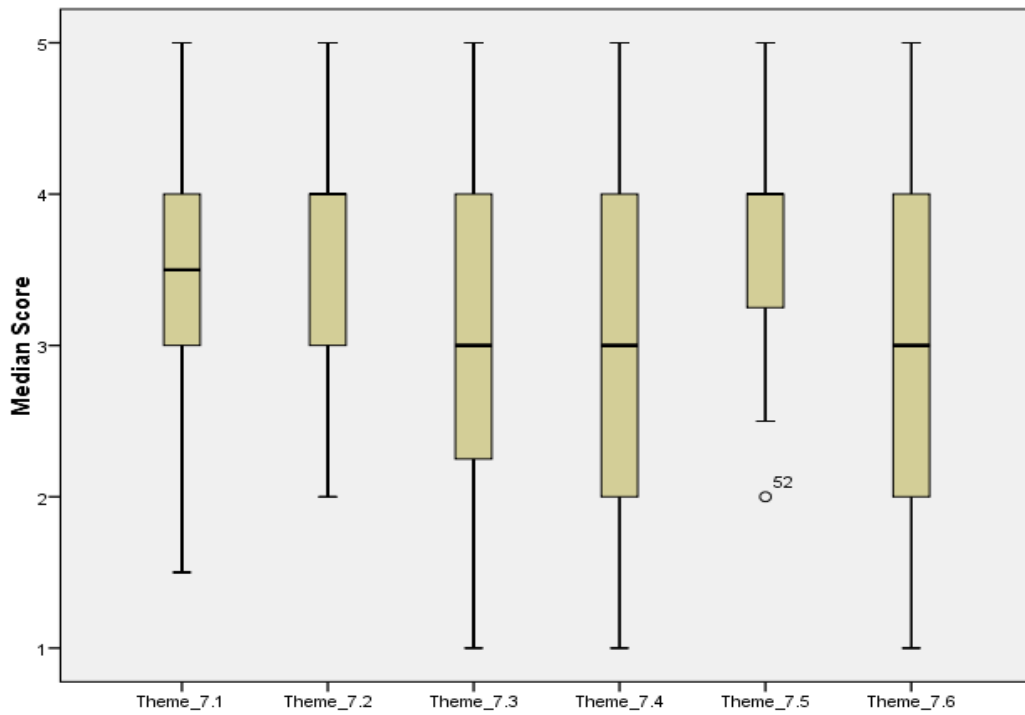
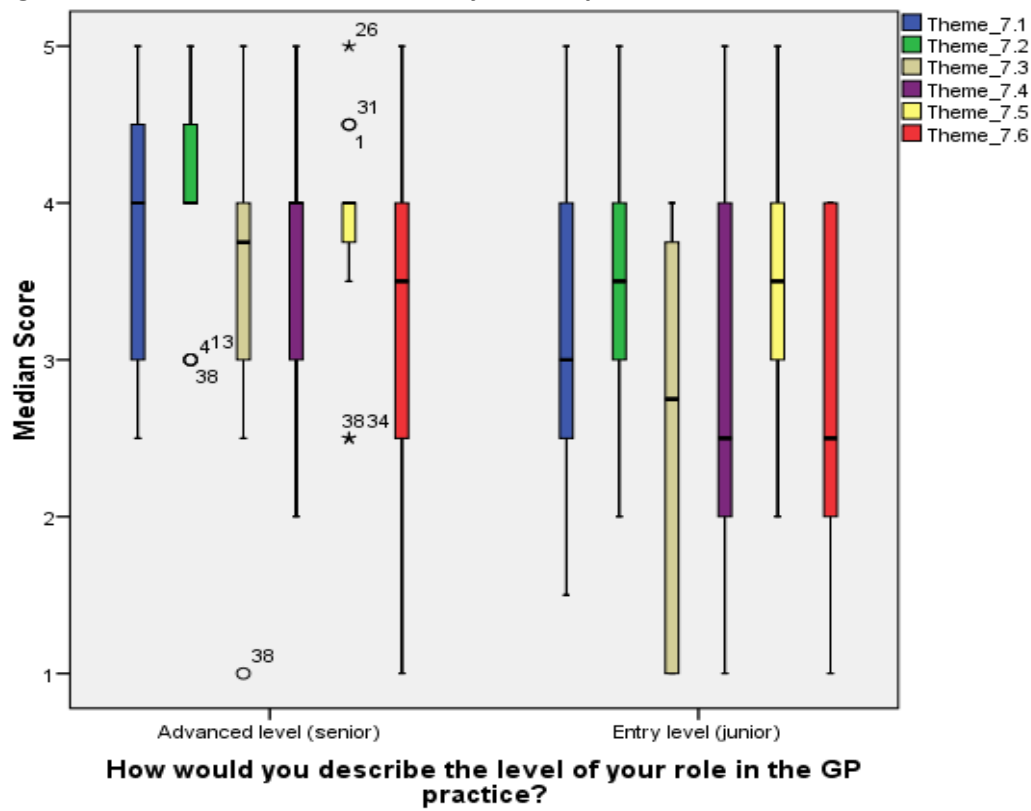


Figure 16 Median scores for Theme 7 by level of practice



Theme 8 – Evidence based medicine and safety

Figures 17 and 18 show the median scores for theme 8, Evidence based medicine and safety. Figure 17 shows that overall, the pharmacists scored themselves as 'I know a lot' in all of the subthemes. Figure 17 shows that the junior pharmacists identified a training need around theme 8.3 (Safety). The difference in scores between junior and senior pharmacists was significant for theme 8.5 (Audit)($p=0.021$).

Pharmacists highlighted the need for training to transfer and update their existing skills from other areas of practice into their practice work and to embed these skills into daily practice. One pharmacist stated they were not aware of the Scriptswitch scheme or RAG scheme. Another pharmacist reported that they found it hard to keep up to date in these areas since leaving the CCG and working for a practice.

Figure 17 Median scores for Theme 8 - Evidence based medicine and safety

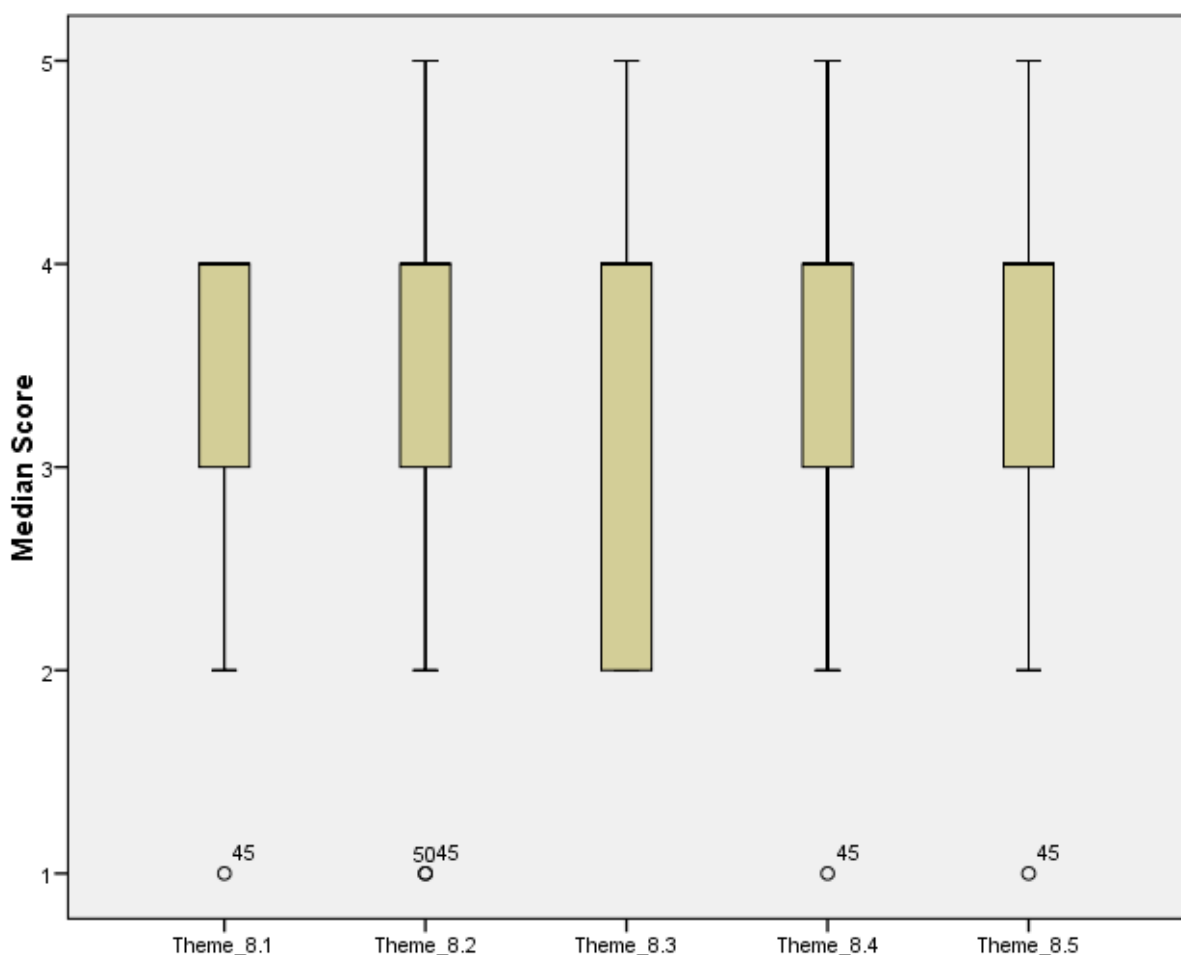
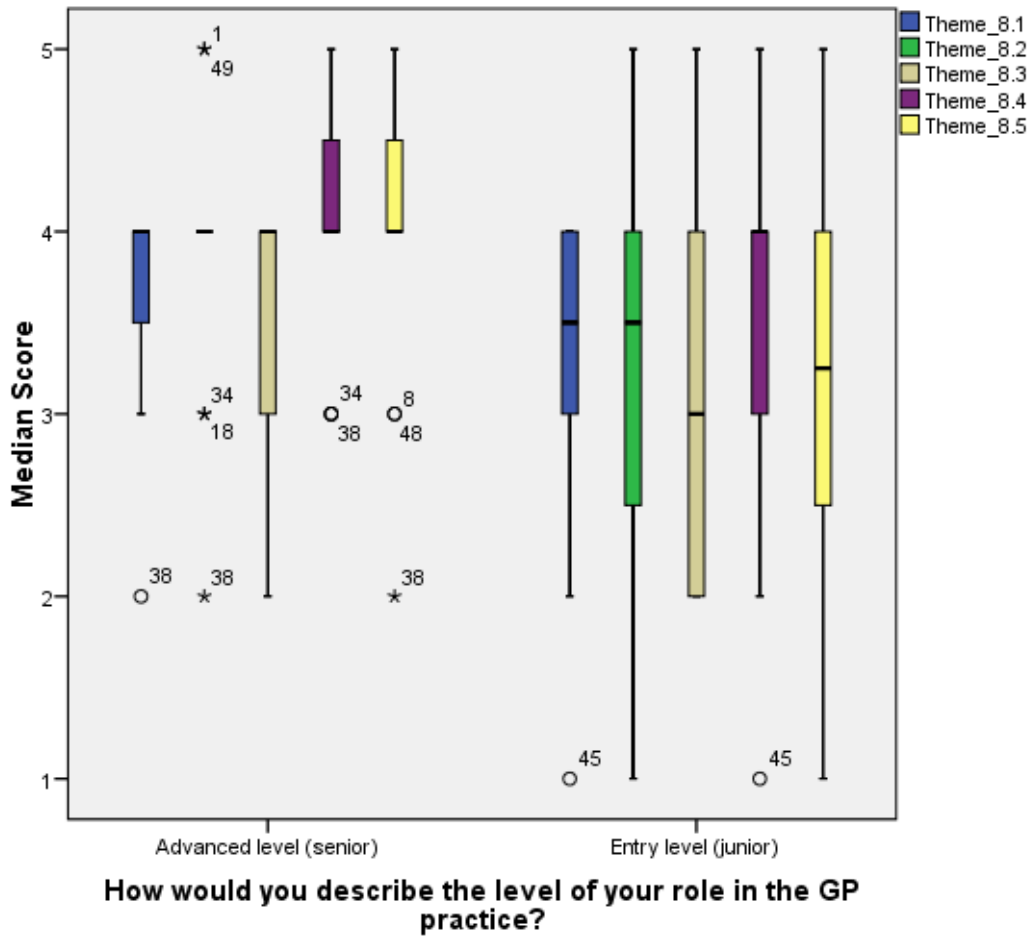


Figure 18 Median scores for Theme 8 by level of practice



Theme 9 Leadership and management

Figures 19 and 20 show the median scores for theme 9, Leadership and Management. Theme 9.2, Management had a slightly lower score than 9.1, Leadership (figure 19). Figure 20 shows that junior pharmacists had training needs in both these areas.

Two pharmacists provided a response to the open question about this theme. One wanted more support in how to manage a team and the other specified that leadership and management were personal learning needs.

Figure 19 Median scores for Theme 9 – Leadership and management

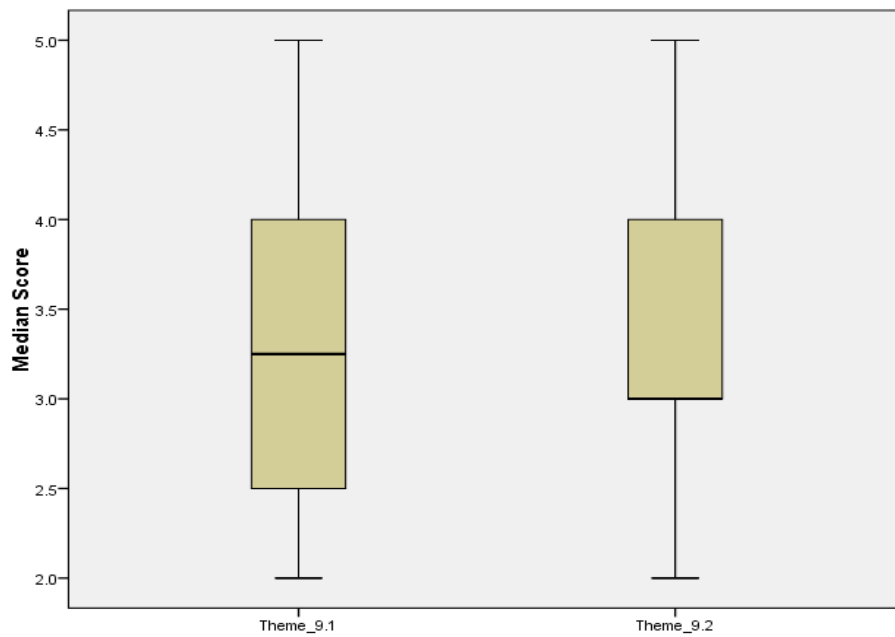
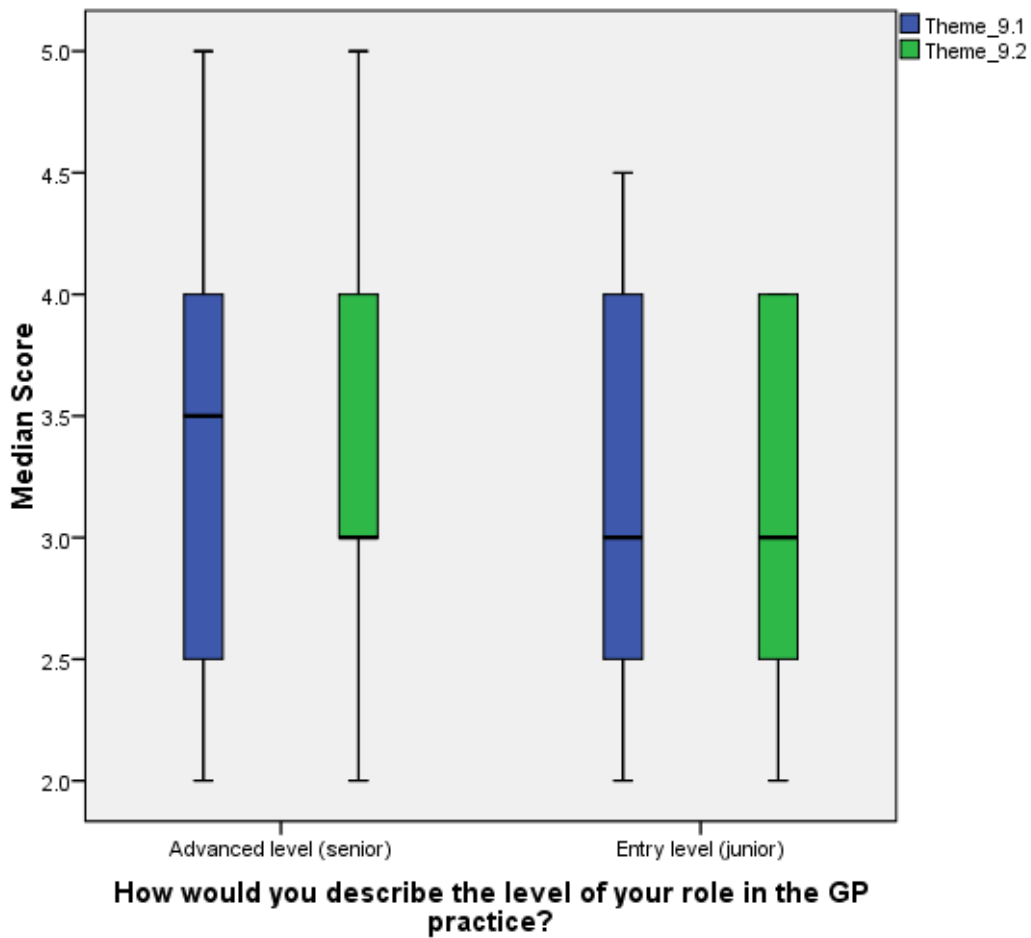


Figure 20 Median scores for Theme 9 by level of practice



Support for development

Twenty-one pharmacists reported having local support for their development. The support described is outlined in table 12 below.

Table 12 Local support for pharmacist development

Type of support as described by pharmacists	Number of pharmacists with this type of support
GP mentor	8
Designated medical practitioner as part of a prescribing course	3
Pharmacist mentor	4
Prescribing pharmacist mentor	2
Work shadowing peers and GPs	5
Line Manager	4
Local mentoring and coaching scheme	2
Peer support	3

Some of the pharmacists that do not have local support commented on what support they would like. One stated the need for a peer network, supported by learning resources with paid, protected time in which to access to support. Another suggested that pharmacist-specific training was needed since the training they currently had access to was aimed at GPs or nurses. Peer support, coaching and mentoring was highly sought after. One pharmacist offered their services as an experienced practice pharmacist to support others.

Eighteen pharmacists reported having used a competency framework to support their development, and nine of these had used two frameworks. The frameworks used are shown in table 12.

Table 13 Competency Frameworks used by pharmacists to support their development as a practice pharmacist

Competency Framework	Number of pharmacists using framework
NHS Healthcare Leadership Model	1
RPS Leadership Development Framework	2
RPS Advanced Pharmacy Framework	1
Single competency framework for prescribers	8
Consultation Skills for Pharmacy Practice	10
Any relevant clinical pharmacy specialist group framework	2

The barriers to accessing training for a role as practice pharmacist are detailed in table 13.

Table 14 **Barriers to accessing training**

Barrier	Number of pharmacists
Lack of employer support	9
Lack of funding	25
Lack of time to attend training	23
Unsure of the quality of available training	14
Lack of appropriate training on offer	18

The other barriers to training stated by the pharmacists were the fact that there were few pharmacists in the role, presumably to provide peer support, and that GPs have very little time to mentor or to understand what the barriers to the pharmacist's development might be.

8 Discussion

Distribution of questionnaire, response rate and practice pharmacist numbers.

There is no centrally kept database of the number and details of pharmacists working in a patient-facing role in GP practices. Pharmacists can be employed to work in a practice in a number of different ways, for example directly with the practice, through the CCG or even through a private company or a secondary care trust. This makes it difficult for commissioners to gauge demand for training and impairs the flow of important information to those pharmacists in the role, as highlighted by one of the pharmacist in this study. This pharmacist had had a previous role within a PCT and so knew the sort of information that is circulated and hence was aware of the lack of information reaching him/her in their practice role.

The distribution method used in this survey was an attempt to reach as many practice pharmacists as possible and to gain some information about the number of practice pharmacists within the study area. Table 2 highlights the difficulties in gathering this data. The study relied on the HOMMs to provide the data, many of whom did not feedback to the project team. As is often the case, there were HOMMs who engaged with the project and HOMMs who did not. The estimates of the number of practice pharmacists in the areas is based on the data supplied by the HOMMs but there is no indication of how much data was not supplied and therefore it is possible that significant numbers of practice pharmacists were missed in this questionnaire. Based on the estimations of the numbers of practice pharmacists in the areas, the response rate was relatively high, but the accuracy of this data is questionable.

For the future development of the practice pharmacist role a way of capturing information about pharmacists in the role will need to be devised. This will not only help with commissioning, but will help in the dissemination of information, and to provide a peer support network for those in the role.

The Primary Care Workforce Tool⁷ is a workforce census model that collects information about all practice staff. If practice pharmacists are included in this, even if they are not directly employed by the GP practice, this would start to generate data on the numbers of practice pharmacists.

Advanced (senior) and entry (junior) level roles

Those pharmacists reporting to be in advanced level roles were more likely to be independent prescribers and hold a PG Diploma, meaning that they had some formal qualifications to underpin their experience. Pharmacists in a senior role were older and had more years of previous experience than those in junior roles. They also had more varied experience with some working in academia and other pharmacy related roles. It was interesting, however, that some senior level pharmacists were relatively new to the role of practice pharmacist (figure 2) suggesting that it is their experience in other roles that has enabled them to take on their senior level role in a new sector of practice.

Training Needs

As would be expected, those pharmacists in a junior level role had greater and more varied learning needs than those in senior roles. When stating their overall training needs prior to completing the

training needs analysis, pharmacists stated that they wanted more training around GP systems, becoming an independent prescriber and consultation skills. It is surprising, therefore, that Theme 1, the fundamentals of general practice, was not a stronger learning need within the training needs analysis. However, pharmacists did not provide more detail about what was included in 'GP systems'. Some GP systems are detailed in theme 7, Medicines Optimisation and this may have been what pharmacists were referring to with their general comments.

Theme 1 covers a variety of skills including specifics of working in a GP practice together with skills pharmacists should feel confident in from other roles, such as professionalism, and working with others. Junior pharmacists identified a greater learning need in the subthemes that were more specific to working in a GP practice such as 'NHS structure and general practice', 'Introduction to local general practice' and 'prescribing data'. Senior pharmacists had few training needs in this area, scoring mostly 4 (I know a lot) in this theme.

Junior pharmacists had some learning needs in theme 2, around good quality prescribing and antimicrobial stewardship. These were rated at a 3 (I know an adequate amount) so could be a lower priority for training.

Theme 3 (clinical assessment) was a clear training need for both junior and senior pharmacists, with physical assessment scoring very low. Physical assessment is a skill learnt on an Independent Prescribing Preparatory Course. Only one junior pharmacist was a trained independent prescriber. Whilst 11 senior pharmacists were independent prescribers some stated that they felt deskilled in this area through lack of practice. A coaching or mentoring scheme with another prescribing pharmacist or a medical practitioner maybe required to help these pharmacists to use the skills they learnt on the prescribing course, rather than any new training.

Junior pharmacists had some training needs in theme 4 (Consultation and communication) particularly around delivering education and training. This is to be expected since junior pharmacists were younger and less experienced than senior pharmacists and may not have had time in their career to develop these skills.

Theme 5, long term condition management, was a clear training need for both groups of pharmacists. Pharmacists highlighted the management of patients with dementia, mental health and learning difficulties as areas for further training. Some felt confident to recognise when patients need further help and to refer but did not feel confident to manage the patients themselves. This was a high priority learning need for junior pharmacists.

Surprisingly, given that most of the respondents had experience working in community pharmacy, theme 6, Common Ailment Management, was a clear training need for both groups of pharmacists. However, in the context of working in a GP practice this involves relevant diagnostics skills including physical assessment. These are skills that pharmacists felt less confident in in Theme 3. They are also skills that would be taught on an Independent Prescribing Preparatory course. One pharmacist described the different approaches to common ailment management in the community pharmacy compared with the GP practice and stated that although they were skilled at it in the community pharmacy, they lacked confidence in the GP surgery.

Theme 7, about medicines optimisation, was a training need for junior pharmacists, with some subthemes scoring less than 3 and so making them a high priority training need. Senior pharmacists had no training needs in this area.

Theme 8, Evidence based medicine, was not a priority area for training.

Junior pharmacists have greater training needs in relation to theme 9, leadership and management, than senior pharmacists. This is most likely a reflection on their level of experience in general rather than lack of experience or training related to the specific practice pharmacist role.

General Comments to be taken into Consideration

It is evident from the open responses in this questionnaire that practice pharmacists benefit enormously from studying the Independent Prescribing Preparatory Course (IP). Pharmacists stated that the IP course provides more than just the legal ability to prescribe. It also trains pharmacists in the areas covered in Themes 2 (Person-centred, safe and quality prescribing), 3 (Clinical assessment and examination skills), 4 (consultation skills) and 6 (common minor ailments). It also provides mentoring and support in the form of the designated medical practitioner (DMP). What is needed is for mentoring support to continue once the pharmacist has qualified, to provide support for them to put their new skills into practice.

Pharmacists with hospital experience stated that they were confident with Theme 7 (medicines optimisation) since this theme included medicines review and medicines reconciliation which are day to day activities in hospital pharmacy. There is potentially a role for those with hospital experience to mentor other pharmacists in this respect.

Some pharmacists stated that they found it difficult to stay up to date with changes such as in NHS structure, or in the evidence and evidence based practice, as they were not on CCG mailing lists. They found they were left out of circulation lists for educational events. This was discussed earlier and is attributed to a lack of a central database of practice pharmacists.

Pharmacists wanted training that was specifically aimed at pharmacists rather than nurses or doctors. They also suggested that an annual update event would be helpful and should include community pharmacist to help promote communicating and cross sector working.

Pharmacists reported a lack of understanding about the role of the practice pharmacist within NHS trusts and MDT teams and that this created barriers to effective working. They also stated that there needs to be greater clarity between the roles and responsibilities of the practice pharmacist and the medicines management team. There is overlap in the roles in terms of medicines optimisation and so the roles need defining. This will come with time as the national pilot progresses and more pharmacists are employed to work in practices; however there is a role for the professional bodies (namely the RPS and the RCGP) to help practitioners develop the required understanding.

A lack of pharmacists in the role of practice pharmacist was stated as a barrier to accessing training. The comment suggested that this, together with lack of time, contributed to GPs' lack of understanding about what pharmacist can contribute and what support they need to develop. Raising awareness about the role will help to address this problem as GPs will develop a greater

understanding of the contributions pharmacists can make. Numbers of pharmacists in a practice role will grow as the national pilot progresses, and more pharmacists are employed directly by GPs outside of the pilot. This will create a network of practice pharmacists to provide peer support, coaching and mentoring. This was highly sought after by the pharmacists in this study. The local areas of HEE will need to give consideration to how to develop the network of practice pharmacists. A formal mentoring scheme might be of benefit.

Lack of funding and lack of time were common barriers to accessing training, together with a lack of appropriate training on offer and uncertainty over the quality of the training. Despite these findings, a number of pharmacists did describe local courses they had attended that they rated highly. Lack of employer support was not found to be as common a barrier as those described above suggesting that there would be uptake for a funded high quality course that meets their training needs.

9 Key recommendations from this report

- Funding for pharmacists in a patient-facing GP practice-based role to train as Independent Prescribers should be prioritised. Support is required once a pharmacist has qualified to help them to put their skills into practice.
- Consideration should be given to funding pharmacists to complete a PG Diploma that could incorporate the Independent Prescribing Preparatory Course and would cover other areas required for a role as a pharmacist in general practice. A PG diploma would provide appropriate and quality assured training. Offering a distance learning diploma could help overcome time barrier since pharmacists would not require time away from the practice to attend study days.
- Local peer support, coaching and mentoring schemes are needed.
- Work needs to be undertaken to increase the understanding of the practice pharmacist role within the NHS.
- Practice pharmacists need to be included in circulations for updates and training from CCGs.

References

- ¹ RCGP and RPS policy statement on GP practice based pharmacists. February 2015. Available at <http://www.rpharms.com/promoting-pharmacy-pdfs/rcgp-joint-statement-for-pharmacists-in-gp-surgeries-version-2.pdf> <accessed 11.2.2016>
- ² NHS England, RCGP, BMA. Building the Workforce – the New Deal for General Practice. January 2015. Available at <https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf> <accessed 11.2.2016>
- ³ <https://www.england.nhs.uk/commissioning/primary-care-comm/gp-action-plan/cp-gp-pilot/> <accessed 11.2.2016>
- ⁴ <https://www.cppe.ac.uk/career/gp-pharmacist-training-pathway> <accessed 11.2.2016>
- ⁵ CPPE. Developing clinical pharmacists in general practice. The national learning pathway. January 2016. Available at https://www.cppe.ac.uk/wizard/files/developing_career/cppe%20hee%20general%20practice%20pharmacist%20learning%20pathway%203rd%20edition.pdf <accessed 11.2.2016>
- ⁶ Field A. Discovering Statistics using SPSS. 2nd Edition. Sage Publications; London: 2005
- ⁷ <http://www.hscic.gov.uk/pcwt> <accessed 11.2.2016>

Appendix 1 Email to CCG Medicines Management Leads from project team

Dear Medicines Management Lead,

You will be aware from the letter sent to you recently by Gail Fleming, that the London and South East local teams of Health Education England are conducting a project to determine the training needs of pharmacists currently working in a patient-facing role in general practice in order to inform future commissioning intentions.

Experience suggests that there are significant benefits for patients and the practice in having a pharmacist as part of the team. NHS England recently launched a pilot project to recruit over 400 pharmacists to general practice. These pharmacists will have access to a fully-funded national training pathway. The London and South East local teams of Health Education England recognise that there will be a significant number of pharmacists in the area working in practices who are not part of the national pilot and who, therefore, will not have access to the funded national training pathway. Nonetheless, there is a clear need to ensure that pharmacists working in practices are supported and trained to optimise their role within general practice.

To this end, the London and South East local teams of Health Education England have devised a training needs questionnaire to be completed by pharmacists working in general practice and we are writing to you to ask for your help to distribute the questionnaire so that we can capture the views of all pharmacists working in general practice. This will involve contacting two groups of people:

- (1) Practice managers in all the GP practices in your area, and
- (2) Individual pharmacists who work in practices and for whom you have contact details.

We have provided some text that you can use to contact each of these two groups. You will find this text at the end of my e-mail.

Once you have e-mailed the GP practices and individual pharmacists please could you reply to me to let me know:

- How many GP practices you e-mailed
- How many individual pharmacists you e-mailed

It is likely that we will need to send out some follow up e-mails in the next few weeks to remind people to complete the questionnaire in order to maximise the response rate. I will contact you when these follow ups are needed.

If you have any questions about the project please don't hesitate to contact me.

Many thanks in advance for your help with this project.

Suggested text for e-mails to practices and individual pharmacists from CCG Medicines Management Leads:

- 1) We ask that you send out the following email to all **practice managers of GP practices in your area:**

Dear Practice Manager,

The London and South East local teams of Health Education England are conducting a project to determine the training needs of pharmacists currently working in a patient-facing role in general practice in order to inform future commissioning intentions. As part of this project we have devised a training needs questionnaire to be completed by pharmacists working in general practice

*We would be grateful if you could **forward this e-mail to any pharmacist who works in your practice in a patient-facing role.***

Experience suggests that there are significant benefits for patients and the practice in having a pharmacist as part of the team. NHS England recently launched a pilot project to recruit over 400 pharmacists to general practice. These pharmacists will have access to a fully-funded national training pathway. The London and South East local teams of Health Education England recognise that there will be a significant number of pharmacists in the area working in practices who are not part of the national pilot and who, therefore, will not have access to the funded national training pathway. Nonetheless, there is a clear need to ensure that pharmacists working in practices are supported and trained to optimise their role within general practice.

If you are a pharmacist working in a patient-facing role in general practice please take some time to complete the questionnaire. The results will be used to inform future commissioning needs. Your response is important to ensure that all training needs are captured with this questionnaire. We anticipate it will take around 15 - 30 minutes of your time to complete.

The link below will take you to the questionnaire:

<http://qoo.gl/forms/tpzuW1A7f7>

Thank you in advance for your time.

- 2) We ask that you send out the following e-mail **to individual pharmacists who work in practices and for whom you have contact details.**

Dear Pharmacist,

The London and South East local teams of Health Education England are conducting a project to determine the training needs of pharmacists currently working in a patient-facing role in general practice in order to inform future commissioning intentions. As part of this project we have devised a training needs questionnaire to be completed by pharmacists working in general practice

Experience suggests that there are significant benefits for patients and the practice in having a pharmacist as part of the team. NHS England recently launched a pilot project to recruit over 400 pharmacists to general practice. These pharmacists will have access to a fully-funded national training pathway. The London and South East local teams of Health Education England recognise that there will be a significant number of pharmacists in the area working in practices who are not part of the national pilot and who, therefore, will not have access to the funded national training pathway. Nonetheless, there is a clear need to ensure that pharmacists working in practices are supported and trained to optimise their role within general practice.

If you are a pharmacist working in a patient-facing role in general practice please take some time to complete the questionnaire. The results will be used to inform future commissioning needs. Your response is important to ensure that all training needs are captured with this questionnaire. We anticipate it will take around 15 - 30 minutes of your time to complete.

The link below will take you to the questionnaire:

<http://qoo.gl/forms/tpzuW1A7f7>

Thank you in advance for your time.

Appendix 2 Reliability Analysis on the Themes and Subthemes in the Questionnaire

Reliability Analysis on the Theme 1 (Fundamentals of General Practice)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Fundamentals of General Practice	NHS Structure and general practice	Demonstrate an understanding of NHS structure Demonstrate knowledge of the general practice contract framework and commissioning of general medical services	0.855	0.939
	Introduction to local general practice	Demonstrate an understanding of the roles and responsibilities for each member of the practice team Demonstrate an understanding of the local services, clinics and specialties in your area encompassing community pharmacy service, social care, secondary and tertiary care providers Demonstrate knowledge of your local practice population demographics and disease prevalence	0.860	
	Prescribing data	Demonstrate knowledge of how prescribing data is produced and the strengths and limitations of the data Able to access and interrogate practice-specific data to identify priorities for improving prescribing and patient care	0.947	
	Clinical Information Systems	Demonstrate ability to use local IT systems to access patients' clinical records Document activities using read codes and free texts Demonstrate ability to run searches to identify groups of patients with a medical condition or taking specific medicines	0.928	
	Working with the multidisciplinary team	Develop relationships with the wider multidisciplinary team and promote networking opportunities Demonstrate effective working across the interface and with other care providers such as care homes or hospital trusts Demonstrate effective team working and the promotion of skill mix	0.845	
	Working with Community Pharmacy	Describe the services offered by community pharmacies and how the general practice can link with these	N/A	
	Professionalism	Understand responsibilities with respect to confidentiality, data protection, equality and diversity, whistle-blowing and complaint handling within the GP practice	N/A	
	Public Health	Deliver public health interventions to support the health and wellbeing of patients and the public (using the Making Every Contact Count approach) within the General Practice setting Support and signpost to other local public health services via healthcare providers such as community pharmacy	0.831	

Reliability Analysis on the Theme 2 (Person-centred, safe and quality prescribing)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Person-centred, safe and quality prescribing	Features of good quality prescribing	Demonstrate knowledge of roles and responsibilities of different types of prescribers including non-medical prescribers Demonstrate understanding of the regulations regarding prescribers and prescribing Describe the features of good-quality prescribing Demonstrate ability to negotiate tensions between cost-effective prescribing and medicines optimisation Promote cost-effective use of health resources and understand the pharmacoeconomics of medicines that underpins NICE recommendations	0.946	0.928
	Antimicrobial stewardship	Take action to reduce antimicrobial resistance including promoting awareness to patients and professionals on how to use antibiotics in a responsible way Support local implementation of the UK Five Year Antimicrobial resistance strategy 2013-18 including taking action to optimise prescribing practice and improve professional education and public engagement	0.869	
	Safe and effective repeat prescribing	Understand the principles of safe and effective repeat prescribing systems including electronic prescribing Determine which patients and which medicines are suitable for repeat prescribing Describe the local repeat prescribing policy and process Identify recommendations for improving local repeat prescribing and repeat dispensing based on good practice principles Promote the role of community pharmacy and support referrals for services such as the New Medicine Service (NMS) and Medicines Use Reviews (MUR) Demonstrate understanding of processes and regulations for controlled drug prescriptions Demonstrate the application of tidy and safe patient record management	0.888	

Reliability Analysis on the Theme 3 (Clinical Assessment, examination and monitoring)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Clinical Assessment, examination and monitoring	Clinical Assessment	<p>Integrate the principles of anatomy and pathophysiology relevant to health problems presenting in a range of body systems</p> <p>Recognise commonly presenting conditions, both acute and long-term conditions, in a range of body systems</p> <p>Demonstrates an ability to take a clinical history, including recognition of red flags and referral criteria</p> <p>Demonstrate ability to make a clinical assessment including in patient groups where communication may be especially challenging</p> <p>Decide immediate treatment options, including appropriate referral, for commonly presenting conditions (including acute and long-term conditions) within a range of body systems</p> <p>Documents history and clinical findings in an appropriate format</p> <p>Complete a mental health assessment</p>	0.926	0.933
	Physical Assessment	<p>Use physical assessment techniques (inspection, palpation, percussion and auscultation) and apply these to clinical examination of a range of body systems</p> <p>Interpret normal and abnormal findings on physical examination for a range of body systems</p> <p>Apply the principles of hygiene and infection control in the clinical setting</p>	0.855	
	Patient Monitoring	<p>Monitor medicines including identifying high-risk drugs and shared care monitoring</p> <p>Monitor medical conditions in line with current recommendations and local/national guidance</p> <p>Understand how to request and interpret pathology reports</p> <p>Understand how to request and interpret clinical biochemistry</p> <p>Demonstrate ability to use Docman, Pathlinks, templates and other practice IT systems</p>	0.837	

Reliability Analysis on the Theme 4 (Consultation and Communication Skills)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Consultation and Communication Skills	Communication Skills	Describe the key elements and skills of interpersonal communication and demonstrate depth and systematic understanding by applying the concepts to interactions and consultations with patients and other healthcare professionals Give examples of barriers to effective communication Reflect on your personal style of communication and that of the practice team Describe different learning styles and how these influence communication Identify the key techniques to effective conflict management Demonstrate an understanding of the art of influencing people Demonstrate ability to assess effectiveness of consultation skills against the Consultation skills for pharmacy practice: practice standards for England	0.922	0.927
	Person-centred Practice	Adopt a person-centred approach to consultations Explain and demonstrate the principles for person centred care and shared decision making, including explaining the risks and benefits of treatments to patients/carers in ways meaningful to them Demonstrate in depth knowledge of the theory of the medical consultation in order to improve the management of complex patients	0.915	
	Education and Training	Use effective teaching skills to train individuals and small groups to improve systems and practice Able to present to small and medium sized groups of professionals using effective verbal and visual presentation skills	0.882	

Reliability Analysis on the Theme 5 (Long-term condition management)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Long-term condition management	Long-term conditions	Demonstrate ability to identify and manage long-term conditions for specific patients with multimorbidity Demonstrate ability to identify and manage long-term conditions in specific groups of patients, for example, older people, children or those with a mental health condition Demonstrate ability to document activity in the clinical system using read coding and available templates Demonstrate ability to advise on management and/or avoidance of drug interactions and adverse drug reactions in specific patients	0.824	0.896
	Pathways of care	Liaise with colleagues to improve local pathways of care and improve patient care and outcomes	N/A	
	Prescribing for people with learning difficulties and dementia of prescribing for priority conditions	Promote medication review of psychotropic medication for people with learning disabilities Promote appropriate use of antipsychotics in dementia and reviews antipsychotic prescribing in partnership with the multidisciplinary team and social care Prioritise review of key medication issues arising from national or local policy or research	0.886	

Reliability Analysis on the Theme 6 (Common Ailments management)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Common Ailments management	Common Ailments management	Demonstrate relevant diagnostic skills (physical assessment techniques, questioning skills, interpretation of normal and abnormal findings, recognition of commonly presenting acute and long-term conditions Demonstrate ability to decide immediate treatment options, including referral, and negotiate with the patient regarding treatment decisions Identify red flags and agrees referral pathways with GP Apply national and local guidelines to prescribing and recommendations for minor ailments	N/A	0.910

Reliability Analysis on the Theme 7 (Medicines optimisation, multimorbidity and polypharmacy)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Medicines optimisation, multimorbidity and polypharmacy	Medicines optimisation	Demonstrates an understanding of the term medicines optimisation and how this can be used to improve patient outcomes relating to medicines Demonstrate knowledge of the national drivers and policy underpinning medicines optimisation	0.900	0.951
	Medicines review and poly pharmacy	Demonstrate understanding of the principles of medication review Demonstrate a structured process for undertaking medication review Demonstrate ability to use practice systems to obtain information and document medication review Implement an evidence based strategy to supporting medication review e.g. PINCER and STOPP/START Able to take an accurate drug history, assess adherence, support selfcare, discuss risks and benefits using decision aids as appropriate, negotiate treatment decisions and discuss prognosis Rationalise drug regimens in light of clinical indicators and reported symptoms and support adherence Refer patients to services and other practitioners as appropriate	0.903	
	Deprescribing	Able to identify patients who would benefit from deprescribing using clinical tools such as STOPP/START Promote the rational and pragmatic use of diagnostic testing	0.924	
	Drug-related admissions	Able to identify patients at risk of drug-related admissions and influences multidisciplinary team activity to reduce drug-related admissions	N/A	
	Medicines reconciliation	Describe the principles of medicines reconciliation and apply this to patients transferred across the interface, for example, discharged from hospital Manage prescription accuracy and hospital letters and address problems raised during medicines reconciliation	0.756	
	Care homes	Promote the role of pharmacists in care homes	N/A	

Reliability Analysis on the Theme 8 (Evidence-based medicine and safety)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Evidence-based medicine and safety	Evidence-based medicine	<p>Explain what evidence-based medicine means</p> <p>Identify trusted sources of evidence-based information</p> <p>Apply information mastery principles to finding relevant and valid summaries of high-quality evidence</p> <p>Apply evidence-based medicine principles to specific patient populations to implement NICE guidelines, act on audit findings and reduce variation in prescribing</p> <p>Demonstrate an understanding of the major theories underpinning decision making in health care</p>	0.951	0.967
	Formularies, policies and guidance	<p>Access local information relating to formularies and medicines approved for use</p> <p>Manage formularies and advise on software to support prescribing decisions</p> <p>Describe the limitations of Scriptswitch and equivalent schemes and negotiate tensions with the medicines optimisation agenda</p> <p>Describe the role of the area prescribing committee and use its decisions routinely to inform practice and share with colleagues</p> <p>Demonstrate a working knowledge of shared care agreements</p> <p>Raise awareness of red amber green (RAG) or equivalent schemes</p> <p>Promote reduction in waste medicine</p>	0.932	
	Safety	<p>Advise on patient safety including regarding recalls, patient safety alerts, audits and incident recording and advise on appropriate systems to promote a safety culture, for example, Datix or equivalent</p>	N/A	
	Medicines Information	<p>Advise the multidisciplinary team about medicines related questions</p>	N/A	
	Audit	<p>Demonstrate understanding of the audit cycle and derive criteria and standards from good quality guidelines</p> <p>Choose appropriate audit topics based on national guidelines, high-risk, high-volume or local priorities</p>	0.960	

Reliability Analysis on the Theme 9 (Leadership and management)

Theme	Sub -Theme	Items	Cronbach's Alpha for Sub-theme	Cronbach's Alpha for Theme
Leadership and management	Leadership	Describe the key characteristics of an effective leader Evaluate the role of coaching and mentoring in leadership Identify the appropriate leadership style to implement change in your practice Assess your leadership skills against the RPS Leadership Development Framework	0.922	0.946
	Management	Manage risk and implement change to reduce risk Manage time effectively to deliver effective patient care and services Able to effectively manage projects within the practice and the locality	0.933	