University of East Anglia

Identifying the Roles of Pharmacy Technicians in the UK

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“Get people to realise that a technician is not 'just a tech' but a qualified, registered healthcare professional in their own right, who deserves to be taken seriously.”

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Contents

Executive Summary

Background: Pharmacy technicians (PTs), whose role has traditionally been to support the pharmacist in the supply of medicines in hospital and community pharmacy settings, became a regulated healthcare profession in 2011. Whilst the model of education and training has remained the same since regulation was introduced, the activities undertaken by pharmacy technicians have expanded in both breadth and complexity. There is currently no detailed description of the activities undertaken by pharmacy technicians and no consideration of the appropriateness of the current training model in light of these. As a new and emerging profession there are additional challenges and opportunities which also need to be considered when reviewing education and training.

Aims & Objectives: This project sought to describe the location and range of PT roles in the UK, identify and explore PT views on their career development and associated education and training in order to identify how the current infrastructure surrounding the profession can be enhanced to enable it to optimise its potential and contribution to patient care.

Method: The research was comprised of two phases: a survey of PTs using a questionnaire accessed via the online survey software SurveyMonkey™, exploring tasks carried out, pre and post-registration training, and barriers and facilitators to career development. The second phase involved focus groups with PTs from across the UK exploring some of the issues raised in the questionnaire responses.

Participants: Registered PTs who were also members of The Association of Pharmacy Technicians UK (APTUK). PTs were from all parts of the UK.

Key Findings: PTs are now commonly located within community, hospital, primary care and medical practices and are undertaking an expanding variety of roles, many of which have traditionally been reserved for pharmacists. There is a strong desire in the profession for further role expansion and this is largely around the provision of patient facing services and additional responsibility by assuming management and leadership roles.

Over a quarter of respondents did not believe that their pre-registration training adequately prepared them for day one practice and there is now an identified need to enhance pre-registration training to incorporate training in clinical knowledge, communication, management, IT literacy and education skills. This is in addition to the provision of accreditation for final checking. Increasing length of training to incorporate the new material and making the qualification degree level was identified as the most appropriate solution.

Whilst there has been an expanse in post-registration training to accommodate some of these new roles, no strategy for post-registration training is in place and a need to develop post-registration career pathways and frameworks was identified.

PTs saw pharmacists, management, lack of understanding of role and lack of opportunities as barriers to their career development. Facilitators included the culture of the employing organisation and support from pharmacists, managers and other staff.

Recommendations:

- Review the education and training needs of pharmacy technicians in light of the roles and activities now commonly undertaken and the identified new knowledge and skills which need to be incorporated into pre-registration training
- Consider qualification requirements for registration of pharmacy technicians, taking into account the complexity of roles undertaken, comparability with other similar healthcare professionals and the need for the profession to develop its own evidence base
- Review post-registration education and training to ensure that opportunities exist which enable the preparation of PTs for the wide variety of roles
- Develop a post-registration career framework to provide a career structure for registered PTs
- Consider how the inter-professional working relationships with pharmacists can be enhanced both pre and post-registration to ensure that the contribution of both healthcare professionals is optimised
- The management culture within pharmacy organisations with respect to pharmacy technicians requires review in order to develop strategies for improvement

1. Introduction

Pharmacy technicians have traditionally worked alongside pharmacists in community and hospital pharmacy settings and have been based primarily in the pharmacy dispensary. Described as 'a vital part of the pharmacy team' (Rosado *et al.*, 2015, p. 10), their primary role has been the preparation and supply of medicines and healthcare products, often with additional advice and guidance. In addition to the supply of medicines via prescription the pharmacy technician role has included production and provision of aseptically prepared medicines, extemporaneous medicines preparation and supply of medicines for clinical trials.

Increasingly pharmacy technicians are undertaking more generic medicines management based roles and assuming training and development roles. As a result of Audit Commission's publication *'A spoonful of sugar, Medicines Management in NHS Hospitals'* (2001) the last 15 years has seen significant change in the role of the pharmacy technician. The main recommendations for pharmacists to work more closely with patients and provide clinical services resulted in a significant transfer of responsibility to pharmacy technicians. Within the hospital pharmacy environment it is now not unusual for pharmacy technicians to manage the pharmacy dispensary and for them to work alongside pharmacists on the ward to ensure that tasks are provided using the most appropriate skills mix. New key roles for hospital pharmacy technicians include the assessment of patients own drugs for use during a hospital stay, undertaking medicines reconciliation responsibilities for patients on admission, supplying medicines to cover the duration of a patient stay and for the period immediately after their discharge.

Parallel to this, pharmacists in primary care roles began working with general practitioners, advising on the evidence-based use of medicines, medication safety and managing prescribing budgets. This work led to the creation of the primary care pharmacy technician who was again required to support the pharmacist in this role and again ensure that the person with the most appropriate skills is used for each task.

The government vision for the role of the community pharmacist has equally changed from the supply of medicines to the provision of patient care and supported by a significant contract change in 2005 (Department of Health, 2005; Pharmaceutical Services Negotiating Committee, 2016), and this again has provided opportunities for the pharmacy technician role to develop. The law currently prevents pharmacists from leaving the pharmacy for significant periods of time and therefore pharmacy technicians have not been able to assume responsibility for all activity within the dispensary in the same manner as that seen in the hospital setting. Community pharmacy based Pharmacy technicians are frequently used to provide elements of clinical and public health based services in collaboration with the community pharmacist. The advent of healthy living pharmacies (http://psnc.org.uk/services-commissioning/locally-commissioned-services/healthy-living-

pharmacies/) where the accessibility of the community pharmacy was seen as providing an excellent opportunity to promote health was perhaps the first time that pharmacy staff were recognised for their contribution to patient care as their ability to engage with the general public was seen as pivotal to the success to the service.

With these expanding and new patient-facing roles across all sectors, greater autonomy was essential to allow pharmacy technicians to make professional decisions. Represented professionally by the Association of Pharmacy Technicians (UK) (APTUK) since 1952, pharmacy technicians were not regulated. In 2001, the Audit Commission recommended to the then pharmacy regulator, the Royal Pharmaceutical Society of Great Britain (RPSGB), that they should consider the formal registration of pharmacy technicians (Yeats, 2001). Voluntary registration was introduced in 2005 by the RPSGB and regulatory registration introduced in 2011 (Pharmacy Order 2010) by the newly formed General Pharmaceutical Council (GPhC).

In order to be accepted onto the GPhC register, pharmacy technicians are required to complete two qualifications in not less than two years, while working under the supervision of a pharmacist. Both qualifications are approved against the GPhC's Initial Education and Training (IET) standards and criteria: Level 3 Diploma in Pharmaceutical Science (knowledge programme) and Level 3 Diploma (NVQ) in Pharmacy Service Skills (competency based programme). Both sets of standards need to be met by the national Awarding Bodies and education and training providers. National Occupational Standards (NOS) (SFH, 2010), are developed into units that form the curriculum for the Level 3 (NVQ) Diploma in Pharmacy Service Skills and all trainees are required to complete 14 mandatory units and a minimum of 3 optional units. All 19 units of the Level 3 Diploma in Pharmaceutical Science must be completed.

The current IET standards for pharmacy technicians have been in use since 2010, and given the rapid expansion of the pharmacy technician role in recent years across all sectors, it is essential that contemporary roles are identified and mapped onto associated training needs. However, there is a paucity of research into the current roles and responsibilities of pharmacy technicians and little is known about the tasks they actually perform as part of their day-to-day work.

When summarising the pharmacy technician' scope of practice, Rosado et al (2015), recommend that clarity of the role of the pharmacy technician was needed, concluding that 'Much now hinges on clearly defining the role of the pharmacy technician and setting IET standards accordingly'(p. 73). Although this study is comprehensive, the scope of interviewees was restricted to commissioners, employers and providers and did not include practicing pharmacy technicians. Engaging with the registrants would provide further substance and discussion on the role of the pharmacy technician to ensure that the roles and scope of practice is accurately reflected.

To date, research on the roles of PTs in the UK relates to commissioned research for national enquiry, with Schafheutle *et al*. (2014) exploring the quality of the initial training and education for pharmacy technicians delivered by providers and Rosado *et al*. (2015), presenting an analysis of Initial education and training standards for PTs and their fitness for purpose. Post qualification education was not within the scope of either project.

With the profession in its early infancy but developing rapidly there is a need to capture the location and roles of pharmacy technicians which are currently being undertaken, identify PT views on the appropriateness of the current education and training in place to develop and support the workforce, and to identify the current barriers and facilitators to the development of the profession in order to optimise its contribution to health and patient care.

2. Aims

The aims of this study were to elicit a description of day to day activities undertaken by pharmacy technicians, obtain and explore pharmacy technician views regarding pre and post-registration education and training and to identify their perceived barriers and facilitators to career development.

3. Method

3.1. Ethical approval

Approval for the study was received from the University of East Anglia Faculty of Medicine and Health Sciences Research Ethics Committee on 15th April 2016 reference number: 20152016-75.

3.2. Introduction

A mixed method approach (Creswell *et al,* 2003) was undertaken to provide a detailed account of the roles and training of PTs. Data collection was carried out in two phases (please see below for details of the two phases).

Quantitative and qualitative data were collected and analysed separately. However, during the focus groups, PTs were invited to discuss some of the anonymised results from the questionnaire and provide further context and explanation of how these findings related to their daily experiences of work and training. Following the analyses, the two sets of data were triangulated before interpretation of the findings in relation to the original aims and objectives of the research. Equal priority was given to the qualitative and quantitative data.

Survey data were analysed using descriptive statistics (please see the Data Analysis section). Focus group data were analysed using Interpretative Phenomenological Analysis (IPA) (Smith & Etough, 2006). IPA is a method of collecting and analysing qualitative data which is based on the idea that individuals are constantly trying to make sense of the world around them. They do this by interpreting events and experiences. This method enabled the researchers to make a closer examination of the work experiences of PTs than could be gained from survey data alone. The process of doing IPA is a dynamic one that allows the researcher's own knowledge of the subject to be included in the interpretation. Thus, the research was carried out by a team that includes PTs, a pharmacist, and a psychologist and expert researcher so that assumptions drawn from the data analysis were as authentic as possible.

3.3. Phase 1: Online survey

A quantitative online survey of PTs' views about their roles and training was administered through the online survey software SurveyMonkey™. Please see Appendix A for a hard copy of the questionnaire but note that although the wording of the questionnaire was identical

to the online survey, the layout was slightly different to conform to the features of the SurveyMonkey™ software.

3.3.1. Participants

We aimed to recruit up to 500 PTs to complete the online survey. We hoped to recruit an even range of PTs from a variety of pharmacy roles e.g. accredited checking, medicines management, from different pharmacy settings including community pharmacy, secondary care, pharmaceutical industry and PT background, e.g. place of training, age, and sex.

3.3.2. Recruitment

Recruitment took place in collaboration with the Association of Pharmacy Technicians UK (APTUK), with the President of the APTUK acting as gatekeeper to the potential participants. The researchers did not have access to the names and addresses or any other personal information of the APTUK members who were invited to take part in the research, nor did the APTUK divulge any personal information about their members. An email was sent by APTUK to all of their members (approximately 6% of the total number of PTs in the UK (23,150)). This provided a pool of potential participants of 1,380 and it was anticipated that we would achieve a 30-40% response rate (400 – 600 responses). We sought to recruit participants from different pharmacy settings across the UK. The email sent to APTUK members invited them to take part in the study (see Appendix B). Information and a copy of the email were also placed on the APTUK website to capture any non-members who might want to take part.

At the end of the email there was a link to the SurveyMonkey™ website page. The website opened at the participant information sheet (see Appendix C). At the end of the information sheet, the potential participants were asked if, having read the information, they would like to continue and participate in the survey. If they clicked ‘yes’ they were taken to the beginning of the survey. If they clicked ‘no’ PTs were told that they could return to the participant information sheet at any time. Once participants completed the survey, final consent to take part in the study was implied if participants clicked the submit button on the online survey.

3.3.3. Withdrawal from the Study

Potential participants were told that it was up to them to decide whether or not they wanted to take part in this research. If they decided to take part, they were still free to change their mind later without giving a reason, provided this was before they submitted their response. They were told in the information sheet that their decision to participate or not, would not affect their employment in any way.

3.3.4. Questionnaire

An online survey was administered using a questionnaire especially designed for the purpose. The questions in the questionnaire were devised in consultation with the board members of the APTUK and an initial pilot study of 6 pharmacy technicians resulted in some changes being made to the wording of some questions to make their meaning clearer. The pilot work also identified how long the questionnaire took too complete so that this could be indicated in the participant information sheet. The responses to the questionnaires for the pilot study were not used in the main study because some changes were made to the questionnaire as a result.

The questionnaire used for the survey aimed to explore the perceptions of PTs of:

- Current role of PTs
- Potential role of PTs
- Current training of PTs
- Training needs of PTs to fulfil an extended role
- Barriers and facilitators to extending the role of PTs
- Working as part of a multidisciplinary team and perceived team members

The questionnaire also gathered information about:

- Demographics e.g. age, sex, length of time working/qualified etc.
- Geographical differences in the work locations of technicians e.g. urban vs rural
- Organisational differences in the work settings e.g. size, type

3.4. Phase 2: Focus groups

A qualitative study was conducted, where PTs who completed the survey questionnaire were invited to participate in a focus group with other PTs and two researchers. The focus groups were conducted to further explore some of the issues associated with the roles and training of PTs that could not be gained from a questionnaire alone. Asking groups of PTs to discuss some of the issues arising from the questionnaire provided a greater richness of data to inform the outcomes of the research.

3.4.1. Participants

Participants for the focus groups were selected from PTs who submitted a response to the online survey and expressed a wish to take part in a focus group.

3.4.2. Recruitment

At the end of the online survey questionnaire, there was a final section inviting PTs to take part in a focus group. They were asked to express their interest in finding out more about the focus groups by clicking on a link to another SurveyMonkey™ webpage where they found a Participant Information Sheet (see Appendix D). At the end of the information sheet

they were asked to provide their names and preferred method of contact. On receipt of the contact details of PTs, the researchers sent each one a paper copy of the Participant Information Sheet and a consent form (Appendix E). PTs who wish to take part in a focus group were asked to sign a consent form immediately prior to the start of the focus group. It was planned that 4-6 focus groups would be held across the UK. Each focus group would have 6-8 participants so a total of between 24 and 48 pharmacy technicians would be were included. The locations were those convenient to the majority of each group taking part. The focus groups were held in a private room with refreshment and toilet facilities available. Purposive sampling of focus group participants was used to ensure that the focus groups had PTs from as many parts of the UK (England, Scotland and Wales) as possible and from different settings of pharmacy (secondary care, community) and different pharmacy organisations (hospitals, care homes, large chain community pharmacies, academia). Participants took part in the focus groups in their own time and so their travel expenses were reimbursed. PTs were also given a £10 shopping voucher as an expression of thanks for taking part.

3.4.5. Topics for Focus Groups

A broad list of topics to be covered in the focus groups was developed. However, it was important that the focus group participants had the freedom to pursue areas of interest to them so the list below is a guide only:

- **Tell us about your current role as a pharmacy technician**

  How would you describe your day?
  - What tasks do you do?
  - How do you feel about doing those tasks?
  - How do you feel at the end of your shift?

- **Tell us about your training as pharmacy technician**

  What did your training involve?
  - Do you feel equipped to do your job?

- **Are there other things you would like to be able to do in your job?**
  - If 'Yes', what are they?
  - If 'No', why is that?
  - What training do you think you would need?

- **Are there any things that stop you extending your role?**
  - If 'Yes', what are they?

- **Are there any things that make it easier to develop your role?**

Other topics that emerged from the survey results were also explored, including attitudes of other healthcare professional and the public towards PTs.

3.4.6. Demographics of Focus Group Participants

Table 1 provides a summary of focus group participant demographics. It can be seen that attendees represented all areas of practice.

Location of FG	Participant Place of Work	Work setting
Cardiff	Cardiff	Hospital
Cardiff	Aberystwyth	Hospital
Cardiff	Cardiff	Hospital
Cardiff	Aberaeron	Primary Care
Manchester	Leeds	NHS England
Manchester	Bradford	Academia
Manchester	Perth	Hospital
Manchester	Norwich	Medicines Support Services
Manchester	Belfast	Independent community pharmacy
Bury St Edmunds	Lowestoft	Academia
Bury St Edmunds	Shoeburyness	Clinical Commissioning Group
Bury St Edmunds	Basildon	Hospital
Bury St Edmunds	Stevenage	Clinical Commissioning Group
Oxford	London	Research Technician
Oxford	Aylesbury	NHS

Table 1 Summary of focus group attendee demographics

4. Data Analysis

The analytic process was both descriptive and explanatory. Data were exported from SurveyMonkey™ and entered into SPSS for Windows version 20 and following data screening, descriptive statistics were produced for participants' characteristics and their descriptions of their roles, career development, MDT work and training. Analyses were carried out by JS with interpretation of the findings being the responsibility of all the members of the project team.

The responses to free text questions were analysed using content analysis (Miles and Huberman, 1994) to provide a complete picture of the participants' perceptions using their own words and comparing them across settings and organisations. The tasks respondents reported carrying out were listed and then collated into categories that reflected the type of work involved in each task. This part of the analysis was carried out by the expert PTs on the research team (MB, JC and TF).

Focus groups were audio-recorded and transcribed in full by KF. All identifying information was removed and transcripts anonymised. Interpretative phenomenological analysis (IPA) (see Introduction to the Method section) was used to explore the focus group discussions and to enable the researchers to provide a narrative of the perceptions of the focus group participants. The data from the focus groups was sorted and organised into categories e.g. tasks performed by PTs, PTs' perceptions of training. These categories were further interrogated and grouped together according to IPA principles, in order to clarify the relationships between categories and to further refine emerging themes. Triangulation was used to draw together the data from the two phases of the research to provide a coherent account of the roles and responsibilities of PTs, their perceptions of the training they currently need, and what training needs should be considered when designing future training of PTs. Analyses were carried out by JS with interpretation of the findings being the responsibility of all the members of the project team.

5. Results

Four hundred and seventy-two PTs responded to the questionnaire (response rate 34%). The data were exported from SurveyMonkey™ and converted to SPSS for Windows version 20. The data were screened and it was found that 79 respondents did not add responses to any of the questions. These were removed from the database. The final number of usable responses was 393 (28%).

The results are organised according to pharmacy setting. Although towards the end of the results section some of the numbers of respondents are small, we felt it was essential that we treated each setting separately. In this way we acknowledge the variety of roles that PTs have and recognise that they are of equal importance. The exception to this format is the final section where there were so few PTs in a number of settings that it was better to present them as a group of specialist PTs; this in no way diminishes our regard for these groups. In section 7 we present a summary of the demographics of all respondents.

Please note that not all respondents were required to answer all questions and some questions asked respondents to indicate more than one answer. For this reason, the number of responses to each question may not add up to the total number of respondents from each pharmacy setting. Findings from the focus groups are included alongside the survey responses and are illustrated by quotations from participants, which have been changed as little as possible to retain the authenticity of the participants' narratives. The number after each quotation is the individuals' identified e.g. Participant 1 (P1) followed by a letter which denotes the location of the focus group.

5.1. Hospital Pharmacy

Hospital Pharmacy Technicians commonly work on a rotational basis at the start of their careers in duties that include working in aseptic services, dispensaries, and pharmacy stores. They can progress to undertake different roles such as ward-based medicines management, and supervising and assessing junior staff and trainees.

This subgroup of 254 participants includes pharmacy technicians from NHS hospitals, community hospitals and hospices.

5.1.1. Participant Demographics

Participants' demographics included sex, age, length of time working in a pharmacy setting, location of work setting, number of hours worked and date of registration.

5.1.1.1. Sex

Respondents from the hospital pharmacy setting were made up of 210 (82.7%; n=254) female and 44(17.3%; n=254) male.

5.1.1.2. Age

Respondents were asked to give their ages and these are presented in groups of ten years in Table 2 where it can be seen that the ages of respondents ranged from 20 to 62 years.

Table 2: Age of Respondents

20-29	30-39	40-49	50-59	>60
53(21%)	94(37.3%)	59(23.4%)	40(15.9%)	6(2.4%)

n= 252; missing data=2

5.1.1.3. Length of Time working in Pharmacy

Table 3 shows how long respondents had worked in a pharmacy setting and this ranged from 2 to 45 years.

Table 3: Tenure in Pharmacy

0-9 years	10-19years	20-29 years	30-39 years	40-49 years
59(23.3%)	96(37.9%)	59(23.3%)	34(13.4%)	5(2.0%)

n=253; missing data=1

5.1.1.4. Location of Work Setting

Respondents were given a list of locations to choose from. In addition, they were given the opportunity to specify their location if it did not fit any of the categories. Other locations included jobs that covered more than one area or that involved travel across the UK. Table 4 shows the different locations of work settings of the respondents.

Table 4: Work Location

Location of Work Setting	Number of Respondents (n=237)
Rural	19 (8.0%)
Urban	48 (20.3%)
Inner city	71 (30.0%)
Town	93 (39.2%)
Other location	6 (2.5%)

Missing data=17

5.1.1.5. Hours Worked

Table 5 shows how many hours respondents worked per week. Although the majority reported working between 31 and 40 hours per week, a number of respondents said that they sometimes worked more hours than they were paid for. The maximum reported weekly hours worked was '60 plus'.

Table 5: Hours worked per Week

0-20 Hours per Week	21-30 Hours per Week	31-40 Hours per Week	Over 40 Hours
6(2.5%)	32(13.3%)	205(85.4%)	6(2.5%)

n=240; missing data=14

5.1.1.6. Date of Registration

Until 2011 the role of the PT was unregulated. Regulation became mandatory under the Pharmacy Order 2010, although a system of voluntary registration was introduced in 2005. Respondents were asked to give the year and month that they registered as a PT. This information is presented in Table 6 as those who registered before 1st July 2011 and those who registered after this date. As can be seen, the majority of respondents from this setting registered prior to 2011.

Table 6: Registration Date

	Registered Before 1st July	Registered After 1st July 2011	From Northern Ireland	In Training
Number of Respondents	138(59.2%)	89(38.2%)	5(2.1%)	1(0.4%)

n=233; missing data=21

5.1.2. Training

Respondents were asked to specify the method of pre-registration they had undergone, the suitability of that training and to describe any post-registration qualifications they held. They were also asked to say what they would change about the PT training.

5.1.2.1. Pre-Registration Training

Table 7 shows that two hundred and fifty-two (99.2%) respondents said they had completed pre-registration training. Respondents were asked to tick all that applied to them so numbers may be uneven due to more than one method of training being undertaken.

Table 7: Pre-Registration Training Method

Further Education College	Distance Learning	Other
175(68.9%%)	71(28.0%)	12(4.7%)

n=254

Focus Group Findings

The issue of pre-registration training was followed up in the focus groups. The discussions in the groups revealed the variety of training that participants had received, with a number of hospital PTs saying that they had received no formal training or had learned ‘on the job’.

One hospital PT who had done a combination of further education and distance learning talked of the benefits of attending college and interacting with other trainees:

> "*I went to college one day a week which I think, I personally feel gives…make a more rounded, um, technician because you're mixing with other people that work in different hospitals. So for me particularly, as I say, when I did my training it was in mental health…which I think there's about 240 drugs that you see in mental health compared to the whole gamut that you see in normal, everyday practice for everybody else. So to have that experience of other people to discuss things with that are coming from other hospitals and things*." P1O

Participants from Wales praised the training of hospital PTs with one referring to the culture of training in Welsh hospitals.

> "*I think in a hospital we are much luckier in as much as we have a massive Welsh training culture and we've got an all Wales training lead ……. If you go to most of the hospitals now, they will have an education and training lead for a technician* [noises of agreement from other participants] *and a pharmacist*." P4C

5.1.2.2. Suitability of Training

Respondents were asked if they felt that their training had equipped them sufficiently for the 'day one' pharmacy technician role. Only 148 out of 254 (58.3) respondents answered this question with 113 (76.4%) reporting that their training had equipped them for the 'day one' role and 35 (23.6%) reporting it had not.

Answers to the question regarding potential changes to training of PTs included some comments about respondents' own training. For example, this respondent had been working as a PT for 6 years and registered after July 2011:

> "*In my pre-registration training the modules we did at college had no real relation to the job I would be performing. There was a lot of time spent on biology and how to present things but very little of the course seemed to be about the use of medicines, their side effects or common regimens of treatment*."

This PT who registered post 2011 and had 3 years' experience said:

> "*A lot of things that were taught at college are not used in our day-to-day working i.e. making medications from scratch - creams/ointments/powders, chemistry knowledge which is not used in our work. Pharmacokinetics and pharmacodynamics, the nervous system, biochemistry* [should be included]."

Another respondent who also registered after July 2011 but had been working as a PT for 13 years said:

"*More should be taught regarding compliance and concordance. I learnt a lot more about this when I undertook the Medicines Management training, 5 years post qualification*."

In comparison this PT had 20 years' experience and registered prior to 2011:

"*I did my training 20 years ago so it may have changed since I did it but it had nothing about patient counselling, ward work such as checking patients own medicines, ordering medicines from a Kardex*."

Participants in one of the focus groups said that there were certain skills that should be displayed for individuals wishing to train as PTs. The reason for including these ideas in this setting is that they emanated from the participants from hospital settings but it was felt that these requirements should apply to all pre-registration training:

- Communication skills
- The ability to listen
- Emotional intelligence
- Self-awareness
- The ability to multi-task
- Ability to ask questions when needed
- Ability to take responsibility

Focus Group Findings

During the focus groups participants talked about their experiences of mentoring students and some of the skills that were lacking. One participant felt that even attending college did not necessarily equip trainees for the PT role and that making the link between drug and patient did not always happen:

"*So even when they go to college …… so I'll stand in the dispensary and obviously I'll go and work in the dispensaries and I'll ask my students 'what does Warfarin do?' And they can't…and they've just done that thing… So you'll just give them a prescription and go 'what do you think is wrong with that patient?' And often they can't tell you because they can't necessarily make that jump between the drug on the page and what could be wrong with that patient*." P2O

This PT went on to talk about how some learning e.g. about accountability could only come with experience, implying that this was not a skill that PTs were equipped with on day one:

"*I think its experience because obviously I ask lots of questions and I like asking questions, I like getting the answers. So we do try and teach them that, you know, you've got to be questioning. So I won't dispense a medicine if I don't know what it is…obviously* [laughs] *but a lot of people will, a lot of technicians that I know will and*

you just go you can't do that because you are professionally responsible for that." P2O

5.1.2.3. Changes to Training

Respondents were asked to comment on the changes they felt should be made to PT training and some of these suggestions are listed below. The quotations have been changed as little as possible to retain the integrity of the respondents' words. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

Some respondents felt that training was no longer fit for purpose with others believing that it should be at degree level so that the profession was in line with other similar professional groups and to enable the extra material to be incorporated within it such as accreditation of checking..

> *"**The training programme is not keeping pace with these changes***."

> "*It should be a **3 year degree level** course similar to those for Physios and OT's. In an acute hospital a technician needs to be able to be a **final checking technician** and a **medicines management accredited technician**, to be a versatile member of the team. A year course would enable them to do both of these. As soon as I had completed my 2 year training I was put on the MM* [Medicines Management] *accreditation (there was not a 1 year period you had to wait then), I then immediately went onto the ACT* [Accredited Checking Technician] *course. **It would have been best if it had been included in my initial training***."

> "***I think it should be made into a degree**. Band 5 in the NHS is equivalent to a degree level, so to reach band 5 after pre-registration training we have to undertake so many other qualifications such as medicines management training, ACPT NVQ assessor's qualification, medicines information qualification etc*."

There was recognition of the current two year model already being content full and that as a result of this newly qualified technicians have to retrain for each new role.

The additional content required was identified as that surrounding the provision of patient care:

> "*The training programme has changed very little over the decades. The training my students are undertaking is very similar to that I completed in the early 90's. These days, certainly in the hospital sector, **clinical knowledge, communication /counselling skills (patient or other colleagues), planning & organisation skills, ward craft** are all far more important than knowing how to make suppositories or spending whole units on stock control which these days is a task competently undertaken by assistant technical staff."*

> "*More training on **problem solving, staff management and customer service***."

A need to focus on values and patient care was identified:

> "*This should be tailored to **patient-centred training** and NHS values, care quality. Learning must be on how the NHS values are linked to the day to day task/activities that the learner undertakes. The training must relate back to the* wider picture of patient care *and how their* [technicians] *role has a significant impact on patient safety and experience. The learners must be trained and made aware of the importance of organisational values, engagement and service delivery*."

More hands on patient facing experience was also identified as a requirement for skills development:

> "*Getting involved in **patient counselling**, getting experience in both **hospital and community settings** to be able to identify differences between the two*."

> ***"[Training] Needs to be more practical and ward focused."***

The method of assessment was also questioned and seen as a tick box exercise:

> "*The course has obviously changed a lot since I did my training, and it seems that now there is a lot **more emphasis on ticking boxes** in relation to each module, rather than on practical experience."*

One participant suggested that hospital and community pharmacy technician roles are so different that the training should be separate:

> "*I did my training in community so when I transferred to hospital I found it quite daunting as it was so different. **Maybe separate out the training***."

The quality of mentoring and length of training in different rotations was also questioned:

> "*More time for **mentoring**, we are too reliant on counting pre-regs in the daily numbers*."

> "*Longer rotations*."

The need for pharmacy technician role development was related to the change in the role of the pharmacist:

> *"The growth of pharmacist prescribing and **the move to near patient service provision** and away from being stuck in a dispensary, requires Pharmacy Technicians to take on roles which support pharmacist developments."*

A lack of understanding of the pharmacy technician role by pharmacists and willingness to support their training was seen as a barrier to professional development:

"*A better support network and understanding of the pre-registration training requirements by other roles within the pharmacy team. For example, I feel there is still* ***a divide between technicians and pharmacists, who are unwilling to understand, engage and participate in a pre-registration technician's training****. This has proved challenging when trying to meet deadlines when the department is short staffed*."

5.1.2.4. Further Qualifications/Accreditations

Table 8 shows the post-registration qualifications/accreditations that PTs had undertaken. One hundred and fourteen respondents out of 178 (64.0%) total number of respondents (all settings of pharmacy) who answered this question reported having one or more qualification.

Table 8: Post-Registration Qualifications

Qualification	Number of respondents (n=114)	Percentage (n=114)
Accuracy Checking Pharmacy Technician	95	83.3
National Approved Medicines Management Skills Programme (including medicines reconciliation)	47	41.2
Certificate/Diploma in Clinical Pharmacy/Medicines Management for Pharmacy Technicians	14	12.3
Patient Consultation Skills	19	16.7
Community Pharmacy training e.g. Healthy Living	12	10.5
NVQ Assessor	58	50.9
Internal Quality Assessor	19	16.7
Management	44	38.6
UKMi Accredited Medicines Information Technicians Training Scheme	7	6.1
Pharmaceutical Technology & Quality Assurance (PTQA)	1	0.9
Chartered Institute of Procurement & Supply (CIPS)	0	0
Teaching qualification	17	14.9

NB ns are unequal because some respondents reported having more than one qualification.

Post-registration training and its implications will be discussed in Section 8 of this report.

5.1.2.5. Method of Completion of Post-registration Training

Table 9 shows the methods used to access post-registration training. Most participants reported completing their post-registration training and qualifications through a regional training provider.

Table 9: Post-Registration Training Method

Method	Number of Respondents (n=114)	Percentage (n=114)
Attending further education college	39	34.2
Through higher education or training	25	21.9
Distance learning	39	34.2
Through a regional training provider	73	64.0
In-house	5	4.4
Other	9	7.9

5.1.3. The Current Role of the Hospital PT

The main aims of this research were to describe the current and future roles of PTs from their perspective and to identify barriers and facilitators to career development. In this section we report on the tasks that hospital PTs said they carried out and daily and weekly tasks have been combined to provide a description of those tasks.

5.1.3.1. Tasks Carried Out by Hospital PTs

The tasks reportedly carried out by hospital PTs are numerous and can be divided into four main categories – technical, clinical, training and management. The technical tasks include the purchasing, storage, manufacture, dispensing, quality testing and supply of all the medicines used in the hospital. The clinical tasks include patient facing tasks such as counselling on the correct administration of medicines and the use of devices such as inhalers for the treatment of asthma. Training includes mentoring of student PTs and training nurses and pre-registration pharmacists.

For ease of reading we have presented the tasks in these 4 categories. These are all as reported by hospital PTs in their questionnaire responses.

As can be seen from Table 10 on the following page, the tasks reportedly carried out by our hospital-based respondents are numerous and varied. In Section 7 we combine the tasks that all PTs from each setting said they carried out in order to provide a broader picture of what is being done by PTs.

Table 10: Tasks carried out by Hospital PTs

Technical Tasks	Clinical Tasks	Management Tasks	Training Tasks

Maintenance of Pharmacy Supplies
• *Ordering/procurement*
• *Updating supply issues for end of life medication*
• *Procurement contract monitoring*
• *Regional drug contract amendments*
• *Source new item requests*
• *Process high cost medication requests*
• *Stock management*
• *Ward stock top ups*
• *Maintaining emergency cupboard supplies*
• *Clearing out drug trollies*
 	
Medicines Management
• *Manage medicines waste*
• *Order medicines for patients*
• *Prescribing audits e.g. for asthma patients*
• *Missed dose audits*
• *Dispensing*
• *Eye clinic discharge prescriptions*
• *Accuracy Checking of Dispensed Items*
• Undertaking financial transactions
• *Dispensing adherence aids*
• *Prescription administration (collection & filing, repeat supply)*
• *Processing prescriptions for payment*
• *Maintaining legal documentation e.g. CD registers*
 	
Management of Controlled Drugs
• *Accountable officer*
	Communication/interaction
	• *Communication with (MDT)*
	• *Attend Multi-disciplinary (MDT) and medicines management team (MMT) meetings.*
	• *General Communication (patients, carers, other healthcare professionals, community pharmacies)*
	• *Patient counselling (Handing out prescriptions and bedside/ward-based counselling)*
	• *Problem solving*
	• *Falls reviews*
	
	Safe Administration
	• *Check allergies and interactions*
	• *Assessing patients own drugs for use*
	• *Ordering new and resupply of medicines for individual patients*
	• *Taking drug histories from patients*
	• *Medicines reconciliation*
	• *Ward spot checks*
	
	Clinical Specialties
	• *Clozapine monitoring*
	• *Antimicrobial stewardship*
	• *Renal dialysis medicines management*
	• *Oncology including paediatrics*
	• *HIV*
	• *Haematology*
	• *Medical assessment clinic*
	• *Anticoagulant clinics*
	• *Transplant patients*
		• *Overseeing a service*
		  ○ *Write monthly staffing rota*
		  ○ *Organise team each morning, discuss issues & rota for the day (following adjustments)*
		  ○ *Co-ordination of training time within the working day e.g. ACPT*
		  ○ *Writing standard operating procedures (SOPs)*
		• *Staff management (recruitment, appraisals, sickness management, disciplinary proceedings*
		• *Budget control*
		• *Monitoring and reporting Trust drug spending*
		• *Writing policies and procedures*
		• *Strategic planning*
		• *Planning for the future in terms of numbers of staff and facilities.*
		• *Building IT software*
		• *Updating IT systems*
		• *Co-ordinate patient and work load (e.g. for clinics)*
		• *Performing user satisfaction surveys*
		• *Health and safety assessments*
		• *Dealing with complaints*
		• *Represent department at external meetings*
		• *Visits to other hospitals in the Trust to advise and problem solve*
		• *Formulary work*
		• *Maintaining training and accreditation databases*
		• *Horizon scanning*
		• *Governance activities*
			• *NVQ Assessing*
			• *Delivering In- house training to pharmacy and other healthcare professionals*
			• *Mentoring staff*
			• *Antibiotics training for nurses*
			• *Supervision of pre-registration PTs and pre-registration pharmacists*
			• *Marking work*
			• *Internal Quality Assurer (IQA) verification*
			• *Facilitator for ACPT*
			• *Writing and updating training programmes*
			• *Acting as an expert witness for NVQ assessment*

Technical Tasks	Clinical Tasks	Management Tasks	Training Tasks
• *Move to community* • *Destruction of controlled drugs* **Quality Assurance** • *Error investigation and management* • *Compliance to medicines and controlled drug policies* • *Datix reporting* • *Monitoring key performance indicators* • *Attending licensed and unlicensed quality review meetings* • *Health and safety risk assessments* • *Checking and compiling fridge data* • *Environment monitoring e.g. temperature* • *Vaccine storage and handling* **Data Analysis and Reporting** • *Prescribing incidents* • *Usage and wastage* • *Medicines management incentive schemes* **Aseptic Medicines Management** • *Checking batches* • *Extemporaneous dispensing* • *Manufacturing aseptic products* • *Checking customer service team orders* • *Health and safety of aseptic medicines preparation*	**Patient discharge** • *Discharge planning* • *Preparing discharge summary* • *Patient counselling in preparation for discharge* • *Pastoral support for patients* • *Home visits following discharge* • *Transfer of care of patients from hospital to GP care.* **Clinical Trials** • *Background research for clinical trials* • *Identifying patients* • *Trials management and project work* • *Authorising staff payments on SSTS trials activities*	• *Training standards group activities* • *Writing business cases*	

Focus Group Findings

The roles of the focus group participants and the exploration of the tasks they carry out was discussed in depth. To begin, here is a hospital PT's brief description of her job:

> "*Um, I do a bit of everything. I go to wards, I do POD assessments; Patient's Own Drugs, I do…I look at the suitability of the medication that they have bought in from home to see whether it's appropriate for them to use while they've been admitted. Um, and I do final checking of medication that's been clinically screened by the pharmacist and release them. I do…facilitate the checking scheme for pre-reg pharmacists, new starters i.e. could be locum pharmacists, it could be permanent pharmacists that are coming onto the trust, in addition to that: trainee pharmacists and technicians that have qualified as well. Um, I've got so many different hats, I also do transcribing and re-supply on the ward. Again, there's* [sic] *rigorous training packages being set out. So what that means is, um, if a drug chart has been clinically screened then I can order those medications and re-supply them as well; I don't need a pharmacist to do a final check on the ward and reorder those. I do counselling for patients, both at the outside of the hatch and also on the ward. I'm now trying to do drug histories as well*." P3B

Embedded in this narrative are a number of clinical tasks that require both specialist knowledge and skills and a high level of responsibility. This sparked off a discussion within the group about responsibility with participants from other settings comparing the level of responsibility in their jobs. One community PT was concerned that no one checked her work and mistakes might happen. The hospital PT (P3B) added that "*If you do identify something that is of a risk, you still have a duty to raise…escalate it upwards irrespective of whether you've had training.*"

Another participant who had experience of working in a hospital setting voiced her concerns about the final accuracy checking task carried out by PTs and whether the Accredited Checking Pharmacy Technician qualification should be core to training:

> "*But the thing that concerns me is, being a checker in a hospital, and knowing what checkers are put through on the bench for hours on end, a newly qualified tech with no experience and very little clinical knowledge being left on their own checking for hours on end…I think it's concerning. I don't…I think it probably does need to go in [as core training], but…I don't know whether it's…I don't know. My honest answer; I don't know if it's the safe thing to do or if it's just the obvious thing to do. I think to become a checker and to become a safe checker, you need some experience*." P1B

Another hospital PT described her role and the responsibilities it entailed:

> "*Um, it depends on the day. So, I'm obviously the chief technician so I'm responsible for all the education, all professional development…um…I'm Response Site Manager*

on the day as well, so it depends on where I am, what's happening and…what's going on, really, to what I do on a particular day. But I do have an awful lot to do with training and development, rotas are the bane of my life but we do lots of rotas and…just to try and make sure that everything is covered." P2O

There was a feeling from some participants that they were doing jobs that would previously have been done by pharmacists. One participant said that she was doing a job that had been done by a pharmacist but was not being paid a pharmacist's salary: "*The job I'm doing now was previously done by a pharmacist. When she left I was appointed and was paid* about £20k a year less". (P5M) This PT had been deputy to that post and when she stepped up to the role vacated by the pharmacist she could only regard it as a money making exercise. These thoughts were echoed by others in the group, regardless of work setting.

Participants in most groups talked about their role supporting pharmacists in their work but cautioned against taking too much on, saying: "*Where more falls on each pharmacist, they're just so grateful for the help but I think we need to watch that we're not being used as cut price pharmacists.*" P1C

There was discussion amongst group members about what the PT role was supposed to be. Most said they had come into the job because the technical bias of it appealed to them. This PT summed it up:

"*That's why we're called technicians; we used to be called medical technical officers because technical detail is what we do, you know. We're not…it's not that we're not interested in clinical but technical detail is our remit*." P3C

5.1.4. The Future Role of the Hospital PT

Respondents were asked to comment on the future role of the PT but were first asked whether they wanted their own role to expand.

5.1.4.1. Desire to Expand Role

Respondents were asked if they would like to expand their role: 136 (53.5%; n=254) answered this question and of these 109 (80.1%; n=136) said they would like to expand their role and 27 (19.9%; n=136) said they would not. However, 118 out of 254 (46.5%) respondents did not answer this question. Respondents were asked the reason why they did not want to expand their role and the answers are shown in Table 11 on the following page.

Table 11: Reasons for not wanting to Expand Role

Reason	Number of Respondents (n=27)	Percentage % (n=27)
Personal reasons	11	40.7
Lack of support from organisation	3	11.1
Lack of support from other staff	4	14.8
No training available	3	11.1
Difficult to get to place of training	1	3.7
Lack of time	8	57.1
Lack of funding	2	7.4
Other reasons	14	51.9

Other reasons for not wanting to expand role included being on the highest band already and having a satisfying role.

5.1.4.2. How could the PT Role Expand?

Respondents were asked to comment on how they thought the role of the PT could be expanded and these suggestions are listed below. Most hospital respondents saw the future role as one with a greater emphasis on clinical care and also a desire to train to prescribe was frequently mentioned.

As previously, the quotations have been changed as little as possible to retain the integrity of the respondents' words. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

As the pharmacy technician role changed then the role of the pharmacy assistant required revisiting.

> "*Becoming mostly **ward based** with the dispensary being primarily assistant*."

A desire for more clinical roles and autonomy was stated with a number of future roles for pharmacy technicians were identified such as prescribing and medicines management.

> *"I think that in the future, **clinically based pharmacy technicians** will continue to take on more and more clinical work, taking part in running clinics and ever more detailed medication reviews. I also think there is scope within the profession for highly skilled and specialised technicians to be involved in **prescribing**. "Greater focus on **ward based activities**. History taking, reconciliation and discharge. More time counselling on medicine optimisation. **Growing into primary care sector** via the Vanguard programme. Technician Validation. Supporting administration of IV medicines*."

"*I sincerely hope that pharmacy technicians are able to **become prescribers**; supply and administer medication under PGDs; lead on **more clinical aspects** within their roles, e.g. anti-coagulant clinics, POACs* [Primary Care Options for Acute Care]*; …I also hope that in the **future Medicines Management is a core part of all PTs training** and that **cross sector experience is mandatory**.*"

"***Independent prescribing** for clinical pharmacy technicians, provided a suitable course is produced. Pharmacy technicians know much more about medications than that of nurses and, in my opinion would be safer prescribers*."

Intermediate care was seen as a future location where pharmacy technicians may play an increasing role.

*"**With an emphasis on moving patient care away from hospitals, the intermediate care setting is a key area for technicians to excel**. This is an environment I worked in before my current role. In the clinical research area I currently work in, I think that the opportunities to expand are constantly changing. Taking responsibility for clinical and technician protocol reviews and financial considerations based upon the technical requirements of a study are all well within the capabilities of most technicians*."

A request for pharmacy technicians to take on more specialist, leadership and management roles was made and again the belief that these roles did not have to be delivered by pharmacists.

"*We also need more techs so that tech lead dispensaries in hospital are the norm. Technicians should also take over **operational higher level roles within pharmacy dept**. These do not need to be done by pharmacists anymore*."

"***Specialist roles** - clinic leaders, care homes, production managers. Even more clinical skills/specialism. **Management/team leader roles, at a senior management level***."

Poor inter-professional relationships with pharmacists were seen as a barrier to role extension.

"*I hope to see the role of them develop as far as an individual is capable of developing themselves. Nurses seem to have gone into all sorts of areas and are working at all levels. Why can't technicians be the same? Often we play the **poor relation to pharmacists**, nurses are no longer playing the poor relation to doctors*."

"*It is difficult to see where the future lies for pharmacy technicians with the current qualifications. I think that **if a degree level qualification was developed** it would enable the pharmacy technician to better support the role of the pharmacist and*

perhaps take on some roles that would enable the pharmacist to dedicate more time to patients who need their clinical knowledge and expertise.

A lack of career pathway post-registration was seen as a barrier to pharmacy technician development:

> "*I think we could be more involved in clinical role but there needs to be* ***more education post qualification****.* ***I feel like I am stuck*** *now I have done ACT, NVQ assessing and UKMi training."*

> *"I think there should be a '****junior pharmacist role****'. The education system needs to be re-structured to allow a qualified pharmacy technician to do a short 2 year intensive clinical course to be pharmacist. I think more management roles should be created for pharmacy technicians*."

Pharmacy management was also seen as a barrier to PT career development:

> "*Unfortunately I cannot see any future development for my own personal career due to* ***poor management***."

> "*Will depend on the attitude of local senior pharmacy management who seem protective of the traditional roles of the pharmacist*."

"The role of the Pharmacy Technician is massively underplayed and undervalued."

One PT who had worked in community prior to moving into a hospital post recognised the greater breadth of opportunities afforded to hospital pharmacy technicians:

> "*Working in community hospitals, my job has a great deal more variety than working in a community pharmacy. I'm now working on the wards which has increased my clinical knowledge, working in the GP practices helping with prescribing projects and cost saving and working visiting patients in their own homes to help with compliance issues and getting involved with multi-disciplinary team meetings. I think the SVQ level 3 training needs to be updated to include all these aspects of the job as technicians are no longer restricted to working in dispensaries. I think the role of the technician will keep growing.* ***Exciting times***!"

5.1.4.3. What would be the Priority for Training for Role Expansion?

Respondents were asked what training would be a priority in order to achieve role expansion. Table 12 gives an idea priorities for training that PTs said they need to obtain or would be desirable for role expansion. These are categorised as per the tasks in Table 10.

Although this lengthy list includes a number of training qualifications, PTs also added that more time, more funding and greater support from senior management would be a priority for their role to expand. One respondent added that it may be necessary to write a new accreditation in order to achieve role expansion.

Table 12: Priorities for Training

Technical	Clinical	Management	Training
ACPT Attend National Framework courses More CPD/conferences to maintain and update knowledge AMITTS scheme I.V. qualification ILM level 2 Closer work with pharmacists and structured training Use of PGDs Medicines Management Skills accreditation Aseptic checking course	Patient counselling Communication Clinical training Clinical diploma (but not one that has to be completed in hospital pharmacy) PTQA Training on certain groups of medications Training in recognising sensory loss and its effects Signing for deaf How to simplify information to aid adherence Admissions avoidance Drug interactions Use of unlicensed medications Experience on the job Specialist training e.g. oncology Interpretation of blood results Working with vulnerable and frail patients CPPE courses	Management masters High level management training HNC in Pharmacy Services Development and Management More soft skills like shadowing the director for capacity. Management degree Finance- related qualification Managerial & General Clinical Research Design Governance qualifications Leadership QIS Business Case writing PRINCE 2 qualification	NVQ assessor training External verifier training and IQA training Training for teaching Revalidation

5.1.5. Barriers to the Career Development of PTs

There were 9 pages of responses to the question 'Overall what do you think are the barriers to the career development of pharmacy technicians?' These included apathy within the profession generally, not having a defined role that is specific to PTs in secondary care, no defined career path in comparison to pharmacists who, in secondary care particularly, are expected to undertake diploma post-qualification and then prescribing, not having a graduate qualification so cannot get into further training e.g. masters. Silo thinking was mentioned and time to train was seen as a barrier, as was the perception of PTs as "*still seen a lower priority than pharmacists*". Some answered the question from the perspective

of their setting, others commented on the barriers to career development of PTs in general. For the complete list of perceived barriers to career development see Appendix F.

Focus Group Findings

Career development was discussed in all of the focus groups with mixed reactions from the different settings. In the hospital setting lack of a clearly defined career pathway was seen as a barrier and a frustration because they felt undervalued. This participant said:

> "*Undervalued in the sense that if there were appropriate training packages for the diverse roles the technicians have…I mean I personally feel rewarded, I feel satisfied with my role. You know, I'm looking at band 4 to band 7, there are few band 8as scattered across the country but not many, you know? It's developing those and when I look back and think…what are we doing about it? When I look at that I feel disappointed and disheartened; the fact that there isn't an appropriate clear pathway to reach that, sort of, ladder? Top of the ladder*?" P3B

This was echoed by another participant in the group "*Pharmacy technician; there is nowhere where you can go up education-wise, it's very, very difficult*" P2B

In another focus group there were lengthy (and sometimes heated) discussions about the lack of acknowledgement of the PT's skills. The conversation began with the notion that there had been initial resistance from pharmacists to Accredited Checking Training and P3M said that at a conference, when talking to pharmacists one told her that 'he knew that PTs did a good job but didn't actually know what they did.' This lack of understanding of the PT role by other healthcare professionals was seen as a major barrier to the development of the role as a profession.

However, it was not just a question of the understanding of the role but the attitude of others. One participant recounted a conversation with a pharmacist which demonstrated a lack of awareness of the professional competence of pharmacy technicians by pharmacists and an unwillingness to allow the responsibility for recording stock holding status to be transferred,

> "*They used a green pen and a chart came down and I knew something was stock. I got a green pen and I wrote an S for stock, that's all I did and I was asked 'what was I doing using a green pen, I was only a pharmacy technician'. Those were the words, and um, 'I would never be qualified enough to use a green pen' is what I was told* [noises of shock from other participants] *and I was only there to…I wasn't there to use my own initiative*." P2C

Considering the significant clinical role that many hospital PTs have (see Table 10), the lack of formal training would seem to be contrary to career development.

There were concerns expressed by one participant who was in a senior role, that funding for the career development of PTs was likely to be cut.

> *So actually the funding really worries me that the funding is all going for technicians. The bursaries are going next year, you know, I've just about got my 2 through this year but if we want to do more of that…just think how many nurses there are in the place…if you want technicians to take those roles on, we are going to have to train a whole group of people and they've got to be the right type of people*." P2O

5.1.6. Facilitators to the Career Development of PTs

Respondents were asked to comment on the things that helped the career development of PTs. Again, there was a long list of comments with things that contributed to career development being described as the culture within the organisation they work for, awareness of courses / qualifications that are available, support from immediate and grandparent managers to undertake development and the accessibility of role models and mentors. Clear pathways to the development of core skills had been experienced by some respondents who described a management willing to embrace a technician led operational structure, using pharmacists at ward level for their clinical skills. Some answered the question from the perspective of their setting, others commented on the facilitators to career development of PTs in general. The full list of facilitators to career development is given in Appendix G.

Focus Group Findings

Focus group conversation tended to be biased towards the barriers to career development rather than the facilitators, although the list in Appendix G shows that there are many issues that help the development of the hospital PT role.

Support and encouragement for both their current role and for future career development were the two most significant things that participants felt helped them to progress in their roles. One participant talked of changing from one hospital to another and the difference it made:

> "*I went to a hospital then that really encourages, um, technicians and they really, you know, did bring me on and made me realise because I was sort of put in this box as 'only a technician'* [at the previous hospital] *and I still say it now 'I'm only a technician' and I get told off, to say you shouldn't say that. But it's because the way I was treated back then, you know, but I'm trying to…I don't work under the supervision of a pharmacist now."*P2C

The above participant said that she no longer worked under the supervision of a pharmacist because she had developed the skills and knowledge required to work autonomously.

5.1.7. Multidisciplinary Teamwork

The questions about working as part of a team of healthcare professionals were asked because MDTs are prevalent in hospitals and thus it was felt to be important to ascertain how PTs felt about this.

Respondents were asked if they considered themselves to be part of an MDT, 122 (48.0%; n=254) said that they did, 8 (3.1%; n=254) said they did not but 124(48.8%; n=254) did not answer this question.

Respondents who said they worked as part of a team listed the other members of that team including pharmacists, other pharmacy technicians, physiotherapists, occupational therapists, doctors, nurses, dieticians, GPs, radiographers, porters, support workers and administrative staff and speech and language therapists.

Of the 8 respondents who said they did not consider themselves to be part of an MDT, 7 said they would like to do so. They were asked who would be part of their team and answers given were nurses, doctors, physiotherapists, occupational therapists, phlebotomists, microbiologists, more technicians, education and training specialists from other healthcare professions and speech and language therapists.

The importance of MDT working and context will be discussed in relation to other PT work settings in Section 8

5.2. Community Pharmacy

Community pharmacy technicians work in retail pharmacies such as chemist shops in the high street, supermarkets or as part of a Health Centre. They undertake a wide range of tasks which include:

- Reading prescriptions, labelling and dispensing prescribed medicines.
- Calculating quantities and doses of medicines
- Providing information and advice to patients on how to use their medication.
- Advising members of the public about over the counter medicines and management of minor ailments.
- Selling over-the-counter medicines and other items stocked by the chemist.
- Manufacturing basic ointments and mixtures by making simple dilutions
- Stock procurement and control.
- Maintaining individual records of patient's prescriptions, usually using the pharmacy computer system.

This subgroup of 71 participants includes pharmacy technicians from community pharmacies.

5.2.1. Participant Demographics

Participants' demographics included sex, age, length of time working in a pharmacy setting, location of work setting, number of hours worked and date of registration.

5.2.1.1. Sex

Respondents from the community pharmacy setting were made up of 61 (86.0%; n=71) female and 10 (14.0%; n=71) male.

5.2.1.2. Age

Respondents were asked to give their ages and these are presented in groups of ten years in Table 13 where ages of respondents ranged from 19-65 years of age.

Table 13: Age of Respondents

<20	20-29	30-39	40-49	50-59	>60
1(1.4%)	13(18.6%)	23(32.9%)	11(15.7%)	21(30.0%)	1(1.4%)

n= 70; missing data=1

5.2.1.3. Length of Time working in Pharmacy

Table 13 shows how long respondents had worked in a pharmacy setting and this ranged from 2 to 48 years.

Table 13: Tenure in Pharmacy

0-9 Years	10-19 Years	20-29 Years	30-39 Years	40-49 Years
16(22.9%)	33(47.1%)	10(14.3%)	8(11.4%)	1(1.4%)

n=70; missing data=1

5.2.1.4. Type of Community Pharmacy worked in

Table 14 shows the type of community pharmacy that respondents indicted they worked in.

Table 14: Type of Community Pharmacy

Independent	Small Chain	Large Chain	Supermarket	Other
17 (29.9%)	13 (18.3%)	17 (23.9%)	3(4.2%)	16 (22.5%)

n=71

Only 8 of the 'other settings' specified the type of CP and these are listed below, exactly as written by respondents:

- GP owned
- Hospital
- Hospital

- Local Pharmaceutical Committee
- Locum
- NHS trust
- Semi-rural GP practice

5.2.1.5. Location of Work Setting

Respondents were given a list of locations to choose from. In addition, they were given the opportunity to specify their location if it did not fit any of the categories. Other locations included jobs that covered more than one area or that involved travel across the UK. Table 15 shows the different locations of work settings of the respondents.

Table 15: Work Location

Location of Work Setting	Number of Respondents (n=71)
Rural	10 (14.1%)
Urban	14 (19.7%)
Inner city	14 (19.7%)
Town	31 (43.7%)
Other location	2 (2.8%)

5.2.1.6. Hours worked

Table 16 shows how many hours respondents worked per week. The majority reported working between 31 and 40 hours per week with only 6 saying they worked more than their contracted hours.

Table 16: Hours Worked per Week

0-20 Hours per Week	21-30 Hours per Week	31-40 Hours per Week	Over 40 Hours
5(7.5%)	12(17.9%)	44(65.7%)	6(8.9%)

n=67; missing data=4

5.2.1.7. Date of Registration

Until 2011 the role of the PT was unregulated. Regulation became mandatory under the Pharmacy Order 2010, although a system of voluntary registration was introduced in 2005. Respondents were asked to give the year and month that they registered as a PT. This information is shown in Table 17 as those who registered before 1st July 2011 and those who registered after this date. As can be seen, as with hospital PTs, the majority of respondents from this setting registered prior to 2011.

Table 17: Registration Date

	Registered before 1st July 2011	Registered after 1st July 2011	From Northern Ireland	In training	Did not specify
Number of Respondents	39(54.9%)	23(32.4%)	1(1.4%)	1(1.4%)	7(9.9%)

n=71

5.2.2. Training

Respondents were asked to specify the method of pre-registration they had undergone, the suitability of that training and to describe any post-registration qualifications they held. They were also asked to say what they would change about the PT training.

5.2.2.1. Pre-Registration Training

Table 18 shows that seventy (98.6%) respondents said they had completed pre-registration training. One respondent (1.4%) did not answer this question.

Respondents were asked to tick all that applied to them so numbers may be uneven due to more than one method of training being undertaken.

Table 18: Pre-Registration Training Method

Further Education College	Distance Learning	Other
23(32.9%)	43(61.4%)	6(8.6%)

n=70

NB 2 respondents completed their training by combined means so total does not equal 70.

Focus Group Findings

(NB Fewer community PTs volunteered to take part in the focus groups so there are fewer quotations from this setting)

PTs talked about the difficulties of undertaking pre-registration training whilst working and one suggested that training was better facilitated in the hospital setting than in community pharmacy.

> "*We have student techs in community and they struggle because they don't get that* [same support as in the hospital setting] *because…through exactly what was said earlier; you are there to work* [noises of agreement from other participants]. *They very often do their training on their day off, um, they very often aren't released for any extra, additional training. Assessors go into the workplace and they struggle to*

get the time with them because the, um, the pharmacist in charge won't release them." P4C

It was the experience of PTs in this focus group that pharmacists tended to make training more difficult than it should be. The reason for this was given as the busyness of the pharmacy and the business nature of community pharmacy organisations. Another participant said that it was down to leadership and "*If they like technicians and they believe the technicians can play a valuable part, that's where you'll get the best* [opportunities]." P3C

Participants talked of some of the skills that should be taught pre-registration and one community PT said that in her pharmacy they regularly had people sitting in the pharmacy who had mental health problems "*They come and wait for their prescriptions then go back to the doctor and tell them they hadn't got any meds to be told that they were already waiting for them at the pharmacy*." P7M. It was the general opinion that when working in community pharmacies, staff often came face-to-face with people with mental health problems and people who are difficult, rude or aggressive. It was therefore essential that students were taught how to communicate effectively. The issue of dealing with people with mental health problems is reported in Section 7.

5.2.2.2. Suitability of Training

Respondents were asked if they felt that their training had equipped them sufficiently for the 'day one' pharmacy technician role. Only 45 out of 71(63.4%) respondents answered this question with 31 (69.0%) reporting that their training had equipped them for the 'day one' role and 14 (31.1%) reporting it had not.

Answers to questions about potential changes to training included some comments about respondents' own training.

> "*At college there was not enough hands on experience of dispensing Rxs* [prescriptions] *and what is actually involved in day to day pharmacy*" Community PT with 10 years' experience who registered prior to 2011.

This PT with 17 years' experience in community pharmacy and who registered prior to 2011, reiterated the need for training in how to deal with 'difficult' patients but also training in the diagnosis of minor ailments.

> "*I had already been working in pharmacy for 10 years as a counter assistant before undertaking my technicians training so had already gained a lot of on the job training. It is therefore hard to suggest what changes need to be made. I think that there is a lot to be said about a less book-based approach to learning for a technician working in community pharmacy. Perhaps there needs to be a bit more practical training made available through workshops and courses that you physically attend to help to learn how to deal with things such as: dealing with difficult patients,*

diagnosing minor skin/stomach/eye problems that need not be seen by a GP. There are certain things that cannot be taught in a distance learning course."

Again, participants talked about core skills and felt that students needed to learn more about professionalism, but that it was a difficult attribute to teach.

Focus Group Findings

Participants talked about the lack of formal training in professionalism as part of pre-registration courses. Although they acknowledged the fact that professionalism skills were often refined 'on the job' new PTs needed to have the personal attributes that enabled them to behave in a professional way. It was also felt that the quality of mentoring was extremely important. One said that what was needed was "*emotional intelligence*". P3C

At one focus group we asked participants to brain storm what pre-registration training might look like and they were full of ideas. At the end we asked them to brainstorm what a PT course should look like. Participants agreed that entry requirements should be 7 GCSEs including Maths English and Science (compulsory). Communication skills were also important, "*Another entry requirement should be good communication skills. PTs need to be able to talk to patients especially in community pharmacy*." P1M

P3M said they needed empathy and when asked how she would assess that, she said it was "*Just obvious when you talked to people. The way they responded and their general attitude*." It was agreed by this group's members that communication skills were not a formal part of the PT programme but should be.

5.2.2.3. Changes to Training

Respondents were asked to comment on the changes they felt should be made to PT training and some of these suggestions are listed below. The quotations have been changed as little as possible to retain the integrity of the respondents' words. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

Whilst some individuals wanted to learn more about dispensing whilst at college.

> "*At college there was not enough **hands on experience** of dispensing prescriptions and what is actually involved in day to day pharmacy*."

Others recognised that a lot of learning is done in the workplace although role play could be used to better prepare individuals for their role.

> *"I don't feel you could ever be issued training to prepare yourself fully for the role undertaken, **learning on the job is the best way**. **Role-play** situations I feel are most appropriate*."

The quality of workplace support provided by the college training was questioned.

> "*A lot **more support** in place, actual regular staff able to deal with your issues/queries, more feedback and organisation needed desperately*."

There was a recognition of the need for the development of more patient facing skills and IT literacy.

> "*It's been a long time since I did my training, but at that time there was **insufficient training on interacting with patients** e.g. counselling, questioning techniques. Training needs to include IT skills e.g. Excel use*."

Management skills and training were also identified as necessary to enhance effectiveness within role.

> "***Learning how to organise my time** better, working with a team. The manager expects you to resolve a lot of problems in pharmacy. It takes time to learn this and experience*."

5.2.2.4. Further Qualifications/Accreditations

Table 19 shows the post-registration qualifications/accreditations that PTs had undertaken. Thirty-five out of 37 (94.6%) who answered this question reported having one or more qualification

Table 19: Post-Registration Qualifications

Qualification	Number of Respondents (n=35)	Percentage (n=35)
Accuracy Checking Pharmacy Technician	29	83.0
National Approved Medicines Management Skills Programme (including medicines reconciliation)	7	20.0
Certificate/Diploma in Clinical Pharmacy/Medicines Management for Pharmacy Technicians	2	5.7
Patient Consultation Skills	6	17.1
Community Pharmacy training e.g. Healthy Living	10	28.6
NVQ Assessor	6	17.1
Internal Quality Assessor	2	5.7

Management	6	17.1
UKMi Accredited Medicines Information Technicians Training Scheme	0	0
Pharmaceutical Technology & Quality Assurance (PTQA)	0	0
Chartered Institute of Procurement & Supply (CIPS)	2	5.7
Teaching qualification	3	8.6
Other qualification	4	11.4

NB n= unequal because some respondents reported having more than one qualification.

Other qualifications included those gained overseas and not recognised in the UK.

5.2.2.5. Method of Completion of Post-Registration

Table 20 shows the methods used to access post-registration training. Most participants reported completing their post-registration training and qualifications via distance learning.

Table 20: Post-Registration Training Method

Method	Number of Respondents (n=35)	Percentage (n=35)
Attending further education college	8	22.8
Through higher education or training	3	8.6
Distance learning	20	57.1
Through a regional training provider	11	31.4
In-house	2	5.7
Other	6	17.1

5.2.3. The Current Role of the Community PT

As previously stated, the main aims of this research were to describe the current and future roles of PTs from their perspective and to identify barriers and facilitators to career development. In this section we report on the tasks that community PTs said they carried out and daily and weekly tasks have been combined to provide a description of those tasks.

5.2.3.1. Tasks Carried Out by Community PTs

The tasks reportedly carried out by community PTs are less extensive than those of hospital PTs and vary in their focus. The tasks are presented in Table 21 in the same 4 categories as presented in Table 10 – technical, clinical, training and management. These are all as reported by community PTs in their questionnaire responses.

The technical tasks include the purchasing, storage, dispensing and supply of all the medicines to patients using the community pharmacy. The clinical tasks are fewer than those carried out by hospital PTs but include essential, advanced and enhanced services. In Section 7 we combine the tasks that all PTs from each setting said they carried out in order to provide a broader picture of what is being done by PTs.

Table 21: Tasks carried out by Community PTs

Technical Tasks	Clinical Tasks	Management Tasks	Training Tasks
Maintenance of Pharmacy Supplies • *Ordering/procurement* • *Invoice reconciliation* • *Dealing with invoice queries* • *Stock management* • *Cleaning* **Medicines Management** • *Order medicines for patients* • *Dispensing* • *Accuracy Checking of Dispensed Items* • *Undertaking financial transactions* • *Dispensing adherence aids* • *Prescription administration (collection & filing, repeat supply)* • *Processing prescriptions for payment* • *Legal register maintenance* • *OTC sales* • *Medicines management (nursing homes)* • *Check MHRA alerts* • *Assisting with audits* • *Actioning tasks from lead pharmacist* **Management of Controlled Drugs** • *Methadone dispensing and supply* • *Destruction of controlled drugs* **Quality Assurance** • *Monitoring key performance indicators*	**Communication/interaction** • *Communication with the multi-disciplinary team (MDT)* • *General Communication (patients, carers, other healthcare professionals)* • *Patient counselling (Handing out prescriptions)* • *Visit community mental health team* • *Support to clozapine and depot clinics* **Essential services** • *Healthy lifestyle advice* • *Travel advice* **Advanced services** • *Assisting with MURs* • *Pastoral support for patients* **Enhanced services** • *Palliative care service* • *Minor ailments service* • *Supervise methadone consumption* • *Smoking cessation*	• *Updating pharmacy IT systems* • *Company related activities (supply figures to senior team)* • *Monthly monitoring forms* • *Manage staff rotas* • *Data collection and management*	• *NVQ Assessor* • *In- house training* • *Maintain ACPT competence in dispensary*

Focus Group Findings

Focus group discussions revealed that skill mix amongst community pharmacy staff was also important. There were a number of tasks that PTs could take on in community pharmacy but financial concerns of the business prevented them from increasing their role. One participant talked of a community PT she had met at a conference:

> "*We had someone at conference who was actually issuing…doing the methadone clinic; a technician, you know. So there are ways, there are things they can be doing in community and I think the community techs are so held back because of the money side of it [group makes noises of agreement] and they could be conducting…I mean, they prepare for MURs but is there any reason why they can't conduct an MUR? There isn't*."P4C

The tasks undertaken by PTs were also said to be affected by attitudes towards PTs with participants saying that that they were expected to play a support role to the pharmacist. One community PT talked of an internet blog that had openly diminished the PT role:

> "*There was a blog from this pharmacist who thought that technicians should be out front on the counter and the pharmacist should be in the back seeing people on request. He said being too accessible would make people think he was less important*." P2M

This was met with horror by the rest of the group. Others had encountered attitudes from pharmacists who couldn't understand the role of the PT and so treated them with suspicion.

5.2.4. The Future Role of the Community PT

Respondents were asked to comment on the future role of the PT but were first asked whether they wanted their own role to expand.

5.2.4.1. Desire to Expand Own Role

Respondents were asked if they would like to expand their role: 44 (61.9%; n=71) answered this question and of these, 39 (88.6; n=44) said they would like to expand their role and 5(11.4%; n=44) said they would not. However, 27 out of 71(38.0%) respondents did not answer this question. Respondents were asked the reason why they did not want to expand their role and the answers included personal reasons, lack of support from organisations, no training available, and lack of time and lack of funding.

5.2.4.2. How Could the Community PT Role Expand?

Respondents were asked to comment on how they thought the role of the PT could be expanded and these suggestions are listed below. Community respondents said they would like more responsibility and training to undertake some of the roles currently carried out by pharmacists such as MURs.

As previously stated, the quotations have been changed as little as possible to retain the integrity of the respondents' words and allow them to speak for themselves. Some respondents had worked in more than one setting, so whilst their qualifications may not normally be found in the community setting they may have trained in hospital. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

A desire to becoming involved in more patient facing roles was expressed.

> "*I don't feel my skills, training and experience are utilised at all within my current role. I could be more involved in* ***targeting potential MUR patients and NMS patients****. If I was given the opportunity to continue studying, then I would be of far more use to the company*."

> "*By giving more varied roles and* ***opportunity to challenge*** *would be great, especially in rural areas*."

With this came a recognition that training needed to reflect this change and that the opportunity to train further to develop clinical knowledge and management skills was necessary.

> "*All techs need to have* ***ACPT*** *and* ***medicines management*** *qualifications*."

> "*I would like to be able to receive training so I can offer some of the same additional services as the pharmacist*."

> "*May be some clinical knowledge and training in managing people*."

A desire for greater responsibility was expressed.

> "*I would like to be given* ***more responsibility****, and put in to practice what I have learnt*."

> "***More opportunities to progress higher****. More responsibility to pharmacy technicians and provide services for example PGD. Opportunity to distinguish between pharmacy technician with limited knowledge and skills and pharmacy technician with a higher level of clinical knowledge and understanding.* ***Being given the opportunity to shape and raise standards***."

Some technicians were either despondent about the opportunity or need for change.

> "*Once you are an ACT in community pharmacy there is nowhere for you to go, you are stuck. There is much more that we could do if we weren't basically running the pharmacy as the pharmacists are too busy*."

"Within my own pharmacy there is no more room for expansion but in Northern Ireland as a whole pharmacy technicians are not sought after in community pharmacy. They are widely used within hospitals here but as there is no register in place here there is no need for them I suppose. I did my training through the NPA in England and am also registered with the GPhC. This was a requirement for completing the Accuracy Checking Accreditation but is not a requirement for working as a technician in Northern Ireland and as such there is not much in the way of training or CPD workshops made available for technicians in Northern Ireland. I therefore mostly do pharmacist led CPD with Northern Ireland Centre for Pharmacy Learning and Development."

5.2.4.3. What would be the Priority for Training for Role Expansion?

Respondents were asked what training would be a priority in order to achieve role expansion. Table 22 shows some of the qualifications PTs said they need to obtain or would be desirable for role expansion. These are categorised as per the tasks in Table 21. One comment suggested that leaving community pharmacy would be the only way to expand the role.

Table 22: Priorities for Training

Technical	Clinical	Management	Training
MMT ACT MMAP More in-depth pharmacy training Anything that challenges me to improve patient care Any training Proper support WCPPE course	EHC Inhalers NPA Travel advice NRT MURs Asthma reviews Clinical training Clinical diploma	Management course	NVQ assessor training Teaching qualification

5.2.5. Barriers to the Career Development of Community PTs

Respondents made a number of comments relating to the barriers to career development and some of these are reproduced below with the full list given as Appendix H.

Some respondents answered the question from the perspective of their setting, others commented on the barriers to career development of PTs in general.

The quality of community pharmacy based technicians was believed to be lower than that of hospital based technicians and this was believed to be due to the training. There was also a perception that it was hard to move from community to hospital.

"***The calibre of community technicians**, from experience, is lower due to lesser quality training*."

A lack of opportunities to expand the role was identified as a common theme and that this was partially due to insufficient pay and a lack of funding for further education and training.

"*We aren't given as many **opportunities for further development** and training beyond ACT*."

***'Lack of opportunity** to attend courses' **Pay** isn't good enough, not enough **time for training/education opportunities** and not enough investment in further qualifications or training*."

The pharmacist and management (which is often a pharmacist) were seen as the main barrier to pharmacy technician role expansion.

"*The main barrier is the **lack of engagement from some pharmacists** as they think this will erode their stance within the profession*."

"***Pharmacists not wanting to give up responsibilities***."

"***Managements lack of understanding** and communication/training team also, no support*."

"*Locum pharmacists who don't know / trust their technicians. **Pharmacists not willing to relinquish roles**.*

One member believed that whilst pharmacists were willing to hand over roles the requisite training was not provided.

"*Pharmacist like us to take responsibility but not let us progress with more training*."

Patient understanding of pharmacy technicians and their role was also identified as a potential barrier.

*Potential **distrust by patients** to increased roles. **We can only practice if the responsible pharmacist on duty allows** this. I have often found that newly qualified pharmacists were reluctant to allow me to use my qualification - mainly due to a **lack of understanding** of my role*."

"***Pharmacists who lack the understanding** of the level of training that a technician has, and companies who do not make their pharmacists aware that the role of the technician is different to that of a dispenser or counter assistant*."

Focus Group Findings

As only a small number of community PTs volunteered to take part in the focus groups the content from this setting is sparse. From the comments above it was clear that career progression within community pharmacy was dependent on the attitudes of the company worked for and the pharmacist in charge. One participant gave a potential reason for the negative attitude:

> "*I think some pharmacists feel threatened by pharmacy technicians taking on more roles. I think it depends on their experience, who they've worked with's background. Um, but I have come across that myself; some that I found very easy to work with, they appreciate, um, the qualities and experience that technicians can bring to the role and others that are very 'no, that's not your job, you shouldn't be doing that'*." P3C

Others in the group picked up on this theme suggesting that the negative attitude was more prevalent in community pharmacy than hospital. As some participants had worked in both settings they were able to make comparisons with P4C saying "*You'll find that more in community, in my experience, than you do in hospital*."

Another talked of how she had originally gone to work in community pharmacy and her attitude towards the community pharmacist she worked with:

> "*Ok, well, I fell into pharmacy. Um, I was waitressing when my friend, who was the manager of XXX said 'nobody has applied for the dispenser position, can you…they're going on Friday'* [laughs]*. So I fell into it completely by accident, um, and couldn't understand why anyone ever became a pharmacist. I have to say, in community I cannot understand why anyone does it; it's a horrific job*." P1C

5.2.6. Facilitators to the Career Development of PTs

Respondents were also asked to comment on the things that helped them to develop their careers. Some answered the question from the perspective of their setting, others commented on the facilitators to career development of PTs in general.

Some of these comments are reproduced below with the full list given as Appendix I.

The importance of mentors for personal development was identified.

> "***Support*** *from mentors*."

Concerns regarding the robustness of the training and assessment processes associated with pharmacy technician training were raised.

> "*Proper training, and proper regulations that can't be cheated on*."

Separate training courses and subsequent development of training courses to allow pharmacy technicians to transfer between areas was suggested.

> "*There needs to be a separate qualification for community and hospital as some of the information is not required in either setting. A* ***conversion module*** *could then be offered for transfer between the two areas*."

A company and management culture which was supportive of pharmacy technician roles was seen as enablers to professional development.

> "***Management understanding*** *what actually happens in the pharmacy and listening to staff members properly*."

> "*A company who* ***value*** *the experience and expertise of a technician*."

Understanding the role and value of pharmacy technicians by work colleagues was seen as an enabler.

> "***Work colleagues who appreciate your role*** *and who realise that we are a valuable member of the team*."

A need for better working together within the profession through the professional body was identified.

> "***Groups such as APTUK*** *providing support to peers. Good working and supporting relationships with the teams we work in. Pharmacy technicians supporting each other*."

Focus Group Findings

Positive comments about career development in community pharmacy were few and far between. Only one community PT in one group had something good to say. This was a participant who had worked in community pharmacy for 17 years; she had a degree in another subject and went to work in the pharmacy because she was unable to get a job elsewhere. She said that she "*Works for a great pharmacist who gives her lots of responsibility.*" (P7M) When asked to say what was great about him she said that he treated her like a "*rational intelligent human being who was capable of making decisions*." She said that she told him that she should be the one to choose the locum pharmacist that she would work with because she was the one who would be working with them. He let her do that. They had talked about the responsibility he was giving her and he has agreed that as the responsible pharmacist he was ultimately responsible. There was clearly a great amount of trust on both sides.

5.2.7. Multidisciplinary Teamwork

Respondents were asked if they considered themselves to be part of an MDT, 29 (40.8%; n=71) said that they did, 11 (15.5%; n=71) said they did not but 40 (56.3%; n=71) did not answer this question.

Respondents who said they worked as part of a team listed the other members of that team including pharmacists, GP's, practise nurses, district nurses, podiatrists, physiotherapists, psychiatric nurses, occupational therapists and carers (professional and family).

Of the 11 respondents who said they did not consider themselves to be part of an MDT, 10 said they would like to do so. They were asked who would be part of their team and answers were as follows: pharmacy technicians, ACTs, dispensary workers, pharmacists, GP's, district nurses, frailty workers

5.3. Primary Care

Technicians working in Primary Care support prescribers and general practice staff in improving the health of their patients through the rational and safe use of medicines through the development and implementation of safe medicines optimisation systems including: audit, facilitating change at practice level by completion of ratified protocols, education and training and communication with patients. This can include visiting patients in their own homes as well as in other settings. Primary care PTs assist in the training and education of many disciplines within the Primary Care Team on prescribing system issues and work as an external adviser to dispensing practices on implementation of best practice. This is a highly diverse role that requires significant knowledge, skills and experience in different pharmacy/healthcare settings.

This subgroup of 41 participants includes pharmacy technicians who worked in primary care including Clinical Commissioning Groups (CCGs) in England and Health Boards in Scotland, Wales and Northern Ireland.

5.3.1. Participant Demographics

Participants' demographics included sex, age, length of time working in a pharmacy setting, location of work setting, number of hours worked and date of registration.

5.3.2.1. Sex

Respondents from the primary care settings were made up of 37(90.2%; n=41) female and 4 (9.8%; n=41) male.

5.3.1.2. Age

Respondents were asked to give their ages and these are presented in groups of ten years in Table 23 where ages of respondents ranged from 25-59 years of age.

Table 23: Age of Respondents

<20	20-29	30-39	40-49	50-59	>60
0	5(12.5%)	16(40.0%)	9(22.5%)	10(25.0%)	0

n= 40; missing data=1

5.3.1.3. Length of Time working in Pharmacy

Table 24 shows how long respondents had worked in a pharmacy setting and this ranged from 6 to 21 years.

Table 24: Tenure in Pharmacy

0-9 Years	10-19 Years	20-29 Years	30-39 Years	40-49 Years
5(12.2%)	15(36.6%)	12(29.3%)	6(14.6%)	3(7.3%)

n=41

5.3.1.4. Location of Work Setting

Respondents were given a list of locations to choose from. In addition, they were given the opportunity to specify their location if it did not fit any of the categories. Other locations included jobs that covered more than one area or that involved travel across the UK. Table 25 shows the different locations of work settings of the respondents. PTs working in primary care were generally peripatetic so location could vary amongst individuals

Table 25: Work Location

Location of Work Setting	Number of Respondents (n=41)
Rural	13 (31.7%)
Urban	7 (17.1%)
Inner city	11 (26.8%)
Town	11 (26.8%)
Other location	0

One respondent worked in more than one location hence the total = 42

5.3.1.5. Hours Worked

Table 26 shows how many hours respondents worked per week. The majority reported working between 31 and 40 hours per week. The maximum reported weekly hours worked was 37.5.

Table 26: Hours worked per Week

0-20 Hours per Week	21-30 Hours per Week	31-40 Hours per Week	Over 40 Hours
1(2.4%)	4(9.8%)	36(87.8%)	0

n=41

5.3.1.6. Date of Registration

Until 2011 the role of the PT was unregulated. Regulation became mandatory under the Pharmacy Order 2010, although a system of voluntary registration was introduced in 2005. Respondents were asked to give the year and month that they registered as a PT. This information is shown in Table 27 as those who registered before 1st July 2011 and those who registered after this date. As can be seen, as with respondents from other settings, the majority of PTs from this setting registered prior to 2011.

Table 27: Registration Date

	Registered before 1st July 2011	Registered after 1st July 2011	From Northern Ireland	In Training	Did Not Specify
Number of Respondents	23(56.1%)	12(29.3%)	0	0	6(14.6%)

n=41

5.3.2. Training

Respondents were asked to specify the method of pre-registration they had undergone, the suitability of that training and to describe any post-registration qualifications they held. They were also asked to say what they would change about the PT training.

5.3.2.1. Pre-Registration Training

Table 28 shows that forty (97.6%) respondents said they had completed pre-registration training. One respondent (2.4%) did not answer this question.

Respondents were asked to tick all that applied to them so numbers may be uneven due to more than one method of training being undertaken.

Table 28: Pre-Registration Training Method

Further Education College	Distance Learning	Other
22(55.0%)	18(45.0%)	0

n=40; missing data=1

5.3.2.2. Suitability of Training

Respondents were asked if they felt that their training had equipped them sufficiently for the 'day one' pharmacy technician role. Only 25 out of 41(61.0%; n=41) respondents answered this question with 16 (64.0%, n=25) reporting that their training had equipped them for the 'day one' role and 9 (36%; n=25) reporting it had not.

Answers to questions about potential changes to training included some comments about respondents' own training. For example, this first quotation is from a PT who had worked in pharmacy for 22 years and registered prior to 2011.

> "*My training was before NVQ so it was theoretical rather than an inclusion of practical information. The practical side could have been improved then and now. Also more information on the jobs people do around you or that you can progress to would be good*."

Furthermore, this PT had been working in pharmacy for 15 years and again, registered prior to 2011:

"*The pre-registration training was good at developing technical and interpersonal skills but I believe it needs to be more clinically focused*."

Focus Group Findings

Participants were asked about the suitability of their training (both pre and post-registration) and primary care participants in general felt that their initial training had not prepared them for the number of tasks they carried out in that setting. This participant said she had no training for her current role and she talked of needing to know her own boundaries when 'switching'. The practice of switching is part of medicines optimisation, done to improve cost efficiency and reducing waste by stopping and preventing more expensive prescribing than necessary. The aim is to reduce costs, help prescribers choose drugs that have been considered by the Primary Care formulary team and prevent further new prescriptions of those same drugs.

> "*No, no. Not in CCG…when I started 12 years ago in PCT I've had…it's pretty much had to be a hands-on role and I've had to develop that role myself. Um, constantly looking for…you know, I need to…I know my remit and I know my boundaries, that's the thing, and if I'm not comforTable with doing something then I won't do it. So, there's that level of trust with my head of department and my pharmacist colleague on the team as such…so, in my background*." P2B

The narrative below is between members of the same group, following up on what P2B had said.

P3B: "*So, I have a question. In terms of when you do you're switching and etcetera, I'm assuming you have a list of medication that's already been approved from the formulary. All you're doing is communicating with the patient, consult…carrying out consultation. Is that right*?"

P2B: "*Yes, that's correct*."

P3B: "*So there's no training framework or anything for that?*"

P2: "*No*."

P3: "*Okay……*"
P4: "*When you're switching, are you doing switching face-to-face with patients or are you doing it blind*?"

P2: "*You're doing it necessarily blind, so you've not necessarily got the patient face-to-face. I mean last year we were doing incontinence and stoma products so it was on the fair use policies again. Switching over from one product to another, um, because it's all cost effective now isn't it. I had a lot of patients phoning up and wanting to, you know…the GPs (not necessarily pass the buck), but said 'oh it's the CCG medicines management team that has switched it', so sometimes I will take the call and I'll be talking to patients as well and educating the patients in the reason why. Obviously sometimes we'll send letters out, communications about why we've just switched…you know - notifying the patients. Some surgeries will prefer to do that. I look after about 70 practices across the two CCGs. Each practice has got different processes in place, so some are quite happy for you to go and switch, some want you to write a letter to the patients, some would want the GP to, you know, switch as such. Sometimes I'll get the practice nurse to do it or I'll get the practice managers to do it because I can't do it all*."

This conversation demonstrates just how complicated the role is and that training is lacking. This and other issues concerning this role will be discussed in Section 8

5.3.2.3. Changes to Training

Respondents were asked to comment on the changes they felt should be made to PT training and these suggestions are listed below. The quotations have been changed as little as possible to retain the integrity of the respondents' words. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

There was an identified desire for more clinical and patient facing roles.

> "***More clinical**, I can only do my job to the level and quality that I do it due to my previous training as a nurse*."
>
> "*It should include **community services** who provide domiciliary visits to patients*."

Experience of working in different sectors was seen as having value when working in a CCG role.

> "*To **rotate between different settings** i.e. community pharmacy, hospital pharmacy (dispensary and wards) and shadow other services e.g. **intermediate care**!*"

A need for IT literacy within both the CCG and hospital setting was reported as a requirement.

> "*More input in **extended roles** including work in primary care - part of the pre-reg training for pharm techs should include **work within CCGs**. Very few pharm techs have the necessary skills for **data management** of prescribing data. Techs working in hospital environments lack skills in Excel, PowerPoint and how to present reports professionally*."

Training which was focussed on the CCG role and which was patient centred was identified as being required.

> "*As my current specific role in community CCG. Quite a specialised role. A separate module for **CCG roles for pharmacy technicians** -working in GP practices understanding clinical systems, switching medication, reading lab reports, blood test results. Updates on clinical drug information*."

> "*Needs a more patient centred base, mixed format (not just distance learning) and cover more 'realistic' patient queries*."

5.3.2.4. Further Qualifications/Accreditations

Table 29 shows that twenty-one out of 41 (51.2%) who answered this question reported having one or more qualification.

Table 29: Post-registration Qualifications

Qualification	Number of Respondents (n=21)	Percentage (n=21)
Accuracy Checking Pharmacy Technician	16	76.2
National Approved Medicines Management Skills Programme	4	19.0
Certificate/Diploma in Clinical Pharmacy/Medicines Management	6	28.6
Patient Consultation Skills	7	33.3
Community Pharmacy training e.g. Healthy Living	4	19.0
NVQ Assessor	6	28.6
Internal Quality Assessor	2	9.5

Management	9	42.9
UKMi Accredited Medicines Information Technicians Training	2	9.5
Pharmaceutical Technology & Quality Assurance (PTQA)	0	0
Chartered Institute of Procurement & Supply (CIPS)	0	0
Teaching qualification	2	9.5
Other qualification	6	28.6

NB n= unequal because some respondents reported having more than one qualification.

Other qualifications included those gained overseas and not recognised in the UK.

5.3.2.5. Method of Completion of Post-Registration

Table 30 shows the methods used to access post-registration training. Most participants reported completing their post-registration training and qualifications via distance learning.

Table 30: Post-Registration Training Method

Method	Number of Respondents (n=21)	Percentage (n=21)
Attending further education college	4	19.0
Through higher education or training	7	33.3
Distance learning	13	61.9
Through a regional training provider	9	42.9
In-house	2	9.5
Other	3	14.3

NB numbers do not add up to 21 because some respondents reported undertaking more than one method of training.

5.3.3. The Current Role of the Primary Care PT

As previously stated the main aims of this research were to describe the current and future roles of PTs from their perspective and to identify barriers and facilitators to career development. In this section we report on the tasks that Primary Care PTs said they carried out and daily and weekly tasks have been combined to provide a description of those tasks.

5.3.3.1. Tasks carried out by Primary Care PTs

The tasks reportedly carried out by Primary Care PTs are quite different from those of their colleagues in other settings. The tasks are presented in Table 31 in the same 4 categories as

presented as before – technical, clinical, training and management. These are all as reported by Primary Care PTs in their questionnaire responses.

The role of the Primary Care PT is somewhat different from other settings in that it seems to combine roles from both hospital and community pharmacy. Some of the tasks Primary Care PTs reported carrying out were highly specialised (e.g. admission avoidance assessments).

In Section 7 we combine the tasks that all PTs from each setting said they carried out in order to provide a broader picture of what is being done by PTs.

Focus Group Findings

The specialist nature of the primary care role was discussed in the focus groups where another PT described her highly specialised role. This PT said that although her role involved making clinical decisions about patients' care, her employers refused to fund clinical training for her:

> "*I'm a pharmacy technician for XX Community Resource Team* [CRT] *which is quite a different role. My background; I've done community, I've done hospital, I've done primary care and now I've come in to, uh, the CRT which is a multidisciplinary team and we're a re-ablement team and we see patients that have had strokes and surgery. We've got a couple of parts of the team, um, we've got the re-ablement and we've got an ERS side as well, which is an early response side. So, we speed up discharge and we prevent admission. So I work with OT's, physios, social workers. So, I tend to see patients when they've come out of hospital with a bagful of medication and they don't know how to take them. Obviously, the hospital have counselled them but, with the best will in the world, they just want to get home quite quickly and don't take any notice of the pharmacy* [staff] *or pharmacist and they don't know what to do with them so it's a lot of counselling, um, there's a lot of sort of emergency situations as well where patients have become acutely unwell and can't manage their medication so we're brought in to try and put some interim measures into place; whether it's a blister pack for carers, um, I could be here all day talking about my role…* [group laughs]". P2C

Discussion about this PT's role took up a lot of time because others in the group were very interested in what she was doing. The conversation turned to the work P2C was doing and how she was dealing with patients with significant mental health problems. This is an issue that has been raised by PTs in other settings and will be discussed in Section 8 of this report.

Table 31: Tasks carried out by Primary Care PTs

Technical Tasks	Clinical Tasks	Management Tasks	Training Tasks
Medicines Management • *Manage medicines waste* • *Prescription administration (collection & filing, repeat supply)* • *Legal register maintenance* • *Datix/incident reporting (investigating & reviewing)* • *Assisting with audits (e.g. prescribing for asthma patients)* • *Generate supply of medicines for individual patients' work relating to prescribing* • *Risk management* • *Lead on medicines management clinical governance issues relating to care homes/liaising with CCG safeguarding adults lead and CQC* • *Data analysis and writing reports (prescribing/incidents/usage & wastage* • *Data analysis for medicines management incentive schemes* • *Provide pharmaceutical technical advice, support & information to care home staff* • *Medicines switches via CCG including letters to patients* • *Checking that medication is safe to administer* • *Provide medicines information to a range of HCPs including GPs* **Management of Controlled Drugs** • *Destruction of controlled drugs* **Quality Assurance** • *Error investigation & management*	**Communication/interaction** • *Communication with the multi-disciplinary team (MDT) and medicines management team* • *General Communication (patients, carers)* • *Patient counselling of medicines on transfer of care and in their own homes* • *Warfarin counselling* • *Patient home visits at the request of GPs practices and hospitals liaising with MDTs including social workers and patients' families* • *Check allergies and interactions* • *Follow up domiciliary visits with GPs* • *MARs chart management* • *Compliance reviews in patient's home* • *Checking patients' own drugs for use* • *Drug history taking* • *Ordering medicines for patients* • *Medicines reconciliation* • *Problem solving transfer of care of patients* • *Demonstrate use of appliances (inhaler technique)* • *Responding to queries (phone, email &d face-to-face)* • *Medicines management (nursing homes)* **Specialist Tasks** • *Care of frail and elderly patients* • *Admission avoidance team referrals* • *Pastoral support for patients* • *Advising on clinical specialties*	• *Updating pharmacy IT systems* • *Company related activities (supply figures and data to senior team)* • *Data collection and management* • *Problem solving* • *Oversee a service (re-ablement service)* • *Staff management (appraisals, recruitment, return to work after sickness)* • *Staff management disciplinary process* • *Budget control* • *Writing/reviewing policies & procedures* • *Writing SOPs* • *Strategic planning (capacity issues, workload planning)* • *Project management e.g. baby milk, nutrition & wound care* • *Media campaigns* • *Collect prescribing data*	• *NVQ Assessor* • *Internal Quality Assurance (IQA) verification* • *Warfarin training for staff* • *Prescribing advice (GPs, nurses, pharmacists)* • *Training of care home staff to administer medicines on legal, safe & secure handling of medicines* • *Training care home staff on medication* • *Training home visit carers* • *Mentoring staff* • *Service improvement advice* • *Train nurses, OTs and physios to check medicines against prescriptions on transfer of care* • *Assess competency of support workers to administer medicines* • *L2 assistant expert witnessing*

5.3.4. The Future Role of the Primary Care PT

Respondents were asked to comment on the future role of the PT but were first asked whether or not they wanted their own role to expand.

5.3.4.1. Desire to Expand Role

Respondents were asked if they would like to expand their role: 22 (53.7%; n=41) answered this question and of these 21 (95.5; n=22) said they would like to expand their role and 1(4.5%; n=22) said they would not. However, 19 out of 41(46.3%) respondents did not answer this question.

5.3.4.2. How could the PT Role Expand?

Respondents were asked to comment on how they thought the role of the PT could be expanded and all of these suggestions are listed below. PRIMARY CARE respondents said their role had to expand with their learning but that they could play a role in improving discharge from hospital to GP practice by providing continuity.

As previously, the quotations have been changed as little as possible to retain the integrity of the respondents' words and allow them to speak for themselves. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

Pharmacy technicians believed that they could take on many of the roles undertaken by pharmacists within this setting.

> "*I feel a lot of the work the pharmacists are doing could be done by techs of the right calibre (writing papers, attending meeting re pathways) etc.* ***we should have more techs and fewer pharmacists***."

> "*I'm not sure it can - I think I'm doing above and beyond the remit of a PT role*!"

A desire to undertake more clinical roles was expressed.

> "*I would like to do* ***more clinical work****. When I work in the practice and have to review patients, it would be nice to have more clinical knowledge, not to overrule the pharmacist but to give help and support*."

> "*I would like to be able to use my ACT qualification so a few hours a week of hospital work to facilitate this included in my Primary Care role would be ideal. Also taking on a* ***more clinical*** *role and also being able to train others*."

> "***Extended clinical role*** *in General Practice*."

A need for more training in clinical and communication skills to undertake the role was identified.

"*Currently looking to develop **more clinical skills** to enable technicians to undertake blood pressure monitoring and venous sampling with a view undertaking **'one stop shop'** home visits e.g. to ensure appropriate routine drug monitoring is undertaken. This is building on point of care INR testing already undertaken by technicians in the team. Currently this training is made available to us by the Nurse led Acute Clinical Team*."

"*I am not sure how it can be expanded. I worked in MI for about 6 years and enjoyed this, I completed the UKMI training. But there was no progression. I moved to working for a CCG which was a different challenge. I don't know if there could be more clinical training to help technicians e.g. a clinical diploma. I have struggled to find anything suiTable for a CCG technician*."

*"When I worked in England there were many more expansive roles for technicians at band 6 and above. I believe that technicians in my role need to achieve **more patient consultation skills**, and clinics could then be held more regularly with us dealing directly with the patient and offering asthma clinics, diabetes monitoring clinics etc"*

A desire for PT education and training to be at degree level was stated.

"*Would be good if they upgraded pharmacy technician to **degree level***."

*"I think lots of the work I am involved in is outside of the 'usual pharmacy technician' role. My colleagues and I cannot, unfortunately, access the Medicines Management Qualification and I have also made several enquiries regarding accessing a clinical diploma at XXX University (as our nearest site) but this is only open to pharmacists**. I would love to undertake a degree level course alongside my role to allow me to widen my clinical skills** and also allow me to access courses like PGCE's as I sometime spend three days out of five teaching a variety of learners, and am also heavily involved in education across education as a whole*."

There was a recognition that PTs working in CCGs need to work across boundaries.

"***Training support workers in medicines administration** who don't work for the NHS i.e. support workers who work for permanent care providers in social care. Provide support, answering queries for support workers who work in social care*."

"*To include liaising with hospital - so that **the discharge into social care is a seamless transition***."

"*I feel that my role could be expanded by getting much **more involved with community pharmacies and hospital pharmacies to ensure seamless care on discharge***."

A need for more leadership and management skills was identified.

"*I feel that there needs to be **more leadership from technicians** within primary care - especially in Wales where the role of pharmacy technicians is not as established and as expanded as in England. Unless management roles are undertaken here, then technicians will not be able to progress beyond band 5."*

"*As a prescribing analyst/senior technician I would like to develop the senior technician side of my role to include supervision/line management of the band 5 techs. I would also like to develop my role within the CCG as a decision maker*."

The importance of integrating the pharmacy technician into the practice team was stated.

"*Within primary care the role of pharmacy technician is becoming more specialised with areas identified by Soar Beyond with primary care pharmacists becoming more practice based, techs have a more integrated role in multi-disciplined teams.*

"*At the moment I work to a Standard Operating Procedure that is ratified by the Health Board before the work is carried out. There are now practice pharmacists working in GP practices within the clusters in Wales. It could be a possibility to work alongside them*."

IT literacy was identified as an important requirement for the role

*"Technicians working in data management within CCGs require **more sophisticated IT skills**, as the process of clinical skills is supportive of the reporting process especially in multi-disciplined roles*."

The experience of working in primary care engendered the desire to train others in the role.

"*I would like to use my position to **help others to understand/deliver good medicines management and help to build their confidence in dealing with queries** e.g. with other technicians/clinical staff/care home providers*."

Intra-professional collaboration was seen as an enabler for professional development

"I am aware that other health boards have their technicians doing roles such as these - and if we were able to network more readily as primary care techs this could benefit the expansion of the roles we currently do."

5.3.4.3. What would be the Priority for Training for Role Expansion?

Respondents were asked what training would be a priority in order to achieve role expansion. Table 32 gives an idea of some of the qualifications PTs said they need to obtain or would be desirable for role expansion. These are categorised as per the tasks in Table 31.

Table 32: Priorities for Training

Technical	Clinical (continued)	Management	Training
MMT Degree level qualification post NVQ for technicians	Dementia training Mental capacity act Working with the vulnerable, elderly and frail Admissions avoidance Accountability Running enhanced services Understanding and interpreting evidence	Project management course Management training Running meetings Primary care management Data management Finance management NHS leadership	NVQ assessor training Teaching qualification In-house training on wards and in community to be proactive in making the discharge from hospital smooth
Clinical			
Healthy living training Blood pressure monitoring Asthma management Stoma management Patient consultation skills Clinical training (for CCG role) Clinical diploma Understanding the use of assistive technology to improve adherence			

5.3.5. Barriers to the Career development of Primary Care PTs

Respondents made a number of comments relating to the barriers to career development and some of these are reproduced below with the full list given as Appendix J.

Some respondents answered the question from the perspective of their setting, others commented on the barriers to career development of PTs in general.

Management and management culture was seen as a barrier to development.

> "*Senior managers not understanding the role of a pharmacy technician*."

> "*Management prevent career development*."

The lack of training opportunities was a barrier

> "*Limited options and advice post qualification. There is little provision for clinical training. I feel like the only option to progress further than I have now would be to go to university to be a pharmacist but I cannot afford to do this*."

> "*Time, money, support and lack of focus/support for the profession/pharmacy technicians*."

As were some pharmacists.

> "*Some pharmacists do not want to let go of traditional roles and allow technicians to run the day to day organising of a dispensary/ community pharmacy. There is a*

barrier also regarding grades of pay. This is more prevalent in community pharmacy. Most technicians know their boundaries and will not make a decision regarding a clinical issue but I think pharmacists are wary about this. Legal requirements are also a boundary to our development."

Focus Group Findings

One of the barriers to career development identified by PTs was lack of support from others and this was discussed by participants from different settings. This participant compared her role to that of a hospital PT who had described her work.

"*Yes, it's quite similar depending on which hospital you work in. Some* [primary care staff] *seem to very much value the role of the technician and they therefore try and use them as much as possible. And other places, um, you're very limited as to what you can and can't do depending on how much faith they have in your abilities*."P3C

This comment illustrated that, as with other settings, there is a lack of understanding about the role of the PT.

Lack of understanding of PT roles makes it difficult to find common ground across the settings and this lack of universal training could be a barrier to development as specialist skills are needed in different settings. As this PRIMARY CARE PT said, "*I've obviously done work in various settings and I just don't see how we can bring us all. I don't think we can all agree on things because it's so varied.*" P2C

5.3.6. Facilitators to the Career Development of Primary Care PTs

Respondents were also asked to comment on the things that helped them to develop their careers. Some answered the question from the perspective of their setting, others commented on the facilitators to career development of PTs in general. Again, some of these comments are reproduced below with the full list given as Appendix K.

The need to promote the ability and role of pharmacy technicians was seen as a facilitator to career development.

"*Publicising more what techs are and what they can do*."

Changing pre-conceived views of pharmacy technicians would enhance professional development.

"***Get rid of the prehistoric outlook in community pharmacies****! Get people to realise that a technician is not 'just a tech' but a qualified, registered healthcare professional in their own right, who deserves to be taken seriously*."

Pharmacist leaders and team members who were supportive of pharmacy technicians were seen as enablers.

> "*Pharmacists that work alongside great technicians help to further the role, as they see the benefits we can bring to teams especially when the techs have much experience. A principal pharmacist that believes in the tech role and what we can achieve can open many more windows of opportunity for us to develop and grow the positions*."

> "*Medicines Management has enhanced all pharmacy technicians' careers over the last few years. There is more emphasis on the cost and the rising prescribing budgets in the NHS. Sometimes this requires a pharmacist's input but sometimes there are a lot of aspects that can be managed by a pharmacy technician.* ***There is also more co-working between different healthcare professionals and this has helped our careers***."

Good quality training materials were also seen as a facilitator

> "*In house training and CPPE are invaluable*."

Focus Group Findings

Support for development is something that came up regularly during the focus groups and seems to be the one thing that facilitates the career development of PTs. The role of the Primary Care PT seems to have evolved and draws on skills from a number of settings and is poorly defined. If the role could be defined and accredited this would provide a platform for career development, as this participant said:

> "*I think it would be nice to have some sort of accreditation so if I was to move somewhere else or into that GP surgery then at least sometimes they would know that you've got that level of competencies. At the moment I must admit we don't have robust standard operating procedures like you would do in a hospital, um. I've got from many years of working in a hospital where you have that standard operating procedure, you're signed off with everything once you've reached that level of competencies and training. Um, but in the CCG……when I first went out into PCT role I was doing prescribing, doing a lot of analysis, did prescribing…oh what was it called…Medicines Management course. But that was part of the diploma course for pharmacists…community pharmacies. Um, I went and did that course. It took me a year to do that course, um, because of the transition from hospital out into the community.*" P2B

After further discussion with PTs in the group from other settings P2B went on to say,

"I've got my appraisal next week looking to set my objectives; my six objectives. But to me, you know, probably off the record a bit…to me, I feel it's a tick box exercise because I can't go any further, I can't develop, I've stayed stuck at the same role, same banding, same grading for the last twelve years. And that's the honest truth…"

5.3.7. Multidisciplinary Teamwork

Respondents were asked if they considered themselves to be part of an MDT, of the 22(53.7%; n=41) respondents who answered this question 21 (95.5%; n=22) said that they did, 1(4.5%; n=22) said they did not but 19(46.3%; n=41) did not answer this question.

Respondents who said they worked as part of a team listed the other members of that team including pharmacists, including practice-based clinical pharmacists, community-based pharmacists, GPs, other non-medical prescribers with prescribing rights, commissioners, service managers and any stakeholders.

5.4. General Practice

PTs in this setting may work in a number of roles. GP practices in some locations are what is called 'dispensing doctors'. This means the doctors working in a practice prescribe medicines which are then dispensed by pharmacy technicians. In this type of practice work does not involve sales of over-the-counter medicines. GP practices can also operate registered pharmacies and so would have pharmacists as well as PTs working in them. They would provide the full range of services to patients that might be found in a community pharmacy.

This subgroup of 28 participants includes pharmacy technicians who worked as part of a primary care GP practice team (including dispensing doctors' practices

No PTs working in GP practices volunteered to take part in the focus groups so we do not have any findings from these to report for this setting.

5.4.1. Participant Demographics

Participants' demographics included sex, age, length of time working in a pharmacy setting, location of work setting, number of hours worked and date of registration.

5.4.1.1 Sex

Respondents from the General Practice pharmacy setting were made up of 26 (92.9%; n=28) female and 2 (7.1%; n=28) male.

5.4.1.2. Age

Respondents were asked to give their ages and these are presented in groups of ten years in Table 33 where ages of respondents ranged from 26-57 years of age.

Table 33: Age of Respondents

<20	20-29	30-39	40-49	50-59	>60
0	7(25.9%)	6(22.2%)	7(25.9%)	7(25.9%)	0

n= 27; missing data=1

5.4.1.3. Length of Time working in Pharmacy

Table 34 shows how long respondents had worked in a pharmacy setting and this ranged from 4 to 41 years.

Table 34: Tenure in Pharmacy

0-9 Years	10-19 Years	20-29 Years	30-39 Years	40-49 Years
3(10.7%)	14(50.0%)	8(28.6%)	2(7.1%)	1(3.6%)

n=28

5.4.1.4. Location of Work Setting

Respondents were given a list of locations to choose from. In addition, they were given the opportunity to specify their location if it did not fit any of the categories. Table 35 shows the different locations of work settings of the respondents.

Table 35: Work Location

Location of work setting	Number of Respondents (n=28)
Rural	13 (46.4%)
Urban	3 (10.7%)
Inner city	4 (14.6%)
Town	12 (42.9%)
Other location	2 (7.1%)

Six respondents worked in more than one location hence the total = 34

5.4.1.5. Hours Worked

Table 36 shows how many hours respondents worked per week. Although the majority reported working between 31 and 40 hours per week, the maximum reported weekly hours worked was 60.

Table 36: Hours worked per Week

0-20 Hours per Week	21-30 Hours per Week	31-40 Hours per Week	Over 40 Hours
2(7.1%)	2(97.1%)	21(75.0%)	3(10.7%)

n=28

NB Respondents who reported that they worked 37.5 hours per week commented that they sometimes worked more than this.

5.4.1.6. Date of Registration

Until 2011 the role of the PT was unregulated. Regulation became mandatory under the Pharmacy Order 2010, although a system of voluntary registration was introduced in 2005. Respondents were asked to give the year and month that they registered as a PT. This information is shown in Table 37 as those who registered before 1st July 2011 and those who registered after this date. As can be seen, as with respondents from other settings, the majority of PTs from this setting registered prior to 2011.

Table 37: Registration Date

	Registered before 1st July 2011	Registered after 1st July 2011	From Northern Ireland	In Training	Did Not Specify
Number of Respondents	16(57.1%)	9(32.1%)	0	0	3(10.7%)

n=28

Respondents who did not specify when they registered said they could not remember the date.

5.4.2. Training

Respondents were asked to specify the method of pre-registration they had undergone, the suitability of that training and to describe any post-registration qualifications they held. They were also asked to say what they would change about the PT training.

5.4.2.1. Pre-Registration Training

Table 38 shows that twenty-six (92.9%; n=28) respondents said they had completed pre-registration training. Two respondents (7.1%) did not answer this question.

Respondents were asked to tick all that applied to them so numbers may be uneven due to more than one method of training being undertaken.

Table 38: Pre-Registration Training Method

Further Education College	Distance Learning	Other
8(30.8%)	18(69.2%)	3(11.5%)

n=26

5.4.2.2. Suitability of Training

Respondents were asked if they felt that their training had equipped them sufficiently for the 'day one' pharmacy technician role. Only 13 out of 28 (46.4%) respondents answered this question with 10 (77.0%; n=13) reporting that their training had equipped them for the 'day one' role and 3 (23.0%; n=13) reporting it had not.

There were no comments made about suitability of training.

5.4.2.3. Changes to Training

Respondents were asked to comment on the changes they felt should be made to PT training and these suggestions are listed below. The quotations have been changed as little as possible to retain the integrity of the respondents' words. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

Only 4 respondents commented on this with two simply saying '*Primary Care training*'.

The remaining 2 said:

> "*The role within primary care is too varied to be able to be 'trained' for. The majority of the things we deal with we learn as we go along or from each other I do think that Excel training should be included, how to deal with difficult people and something around understanding data, where to find information and how to write reports*."
>
> "*More about interactions and alternatives available when drugs in short supply as the doctor always asks what alternative we have available*."

5.4.2.4. Further Qualifications/Accreditations

Table 39 shows the post-registration qualifications/accreditations that PTs had undertaken. Only 9 out of 28 (32.1%) who answered this question reported having one or more qualification.

Table 39: Post-Registration Qualifications

Qualification	Number of Respondents (n=9)	Percentage (n=9)
Accuracy Checking Pharmacy Technician	7	77.8
National Approved Medicines Management Skills Programme (including medicines reconciliation)	2	22.2
Certificate/Diploma in Clinical Pharmacy/Medicines Management for Pharmacy Technicians	2	22.2
Patient Consultation Skills	0	0
Community Pharmacy training e.g. Healthy Living	4	44.4
NVQ Assessor	0	0
Internal Quality Assessor	0	0
Management	0	0
UKMi Accredited Medicines Information Technicians Training Scheme	0	0
Pharmaceutical Technology & Quality Assurance (PTQA)	0	0
Chartered Institute of Procurement & Supply (CIPS)	0	0
Teaching qualification	2	22.2
Other qualification	0	0

NB n= unequal because some respondents reported having more than one qualification.

5.4.2.5. Method of Completion of Post-Registration Training

Table 40 shows the methods used to access post-registration training. Most participants reported completing their post-registration training and qualifications via distance learning.

Table 40: Post-Registration Training Method

Method	Number of Respondents (n=9)	Percentage (n=9)
Attending further education college	1	11.1
Through higher education or training	1	11.1
Distance learning	9	100
Through a regional training provider	1	11.1
In-house	0	0
Other	0	0

NB numbers do not add up to 9 because some respondents reported undertaking more than one method of training.

5.4.3. The Current Role of the PTs working in a GP Setting

As previously stated, the main aims of this research were to describe the current and future roles of PTs from their perspective and to identify barriers and facilitators to career development. In this section we report on the tasks that GP practice PTs said they carried out and daily and weekly tasks have been combined to provide a description of those tasks.

5.4.3.1. Tasks carried out by PTs working in a GP Setting

The tasks reportedly carried out by GP practice PTs are quite different from those of their colleagues in other settings. The tasks are presented in Table 41 in the same 4 categories as presented as before – technical, clinical, training and management. These are all as reported by PTs in their questionnaire responses.

The role of the GP practice PT is somewhat different from other settings in that, rather like the primary care role, it combines tasks from both hospital and community pharmacy. Some of the tasks GP practice PTs work part of their time in GP practices and part of the time in community hospitals.

In Section 7 we combine the tasks that all PTs from each setting said they carried out in order to provide a broader picture of what is being done by PTs.

Table 41: Tasks carried out by PTs working in a GP setting

Technical Tasks	Clinical Tasks	Management Tasks	Training Tasks
Maintenance of Pharmacy Supplies • *Ordering/procurement* • *Stock management* **Medicines Management** • *Order medicines for patients* • *Dispensing* • *Accuracy Checking of Dispensed Items* • *Make up repeat prescriptions* • *Undertaking financial transactions* • *Dispensing adherence aids* • *Prescription administration (collection & filing, repeat supply)* • *Processing prescriptions for payment* • *Medicines management (nursing homes)* • *Assisting with audits* • *Medicines switches via CCG including letters to patients* **Management of Controlled Drugs** • *Methadone dispensing and supply* • *Destruction of controlled drugs*	**Communication/interaction** • *Communication (MDT)* • *General Communication (patients)* • *Patient counselling (Handing out prescriptions)* • *Patient home visits liaising with MDTs including social workers and patients' families* • *Pastoral support for patients* • *Coordinate patients and workload* **Safe administration** • *Check allergies and interactions*	• *Updating pharmacy IT systems* • *Company related activities (supply figures to senior team)* • *Manage staff rotas* • *Data collection and management*	• *In- house training* • *Training for prescription clerks and other practice staff* • *Maintain ACPT competence in dispensary*

5.4.4. The Future Role of PTs working in a GP Practice Setting

Respondents were asked to comment on the future role of the PT but were first asked whether or not they wanted their own role to expand.

5.4.3.1. Desire to Expand Role

Respondents were asked if they would like to expand their role: 12 (42.9%; n=28) answered this question and of these all said they would like to expand their role. However, 16 out of 28(57.1%) respondents did not answer this question.

5.4.4.2. How could the PT Role Expand?

Respondents were asked to comment on how they thought the role of the PT could be expanded and all of these suggestions are listed below.

As previously, the quotations have been changed as little as possible to retain the integrity of the respondents' words and allow them to speak for themselves. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

The continual expansion in role was reported and this was partially due to taking on traditional pharmacist roles.

> "*My role seems to expand each year as it is - the knack would be to stop the expansion and stabilise my workload*."

> "*The technician role could be expanded by* ***taking on some of work practice pharmacists*** *have been doing in practices*"

In some instances role expansion had resulted in reaching working capacity.

> "*I am working to absolute capacity at the moment so have no time to do anything further. I worked for the CCG Medicines Management Team 6.5 years previously and would like to be able to do more detailed work around things I learnt whilst doing this job*."

A desire for expansion into more clinical roles was expressed and this would require more clinical knowledge and training.

> "*It would be good to see pharmacy technicians doing* ***more clinical roles****. We would need relevant training but I feel as a profession we are capable of taking that on*."

> "*I think our current role could be expanded by getting* ***more clinical knowledge***."

A lack of relevant courses for the role was identified

> "*I would like to do advance training, but* ***cannot find any courses***."

Greater integration into the medical practice was identified as enhancing role effectiveness.

"***Could be further integrated into GP practice to include a seamless service with medicines from home to hospital***."

5.4.4.3. What would be the Priority for Training for Role Expansion?

Respondents were asked what training would be a priority in order to achieve role expansion. Table 42 shows some of the qualifications PTs said they need to obtain or would be desirable for role expansion. These are categorised as per the tasks in Table 41.

Table 42: Priorities for Training

Technical	Clinical	Management	Training
MMT Qualification in community pharmacy	Clinical training (for CCG role) Clinical diploma A recognised clinical qualification Understanding specialist medicines to advise patients Working with the vulnerable, elderly and frail	HNC in Pharmacy Services Development and Management	Teaching qualification In-house training

5.4.5. Barriers to the Career Development of PTs working in a GP Practice Setting

Respondents in this setting made fewer comments about barriers to career development so these are all reproduced below. Some answered the question from the perspective of their setting, others commented on the barriers to career development of PTs in general.

Barriers were identified as a lack of training and funding for training plus a lack of opportunities within the role.

"***Lack of training***."

"*Limited possibilities within the role*."

"*Lack of funding and limited spaces for technicians to get additional training. Low staffing levels can make completing training courses more difficult.* ***I would like to see more post-registration training.***"

The attitudes of some pharmacists to pharmacy technicians and understanding of their ability was seen as a barrier to development.

"***Pharmacists****! Some still look down at technicians and consider them as inferior*."

"*Locum pharmacists who don't know/trust their technicians. Pharmacists not willing to relinquish roles Potential* ***distrust by patients*** *to increased roles. Lack of opportunity to attend courses. Hard to move from community pharmacy role to equivalent hospital position*."

Management focus on pharmacists was seen as detrimental to pharmacy technician role development:

"*Pharmacists. Too much focus placed on them and techs are forgotten and have so much to offer*."

5.4.6. Facilitators to the Career Development of PTs working in a GP Practice Setting

Respondents in this setting, again, made fewer comments about barriers to career development so these are all reproduced below. Some answered the question from the perspective of their setting, others commented on the facilitators to career development of PTs in general

PTs having the right attitudes was seen as a facilitator to career development:

"Taking your own ***initiative*** *and seeking the courses yourself."*

"Pharmacy technicians' ***enthusiasm****. Opportunities for advancing knowledge and experience."*

Undertaking CPD was seen as a facilitator where it was available:

*"****Ongoing training and developing new skills*** *help technicians gain experience. NES training nights are great and are very informative.'*

The environment created by management and support from colleagues were seen as facilitators:

"Having managers/pharmacists who are happy to support technicians' career development and to see the training through is important."

The shortage of other healthcare professionals was seen as a driver for providing opportunities for PTs:

"Lack of GPs and pharmacists - this is the only reason that pharmacy technicians are now being seen as valued members of the pharmacy team."

Whilst working within a CCG was seen as providing career progression compared to other locations within which the PT had worked, working for dispensing doctors was seen as providing no opportunities for career progression:

"Working at the CCG has been the only job that has really progressed my career in terms of learning."

"In dispensing doctors there isn't any help in the career development."

5.4.7. Multidisciplinary Teamwork

Respondents were asked if they considered themselves to be part of an MDT, of the 12(42.9%; n=28) respondents who answered this question 11 (91.7%; n=12) said that they did, 1(8.3%; n=12) said they did not but 16(57.1%; n=28) did not answer this question

Respondents who said they worked as part of a team listed the other members of that team including pharmacists, including other MMTs, pharmacists, pharmacy technicians, student technicians, pharmacy assistants (dispensers), stores team, doctors, nurses, HCA's, dietitians, receptionists, physiotherapist, OTs, specialist nurses, drivers, admin staff, community nursing teams, practice manager.

5.5. Education & Training Setting

PTs that work in education and training may work in practice and undertake education and training as part of their role or work wholly in education. If working as part of a role, the PT will usually be responsible for the pre and post qualification training and development of PTs and other pharmacy support staff and commonly manage the pre-registration trainee pharmacy technicians. If working wholly in education, they will undertake development and delivery of pharmacy related education programmes. Additional qualifications for PTs involved in education range from the NVQ Assessing qualification to a Postgraduate Certificate in Education (PGCE).

This subgroup of 22 participants includes pharmacy technicians who worked in education and training and in a research role.

5.5.1. Participant Demographics

Participants' demographics included sex, age, length of time working in a pharmacy setting, location of work setting, number of hours worked and date of registration.

5.5.1.1. Sex

Respondents from the academic setting were made up of 19 (86.4%; n=22) female and 3 (13.6%; n=22) male.

5.5.1.2. Age

Respondents were asked to give their ages and these are presented in groups of ten years in Table 43 where ages of respondents ranged from 26-65 years of age.

Table 43: Age of Respondents

<20	20-29	30-39	40-49	50-59	>60
0	1(4.5%)	5(22.7%)	9(40.9%)	6(27.2%)	1(4.5%)

n= 22

5.5.1.3. Length of Time working in Pharmacy

Table 44 shows how long respondents had worked in a pharmacy setting and this ranged from 6 to 48 years.

Table 44: Tenure in Pharmacy

0-9 Years	10-19 Years	20-29 Years	30-39 Years	40-49 Years
1(4.5%)	5(22.7%)	9(40.9%)	5(22.7%)	2(9.0%)

n=22

5.5.1.4. Location of Work Setting

Respondents were given a list of locations to choose from. In addition, they were given the opportunity to specify their location if it did not fit any of the categories. Table 45 shows the different locations of work settings of the respondents.

Table 45: Work Location

Location of Work Setting	Number of Respondents (n=20)
Rural	2 (10.0%)
Urban	4 (20.0%)
Inner city	8 (40.0%)
Town	5 (25.0%)
Other location	1(5.0%)

Missing data=2

5.5.1.5. Hours Worked

Table 46 shows how many hours respondents worked per week. The majority said they worked between 31 and 40 hours per week, although the maximum reported weekly hours worked was 50.

Table 46: Hours worked per Week

0-20 Hours per Week	21-30 Hours per Week	31-40 Hours per Week	Over 40 Hours
1(4.5%)	0	17(87.8%)	4(18.0%)

n=22

NB A number of respondents who reported that they worked 37.5 hours per week commented that they sometimes worked more than this.

5.5.1.6. Date of Registration

Until 2011 the role of the PT was unregulated. Regulation became mandatory under the Pharmacy Order 2010, although a system of voluntary registration was introduced in 2005. Respondents were asked to give the year and month that they registered as a PT. This information is shown in Table 47 as those who registered before 1st July 2011 and those who registered after this date. As can be seen, as with respondents from other settings, the majority of PTs from this setting registered prior to 2011.

Table 47: Date of Registration

	Registered before 1st July 2011	Registered after 1st July 2011	From Northern Ireland	In Training	Did Not Specify
Number of Respondents	16(72.7%)	3(18.2%)	0	0	2(9.0%)

n=22

Respondents who did not specify when they registered said they could not remember the date.

5.5.2. Training

Respondents were asked to specify the method of pre-registration they had undergone, the suitability of that training and to describe any post-registration qualifications they held. They were also asked to say what they would change about the PT training.

5.5.2.1. Pre-Registration Training

Table 48 shows that 19 (97.6%) respondents said they had completed pre-registration training. Three respondents (18.2%) did not answer this question.

Respondents were asked to tick all that applied to them so numbers may be uneven due to more than one method of training being undertaken.

Table 48: Pre-Registration Training Method

Further Education College	Distance Learning	Other
14(73.7%)	6(31.6%)	0

n=19

5.5.2.2. Suitability of Training

Respondents were asked if they felt that their training had equipped them sufficiently for the 'day one' pharmacy technician role. Only 16 out of 22(72.7%) respondents answered

this question with 12 (75.0%, n=16) reporting that their training had equipped them for the 'day one' role and 4 (25.0%; n=16) reporting it had not.

5.5.2.3. Changes to Training

Respondents were asked to comment on the changes they felt should be made to PT training and these suggestions are listed below. The quotations have been changed as little as possible to retain the integrity of the respondents' words. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

Recommendations were made with respect to the content of training which included greater focus on clinical content and ,.

> "*The training did not deal with enough **professionalism** issues, however I do think this has improved over the time I have been qualified, however I do think there is still scope for improvement*."

> "*I completed my training several years ago and I do feel it has improved now. I did not have enough **clinical knowledge** when I first qualified. I also think it is important for pharmacy technicians to have an understanding of **roles of pharmacy technicians in different work environments**. I qualified in community pharmacy but I didn't know what the job of a hospital technician entailed until I went to work for an NHS Trust after I had qualified*."

The ratio of different methods of delivery of training and education was questioned.

> "*At college there was not enough **hands on experience** of dispensing prescriptions and what is actually involved in day to day pharmacy*."

Focus Group Findings

Initial training was discussed in the focus groups where in 2 groups there was 1 PT who worked full time in education and training. In addition to this a number of participants had training support and mentoring roles and were able to give some useful insights into the current training needs of PTs. The subject of ACT training came up in all 4 focus groups and it was felt that this needed to be a core element of basic PT training. One participant with extensive experience in a variety of pharmacy settings was critical of the ACT programme.

> "*I've been instrumental in leading a few ACT programmes and in hospitals and seeing them develop and pushing stuff through the ACT programme. I feel sorry for them* [the students] *and I think the ACT programme is fundamentally wrong. It needs looking at very carefully in terms of that you're putting undue pressure on the candidate that's going through it. There's no consistency between local procedure and regional guidelines for ACT, that's the first thing, and candidates find that very difficult*." P4B

The undue pressure this participant spoke of arose from the students' lack of experience in checking and should therefore undergo a probation period before entering on the ACT programme. In this way they would gain experience which might make the ACT programme less onerous for the students.

This led to a discussion about the fact that some students just cannot grasp the skills required to do final accuracy checks as these participants said:

P1: "*Some people just can't check and that doesn't make them bad technicians, they just can't…they just can't check*."

P2: "*Physically or mentally, they just can't grasp it can they*?"

P1: "*Yeah, mentally they cannot do the checking process and get through 1000 items without making an error or get through the exam. It doesn't make them a bad technician, it just means they're not cut out for that job role and if that's [the case] then put into the basic…qualification for the technician*."

Another PT with training responsibilities talked of her pride in the profession:

> "*Finally we're recognised as technicians, so I feel proud in that sense. Um…there are so many…roles technicians are undertaking yet I feel undervalued in the sense that, um, there's no standardised training framework across technicians in England at all, or even region to region in certain roles that we are doing ……. there's nothing accredited*." P3B

In another focus group, an education and training lead described the extensive role taken by PTs. She said that they had a licenced unit in their pharmacy department and the in-process check was all done by a technician. She said that the final check was still done by a pharmacist but before long this would be a PT task too. This has further implications for the training and development of PTs.

> "*I mean; they're still working towards the final check of that but that'll come. But, most of…well all of our procurements is led by a technician, there's no pharmacist input at all. Um, our dispensary is a technician-led dispensary, um, the only role of the pharmacist is the clinical check and they're starting to bring in this pre-clinical check. That's something that's fairly new that they're looking to do*." P4C

5.5.2.4. Further Qualifications/Accreditations

Table 49 shows the post-registration qualifications/accreditations that PTs had undertaken Thirteen out of 22 (59.1%) who answered this question reported having one or more qualification.

Table 49: Post-registration Qualifications

Qualification	Number of Respondents (n=13)	Percentage (n=13)
Accuracy Checking Pharmacy Technician	7	53.8
National Approved Medicines Management Skills Programme (including medicines reconciliation)	3	23.1
Certificate/Diploma in Clinical Pharmacy/Medicines Management for Pharmacy Technicians	1	7.7
Patient Consultation Skills	5	38.2
Community Pharmacy training e.g. Healthy Living	3	23.1
NVQ Assessor	10	76.9
Internal Quality Assessor	8	61.5
Management	7	53.8
UKMi Accredited Medicines Information Technicians Training Scheme	0	0
Pharmaceutical Technology & Quality Assurance (PTQA)	0	0
Chartered Institute of Procurement & Supply (CIPS)	1	7.7
Teaching qualification	8	61.5
Other qualification	7	53.8

NB n= unequal because some respondents reported having more than one qualification.

Other qualifications included those gained overseas and not recognised in the UK.

5.5.8.2. Method of Completion of Post-Registration Training

Table 50 shows the methods used to access post-registration training. Most participants reported completing their post-registration training and qualifications either attending college or via a regional training provider.

Table 50: Post-registration Training Method

Method	Number of Respondents (n=13)	Percentage (n=13)
Attending further education college.	7	53.8
Through higher education or training	6	46.2
Distance learning	6	46.2
Through a regional training provider	7	53.8
In-house	0	0
Other	1	7.7

NB numbers do not add up to 13 because some respondents reported undertaking more than one method of training.

5.5.3. The Current Role of the PTs working in Education & Training

As previously stated, the main aims of this research were to describe the current and future roles of PTs from their perspective and to identify barriers and facilitators to career development. In this section we report on the tasks that PTs working in Education & Training said they carried out and daily and weekly tasks have been combined to provide a description of those tasks.

5.5.3.1. Tasks carried out by PTs working in Education & Training

The tasks reportedly carried out by PTs in education and training are presented in Table 51 in only 2 of the categories presented before: training and management. This is because PTs working in this setting were undertaking tasks specific to the education, training and development of PTs. The tasks are as reported by PTs in their questionnaire responses.

In Section 7 we combine the tasks that all PTs from each setting said they carried out in order to provide a broader picture of what is being done by PTs.

Table 51: Tasks carried out by PTs working in Education & Training

Management Tasks	Training Tasks
• *Communication with others involved in the training and education of PTs (other trainers, stakeholders)* • *Overseeing a service (responsibility for training on a particular course, including design and delivery)* • *Management of a regional pharmacy technicians' education unit* • *Staff management (own training staff)* • *Education related activities (supply figures to senior team)* • *Staff management including appraisals, recruitment and staff rotas* • *Data collection and management* • *Manage the quality assurance of educational programmes* • *Writing & updating training programmes* • *Data collection and management* • *Assisting with audits* • *Project management/project work* • *Academic research*	• *NVQ assessor* • *Undertake IQA verification* • *Assessment & verification of level 4 diploma* • *Mentoring students and staff* • *Antibiotics training for nurses* • *Infection control training for ward staff* • *Training for prescription clerks and other practice staff* • *Maintain ACPT competence in dispensary* • *MDT training on antimicrobial stewardship* • *Running Learning@Lunch courses* • *Training in pharmacy IT*

5.5.4. The Future Role of PTs working in Education & Training

Respondents were asked to comment on the future role of the PT but were first asked whether or not they wanted their own role to expand.

5.5.4.1. Desire to Expand Role

Respondents were asked if they would like to expand their role: 14 (63.6; n=22) answered this question and of these 12 (54.5%; n=22) said they would like to expand their role and 2(9.1%; n=22) said they would not. However, 7 out of 22(31.8%) respondents did not answer this question. The reasons for not wanted to expand the role were given as the wrong time, and no role expansion available.

5.5.4.2. How could the PT Role Expand?

Respondents were asked to comment on how they thought the role of the PT could be expanded and all suggestions are listed below.

As previously, the quotations have been changed as little as possible to retain the integrity of the respondents' words and allow them to speak for themselves. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

Management roles and increased responsibility were identified:

> "*More/overall responsibility for projects/service*."

"Senior management across the Trust (beyond pharmacy)."

"*More statistical analysis/reports/change management."*

Undertaking education and training roles was seen as a common role expansion:

"*My role in the training department has expanded greatly since starting in 2006. Our department is ahead of many hospitals who do not have a training team. There is more we could do to support the training of many pharmacy staff*."

"*Within the regional development unit, the current role of the pharmacy technician (myself and Band 6 PLFs) could be extended through more formal engagement with Universities and AHSNs to engage as formal researchers*."

"*I could be asked to participate more in* ***national education/development groups****. I would be extremely keen to be involved in this, but I am rarely approached*."

New prescribing like roles were identified:

"TTA transcribing (Currently done by a doctor.)."

Expansion into clinical trials and research was an area where PTs were seen to be able to make a contribution.

"*The role has developed a lot over the last 10 years, so I don't think it will develop much more in the short term. There seems to be more* ***involvement in clinical trials area*** *which I think will increase*."

"*My current role allows me to go as far as I want to go. I have only been in the role just over a year, and have already been encouraged to apply for an ICHT Fellowship [Research post]. But I know that there are many pharmacy technicians who do not get this sort of opportunity*."

5.5.4.3. What would be the Priority for Training for Role Expansion?

Respondents were asked that training would be a priority in order to achieve role expansion. The PTs in this setting gave very few responses to this question so these are listed below as they were written rather than placed in a table.

- More in-depth pharmacy training
- I would like the opportunity to apply for an MRes and/or a PhD. Neither of which are necessary to expanding my job role
- Continued support and training from the antimicrobial pharmacist
- Experience on the job
- Educational diploma or similar

5.5.5. Barriers to the Career development of PTs working in Education & Training

Respondents in this setting made fewer comments about barriers to career development so these are all reproduced below. Some answered the question from the perspective of their setting, others commented on the barriers to career development of PTs in general.

The attitude of the profession as a whole was seen as a barrier:

> "***Apathy*** *within the profession generally."*

The pharmacy technician role was not seen as having a discrete role specific to the profession only and therefore this enabled them to be overlooked for roles:

> *"**Not having a defined role** that is specific to pharmacy technicians, i.e. in secondary care, if Band 6 **funding** is available then many organisations will employ a pharmacist; likewise, in secondary care organisations see employing Level 2 assistants as a good business model to achieving efficiency. "*

An undefined accepted career path was seen as a barrier to professional development:

> *"**No defined career path** in comparison to pharmacist who, in secondary care particularly, are expected to undertake diploma post-qualification and then prescribing."*

The fact that pharmacy technicians were not graduates was a barrier to accessing generic healthcare professional courses that are available to other graduate professions, and the level of qualification was affecting their recognition as a healthcare professional:

> *"There are many more accredited and supported options for pharmacist qualifications. If a PT wants to undertake a masters or any form of post-registration qualification, **they are hindered by the fact that they are often not graduates**.*"
>
> "*I think that PTs are still not seen as health professionals and **more recognition** and qualifications should be available to support this*."

A lack of funding for post-registration training and training opportunities were perceived as barriers:

> "***Money*** *- no funding available for post qualification courses"*
>
> *".. not enough **time for training/education opportunities** and not enough **investment** in further qualifications or training*."
>
> "*Reluctance of employers to release staff to attend courses due to **work pressures**."*

Remuneration for the role was seen as hindering professional development:

"***Pay*** *isn't good enough"*

"..and no money available to pay technicians appropriately for the level of training they've had which breads apathy among technicians who don't see the point in doing additional roles of they aren't going to be paid for it or appreciated for doing it"

Concerns were expressed regarding new government policies regarding the training of healthcare professionals:

"Funding *- I am very nervous about the new Apprenticeship only funding, and move to self-funded programmes once again. I am sure many professionals would be willing to pay, however there are probably many who just don't have the personal funds*."

The attitudes of pharmacists was seen as a barrier to development:

"***Pharmacists attitudes*** *can be a barrier.."*

" May be a reluctance from some pharmacists to ***fully utilise technicians to their full potential****. Supervision requirement. Too many people making decisions without full consultation from technician themselves*."

" Pharmacists who are not forward thinking or who are intimidated by well qualified staff. Shortages, meaning no time available to send technicians out to study days."

Members of the profession were also seen as barriers to development.

"*Pharmacists and techs* ***resistant to change***."

It was suggested that the two professional representation bodies for pharmacists and pharmacy technicians need to work more effectively together to ensure that the roles of the two professions are optimised:

"Professional ***bodies*** *need to be aligned and working together to support the whole pharmacy family, so we work to complement each other;"*

The management culture was also identified as important.

"..as well as the ***attitudes of the hospital itself****. I currently work in a large London Trust, and apart from a few techs on the wards there is a dearth of pharmacy technicians here. My previous Trust, a relatively small DGH* [District General Hospital]*, had as many technicians as they had pharmacists, and also lots of SATO's, which again there are not in my current Trust. This means that inpatients* [pharmacy] *in my current Trust runs on a shoe string, and there are always calls for help to get though the day's work, or else the late shifts turn into 9pm finishes*."

> *"**Middle Managers - priorities, mind-set, lack of awareness**; **Culture** - we have a long way to go for the NHS to REALLY be a Learning Organisation"*

There was a lack of recognition of the contribution made by pharmacy technicians.

> *Pharmacy Technicians need to be respected for the hard work and capabilities they have; **Managers**: There are some fantastic examples of managers who are incredibly supportive, however these other factors are quite common; Busy services - **no time /insufficient resources** to REALLY look at workforce planning and link to workforce needs and education needs; Tension between pressure to deliver services with reducing resource vs pressure to ensure all staff are competent to do the role they do;*

> "***Recognition of the role** (Public generally do not understand what a pharmacy technician is). **Faith in the role** (Career development in a trust/Community pharmacy entirely based on senior management perception of the role). **Ultimate responsibility** (e.g. Responsible pharmacist responsible for errors made by ACPT, responsibility should lay with pharmacy tech).* Clinical knowledge."

> "***Recognition of the potential** pharmacy technicians have. A proper career structure/pathway.*"

5.5.6. Facilitators to the Career Development of PTs working in Education & Training

Respondents in this setting, again, made fewer comments about barriers to career development so these are all reproduced below. Some answered the question from the perspective of their setting, others commented on the facilitators to career development of PTs in general.

Provision of training opportunities was a facilitator.

> *"**Opportunities** for staff to attend courses. In the NHS there are often limits on funding so only one person can go on a course at a time and they may only be held once a year."*

> *"CPD, **hands on experience**, any pharmacy/medicines related qualifications."*

Increased clinical and leadership skills were identified as important facilitators.

> *"**More clinical content** in syllabus. More leadership skills."*

Training PTs in management skills and helping them to understand overarching systems was seen as a facilitator for professional development.

> *"**Training in management** and understanding of the whole pharmacy including HR management of staff and the finance."*

Environmental drivers to improve efficiency were seen as a facilitator.

> *"Increased focus on technicians in light of registered status. Increased pressure to develop and widen skill mix to attain levels of pharmacy involvement in increasingly lower funded roles."*

Demonstrating appropriate attitudes enhances professional development

> *"Forward thinking and dynamic pharmacy technicians who push themselves to expand their role and will embrace new responsibilities. Availability of suitable courses and post qualification accreditation. Positive and forward thinking pharmacists or managers who see the value in their staff and appreciate the knowledge technicians have."*

> *"**Individual confidence and willingness to learn**. Faith in the role from senior management."*

Management culture was seen as a facilitator to professional development.

> *"I think there needs to be a willingness on both the technicians and their employers' part. I am very lucky in the job role I have that I am at a fairly senior level (Band 6) and have not needed to do any extra training to get here - although my previous role as a Clinical Trials Technician (which I did the practice supervisors course for, as well as specific GCP training) helped with my being successful in the application for my current role."*

> *"**Culture** within the organisation they work for. Awareness of courses / qualifications that are available. **Support** from immediate and grandparent managers to undertake development. Accessible role models / mentors."*

Pharmacists with a positive attitude were seen as an enabler.

> *"Having a **supportive pharmacist** and having relevant courses available to technicians."*

Training to encourage inter-professional collaboration was identified as a facilitator

> *"Training, collaborative working, good communication/networking."*

Effective national leadership and direction was also seen as a facilitator.

> *"Working together in national groups in an inclusive way, including pharmacy technicians working in academia who could have their skills utilise in informing development of course/ qualifications."*

> *"Great support that we have had from bodies such as GPhC, CPPE who see us as 'pharmacy professionals' and treated equally. Great **funding opportunities** from HEE*

(although this may be uncertain). Groups such as NHS PEDC who have created learning programmes where there are gaps, such as ACPT many years ago and more recently MMT accreditations. Self-understanding of own capabilities. ***Resilience****. Networks and role models."*

"A strong voice - from the leadership body and individuals to push for change and development."

5.5.7. Multidisciplinary Teamwork

Respondents were asked if they considered themselves to be part of an MDT, and of the 14(63.6%; n=22) respondents who answered this question 11 (50.0%; n=22) said that they did, 3(13.6; n=22) said they did not but 8(36.4%; n=41) did not answer this question.

Respondents who said they worked as part of a team listed the other members of that team including pharmacists, PTs, doctors - not just GPs, nursing colleagues, scientists, allied health professionals, ambulance Service, finance, administration, IT teams, HEE colleagues, education and training colleagues and external networks.

5.6. Other Settings of Pharmacy Practice

This subgroup of 28 participants includes pharmacy technicians, who worked in roles including HM Prison service, HM armed forces, the pharmaceutical industry and public health. According to the APTUK, Pharmacy Technicians working in the Prison Service and the Armed Forces perform similar roles to pharmacy technicians working in community pharmacies. They would be involved in supplying medicines to patients within a medicines management role. PTs in public health train pharmacy staff in a variety of settings including training and assessing prescription clerks in GP practices. They help keep pharmacies, GP practices and care homes up-to-date with prescribing practice and advice. PTs working in the pharmaceutical industry assist in the manufacture and supply of medicines and provide advice on medicines use. They also visit pharmacies in all settings to advise on supply, storage and use of medicines.

No PTs from any of these setting volunteered to take part in the focus groups so we have no data for these respondents.

5.6.1. Participant Demographics

Participants' demographics included sex, age, length of time working in a pharmacy setting, location of work setting, number of hours worked and date of registration.

5.6.1.1. Sex

Respondents from the other settings of pharmacy practice were made up of 25(89.3%; n=28) female and 3 (10.7%; n=28) male.

5.6.1.2. Age

Respondents were asked to give their ages and these are presented in groups of ten years in Table 53 where ages of respondents ranged from 24-58 years of age.

Table 53: Age of Respondents

<20	20-29	30-39	40-49	50-59	>60
0	3(10.7%)	10(35.7%)	7(25.0%)	8(28.6%)	0

n= 28

5.6.1.3. Length of Time working in Pharmacy

Table 54 shows how long respondents had worked in a pharmacy setting and this ranged from 3 to 36 years.

Table 54: Tenure in Pharmacy

0-9 Years	10-19 Years	20-29 Years	30-39 Years	40-49 Years
4(12.2%)	11(36.6%)	8(29.3%)	4(14.6%)	0

n=27; missing data=1

5.6.1.4. Location of Work Setting

Respondents were given a list of locations to choose from. In addition, they were given the opportunity to specify their location if it did not fit any of the categories. Table 55 shows the different locations of work settings of the respondents.

Table 55: Work Location

Location of work setting	Number of Respondents (n=28)
Rural	2(7.1%)
Urban	5(17.6%)
Inner city	7 (25.0%)
Town	10 (35.7%)
Other location	4(14.2%)

5.6.1.5. Hours worked

Table 56 shows how many hours respondents worked per week. The majority said they worked between 31 and 40 hours per week.

Table 56: Hours worked per Week

0-20 Hours per Week	21-30 Hours per Week	31-40 Hours per Week	Over 40 Hours
0	6(21.4%)	21(75.0%)	1(3.6%)

n=28

NB A number of respondents who reported that they worked 37.5 hours per week commented that they sometimes worked more than this.

5.6.1.6. Date of Registration

Until 2011 the role of the PT was unregulated. Regulation became mandatory under the Pharmacy Order 2010, although a system of voluntary registration was introduced in 2005. Respondents were asked to give the year and month that they registered as a PT. This information is shown in Table 57 as those who registered before 1st July 2011 and those who registered after this date. As can be seen, as with respondents from other settings, the majority of PTs from this setting registered prior to 2011.

Table 57: Date of Registration

	Registered before 1st July 2011	Registered after 1st July 2011	From Northern Ireland	In Training	Did Not Specify
Number of Respondents	19(67.9%)	5(17.9%)	1(3.6%)	0	3(10.7%)

n=28

Respondents who did not specify when they registered said they could not remember the date.

5.6.2. Training

Respondents were asked to specify the method of pre- registration they had undergone, the suitability of that training and to describe any post-registration qualifications they held. They were also asked to say what they would change about the PT training.

5.6.2.1. Pre-Registration Training

Table 58 shows that all respondents said they had completed pre-registration training.

Respondents were asked to tick all that applied to them so numbers may be uneven due to more than one method of training being undertaken.

Table 58: Pre-Registration Training Method

Further Education College	Distance Learning	Other
18(64.3%)	8(28.6%)	2(7.1%)

n=28

5.6.2.2. Suitability of Training

Respondents were asked if they felt that their training had equipped them sufficiently for the 'day one' pharmacy technician role. Only 16 out of 28(57.1%; n=28) respondents answered this question with 13 (81.3%; n=16) reporting that their training had equipped them for the 'day one' role and 3 (18.7%; n=16) reporting it had not. Just 2 PTs made additional comments about this and these are reproduced below.

> "*It is a very long time since I did my training and it was wholly aimed at hospital technicians and had no content that would be suitable for the role I do now*." (PT had worked in pharmacy for 20 years partly in primary care and the role included giving specialist advice to patients about medicines taking and appliance technique).

> "*It's been a long the since I did my training, but at that time there was insufficient training on interacting with patients e.g. Counselling, questioning techniques. Training needs to include IT skills e.g. Excel use*." (PT had 34 years' experience and current role was a regional training post).

5.6.2.3. Changes to Training

Respondents were asked to comment on the changes they felt should be made to PT training and only 2 suggestions were made which are listed below. The quotations have been changed as little as possible to retain the integrity of the respondents' words. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

> "*Medication history taking. Reconciliation. Counselling skills. POD checking. Accuracy checking. More actions and uses of drugs.* ***Greater focus on using the BNF and other additional resources.*** *Needs to be more practical and ward focused*."

> "*I have worked in community pharmacy, prison, hospital and now the local health board. The technician's role has changed over the years that I've worked in pharmacy and I think each role is different. It is some time since I qualified so not sure what the training consists of now. Less need for dispensing training due to automated dispensing in hospitals and* ***more focus on the evolving role of the technician***."

5.6.2.4. Further Qualifications/Accreditations

Table 59 shows the post-registration qualifications/accreditations that PTs had undertaken. All 14 out of 28 (50.0%) who answered this question reported having one or more qualification.

Table 59: Post-Registration Qualifications

Qualification	Number of Respondents (n=14)	Percentage (n=14)
Accuracy Checking Pharmacy Technician	10	71.4
National Approved Medicines Management Skills Programme (including medicines reconciliation)	7	50.0
Certificate/Diploma in Clinical Pharmacy/Medicines Management for Pharmacy Technicians	4	28.4
Patient Consultation Skills	3	24.1
Community Pharmacy training e.g. Healthy Living	2	14.2
NVQ Assessor	5	35.7
Internal Quality Assessor	2	14.2
Management	5	35.7
UKMi Accredited Medicines Information Technicians Training Scheme	0	0
Pharmaceutical Technology & Quality Assurance (PTQA)	0	0
Chartered Institute of Procurement & Supply (CIPS)	1	7.1
Teaching qualification	1	7.1
Other qualification	3	21.4

NB n= unequal because some respondents reported having more than one qualification.

Other qualifications included those gained overseas and not recognised in the UK.

5.6.2.5. Method of Completion of Post-Registration Training

Table 60 shows the methods used to access post-registration training Most participants reported completing their post-registration training and qualifications through a regional training provider.

Table 60: Post-Registration Training Method

Method	Number of Respondents (n=14)	Percentage (n=14)
Attending further education college	4	28.4
Through higher education or training	2	14.2
Distance learning	5	35.7
Through a regional training provider	8	57.1
In-house	0	0
Other	0	0

NB numbers do not add up to 14 because some respondents reported undertaking more than one method of training.

5.6.3. The Current Role of the PTs working in Other Settings

As previously stated the main aims of this research were to describe the current and future roles of PTs from their perspective and to identify barriers and facilitators to career development. In this section we report on the tasks that PTs in these various specialist settings said they carried out and daily and weekly tasks have been combined to provide a description of those tasks.

5.6.3.1. Tasks carried Out by PTs working in Other Settings

The tasks reportedly carried out by PTs in the armed forces, prisons and other specialties are presented in Table 61 in the same 4 categories as presented as before – technical, clinical, training and management. These are all as reported by PTs in their questionnaire responses. Where a tasks is specific to a setting the setting is shown in brackets after the task.

In Section 7 we combine the tasks that all PTs from each setting said they carried out in order to provide a broader picture of what is being done by PTs.

Table 61: Tasks Carried Out by PTs Working in Specialist Settings

P=prison; PH=public health; PI=pharmaceutical Industry; NHS=top level policy maker; RRS=rapid response service; ASC=adult social case; HSCIC=Health & Social Care Information Centre

Technical Tasks	Clinical Tasks	Management Tasks	Training Tasks
Maintenance of Pharmacy Supplies • *Ordering/procurement* P, PI • *Stock management* P, PI • *Generate supply of medicines for individual patients* P **Medicines Management** • *Order medicines for patients* P • *Prescribing audits e.g. for asthma patients* P • *Dispensing* P • *Accuracy Checking of Dispensed Items* P, PH • *Adios reporting* P, PH, • *Prescribing advice* P • *Calculate costs for prescriptions* PI • *Medicines information for other HCPs* P • *Screening of medicines* P **Management of Controlled Drugs** • *Destruction of controlled drugs* PH **Quality Assurance** • *Error investigation and management* PH • *Service improvement advice* P **Data Analysis and Reporting** • *Usage and wastage* P	**Communication/interaction** • *Communication (MDT)* P, PH, PI • *Attend MDT and medicines management team (MMT) meetings.* P, PH • *General Communication (patients)* P • *Patient counselling (Handing out prescriptions)* P, RRS, ASC • *Home visits* RRS, ASC • *Problem solving* PI • *Coordinating across sectors for the patient pathway e.g. setting up patients with hepatitis B in the community* PH **Safe Administration** • *Clinical check of medicines before faxing to satellite pharmacy* P • *Advising and liaising with doctors on formulary medicines and chart rewrites* P **Clinical Specialties** • *Aseptics* P **Patient discharge** • *Discharge planning* P • *Pastoral support to patients* P	• *Overseeing a service* P, NHS, RRS, ASC • *Staff management* PH • *Staff rotas* PI • *Budget control* P! • *Data collection and analysis* NHS, HSCIC • *Project management/project work* HSCIC	• *NVQ Assessor* PH • *In- house training* P, PH • *Ward based training for nurses* P • *Mentoring staff* PH

5.6.4. The Future Role of PTs working in Other Settings

Respondents were asked to comment on the future role of the PT but were first asked whether or not they wanted their own role to expand.

5.6.4.1. Desire to Expand Role

Respondents were asked if they would like to expand their role: 15 (53.6%; n=28) answered this question and of these 13 (86.7; n=15) said they would like to expand their role and 2(13.3%; n=15) said they would not. However, 13 out of 28(46.4%) respondents did not answer this question. Respondents were asked the reason why they did not want to expand their role and the answers included personal reasons and lack of time.

5.6.4.2. How could the PT Role Expand?

Respondents were asked to comment on how they thought the role of the PT could be expanded and all of these suggestions are listed below.

As previously, the quotations have been changed as little as possible to retain the integrity of the respondents' words and allow them to speak for themselves. Some of the key comments have been emboldened by the researchers to highlight areas of particular need.

Expansion into more clinical roles and those traditionally undertaken by pharmacists was commonly stated.

> *"**Greater focus on ward based activities**. History taking, reconciliation and discharge. More time counselling on medicine optimisation. Growing into primary care sector via the Vanguard programme. Technician validation. Supporting administration of IV medicines."*

> *"More ward based, **expansion of a clinical role**, involved in the administration of medicine."*

> *"They need to be much **more clinically focused** and my personal belief is that the basic qualification should be a degree. That would not be the same as the pharmacy degree that pharmacists undertake but one that would give pharmacy technicians the advanced clinical knowledge that they are likely to need in the future and enabling them to work in a far more autonomous way than they do currently."*

Management and leadership roles were identified.

> *"To progress to a band 6 as a lead technician."*

> *"**Higher numbers of management posts** in all settings."*

As was the involvement in research.

> *"**More involvement in research and developments**."*

The need to raise the entry level qualification and incorporate accuracy checking accreditation within this was identified.

> *"**A higher level entry qualification** – HND? Accuracy Checking as standard part of that qualification. Post qualification."*

5.6.4.3. What would be the Priority for Training for Role Expansion?

Respondents were asked what training would be a priority in order to achieve role expansion. As in the previous setting there were too few training priorities identified by respondents so these are simply listed below:

- MMAP
- IQA training
- ILM level 2
- Clinical content
- Management courses (ILM)
- BTEC level 5 therapeutic use of medicines, experience.
- ACPT
- In role training and distance learning courses.
- Nye Bevan Programme administered by the Leadership Academy.
- Polypharmacy training
- Consultation skills training
- Management

5.6.5. Barriers to the Career Development of PTs working in a Specialist Setting

Respondents in this setting made fewer comments about barriers to career development so these are all reproduced below. Some answered the question from the perspective of their setting, others commented on the barriers to career development of PTs in general.

A lack of funding was a reported barrier

> *"**Funding for new roles**, people already in the job."*

> *"Lack of funding for courses."*

As was the lack of a defined career pathway and associated training.

> *"YES - there are very **poor career pathways**, patchy access to approved training, no structured funding. We need post-registration training like pharmacists."*

Managers were a barrier and part of this problem was a lack of recognition of the profession and its role.

"Managers and business owners; not being recognised still as a profession."

"Management often don't understand how to utilise knowledge and skills due to various reasons."

*"**Lacking support from other NHS Trusts** to move and push forward with personal development. Set roles that have stagnated for years which would benefit from being re-evaluated and assessed on viability and longevity."*

"There is no defined career pathway. Job descriptions that ask for a GPhC registrant but really mean they want a pharmacist.

A lack of understanding of the role of the pharmacy technician and what it can offer was identified.

*"**Employers recruiting for a pharmacist when a tech could equally well do the job**. Lack of insight into extended roles. Lack of extended/advanced training. Being overlooked for other professions."*

*"Insufficient recognition of skill set especially when **moving beyond the traditional dispensing centred practice**."*

*"In industry specifically there is a lack of roles suited to technicians and many leave to return to hospital work. **I do not think industry recognises technicians for the skills they bring**. Most roles in industry are filled by 'In-house trained' individuals and not technicians."*

The constituency of the professional leadership body was seen as a barrier due to over representation of certain sectors within its ranks.

*The professional leadership body does not have sufficient members to truly say it is the voice of pharmacy technicians. They are predominantly led by hospital pharmacy technicians which means that there is a **lack of understanding of other sectors** which makes it difficult for them to take issues forward."*

Individual members of the profession itself were seen as creating barriers.

"Career progression of people who are unsuitable or unwilling to progress, for example I am unable to begin my ACT in work until people who are already undertaking theirs have finished. But they seem to have little desire or motivation to complete it as they never wanted to do it in the first place and were told they had to. So, as a result, they're holding up my progression."

Finally pharmacists were seen as a barrier and this was due to an unwillingness to relinquish traditional roles.

*"**Pharmacists**! It would appear there is a fear of technicians taking over rather than being seen as a colleague with skills of their own."*

*"The work being done by the APT as lone technicians have little voice in large workforces and pharmacists tend to 'look after' the needs of their own and **technicians are left picking up what the pharmacist doesn't want** to rather than utilising the skills of each individual."*

5.6.6. Facilitators to the Career Development of PTs working in a Specialist Setting

Respondents in this setting, again, made fewer comments about barriers to career development so these are all reproduced below. Some answered the question from the perspective of their setting, others commented on the facilitators to career development of PTs in general.

Strong leadership by pharmacists and managers was a facilitator for professional development,

*"I think the **attitude of pharmacists** is very important. I have worked with a lot of pharmacists over the years and many have been wonderful in supporting development and giving advice and training… Some however do not see pharmacy technicians as a profession in its own right and have difficulty in letting go of roles previously done by pharmacists that can be done by technicians with the correct training."*

"Access to a pharmacist who believes in your own ability and trusts you! Wanting to do more - and being aware of what is out there."

A need for PTs to undertake a role and undertaking training to support this was identified as a driver.

"Opportunity to develop, training and reflecting on objectives, self-motivation, investment."

*"Access to CPPE training, recognition of suitability of pharmacy technicians to a wide range of roles available throughout NHS and commercial organisations, so not limiting to the 'traditional dispensing' roles. **The improved status since mandatory GPhC registration**, has been a massive step up in credibility. This will continue to be heightened with pharmacy-based tasks being restricted to GPhC registrants only e.g. access to SCR."*

The attitude of individual PTs was seen as a driver for development.

"Desire to progress, earn more money, broaden scope of understanding and learn more."

*"**Pure determination** on the part of individuals to succeed and do well."*

The changing landscape of healthcare was a facilitator for change.

"The constant drive to better the profession, roles changing thanks to continuously developing the staff at our local hospitals. Pushing boundaries and encouraging skill mix between Pharmacists and Technicians."

"The ever changing job roles developing into more of a clinical role, management and practical skills, professional recognition and expansion of role."

Access to professional networks and mentors was also identified as important.

*"**Access to professional networks and mentors**."*

5.6.7. Multidisciplinary Teamwork

Respondents were asked if they considered themselves to be part of an MDT, of the 14(50.0%; n=28) respondents who answered this question 12 (85.7%; n=14) all said that they did, 2(14.3%; n=14) but 14(50.0%; n=50.0%) did not answer this question.

Respondents who said they worked as part of a team listed the other members of that team including healthcare managers, pharmacists, GPs, nurses - General/IDTS/Mental Health/Learning disabilities, dental Staff, healthcare assistants, prison officers, opticians, podiatrists, physiotherapists, mental health team, pharmaceutical industry, Addiction team, community teams, hospitals and transport department.

6. Context

In order to further explore the diversity of the role of the PT, we included in the questionnaire a setting 'Mental Health' in question 6 ('Which of the following do you work in?'). Early discussions around the role of the PT suggested that a number of them might be working not only in Trusts (primary care and secondary care) but in settings where patients/customers might have mental health issues that could affect their care. These might range from memory problems to drug abuse and schizophrenia. Our results have shown so far that amongst the core tasks carried out by PTs, are a number of contexts including antimicrobial stewardship, renal dialysis medicines management, oncology including paediatrics, HIV, haematology and medical assessment prior to surgery. This means that within each setting PTs are carrying out tasks that require highly specialised skills and the implications of these for both governance and training will be discussed in Section 8.

In this short section we will reiterate some of the things our survey respondents and focus group participants said about dealing with patients with mental health problems.

6.1. Work setting of PTs who said they also worked in a mental health context

This subgroup of 28 participants indicated that their job role included a work setting in mental health. This represents approximately 7% of our respondents. Table 62 shows the work setting of these respondents.

Table 62: Work Setting of PTs also working in Mental Health

Community	Hospital	GP Practice	HM Prison	Public Health	Academia	Other (Not Specified)
5	16	1	1	2	1	2

6.2. Further Qualifications/Accreditations

Table 63 shows the post-registration qualifications held by these 28 respondents

Table 63: Post-Registration Qualifications

Qualification	Number of Respondents (n=28)	Percentage (n=28)
Accuracy Checking Pharmacy Technician	10	35.7
National Approved Medicines Management Skills Programme (including medicines reconciliation)	7	25.0
Certificate/Diploma in Clinical Pharmacy/Medicines Management for Pharmacy Technicians	4	14.3
Patient Consultation Skills	3	10.7
Community Pharmacy training e.g. Healthy Living	2	7.2
NVQ Assessor	5	17.9
Internal Quality Assessor	2	7.2
Management	5	17.9

UKMi Accredited Medicines Information Technicians Training Scheme	0	0
Pharmaceutical Technology & Quality Assurance (PTQA)	0	0
Chartered Institute of Procurement & Supply (CIPS)	1	3.6
Teaching qualification	1	3.6
Other qualification	0	0

NB n= unequal because some respondents reported having more than one qualification.

6.3. Supporting Patients with Mental Health Problems

In this section we summarise some of the situations spoken about by our participants and the difficulties the PTs faced.

6.3.1. Tasks Involving Patients/Customers with Mental Health Problems

- In Section 5.1.2.1 we heard from only one PT who had actually trained in a mental health setting. She said: "my training it was in mental health…which I think there's about 240 drugs that you see in mental health compared to the whole gamut that you see in normal, everyday practice for everybody else." P1O
- Respondents working in the hospital (see Table 10), community pharmacy (see Table 21) and GP practice (see Table 41) settings all reported being involved with the dispensing and supply of methadone. This is part of the supervised consumption programme for people with drug addiction problems.
- Respondents working in the hospital (see Table 10) and community pharmacy settings (see Table 21) reported being involved with the monitoring and/or supply of clozapine used in the treatment of treatment resistant schizophrenia and bi-polar disorder (depot treatment)
- In Section 5.2.2.1 we heard from one community PT who said that her pharmacy regularly had people sitting in it who had mental health problems "*They come and wait for their prescriptions then go back to the doctor and tell them they hadn't got any meds to be told that they were already waiting for them at the pharmacy*." P7M
- In the same section we heard that it was the general opinion of PTs in that focus group that staff working in community pharmacies often came face-to-face with people with mental health problems and people who can be difficult, rude or aggressive.

- Respondents from all groups said that one of their tasks was to counsel patients when handing out prescriptions. This may include patients with memory problems, dementia (diagnosed or not). It will also include patients who may have speech or understanding difficulties post-stroke.
- In Section 5.2.1.3 a hospital PT commented on changes to training saying "*How to deal with different ward situations i.e. stroke patients who may not be able to talk or palliative care patients.*"

The diagram below shows how this organisation of role, setting and context might look.

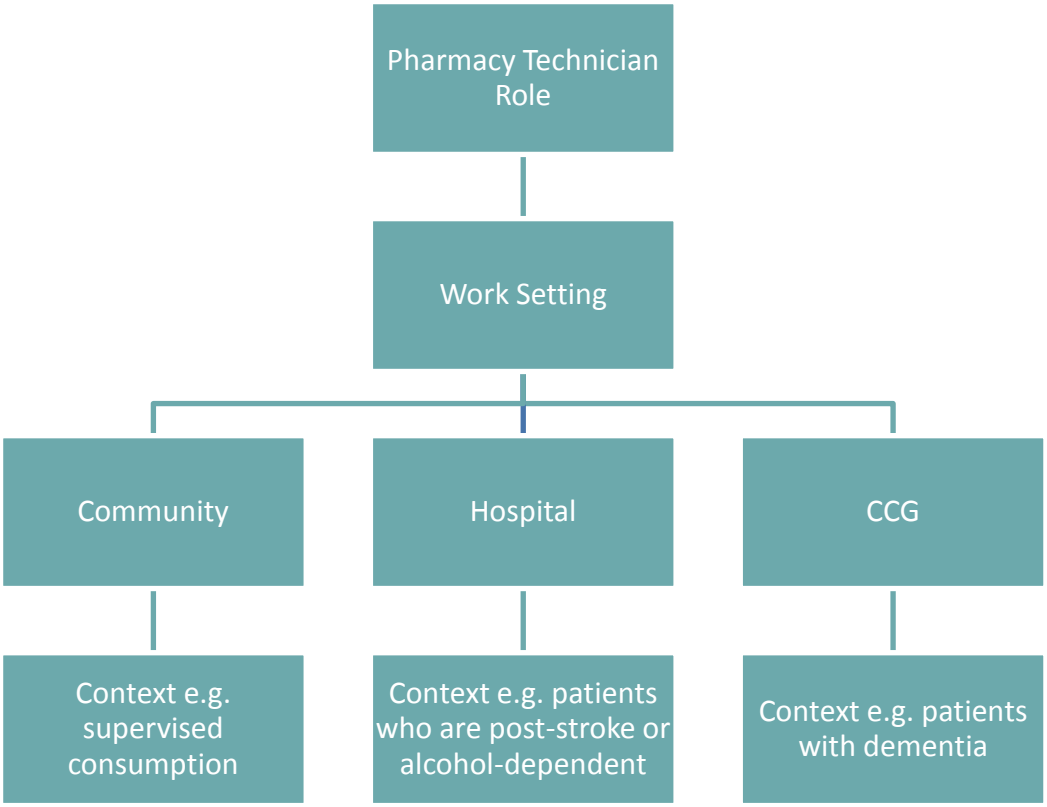

Figure 1: Examples (using 3 settings) of the Organisation of Role, Setting & Context

7. Summary of Results

7.1. The current role of the pharmacy technician

Table 64, provides a list of tasks that questionnaire respondents and focus group attendees stated they are undertaking following qualification.

It can be seen that the competencies required for pharmacy technicians to undertake their role are around medicines supply, communication, improving medicines adherence, pharmacy management and quality improvement.

Table 64: Tasks Common to 3 or more Settings

Role	Community	Hospital	Primary Care	GP Practice	Education & Training	Other
Ordering/procurement (including invoice reconciliation & dealing with invoice queries)	Y	y		y		y
Stock management	Y	y		y		y
Order medicines for patients	Y	y		y		y
Fridge management (e.g. temperature monitoring)	Y	y		y		
Dispensing	Y	y		y		y
Accuracy Checking of Dispensed Items	Y	y		y		y
Check endorsing on prescriptions	Y	y	y			y
Handing out medicines	Y	y		y		y
Maintain ACPT competencies in dispensary	Y	y		y		
Dispensing compliance aids	Y	y		y		
Prescription admin (collection & filing, repeat supply)	Y	y		y		
Communication (MDT)	Y	y	y	y	y	y
Liaise with care/nursing homes	Y	y	y	y		
General Communication (patients)	Y	y	y	y		y
Patient counselling	Y	y	y	y		y
Dispensing controlled drugs	y	y		y		
Maintain legal registers	y	y	y			

Check allergies and interactions	y	y	y	y		
Medicines Optimisation (assisting with MURs, Drug history taking)	y	y	y			
Providing healthy lifestyle advice (Essential Services, patient consultations)	y	y	y		y	y
Preparing staff rotas & time sheets	y	y	y	y		y
Organisational related activities (supply figures to senior team)	y	y	y	y	y	
Training and development (in-house training)	y	y	y	y		y
Teaching/training pre-reg pharmacists/pharmacy technicians/pharmacy assistants in-house: MMS, Level 2 & 3	y	y	y			
L2 assistant expert witnessing	y	y	y			
Responding to queries via phone, email, face to face	y	y	y			y
Liaise between hospital, patients and community pharmacies regarding	y	y	y	y		
Assisting with audits	y	y	y	y	y	
Updating pharmacy IT systems	y	y	y	y	y	
Deal with complaints	y	y	y	y	y	

7.2. Barriers and Facilitators to Career Development

Commonly held views on barriers and facilitators to development of pharmacy technician role were:

Facilitators

- Management who were seen to embrace technician-led services
- Management understanding the role of the pharmacy technician
- Acknowledgement of skills the PTs have to offer
- Positive pharmacy technician relationships with pharmacists
- Organisational culture of training and development
- Continuing changing healthcare landscape
- Access to training
- Attitudes of individual members of the profession
- Effective national leadership

Barriers

- Management culture
- Pharmacist unwillingness or relinquish roles and responsibilities
- Pharmacy technician relationship with pharmacist
- Lack of understanding of the role and skills set
- Level of qualification required for registration
- Lack of technician specific/unique role
- Lack of a post-registration career framework
- Lack of funding to support development
- Availability of opportunities for development
- APTUK not seen to represent all members of profession equally
- Attitudes of individual members of the profession

7.3 Education and Training

7.3.1. Current

Up to one third of respondents did not believe that their pre-registration training had adequately prepared them for the 'Day 1' PT role with many citing the need for more practical skills training.

7.3.2. Post-registration

The only post-registration accreditation for PTs that prevails across sectors is the Accredited Checking Pharmacy Technician (ACPT).

In the hospital sector, there was a significant number of PTs who have also completed post registration training in Medicines Management Skills, NVQ Assessing and management.

7.3.3. Future

7.3.3.1. Pre-registration

All respondents agreed that pre-registration training should be at a higher level to reflect the role. Commonly held views on what should be included in future pre-registration education and training were:

- General communication skills plus:
  - Patient focused consultation skills
  - Emotional intelligence
  - Self-awareness
- Medicines management skills to deliver medicines optimisation to include:
  - Checking patients own drugs for use
  - Drug history taking
  - Medicines use reviews
  - Compliance and concordance
- Clinical training
- Final accuracy checking
- IT Literacy
- Management and leadership skills
- Professionalism including inter-professional working

7.3.3.2. Post-registration Training

Respondents from all settings overwhelmingly spoke about the need for role definition and structured post qualification education, training and development, similar to that available to pharmacists in the postgraduate diploma. Such post-registration training would equip PTs for the specialist roles that have been described throughout this research. They would also answer the call made by our respondents for clearer career pathways and opportunities to develop their job roles, particularly being able to move from one setting to another more freely.

A summary of priorities for post qualification training can be found in Table 67. However, common requirements are:

- Additional clinical training and therapeutics
- Management
- Training/teaching others
- Working with vulnerable and frail patients

Below are summary Tables for all participants' demographics (Table 65), post-registration qualifications (Table 66) and priorities for training (Table 67)

Table 65: Summary of Respondent Demographics

	Hospital	Community	Primary Care	GP practice	Education & Training	Specialist Pharmacy
Sex:	n=254	n=71	n=41	n=28	n=22	n=28
Female	210 (82.7%)	61(86%)	37(90.2%)	26 (92.9%)	19 (86.4%;	25(89.3%)
Male	44(17.3%)	10(14%)	4 (9.8%	2 (7.1%)	3(13.6%)	3 (10.7%)
Age:	n=252; missing=2	n=70; missing=1	n=40; missing=1	n=27; missing=1	n=22	n=28
Under 20	0	1(1.4%)	0	0	0	0
20-29	53(21.0%)	13(18.6%)	5(12.5%)	7(25.9%)	1(4.5%)	3(10.7%)
30-39	94(37.3%)	23(32.9%)	16(40.0%)	6(22.2%)	5(22.7%)	10(35.7%)
40-49	59(23.4%)	11(15.7%)	9(22.5%)	7(25.9%)	9(40.9%)	7(25.0%)
50-59	40(15.9%)	21(30.0%)	10(25.0%)	7(25.9%)	6(27.2%)	8(28.6%)
Over 60	6(2.4%)	1(1.4%)	0	0	1(4.5%)	0
Tenure (years):	n=253; missing=1	n=70; missing=1	n=41	n-28	n=22	n=27; missing=1
0-9	59(23.3%)	16(22.9%)	5(12.2%)	3(10.7%)	1(4.5%)	4(12.2%)
10-19	96(37.9%)	33(47.1%)	15(36.6%)	14(50.0%)	5(22.7%)	11(36.6%)
20-29	59(23.3%)	10(14.3%)	12(29.3%)	8(28.6%)	9(40.9%)	8(29.3%)
30-49	34(13.4%)	8(11.4%)	6(14.6%)	2(7.1%)	5(22.7%)	4(14.6%)
Over 40	5(2.0%)	1(1.4%)	3(7.3%)	1(3.6%)	2(9%)	0
Location of work:	n=237; missing=17	n=71	n=42; 1=2 locations	n-28	n=20; missing=2	n=28
Rural	19 (8.0%)	10 (14.1%)	13 (31.7%)	13 (46.4%)	2 (10.0%)	2(7.1%)
Urban	48 (20.3%)	14 (19.7%)	7 (17.1%)	3 (10.7%)	4 (20.0%)	5(17.6%)
Inner city	71 (30.0%)	14 (19.7%)	11 (26.8%)	4 (14.6%)	8 (40.0%)	7 (25.0%)
Town	93 (39.2%)	31 (43.7%)	11 (26.8%)	12 (42.9%)	5 (25.0%)	10 (35.7%)
Other location	6 (2.5%)	2 (2.8%)	0	2 (7.1%)	1(5.0%)	4(14.2%)
Type of Community Pharmacy:		n=71				
Independent	-	17 (29.9%)	-	-	-	-
Small chain	-	13 (18.3%)	-	-	-	-
Large chain	-	17 (23.9%)	-	-	-	-
Supermarket		3(4.2%)	-	-	-	-
Other	-	16 (22.5%)	-	-	-	-
Hours worked/week:	n=240; missing=14	n=67; missing=4	n=41	n=28	n=22	n=28
0-20	6(2.5%)	5(7.5%)	1(2.4%)	2(7.1%)	1(4.5%)	0
21-30	32(13.3%)	12(17.9%)	4(9.8%)	2(7.1%)	0	6(21.4%)
31-40	205(85.4%)	44(65.7%)	36(87.8%)	21(75%)	17(87.8%)	21(75.0%)
Over 40	5(2.0%)	6(8.9%)	0	3(10.7%)	4(18%)	1(3.6%)
Date of registration:	n=232; trainee=1	n=64; trainee=1; missing=7	n=35; missing=6	n=25; missing =3	n=20; missing=2	n=28; missing=25
Pre 1st July 2011	138(59.2%)	39(54.9%)	23(56.1%)	16(57.1%)	16(72.7%)	19(67.9%)
Post 1st July 2011	89(38.2%)	23(32.4%)	12(29.3%)	9(32.1%)	3(18.2%)	5(17.9%)
Northern Ireland	5(2.1%)	1	0	0	0	1(3.6%)

Table 66: Summary of Post-Registration Qualifications

NB n=number of respondents who answered this question

	Hospital (n=114)		Community (n=35)		Primary Care (n=21)		GP practice (n=9)		Education & Training (n=13)		Specialist Pharmacy (n=14)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Accuracy Checking Pharmacy Technician	95	83.3	29	83.0	16	76.2	7	77.8	7	53.8	10	71.4
National Approved Medicines Management Skills Programme (including medicines reconciliation)	47	41.2	7	20.0	4	19.0	2	22.2	3	23.1	7	50.0
Certificate/Diploma in Clinical Pharmacy/Medicines Management for Pharmacy Technicians	14	12.3	2	5.7	6	28.6	2	22.2	1	7.7	4	28.4
Patient Consultation Skills	19	16.7	6	17.1	7	33.3	0	0	5	38.2	3	24.1
Community Pharmacy training e.g. Healthy Living	12	10.5	10	28.6	4	19.0	4	44.4	3	23.1	2	14.2
NVQ Assessor	58	50.9	6	17.1	6	28.6	0	0	10	76.9	5	35.7
Internal Quality Assessor	19	16.7	2	5.7	2	9.5	0	0	8	61.5	2	14.2
Management	44	38.6	6	17.1	9	42.9	0	0	7	53.8	5	35.7
UKMi Accredited Medicines Information Technicians Training Scheme	7	6.1	0	0	2	9.5	0	0	0	0	0	0
Pharmaceutical Technology & Quality Assurance (PTQA)	1	0.9	0	0	0	0	0	0	0	0	0	0
Chartered Institute of Procurement & Supply (CIPS)	0	0	2	5.7	0	0	0	0	1	7.7	1	7.1
Teaching qualification	17	14.9	3	8.6	2	9.5	2	22.2	8	61.5	1	7.1

Table 67: Priorities for Training

Technical	Clinical	Management	Training
ACPT H, C, O Attend National Framework Courses H More CPD/conferences to maintain and update knowledge H AMITTS scheme H I.V. qualification H ILM level 2 H, O Closer work with pharmacists and structured training H Use of PGDs H Medicines Management (MM) H, PC, GP, MMAP C, O Skills accreditation Aseptic checking course More in-depth pharmacy training C, E&T, Anything that challenges me to improve patient care C Any training C Proper support H Degree level qualification post NVQ for technicians PC Qualification in community pharmacy GP Experience on the job O	Patient counselling & consultation H, PC, O EHC C Asthma reviews C, PC Inhalers C Stoma management PC Communication H Clinical training H, C, PC, GP, O Clinical diploma PC, GP Clinical diploma (but not one that has to be completed in hospital pharmacy) H PTQA H Training on certain groups of medications H Training in recognising sensory loss and its effects H Signing for deaf H How to simplify information to aid adherence H Admissions avoidance H, PC Drug interactions H Use of unlicensed medications H Experience on the job H Specialist training e.g. oncology H Understanding specialist medicines to advise patients GP Interpretation of blood results H Working with vulnerable and frail patients H, C, PC, GP CPPE courses H NPA travel advice C HRT C Healthy living PC Blood pressure PC Understanding assistive technology PC Accountability PC Understanding & interpreting evidence PC BTEC level 5 in therapeutic use of medicines O Polypharmacy O	Management masters H High level management training H Management course C, PC, O HNC in Pharmacy Services Development and Management H, GP More soft skills like shadowing the director for capacity H Management degree H Finance- related qualification H Managerial & General H Clinical Research Design H Governance qualifications H Leadership H Quality Improvement H Business Case Writing H PRINCE 2 qualification H Running enhanced services PC Understanding & interpreting evidence PC Running meetings PC Primary care management PC Data management PC Finance management PC NHS leadership PC Nye Bevan Programme (Leadership Academy) O	NVQ assessor training H, C External verifier training and IQA training H, O Training for teaching H, C, GP Revalidation H In-house training GP, O In-house training on wards and in community to be proactive in making the discharge from hospital smooth PC A1/A2 assessor's course PC Support & training from antimicrobial pharmacist E&T Educational diploma E&T **Research** MRes E&T PhD E&T

H=Hospital; C=Community; PC=primary care; GP=GP Practice; E&T=Education & Training; O= Other specialist setting

8. Discussion

8.1. Main messages

This is the first nationwide survey of pharmacy technicians to describe the range of activities undertaken, describe beliefs about education and training and to identify barriers and facilitators to professional development.

The data shows that pharmacy technicians are no longer confined solely to the dispensary or to community and hospital pharmacy. In parallel with developments seen within the pharmacy profession pharmacy technicians are found to be providing more patient facing care and are now commonly located within the primary care and medical practice settings.

The significant commonality seen between roles within the different settings means however that a generic training and registration period is still relevant. Stern (2006) describes professionalism as something which is demonstrated through a foundation of clinical competence, communication skills, and ethical and legal understanding, upon which is built the aspiration to and wise application of the principles of professionalism: excellence, humanism, accountability and altruism. Due to the expansion of the pharmacy technician remit, the pre-registration training years should now include the knowledge and skills pertaining to professionalism, effective inter-professional working, communication skills, supporting medicines taking, education and training of others and people management.

With the majority of pharmacy technicians reporting that they have since undertaken an accuracy checking accreditation, this may also be appropriate for inclusion within pre-registration training. The difficulty with incorporating additional requirements to an existing already full training program is that either the course has to expand or current topics need to be removed. Whilst there were some requests for less theory within the two-year course, this removal, if it were appropriate, would not be sufficient to enable addition of all of the new material.

Due to the increasing responsibility and complexity within the role of the pharmacy technician there were also frequent calls for the level of the qualification to be raised in line with other similarly remunerated healthcare professionals. Transformation of pharmacy technician training to a three year work placed degree similar in nature to that seen with nursing would provide the additional time required to incorporate the identified new material which has been required to prepare pharmacy technicians for their role. Additionally it would provide some research training and thereby empower the profession to develop its own unique knowledge base, which has been identified as a requirement for obtaining professional status.

Whilst a range of post-registration training courses were identified as being available there is no recognised career framework and this was seen as a barrier to professional

development. Without a degree qualification PTs had also identified that this created an artificial barrier to accessing many of the generic post-graduate courses designed for healthcare professionals wanting to develop management, leadership, education and research roles.

A lack of awareness of the capabilities of pharmacy technicians was seen as a barrier to role expansion and this will not be addressed unless a culture of publication and promotion is engendered within the profession. Where management understood the role and capabilities of the pharmacy technician this was seen as a facilitator for role expansion and development. Whilst an organisation culture of development and training was also seen as an enabler for pharmacy technicians it is unlikely that PTs will be able to influence this unless they are given opportunities to undertake senior management roles.

The pharmacist was frequently reported as a barrier to professional development and this requires further exploration. Whilst the pharmacy profession is itself continually reviewing its role and location within the healthcare team it may be reluctant to enable another profession to develop and undertake roles which it may then permanently lose. The comments however were more at the individual level and therefore research to better understand this is required. When considering inter-professional learning for pharmacists this usually consists of working with doctors and nurses with little consideration for the profession they most commonly work with, the pharmacy technician. Similarly inter-professional learning is not a requirement within current pharmacy technician training and although it is a central element of professionalism it may require highlighting as part of developing this element.

A lack of funding for pharmacy technician roles and development was seen as a barrier and although this could be argued for all healthcare professionals it is probably more acute in a profession which does not have a research culture and therefore does not routinely apply for access to research or service innovation funds.

8.1.2. Strengths and limitations

This was a national study of pharmacy technicians which aimed to obtain a representative sample of responses. This was however not achieved and this may be due to the use of APTUK for promotion of the survey and their membership being largely derived from the hospital sector and the fact that community based technicians were accessed indirectly through their managers. The large number of responses however represents a good proportion of registered pharmacy technicians and is likely to include those with greater enthusiasm for change. Due to significant over representation of hospital based pharmacy technicians we chose to split the data analysis by setting to enable commonalities between the different groups to be identified rather than take the majority view which would be most likely to be that of the hospital based respondents. The use of focus groups enabled us to obtain some qualitative insight into the responses provided through the survey.

8.1.3. Discussion

Many of the issues reported by our respondents and focus group participants have come about because of the continued lack of definition of the roles of PTs. Our PTs reported carrying out a huge number and variety of tasks and were willing to do so, but the responsibility for these tasks needs to be clearly defined, skill and skill mix must be identified for each pharmacy setting and PTs must be paid according to their roles and responsibilities.

Turner *et al*. (2005) conducted research in Australia to establish the role of the clinical pharmacy technician. They examined the division of labour between clinical pharmacists and PTs in a hospital setting. The aforementioned research said that the utilisation of PT's skills resulted in the pharmacist being freed up to take on more clinical tasks. The Australian research was conducted some 12 years ago and thus roles may have changed. In comparison, it would seem from the responses from our PTs that many of them have been carrying out clinical tasks, like those carried out by the pharmacists in this study, for some time, for example, assessing patients' ability to take medication, confirming medications with a carer or external health provider, allergy checking, providing drug information and counselling patients. They note the initial resistance from several pharmacists for the technicians to take on this role and recognises how pivotal the perseverance of the pharmacy technician was to the success of the project, being highly motivated and actively involved in the change process from the beginning (p. 121). This clearly demonstrates what is reflected throughout our study, that pharmacy technicians want to take on more responsibility and extend their roles in support of pharmacy services. Furthermore, our research has identified those tasks that PTs say they carry out which has not been specified in such detail before. What is of concern is that some of our respondents reported carrying out complex tasks, such as patient counselling, with no additional training.

The collation of different activities undertaken by PTs enables the education and training requirements for those which are undertaken by PTs in most locations to be considered for inclusion within pre-registration training. At the same time it is important to identify which roles can be given to pharmacy assistants and therefore enable the focus of training of PTs within pre-registration years to be appropriately changed.

PTs do not do their jobs in isolation and a high number of respondents recognised this. There are others working in pharmacy and healthcare in general, so the skill mix in all settings is of importance to provide the optimum care for patients. Also of concern are the duplication of tasks and the potential waste of funds that can arise through poor utilisation of health care staff.

The work by Turner *et al.* (2005), suggests that pharmacists and pharmacy technicians can work together to optimise the delivery of patient care, and working together was also one of the things that some of our respondents mentioned as being a facilitator to career

development. They did however say that as their project evolved there was resistance from pharmacists who '*did not feel comfortable delegating the traditional dispensing and supply tasks to technicians*' (p. 121). A fear of role erosion by pharmacists was consistently reported by PTs as their perceived reasons for the resistance seen. There was also a fear of technicians making dispensing errors that are not identified. The repeated identification of pharmacists as a barrier to the career development of PTs suggests that further research to understand this is required and that interventions to address this need to be identified and testing. The requirement of some inter-professional education of pharmacists and pharmacy technicians may be one intervention worth consideration.

Research carried out by Bradley *et al.* (2013) found that not all community pharmacists believed that it was safe to allow qualified support staff (including PTs) to carry out the accuracy checking of prescriptions. Bradley *et al*. found that some of the main barriers and challenges to supervision changes in future included '*CPs' perceptions about their presence being critical to patient safety and a reluctance to relinquish control, concerns about knowing and trusting the competencies of support staff, and a reluctance by support staff to take greater professional responsibility, with pharmacists also reluctant to take responsibility for the actions of others during their absence*'. (p.652).

The reluctance on the part of community pharmacists to relinquish their responsibilities may be in part, due to the commercial pressures and professional responsibilities placed on them by employers and the regulatory body. So rather than simply not supporting PTs, they may feel the need to control their work environment because they are the ones who will ultimately take responsibility for their work. The GPhC guidance (General Pharmaceutical Council, 2010) for responsible pharmacists in a retail setting states that '*In order to lawfully conduct a retail pharmacy business, a registered pharmacist must be in charge of the registered pharmacy as the responsible pharmacist*' (p.2). They go on to say that community pharmacies must '*establish the scope of the role and responsibilities you will have as the responsible pharmacist and take all reasonable steps to clarify any ambiguities or uncertainties with the pharmacy owner, superintendent pharmacist or other delegated person*' (p.2). Given the magnitude of these responsibilities it is hardly surprising that some pharmacists might be protective of their role.

On the other hand, there is a longer tradition of teamwork and understanding of roles within the hospital setting that may also influence pharmacists' attitudes towards, not only PTs but others involved in service delivery. If this attitude encourages support and development of others, we suggest that there is a need for this in other pharmacy organisations. Research carried out by Sutton *et al*. (2015) found a lack of understanding of the role of the *pharmacist* in the running of mental health clinics. It shows that the lack of understanding by those managing healthcare services is not just confined to the role of PTs

The nature of work (Schwartz, 1999) and its relationship to societal and cultural change means that work roles should evolve as work becomes more complex and tasks transfer from one person to another. This is the only way that organisations can remain fit for purpose and this evolution should be seen as positive and exciting. Our results suggest that this is the process that is happening in pharmacy practice at the moment and the reallocation of roles is inevitable for those working in, managing and regulating the profession. In speaking about the barriers and facilitators to career development some PTs seemed quite pessimistic about the future.

Discussions about recognition of the profession from the focus groups revealed mixed feelings. Some respondents seemed to think that PTs are well recognised and others felt they were not. Recognition of role can only be addressed through publication and appropriate use of the media. As a new and evolving profession which does not have a culture of publication this provides a barrier to improving professional recognition.

8.1.4. Education and Training

8.1.4.1. Current

In spite of the quite extensive list of post-registration qualifications held by respondents to our questionnaire, the only post-registration accreditation for PTs that prevails across sectors is the Accredited Checking Pharmacy Technician (ACPT). The accreditation is obtained through the completion of an accredited course to enable the pharmacy technician to carry out the final accuracy check on dispensed items that have been clinically checked and approved by a pharmacist. The initial ACPT certificate is valid for two years, or until there is a period of absence, change of base, or change of setting. The National Frameworkwww.nhspedc.nhs.uk/supports.htm) provides the guidance for this but each organisation may have its own requirements which they are able to build into local training.

8.1.4.2. Future

If the role of the PT is to be expanded in the future, then it is suggested that further qualifications will be required to enable them to take on more tasks. The ability to listen and understand the point of view of others are essential skills for a pharmacy technician. Some of the contexts, e.g. supporting patients with mental health problems, or patients who are very ill, rely on these attributes on the part of the healthcare professional. However, we suggest that although many people entering PT training may already have well-developed communication skills many may not, but it may be possible to identify candidates for training who have the potential to develop these skills. Being able to communicate well and to listen to what patients are saying improves patient-centred care but also makes patients feel that they are cared about and listened to.

Emotional intelligence (EI) can be broadly described as a person's capacity to understand the emotions of others. This is important for direct, face to face and for communications by telephone and email. This is because in order to communicate effectively we need a two-

way process of understanding known as 'reciprocity'. Without this, misunderstanding and distress can result which might lead to patients/customers not following information about how to take their medicines. The implications of this are at the least patients do not recover from a condition (e.g. an infection treated with antibiotics) and at worst they could die (e.g. drugs used to control heart rate such as digoxin). Emotional Intelligence is also essential to the effective management and supervision of other staff.

Learning together with other healthcare professionals either in a clinical or classroom setting is already well established in the medical, nursing and pharmacist professions. Work carried out in a primary mental health team in Australia (Fletcher *et al.*, 2014) found that mixed methods of collaborative training including workshops and networking helped to overcome some of the challenges faced by healthcare professionals trying to work together.

One of our hospital respondents commented that training of PTs should include teaching about the values inherent in patient care saying: "*Learning must be on how the NHS values are linked to the day to day task/activities that the learner undertakes. The training must relate back to the wider picture of patient care and how their* [technicians] *role has a significant impact on patient safety and experience. The learners must be trained and made aware of the importance of organisational values, engagement and service delivery*." (p.17)

Work carried out in the UK in nurse education (Tetley *et al.*, 2015) suggests that '*nurse education has found itself challenged to select and educate nurses who on completion of their Programme have: excellent technical skills, an ability to critically analyse care and work compassionately in ways that support the values of care that are important to service users*' (p.152). These authors suggest that identifying the values of compassion towards care-giving should be incorporated into the selection process and they provide examples of how this has been implemented in an education setting. However, the NHS already uses a Values Based Recruitment (VBR) model to help employing organisations, in this case, for example, hospital, primary care and GP practices, to ensure that candidates for employment are assessed according to how the attributes they hold match the values of the NHS. Case studies and resources for this topic can be found at http://www.nhsemployers.org/your-workforce/recruit/employer-led-recruitment/values-based-recruitment.

Perceptions of current training varied with PTs from community settings saying that training was more geared towards working in a hospital setting. Many community PTs said they had to do their training on their days off and struggled to get time with their mentors due to pressure of work. This resonates with the reports of the number of hours worked by our qualified PTs and has implications for the wellbeing of pre-registration PTs. It is unreasonable to expect students to undertake training on their days off and this is a matter that should be treated with some urgency by pharmacy organisations and the regulatory and professional bodies.

8.1.5. Changes to Training

PTs themselves made a number of suggestions about how training might be changed to facilitate the future roles of the profession. The priorities for training identified by our respondents are summarised in Table 64. The participants in our focus groups did highlight the fact that the role of the pharmacy technician is a technical one, which is what appealed to most of them when they began work in the profession. Most healthcare professions have technical support roles that involve tasks that are more clearly technical than the tasks now reported by our PTs (e.g. operating departments and orthopaedics). The more patient-facing roles PTs take on, the less technical the role becomes and this may result in dilemmas for the future of the profession.8.1.5.1. Pre-Registration Training.

Respondents commonly agreed that the level of pre-registration training should be higher than the current level 3 diploma. Some respondents felt that this should be at degree level, which would bring pharmacy technicians into line with other healthcare professions such as nurses and paramedics, providing the opportunity to embed patient focused professionalism, and promote the professional recognition of pharmacy technicians, which many respondents believe does not happen. Additionally by changing from a two year training program to a three year degree would provide the time required for the current extended roles identified in this study such as accredited checking, medicines management and communication skills to become expected practice at the point of registration. Wicker (2010) writing about Operating Department Practitioners (ODPs) cited the NHS Workforce Review Team (2008) stating that *'a shift to graduate status for ODPs will offer the opportunity to adopt a clear difference in knowledge and competence beyond that of an assistant and into the realms of higher level practice opening up new and better career opportunities'*. A move into practice-based higher education for pharmacy technicians, like that of the other healthcare professions, would provide the door to develop further, for example, undertaking postgraduate education, which some respondents in this study said was not available to them with the current qualification.

The evolution of nursing as a professional discipline necessitated the establishment of scientific research base (Wuest 1994, Donaldson & Crowley 1997/1978 cited in Weaver & Olson, 2005) to increase disciplinary credibility and to develop their own knowledge base through professionally orientated research (p. 461). The location of pharmacy technician training within further education colleges does not provide the opportunity to develop a research culture within the profession and therefore there is limited research surrounding the practice of pharmacy technicians. For pharmacy technicians, undertaking their own research to develop their specialised knowledge would provide opportunity to increase professional recognition and differentiation of skills sets from other members of the pharmacy team.

The methods of delivery of the current pre-registration qualification are well documented (Rosado *et al.,* 2015; Schafheutle *et al.*, 2014). Both papers suggest that there are clear

advantages academically and professionally in face-to-face learning, support and networking, and that the advantage of distance learning, rather than academic, is the accessibility for trainees primarily in community settings, whether it be due to being released from work to attend a study day or the geographical challenge in some areas of the UK. Comments from our respondents also support this previous research. The mode of delivery however does not prevent the education and training of pharmacy technicians within the HEI setting as this is the usual location for the training of other healthcare professionals.

Respondents considered that training in the future should include patient focused counselling skills linked to the optimisation of medicines use with patients. The majority of our respondents and participants said that they were asking patients for information about their medicines and this involves an understanding of the implications of what patients say during such drug history taking. However, the tasks involving communication vary according to setting and context. For example, whereas a hospital PT may need communications skills to take a medicines history from a newly admitted patient in a hospital, a community PT will need them to, say, find out the appropriate product to sell over-the-counter. The context of the hospital patient may be prior to surgery or admission to a coronary care ward whereas the community patient may require medicine for a persistent cough. The core skills required for each of these situations e.g. open demeanour, listening to the patient, checking that they have the correct information, are the same but further knowledge and skills are required to enable the PT to communicate effectively e.g. knowledge and understanding of the surgery being undertaken or the potential causes of a persistent cough.

Experience in different settings e.g. hospital, community, primary care and GP practice, would provide trainees with an understanding of the roles of PTs in these settings. This not only gives them ideas for future career development but enables them to understand the needs of patients at the interface between settings. It would also develop the PTs perceptions of how patients' needs could be better met on discharge from hospital into primary care. The inclusion of experience in different settings in PT training would begin this process of understanding. It is hard to say whether there is a fundamental difference in the skills required to undertake the tasks reported by PTs in the different settings and further research should involve an analysis of the tasks undertaken by PTs in relation to the skills required to undertake them. This would then lead to a clearer understanding of similarities and differences in the skills sets required across the settings and inform future education and training needs. Interestingly it was those PTs employed in primary care based roles who identified the need for greater understanding of different settings as they were perhaps more focussed on medicines reconciliation and in identifying how to work more effectively with pharmacists working in both hospital and community sectors.

This greater understanding was also relevant within pharmacies themselves and one PT working in education and training indicated that PTs needed to learn what went on in the whole pharmacy. *"Training in management and understanding of the whole pharmacy including HR management of staff and the finance".* This would help PTs to gain a broader understanding of how pharmacies function. This and many other skills cannot, however, be learned in the classroom and can only be developed through experience. Our respondents from the community setting included in their priorities for future training '*hands on experience*' (p. 32), '*better support*' (p. 38) and '*interacting with patients*' (p. 34).

This means that time, patience and support for PTs in training is of great importance and PTs themselves said that there was a need for properly trained and assigned mentors. The GPhC sets out guidance on tutoring for pharmacists and pharmacy technicians (2014). The guidance states: You must put patient safety first at all times. For example:

- Make sure your trainee follows and understands safe and effective pharmacy practice
- Make sure your trainee is supervised appropriately
- Make sure your trainee always works within the limits of their competence.

The guidance goes on to say: You must practise as a tutor only if you are fit and competent to do so. For example:

- Reflect on the training and development you need if you are to act as a tutor
- Reflect on your performance as a tutor
- Deal with any developmental needs identified by you or someone else.

It was not within the remit of this research to examine the mentoring process for PTs but in the light of our participants' calls for more mentoring and support future research should do so. Encouragement to reflect on how learning might be applied in practice might help PTs to increase their understanding of their own training and development needs. Research by Schafheutle *et al.* (2012) into PTs view of learning and practice implementation, found evidence that PTs do apply their learning to practice through a variety of means including activities involving reflection.

8.1.5.2. Post-Registration Training

Respondents from all settings overwhelmingly spoke about the need for structured post qualification education, training and development, similar to that available to pharmacists in the postgraduate diploma. This type of development would provide a framework from which a career path and role definition, currently lacking, could develop. There are training programmes available that support development into the extended PT role and some link to specific national frameworks used primarily in the hospital setting. However, as discussed in the focus groups and in the questionnaire, although there is evidence of PTs undertaking

these courses, a lack of support for development and funding creates a barrier for many. Any new development would need to take place following a review of pre-registration training. APTUK have developed a Foundation Pharmacy Framework for self-development which is used voluntarily. It is aimed at Day 1 pharmacy technicians as a means to map their developing skills and help them prepare them for extended roles.

9. The Future Role of the Pharmacy Technician

The future role of the PT should be considered primarily in the light of the tasks that they are currently carrying out. This is because this is an independent pharmacy role and must be treated as a profession in its own right. However, it must be reviewed in the context of the role of the pharmacist and another pharmacy staff. PTs work as part of a highly skilled healthcare team and have a significant contribution to make to patient care and the optimisation of medicines use. In an independent report for the Department of Health, Lord Carter (2026) suggests ways of improving efficiency in the NHS. He recommended that four themes be explored:

- Engaging clinicians
- Tackling variation
- Incentivising productivity
- Developing new ways of working.

These themes should be applied to pharmacy practice with the emphasis being on the perspective of the pharmacy technician.

Some of our participants said that they did not want to become pharmacists they wanted to continue to be pharmacy technicians. To quote one of them: *"Get people to realise that a technician is not 'just a tech' but a qualified, registered healthcare professional in their own right, who deserves to be taken seriously*." P.57

10. Future Research

Our research has shown that there is the potential and the will on the part of PTs to expand their role in the UK and the research from other parts of the world confirmed this some years ago. Future research could include:

- Full analysis of the tasks, skills and training required by PTs
- Identification of the professional attributes required by PTs
- Examination of the nature and quality of mentoring of PTs in training
- The relationship between pharmacists and PTs and how this might be improved through greater understanding of each other's roles

- The management culture in pharmacies and how this can be enhanced to better utilise PTs
- The public knowledge and perception of the PT
- An investigation into the working hours and wellbeing of PTs

11. Main recommendations and considerations

The recommendations below have been drawn from the results of this research and will require significant collaboration between pharmacy staff and other members of the MDT. They also require the full support of the regulators and the pharmacy professional leadership bodies to work together to promote high levels of professionalism, education and career development of the pharmacy team:

Recommendations

- Review the education and training needs of pharmacy technicians in light of the roles and activities now commonly undertaken and the identified new knowledge and skills which need to be incorporated into pre-registration training
- Consider qualification requirements for registration of pharmacy technicians, taking into account the complexity of roles undertaken, comparability with other similar healthcare professionals and the need for the profession to develop its own evidence base
- Review post-registration education and training to ensure that opportunities exist which enable the preparation of PTs for the wide variety of roles
- Develop a post-registration career framework to provide a career structure for registered PTs
- Consider how the inter-professional working relationships with pharmacists can be enhanced both pre and post-registration to ensure that the contribution of both healthcare professionals is optimised
- The management culture within pharmacy organisations with respect to pharmacy technicians requires review in order to develop strategies for improvement

Considerations

- Gaining cross sector experience across both hospital and primary care sectors to enhance seamless patient care
- Accessibility to professional networks and mentors for all PTs
- The use of pharmacists as mentors
- The length of rotations during the training period
- Training PTs to supply and administer medication under PGDs
- Creating a fast track pharmacy degree for those with a PT qualification
- Introduction of more practical learning through workshops for pre-registration PTs
- The need for more applied learning at college
- Formal engagement of PTs within universities

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Appendices

Appendix A – Questionnaire

WELCOME

Dear Pharmacy Technician,

Welcome to our survey.

Thank you for helping us to explore the current and future roles of qualified pharmacy technicians. This survey will help us to identify the future training needs of pharmacy technicians from your perspective. To take part you must be registered as a pharmacy technician with the General Pharmaceutical Council.

We ask you, as a pharmacy technician, to participate because pharmacy staff roles have changed significantly over the past few years. We want to hear your thoughts about *your* role and *your* training needs. Once we have collected the thoughts of as many pharmacy technicians as possible we will be able to contribute to the definition of your roles, and make recommendations for the future training of pharmacy technicians. This study is in two parts. This first part is the completion of the questionnaire and at the end of this you will be asked if you would like to take part in a focus group. The focus groups are the second part of the study.

In the unlikely event that the questionnaire brings up difficult issues for you, you are free to discontinue at any time without giving a reason.

Your answers will be completely anonymous and kept confidential.

The questionnaire will take approximately 40 minutes to complete, to start please click on **next** button.

Thank you for your time!

Please tell us a little about yourself

(Please remember everything in this questionnaire will remain confidential).

1. Are you:

[ ] Female

[ ] Male

[ ] Prefer not to say

2. What is your age?

And a little about your career so far

3. How long have you worked in Pharmacy?

4. When did you register as a pharmacy technician?

[ ] *Month* [ ] *Year*]

5. How did you complete your pre-registration training?

[ ] Attending further education college

[ ] Distance learning

[ ] Other (please describe in the box below)

6. Which of the following do you work in?

[ ] Mental Health

[ ] Community pharmacy

[ ] Hospital

[ ] Community hospital

[ ] GP practice

[ ] Dispensing doctors' practice

[ ] Clinical Commissioning Group (CCG)

[ ] HM Prison Services

[ ] Armed Forces

[ ] Public health

[ ] Academia

[ ] Pharmaceutical Industry e.g. pharmaceutical manufacturing, specials

[ ] If you don't work in any of the above sector please tell us where you work. (Use the box below for your answer)

7. If you are working in a community pharmacy what type of pharmacy is it?

[ ] Independent

[ ] Small chain

[ ] Large chain

[ ] Supermarket

8. Are you working in a rural or urban or other location?

[ ] Rural

[ ] Urban

[ ] Inner city

[ ] Town

If the location of your work doesn't fit any of the above please use the box below to describe your location

9. How many hours do you work per week?

[ ] hours per week

The role of the pharmacy technician

10. Please list the tasks that you carry out on a daily basis. Think about your **daily** work routine and write down everything you do and how many times a day you do each task (an estimate will be fine if you are not sure of the exact number).

11. Think about your **weekly** work routine and write down everything you do and how many times a **week** you do each task (an estimate will be fine if you are not sure of the exact number).

12. With regards to providing advice to customers/patients, please describe in your own words what form of advice you give

Pre-registration training

13. Do you think that your pre-registration training equipped you sufficiently for the ‘day one’ pharmacy technician role?

[ ] Yes

[ ] No

14. If no, what do you think should be changed? Please list in the box below.

Management and leadership

15. What is the role of the person you are managerially responsible to?

16. If you are managerially responsible for other people please tell us below what their roles are. If you do not manage anyone please write ‘None’.

Qualifications

17. What further qualifications/accreditations that relate to your role have you gained since initial qualification?

Accuracy Checking Pharmacy Technician

National Approved/accredited Medicines Management Skills Programme (including medicines reconciliation)

Certificate/diploma in Clinical Pharmacy/Medicines Management for Pharmacy technicians

Patient Consultation Skills

Community Pharmacy training e.g. Healthy Living

NVQ Assessor

Internal Quality Assurer

Management

UKMi Accredited Medicines Information Technicians Training Scheme

Pharmaceutical Technology & Quality Assurance (PTQA)

Chartered Institute of Procurement & Supply (CIPS)

Teaching qualification, please specify

[ ] Other (please list in the box below)

18. How did you complete your post-registration training?

[ ] Attending further education college

[ ] Through higher education or training

[ ] Distance learning

[ ] Through a regional training provider

[ ] Other (please describe in the box below)

Career pathways

19. In your own words, please tell us how your current role as a pharmacy technician could be expanded.

20. What career development do you see in the future for pharmacy technicians?

21. Would you like to expand your current role?

[ ] Yes

[ ] No

22. If yes, what would you like to do? (Please describe in the box below).

23. What training would be a priority in order to achieve this expansion?

24. If you do not want to expand your current role, is this because of any of the below (tick all that apply).

Personal choice

Lack of support from organisation

Lack of support from other staff

No training available

Difficult to get to place of training

Lack of time

Lack of funding

[ ] Other (please describe in the box below)

25. Overall what do you think are the things that ***help*** the career development of pharmacy technicians?

26. Overall what do you think are the ***barriers*** to career development of pharmacy technicians?

Working as a team

27. Do you consider yourself to be part of a multidisciplinary team?

[ ] Yes

[ ] No

28. If yes, who else do you consider to be part of the multidisciplinary team? (E.g. Pharmacist, GP)

Please list below

29. If no, would you ***like*** to work as part of a multidisciplinary team?

[ ] Yes

[ ] No

30. If yes, who would be part of that team? Please list below.

Finally

If there is anything else you would like to tell us then please add it in the box below

Thank you very much for taking part in this research, we couldn't do it without you.

We will also be conducting focus groups with pharmacy technicians and the researchers to help us understand more about your roles. If you would be interested in taking part in a focus group please follow the link below. This will lead to a completely separate SurveyMonkey™ page. The reason the two parts of the study are kept separate is to keep the answers to the main survey anonym

Appendix B – Recruitment Email

Dear colleagues,

Research into Post Qualification Pharmacy Technician Roles and Training

The School of Pharmacy at the University of East Anglia (UEA) in collaboration with Association of Pharmacy Technicians UK (APTUK) would like to invite all pharmacy technicians registered in the UK to take part in some new research.

Recent research into the Initial Education and Training standards of pharmacy technicians has highlighted the variety of tasks that qualified pharmacy technicians undertake as part of their role.

We would like to take this a step further by asking pharmacy technicians what training they currently receive post-qualification to undertake their roles, and what training and support they consider is required to undertake these roles safely and effectively. Furthermore, we would also like to know what roles you think pharmacy technicians will, or could undertake, as the pharmacy profession evolves.

We hope that you will take part in this valuable research as the results will be used by APTUK, as the professional leadership body, to inform the professional support given to pharmacy technicians and engagement with national and international pharmacy technician strategies and workforce development. UEA intends to present this work at the Royal Pharmaceutical Society conference and submit a report to the General Pharmaceutical Council to enhance their evidence base and inform their decision making.

If you would like more information and to take part in the survey, please click on the link below:

https://www.surveymonkey.co.uk/r/ueaptquestionnaire

Kind regards,

Tess Fenn BA Hons MIfL MAPharmT

President | Association of Pharmacy Technicians UK

Tel: 0121 632 2025 (voice mail)

Mobile: 0776 448 1740
president@aptuk.org

Appendix C – Survey Participant Information

Project Researcher
Dr Jane Sutton
E-mail: j.sutton@bath.ac.uk

Lead Researcher
Mrs Melanie Boughen
E-mail: m.boughen@uea.ac.uk

Identifying the Training Needs of Pharmacy Technicians in the UK

Information for Pharmacy Technicians

The workload of pharmacy teams has grown significantly in recent years. To date, little research has been conducted into the roles and training needs of pharmacy technicians. We would like to know more about what pharmacy technicians do and what training they think they need.

You are being asked to take part in a research study. Please take time to read this information carefully. In the sections which follow you will find information about the purpose of this study and what will happen to you if you take part. If you would like more information or if there is anything that is not clear, then please contact either Jane Sutton or Melanie Boughen using the contact details above. The study is being supported by the Association of Pharmacy Technician's UK (APTUK) who sent you an email giving you information about this study and how to find out more.

Purpose of this Study

The purpose of this study is to explore your roles, experiences and training needs in your day-to-day work as a pharmacy technician. You are being invited to participate because you are a registered pharmacy technician working in a pharmacy setting in England, Scotland or Wales

Taking part in the Study

It is up to you to decide whether or not you want to take part in this research. If you do take part you can return to this information sheet at any time and you can follow the link at the end of this information which will take you to the questionnaire. Once you have completed the questionnaire and submitted it to the researchers, this will indicate that you consent to taking part in the survey phase of the research. If you decide to take part you are still free to change your mind later, without giving a reason, provided this is before you submit your response. Once you have submitted your response we will have no way of contacting you. Your decision to participate, or not, will not affect your employment in any way. This study is in two parts. This first part is the completion of the questionnaire and at the end of this you will be asked if you would like to take part in a focus group. The focus groups are the second part of the study.

Description of the Study

If you would like to take part in the survey you can click on the link at the end of this information sheet and you will be taken straight to the online questionnaire. This will require answering 30 questions about how you feel about your current role and training. It is estimated that the survey will take 40 minutes to complete.

Potential disadvantages and risks of taking part

Taking part in the study is unlikely to put you at any risk. In the unlikely event that the questionnaire brings up any difficult issues for you, please contact one of the researchers who will deal with these sensitively and, if necessary, direct you to information where you can find contact details of individuals qualified to discuss any issues in detail. You may stop completing the questionnaire at any time without giving a reason.

Potential advantages of taking part

The information you provide will contribute to a developing understanding of the role of PTs and their training needs and will allow for the identification of training and development needs. This may impact on role design and training in the future.

Making a complaint

In the unlikely event that you are harmed by taking part in this study, there are no special compensation arrangements. Anything you discuss with the researcher or lead researcher will be kept confidential and not shared with your employer or anyone else. However, if you wish to complain or have any concerns about any aspect of the way you have been approached or treated during the course of this study, you can contact Professor Mark Searcey, Head of Chemistry and Pharmacy at the University of East Anglia, on M.Searcey@uea.ac.uk or on +44 (0)1603 59 2026.

Confidentiality and participants' rights

By clicking on the link to the survey your consent to take part in this research is assumed. We will follow ethical and legal practice and the data and information you provide will be confidential and anonymous. Anything that you write in the free text boxes in the questionnaire will be anonymised. For example, if you mention any names, places and any other information that could identify you, it will be removed.

Data Storage

Your response to the questionnaire will be downloaded with the responses from other people and will be entered onto a database so that we can analyse it. The database will be stored on the UEA server. Responses to the questionnaire have no personal identifiers and respondents will be known by a number only.

Results of the Study

We may have some of what you say printed in a journal or magazine. If this happens, any names and details will always be removed so that nobody will know whose words they are.

If you are interested to know more about the results, you should contact the Lead Researcher (Melanie Boughen) for further information. Her contact details can be found at the end of this information sheet.

Organisation and funding for this research

The study is organised by Mrs Melanie Boughen and it is funded by the School of Pharmacy at the University of East Anglia.

Ethics review of this study

This study has been reviewed by the Faculty of Medicine and Health Sciences Research Ethics Committee at the University of East Anglia.

Who do I contact for further information?

If you have any other questions or for further information, please contact Melanie Boughen, School of Pharmacy (SCI 01.37J) Faculty of Science, University of East Anglia, Norwich, NR4 7TJ. Telephone: 01603 597 148. E-mail: m.boughen@uea.ac.uk or Jane Sutton on j.sutton@bath.ac.uk

What do I do now?

If you would like to take part in the survey study, please click on the button below to begin the questionnaire.

Alternatively you can contact Mrs Melanie Boughen using the details below.

School of Pharmacy (SCI 01.37J)
Faculty of Science
University of East Anglia
Norwich NR4 7TJ
01603 597 148

m.boughen@uea.ac.uk

Thank you for your time.

Appendix D – Identifying the Training Needs of Pharmacy Technicians in the UK:

Project Researcher
Dr Jane Sutton
e-mail: j.sutton@bath.ac.uk

Lead Researcher
Mrs Melanie Boughen
e-mail: m.boughen@uea.ac.uk

University of East Anglia

Focus Groups

Information for Pharmacy Technicians

The workload of pharmacy teams has grown significantly in recent years. To date, little research has been conducted into the roles and training needs of pharmacy technicians. We would like to know more about what pharmacy technicians do and what training they think they need.

You are being asked to take part in a research study. Please take time to read this information carefully. In the sections which follow you will find information about the purpose of this study and what will happen to you if you take part. If you would like more information or if there is anything that is not clear, then please contact either Jane Sutton or Melanie Boughen using the contact details above. The study is being supported by the Association of Pharmacy Technician's UK (APTUK) who sent you an email giving you information about this study and how to take part in the survey.

Purpose of this Study

The purpose of this study is to explore your roles, experiences and training needs in your day-to-day work as a pharmacy technician. You are being invited to participate because you are a registered pharmacy technician working in a pharmacy in England, Scotland or Wales.

Taking part in the Study

It is up to you to decide whether or not you want to take part in this research. If you do take part, we will send you a paper copy of this information sheet and a consent form that you will be asked to sign on the day of your focus group in case you have any questions before giving your consent. The researchers will contact you about suitable dates and times for the focus groups.

Description of the Study

This study follows on from the survey that you took part in about the roles and training needs of pharmacy technicians. The study will involve taking part in a focus group with 6 or 7 other pharmacy technicians to discuss your thoughts and feelings

about your roles and your training. The focus groups will be arranged in various parts of the UK and we will do everything we can to make a convenient location for you. The focus groups will be facilitated by 2 or 3 researchers, including a pharmacy technician, and we would like to audio-record the discussions.

The focus group will take around 45 minutes to 1 hour. The researchers will ask you some questions about your experiences of day-to-day work in your pharmacy, and what daily tasks you do. The researchers will also ask about training and development needs and what makes access to this harder or easier. The researchers will audio-record the interview. This is so that they don't have to take too many notes during the session and have an accurate record of what you say. However, the recording will be transcribed (typed up) and anonymised during the transcribing process. The focus group content will be analysed by the researchers and no-one else. One researcher will make some notes but this is just to make sure we have an accurate record of who said what so that we can provide a true representation of what was said. Once the study is completed, the focus group recordings will be stored for 10 years in a locked cupboard, in a locked room, at the University of East Anglia.

After taking part in the focus group, if you have any questions about the research the researchers will answer them for you. Later, you can contact the researchers at any time if you require any further information about what is involved in the analysis and reporting phase of the study. Contact details can be found at the end of this information sheet.

Potential disadvantages and risks of taking part

Taking part in the study is unlikely to put you at any risk. In the unlikely event that the focus group brings up any difficult issues for you, this will be dealt with sensitively and discretely by the researchers present. Afterwards, if necessary, the researchers will direct you to information giving contact details of individuals qualified to discuss any issues in detail.

Potential advantages of taking part

The information you provide will contribute to developing an understanding of the role of PTs and their training needs and will allow for the identification of training and development needs. This may impact on role design and training in the future.

Expenses

In the circumstance that you travel to take part in the focus groups, then you will have your travel expenses to the focus group location refunded. You will be given a £10 voucher for taking part in the focus group as a token of our thanks for your participation in our study.

Voluntary Participation and Discontinuation

Your participation in this study is voluntary. If you agree to take part and then change your mind, you may withdraw from the focus group at any time without giving a

reason. If you withdraw once the recording has begun, then we cannot remove your data. Anything you discuss with the researchers will be kept confidential and not shared with your employer or anyone else. Your decision to participate, or not, will not affect your employment in anyway.

Making a complaint

In the unlikely event that you are harmed by taking part in this study, there are no special compensation arrangements. Anything you discuss with the researchers will be kept confidential and not shared with your employer or anyone else. However, if you wish to complain or have any concerns about any aspect of the way you have been approached or treated during the course of this study, you can contact Professor Mark Searcey, Head of School (Chemistry and Pharmacy), at the University of East Anglia, at M.Searcey@uea.ac.uk or on +44 (0)1603 59 2026.

Confidentiality and participants' rights

You will be asked to sign a consent form before you take part in a focus group. We will follow ethical and legal practice and the data and information you provide will be confidential and anonymous unless you say something that may indicate illegal behaviour and/or where there is concern about welfare or the welfare of others. In this case, the researchers will discuss what you have disclosed and decide if anyone else needs to be informed. In this case the researchers may need to consider the confidentiality of your comments. In all other respects, data from focus groups will be pooled and analysed with all contributors being anonymised (all names, places and any other information that could identify you will be removed).

Data Storage

Focus group data will be audio-recorded and the recordings will be returned to UEA by one of the researchers attending the focus groups as soon as is reasonably practicable. The audio recordings will be stored for 10 years in a locked cupboard, in a locked room, at the University of East Anglia. The consent form with any link to your participant number in the anonymised transcript will be kept in a secure cupboard, in a locked room, and will only be accessible to the researchers at the University of East Anglia.

Results of the Study

We may have some of what you say printed in a journal or magazine. If this happens, any names and details will always be removed so that nobody will know whose words they are.

If you are interested to know more about the results, you should contact the Lead Researcher (Melanie Boughen) for further information. See contact details at the end of this information sheet.

Organisation and funding for this research

The study is organised by Mrs Melanie Boughen and it is funded by the School of Pharmacy at the University of East Anglia.

Ethics review of this study

This study has been reviewed by the Faculty of Medicine and Health Sciences Research Ethics Committee at the University of East Anglia.

Who do I contact for further information?

If you have any other questions or for further information, please contact Melanie Boughen, School of Pharmacy (SCI 01.37J) Faculty of Science, University of East Anglia, Norwich, NR4 7TJ. Telephone: 01603 597 148. E-mail: m.boughen@uea.ac.uk or Jane Sutton on j.sutton@bath.ac.uk

What do I do now?

If you would like to take part in a focus group, please go to the next page and give us your name and preferred method of contact then click 'Submit'. A member of the research team will then contact you to tell you where the focus groups are being held. We will then send you a paper copy of the information sheet for you to keep, as well as a consent form. Please bring the consent form with you to the focus group and you will be asked to sign it just before the beginning of the group.. The number of pharmacy technicians needed for the focus groups is quite small with 6-7 people in each group. We hope to conduct 4-6 focus groups so we will include the first 24-42 pharmacy technicians who volunteer to take part. If you are not asked to take part in a focus group, this is simply because we already have enough people who have agreed to take part.

If you would like any further information before you decide whether or not you would like to take part in a focus group, you can contact Mrs Melanie Boughen using the details below.

School of Pharmacy (SCI 01.37J)
Faculty of Science
University of East Anglia
Norwich NR4 7TJ
01603 597 148

m.boughen@uea.ac.uk

Thank you for your time.

Appendix E – Participant Consent Form

Project Researcher
Dr Jane Sutton
e-mail: j.sutton@bath.ac.uk

Lead Researcher
Mrs Melanie Boughen
e-mail: m.boughen@uea.ac.uk
Tel: **01603 597148**

University of East Anglia

PHARMACY TECHNICIAN ROLES AND TRAINING STUDY

FOCUS GROUP CONSENT FORM

Please tick all boxes that apply to you

1.	I confirm that I have read and understand the information sheet dated 1ST FEBRUARY 2016 for the above study.	_____(Initial)
2.	I understand that my participation is voluntary and that I am free to withdraw at any time up until the analysis of the information from the	_____(Initial)
3.	I agree to be audio recorded during the focus group.	_____(Initial)
4.	I understand that all data collected during the study will be anonymous and my participation kept anonymised.	_____(Initial)
5.	I agree to the anonymised transcript from my focus group being made available for use in future research, by the same research team.	_____(Initial)
6.	I agree to be quoted in academic journals or magazines and understand any quotes will be anonymised so that I cannot be identified from them.	_____(Initial)
7.	I agree to take part in the study.	_____(Initial)

_____	_____	_____
Name of participant	Date	Signature
_____	_____	_____
Name of researcher	Date	Signature

1 for participant; 1 for researcher

Appendix F – Barriers to Career Development: Hospital Setting

Please note. We asked respondents to write what they thought in their own words. Although these comments have been checked for spelling and punctuation we have not changed anything else. Use of upper care lettering is the respondents' own.

- Apathy within the profession generally. Not having a defined role that is specific to pharmacy technicians, i.e. in secondary care, if Band 6 funding is available then many orgs will employ a pharmacist; likewise in secondary care orgs see employing Level 2 assistants as a good business model to achieving efficiency - No defined career path in comparison to pharmacist who, in secondary care particularly, are expected to undertake diploma post-qualification and then prescribing. There are many more accredited and supported options for pharmacist qualifications. If a PT wants to undertake a masters or any form of post-registration qualification, they are hindered by the fact that they are often not graduates.
- Silo thinking. Time to train (still seen a lower priority than pharmacists).
- The calibre of community technicians, from experience, is lower due to lesser quality training.
- Time constraints, funding, opportunity.
- Education level and a glass ceiling.
- Lack of organisational support. Unavailability of funds to support training. Lack of self-belief/motivation.
- COURSE AVAILABILITY & FUNDING.
- Being seen as inferior alternative to a Pharmacist. We are not seen as having clinical knowledge, however many technicians I have worked with know far more than junior Pharmacists. At my Trust you qualify and become a Band 4 and then you will go to Band 5, there you stay for the rest of your career. If you are a Pharmacist you are Band 6 and then 7 in 1-2 years and then a Band 8a in 3-4 years so there is a lot more scope for them to develop. Why is this?
- Pharmacists.
- Lack of courses. Lack of funding. Lack of time to be released from job. Lack of support from managers.
- Pharmacists not wanting to give up responsibilities.
- Pharmacists. Time. Money.
- Time and pharmacists.
- Lack of awareness of pharmacy technician skill sets and scope of practice.

- The lack of suitable post-registration training and development is a barrier to the development of Pharmacy Technicians as is the current level of education of Pre-registration Trainees.
- Primary to secondary and PCT.
- Access to further qualifications. For example, courses are available but only in colleges around 150 miles away which require weekly attendance. Distance learning courses would allow more people in remote or less populated areas to access the same training.
- Lack of understanding and appreciation of the value of education and training. Old-fashioned perceptions of the role of the technician still persist in some quarters.
- Very hard to get a role above band 5 unless you want a management role
- I feel that the biggest barrier to development for technicians remains the attitude of pharmacists. There is still a definite divide between pharmacists and technicians. Often pharmacy technicians are "looked down upon" or devalued by pharmacists. This is not always intentional but does occur. A very common example of this is that when training opportunities arise or need to be funded, pharmacist will almost always be given first choice and technicians will be declined or not be made aware of the opportunities that are in fact open to them. Having said the above, the technicians do need to believe and realise that they can progress to make teams realise that they could be given such opportunities.
- Pharmacists feeling threatened by techs taking on more. Time for training. Lack of staff so need to pull back to get the basics done.
- *The following is from my own Northern Ireland perspective therefore it may not be applicable to GB*. Within NI, there is a finite number of posts to apply for. There may be some movement within hospitals around Belfast, but outside that area there are limited posts to apply for and people are in those jobs for life. As appeals are still outstanding for AfC banding here in NI, some technicians have not been sent on the ACPT / Medicines Management courses until the banding has been decided for posts that require these qualifications. A lack of technician registration has really held the technician work force back in NI. No compulsory CPD.
- Limited options and advice post qualification. There is little provision for clinical training. I feel like the only option to progress further than I have now would be to go to university to be a Pharmacist but I cannot afford to do this.
- Peoples' attitudes to their career and what they want out of it.
- In hospital you can only go as far as they have procedures for you to do.
- YES - there are very poor career pathways, patchy access to approved training, no structured funding. We need post registration training like pharmacists.
- I feel like there is a lack of national framework. Hospitals seem to be doing their own things. There is a lot of in-house training which allows hospitals to do what they see fit. This can make it difficult to move around trusts for job promotion as you don't have a national qualification.

- Some pharmacists who prevent pharmacy technician development. Some Pharmacy technicians who were grand-parented and do not recognise the changing world of pharmacy and support their fellow technicians to develop.
- Negative attitude towards technicians from other staff members, including from pharmacists, lack of knowledge about the role, lack of workplace funding, some workplaces do not take the learning and development of technicians seriously enough.
- Not enough funding available for pharmacy career development within the NHS.
- Pharmacists' attitudes can be a barrier, as well as the attitudes of the hospital itself. I currently work in a large London Trust, and apart from a few Tec's on the wards there is a dearth of pharmacy technicians here. My previous trust, a relatively small DGH, had as many technicians as they had pharmacists, and also lots of SATO's, which again there are not in my current trust. This means that inpatients in my current trust runs on a shoe string, and there are always calls for help to get though the day's work, or else the late's turn into 9pm finishes.
- The lack of a higher qualification, lack of funding, the fact that the pre-reg pharmacy technician role has been reduced to an apprenticeship - this will only attract school leavers, and, in my experience, school leavers do not have the skills or interest to take on a hospital pharmacy technician role. If it had been an apprenticeship when I applied for the role, I would not have been denied access to the course as I hold an undergraduate qualification - as did many in my college year. This is plain wrong and prevents highly skilled people from entering into the profession which can easily match that of a undergraduate role if you get high enough up the pharmacy technician career ladder.
- In NI there is no registration currently. The Trusts choose which qualifications to recognise i.e. the ACPT is recognised and staff are banded appropriately as per agenda for change, however ACT for PODs is not treated in the same manner by managers, although it is an equally valid accredited qualification. The structure of hospital pharmacies in NI are very pharmacist focused, as are all the elements of education and training. This is very unbalanced. There is no career path for hospital pharmacy technicians in NI. You hit a band 5 and are stuck there for (in my case) 13 years!
- Time pressures, limited places on available courses
- Funding and other candidates.
- All of my management are pharmacists, there is no one to promote and develop technician roles.
- In Northern Ireland the main barrier is lack of registration, regulation and compulsory CPD. Until techs can register they will not be valued as professionals in their own right. The PSNI have to acknowledge the vital role pharmacy technicians have and bring us in line with the rest of the United Kingdom. Over the last couple of years I have worked closely with schools and provide open events twice a year

giving pupils an opportunity to learn about the role of the pharmacy technician. Until recently quite a number of the schools I am involved with did not know that there was a specific qualification attached to the role.

- Funding for training.
- Poor leadership, an unwillingness to skill mix, adhering rigidly to professional norms, fear, a very poor pre-registration programme, a poor post-registration programme, a lack of understanding of the potential roles / responsibilities for Technicians - just look at how the Government were unable to explain what a Pharmacy Technician could contribute to pharmacy services in their report from 2015, a clear vision, apathy by the Technicians themselves.
- The stigma between pharmacists and technicians and not giving technicians the opportunity to expand into roles a technician could easily perform but are currently held by pharmacists.
- Career progression of people who are unsuitable or unwilling to progress, for example I am unable to begin my ACT in work until people who are already undertaking theirs. But they seem to have little desire or motivation to complete it as they never wanted to do it in the first place and were told they had to. So, as a result, they're holding up my progression.
- Other Technicians. Other professionals not aware of the complex and detailed job role some technicians have and because of the lack of understanding, technicians are seen to be lower ranking professionals. No defined career path / structure.
- Not enough training programmes.
- Too much of an attitude of we've always done it this way. This is the pharmacist job. That's too hard/scary/much responsibility. Both from technicians and from pharmacists.
- Once you have specialised in this area there are very few or no training sessions run relevant to aseptics. There are no WCPPE events organised for aseptic staff.
- 5 years at university studying pharmacy - cost???/ entry requirements. Not taking in to consideration previous experience, applied learning and other qualifications. Lack of career progression opportunities. Career progression doesn't seem to be promoted. Is this because it is unclear?
- I think that PTs are still not seen as health professionals and more recognition and qualifications should be available to support this.
- Not being registered. I am a registered pharmacy technician who works in Northern Ireland however it is not mandatory for technicians to be registered here. I believe due to this, they are not seen as professionals. I also believe that pharmacy technician banding of jobs is consistently lower than the mainland. I am a 100% clinical technician, though my job title is in fact as a rotation technician band 4. I have further study and qualifications on top of the basic technician requirement, yet I am being paid the same as someone who has just qualified which has led me to consider leaving the profession. I believe that technician development is somewhat

hindered here, with lack of progression and jobs at higher banding, even though you compare to other trusts in the UK, generally we are 1 band lower.

- Management prevent career development.
- Lacking support from other NHS trusts to move and push forward with personal development. Set roles that have stagnated for years which would benefit from being re-evaluated and assessed on viability and longevity.
- Lack of staff, no move to progress in banding without leaving clinical role.
- Qualifications, the fact that to expand our role initial training would have to be significantly updated or much more additional training done to meet the needs of the new roles.
- Financial cutbacks in the NHS.
- Funds, cost cutting.
- Pharmacy technicians! You need to believe that you are capable of undertaking a role to be able to develop further. Also in specialised roles the training is not always easily accessible to help.
- Funding often goes to pharmacists before technical staff.
- The lack of funding for training is a huge barrier. Sometimes it is only pharmacy technicians own limitations or an "old school" mentality where only pharmacists can do certain things.
- Politics. Managers unwilling to allow/release staff within the department to assist with alleviating pressures of the site as a whole.
- Pharmacists' expectations. Other pharmacy technicians (not all the same)
- Location - depending where you are situated in the country you either have lots or no career development opportunities. I.e. in Cornwall there is only one hospital, our wages are lower and there is little or no career development. You cannot be a band 6 pharmacy technician without being a manager. You cannot take your accreditations with you - there are so many providers of accreditations but these are often not accepted in different locations.
- Role barriers i.e. getting a pharmacist to sign off a med rec, pharmacists needing to do MURs when a tech is capable.
- Staffing within the department to allow for a technician to have study time to attend training. Funding. Technicians need to have a lot of self-motivation and self-interest in wanting to develop themselves beyond what the department offers, to find out about the courses that are available to them.
- I think that the pharmacy is ever expanding and changing and I think that the role of the technician needs to move with this.
- Historical hierarchy. Some technicians have a lack of self-belief. Not being line managed properly or inspired by those we work for.
- PHARMACIST MANAGERS.
- Lack of clear training and supportive management.

- Time for training funding.
- Pharmacists.
- Unhelpful pharmacists.
- Funding for new roles, people already in the job.
- Out-dated thinking amongst some senior pharmacy management teams who often tend to be exclusively contain pharmacists.
- SOME OLDER PHARMACIST MAY NOT LIKE TO ENCOURAGE TECHNITION TO DEVELOPE THERE ROLE. BUT THIS IS BECOMING LESS OF A PROBLEM.
- Better national role profiles so that technicians can easily move up the pay scales rather than being trapped at band 7.
- Finance. Individuals in management roles. Time.
- Money. Pharmacy Technicians not feeling as valued as pharmacists.
- Lack of qualifications for specialist areas.
- Training issues due to busy department.
- Not being able to cross trusts with specific course qualifications, and having to re-do courses when you transfer trusts. Lack of staff. Poor Management.
- I think the barriers are lack of funds and lack of staff in the service that are able to train.
- Time.
- The main barrier is our own reliance on our pharmacist colleagues to set the pharmacy technician agenda. We should strive to become equal partners within the pharmacy team, each clear on our roles and responsibilities. Example: the introduction to this survey highlighted the development of pharmacists which leaves gaps that could be filled by technicians. I would suggest that this supports the impression that pharmacists are the important professionals within the team and pharmacy technicians are their support. It's time for pharmacy technicians to fully accept the responsibility and accountability of their own profession, working as equal partners with our pharmacist and other healthcare professional colleagues.
- Time. Lack of funding.
- At present there is not a clear education pathway. Something similar to the pharmacist education pathway would be useful.
- Legal terms, pay scales.
- Workload and shortage of staff who can provide the training and mentor role. Also the cost of the training prevents many technicians being given the opportunity to develop their skill set.
- Lack of training places. Vacant posts.
- Training not well known about.
- Managers who don't want to develop the role will not put forward Techs for extra training. We've been asking for years for extra clinical training and documented this

in PDRs but to no avail. If the manager doesn't see the importance then they won't go down that route.

- Recognition of the role (Public generally do not understand what a pharmacist technician is) Faith in the role (Career development in a trust/Community pharmacy entirely based on senior management perception of the role). Ultimate responsibility (e.g. Responsible pharmacist responsible for errors made by ACPT, responsibility should lay with pharmacy tech). Clinical knowledge.
- Time. Money - funding and vacancy rate.
- Pharmacist.
- Staffing issues.
- People in managerial positions with their own agenda and do not acknowledge the value of pharmacy technicians. NHS management that prefer low costing unqualified staff to boost number of bodies.
- Management often don't understand how to utilise knowledge and skills due to various reasons.
- Funding Fear of staff leaving once they have received the training and moving on to another organisation to work on higher banding. Having structured and standardized Personal Development Plan for bands 4- 8A and set up a clear pathway to career progression instead of suppression.
- Pharmacists that don't want change, some pharmacy technicians not confident enough or may not have the proper support/drive from management, lack of staff or support staff to release pharmacy technicians.
- Lack of funding and limited spaces for technicians to get additional training. Low staffing levels can make completing training courses more difficult. I would like to see more post-registration training.
- Initial education and training. Limited post registration qualifications/courses. A wider understanding of the role of Pharmacy Technicians. Professionalism. The ‘you're only a technician'. We work to the same ethical standards as Pharmacists. Although our clinical knowledge is not comparable - our experience is.
- Funding and support.
- Time and money. Lack of adequate staffing in many areas which leaves them having to cover assistant roles or being pulled to support other areas which makes having sufficient time to undertake training and progressing with this difficult. Lack of staffing at pharmacist/ward based technician level also makes continuity of training difficult particularly in the clinical field. Unfortunately there are still some pharmacists/managers and senior technicians who are not keen to see technicians progress for whatever reason. These people are often the same ones that do not see that development of the assistants is needed to free up the technicians to progress. Some courses are only aimed at technicians and should and could be offered to assistants again freeing up the technicians to do other roles. More management training is needed for all levels of staff undertaking this role. Trust liability.

- Fewer responsibilities than pharmacists.
- Limited senior pharmacy technician jobs.
- Lack of appreciation from some SPMs as to the skills that Pharmacy Technicians can bring to the skill mix. Pre-registration training that does not adequately prepare the Pharmacy Technicians for future roles.
- Time. Lack of opportunities. Feeling of not know where are can progress next.
- Limited possibilities within the role.
- The 'old school' of pharmacists who still see Technicians as a support service. We need to break down barriers and grow a culture of Technicians being a different role and a different set of skills even though many of us have a clinical aspect to our roles.
- I think that the pharmacy is ever expanding and changing and I think that the role of the technician needs to move with this.
- Limited courses for technicians to further themselves.
- Training not well known about.
- Lack of funding and limited spaces for technicians to get additional training. Low staffing levels can make completing training courses more difficult. I would like to see more post-registration training.

Appendix G – Facilitators to Career Development: Hospital

Please note. We asked respondents to write what they thought in their own words. Although these comments have been checked for spelling and punctuation we have not changed anything else. Use of upper care lettering is the respondents' own.

- Culture within the organisation they work for. Awareness of courses/qualifications that are available. Support from immediate and grandparent managers to undertake development. Accessible role models/mentors.
- Good pathways and training to develop core skills.
- Management willing to embrace a tech led operational structure, using pharmacists at ward level for their clinical skills. Pharmacists are not particularly great at operational work.
- Study days, opportunity for accreditation.
- Education & qualifications and the opportunity to develop.
- Development of pharmacist roles. National Frameworks to support extended roles. Utilisation of training resources internal and external to their organisation. Self-belief. Organisational support. Regulatory restrictions.
- INHOUSE TRAINING. NATIONALLY ACCREDITATED TRAINING SCHEMES.
- The basic training needs to be upgraded from a NVQ3 this is really poor, to enter into the NHS on A4C Band 5 is degree level, the qualification needs to reflect this. Many of the technicians coming from community have very few skills that match those required in the NHS in a hospital setting. The distance learning course they have carried out such as Buttercups have left them poorly trained and equipped to work in an ever changing role.
- Accredited courses for techs working in community provider setting (not community pharmacy). Accredited checking course to be available for techs in community provider setting (not community pharmacy).
- Proper training and proper regulations that can't be cheated on.
- Pharmacists who support the role of the technician and don't see them as a threat.
- Supported employment.
- Opportunity to access training at higher levels. Forward thinking pharmacy management teams.
- The things that help the career development of the Pharmacy Technicians are organisations such as APTUK and CPPE but some technicians seem reluctant to make the most of them. Access to study days and networking with colleagues from other organisations help with career development such as those opportunities provided by the former Pharmacy Development Unit now based at Leeds General Infirmary.
- Understanding the work criteria and the needs to undergo what we do.

- I feel that creating more roles for pharmacy technicians ultimately expands career development and allows a career to be specialised also.
- Strong managerial support of training opportunities.
- There is now a lot of diversity of roles for techs which is great.
- If pharmacy technicians are willing to work hard and show enthusiasm, then I believe there is a great distance that technicians can go. I have noticed that as a technician who has sometimes been the only pharmacy member of staff within a team, the knowledge, skills and way of thinking that technicians can bring to the table is unique and appreciated by the wider MDT we work with. Often patients are keen to talk to technicians as they are seen as less intimidating. A key skill over pharmacist colleagues is sometimes the ability to look more practically and technically at a situation as opposed to being constantly clinically focussed.
- Service need/cost savings that a tech can produce.
- The drive of the technicians and the will of senior pharmacy management to see their staff develop.
- Ambition. Post qualification there is very little support. The only training really offered is ACT. I requested to do the NVQ assessor training. I worked in MI and was the first technician to do this in the trust I work at. I completed the UKMI training. Now I do not know what to do and there is little support. Without looking for training yourself and pushing forward you will just remain as a dispensary technician.
- Overall it's the individuals' abilities and drive to want to succeed and develop.
- Management experience and the ability to problem solve without being hand held.
- For ward based technicians the medicines management diploma helps with their clinical knowledge and in our Trust it is essential to become an ACT.
- Taking your own initiative and seeking the courses yourself.
- Good supporting managers. Availability of funding and time off to attend training. Structured training frameworks - sadly lacking.
- Good managers who encourage you and fight your corner.
- Pharmacists' development allowing technicians to take on new roles. Recognition that pharmacy technicians are a registered profession and have the ability to take on advanced roles.
- Training, further education via CPPE etc., increased involvement in other areas that were previously pharmacist-only.
- Further access to education, in the form of further education (degrees, diploma's etc.)
- I think there needs to be a willingness on both the technicians and their employer's part. I am very lucky in the job role I have that I am at a fairly senior level (Band 6) and have not needed to do any extra training to get here - although my previous role as a Clinical Trials Technician (which I did the practice supervisors course for, as well

as specific GCP training) helped with my being successful in the application for my current role.

- The pharmacist role taking on more responsibility - which in turn gives the technician more scope to expand.
- Better structure in hospital pharmacy - balance between pharmacists and technicians as well as band 2 and 3 staff. Good education and training packages that meet national accredited standards. Someone advocating the usefulness of well trained technicians in a hospital setting, and managers listening.
- Registered training courses/further qualifications.
- Positive attitude and willing to undertake further training along with employer/management willing to fund training.
- Understanding management that are not solely focused on pharmacists.
- A change in the attitude towards the role of the technician and movement away from the idea that pharmacy technicians just "put tablets in a bottle". Registration in the mainland has identified pharmacy technicians as professionals and having so many techs working on wards and in clinics now other professionals can see the vital role technicians play. Also the role of the pharmacist is also changing and there is a need for techs to take on some of the roles traditionally done by the pharmacist.
- Training in management and understanding of the whole pharmacy including HR management of staff and the finance.
- Good leadership, a willingness to skill mix and not adhere rigidly to professional norms, pharmacists expanding their skill sets and leaving scope for Technicians to take on the roles/responsibilities left behind, cost reduction programmes i.e. how can we offer the same level of service but more efficiently/cheaper.
- Appraisals are the only thing that help career development.
- Desire to progress, earn more money, broaden scope of understanding and learn more.
- Flexibility within the job role. Maturity. Having different role opportunities which increase experience and knowledge. Good communication skills. Job satisfaction. Various qualifications.
- Pharmacist work load.
- Being willing to stand up and say we need this, and I can do it if you let me!
- Good managers and availability of training. Adequate staff cover to enable this training to take place.
- Studying. Mentoring. Opportunities to specialise.
- Having a supportive pharmacist and having relevant courses available to technicians.
- Being a registered professional. Having a head of pharmacy department who supports technicians/not just pharmacists. Trust need. Finance.
- Peer support as very little support is given by management.

- The constant drive to better the profession, roles changing thanks to continuously developing the staff at our local hospitals. Pushing boundaries and encouraging skill mix between Pharmacists and Technicians.
- Supportive, forward thinking managers.
- Our role working in hospitals which has continued to expand with further opportunities in clinical governance and IT systems and as we prove we can carry out the roles then more responsibility is passed to us.
- Post qualification education.
- Better training opportunities.
- Good line managers. Correct skill mix.
- Confidence in the technician from their superiors including pharmacists. I would not have developed my role if not encouraged to by the chief pharmacist. Having access to training to support the development of the roles. Identifying gaps that pharmacists cannot fill, that technicians are capable of filling.
- A head of department that sees potential and encourages technician education. Someone like me who supports the junior technicians and encourages them to go on further and learn new skills.
- I think that having technicians already in positions of influence helps to promote the qualities of pharmacy technicians for further roles. This includes working closely with pharmacists as a team and not segregating. The training available also helps to expand horizons.
- Service needs pressures.
- Experience. Regional training.
- Motivation, place of work that encourages progression, access to learning courses.
- The world of pharmacy is continually changing and varied. Therefore technician roles need to be adapted/changed to meet the needs of the service provided.
- In house training and CPPE are invaluable.
- Being included and inspired by others, technicians and pharmacists and multidisciplinary teams. Being recognised for the work done and being a professional. Having the knowledge about development accessible e.g. knowing courses and events that you can attend and knowing the career paths available.
- Supportive management and pharmacists, comprehensive training packages in place.
- A good grounding in a dispensary role and breadth of experience i.e. hospital and community supportive managers/leaders.
- ACT.
- Personal determination. Helpful pharmacists.
- Training and the need for the role.

- Forward thinking senior pharmacy managers who are not restricted in thinking that the pharmacy is the domain of pharmacists and that technical staff only exist to undertake roles that pharmacists do not wish to undertake.
- Becoming an ACPT and if in hospital pharmacy meds man accreditation.
- Training to take on management roles. Better national role profiles so that technicians can easily move up the pay scales rather than being trapped at band 7. Better perception from other professional colleagues.
- Available courses. Technician focused management NHS recommendations. Audits.
- Groups such as APT providing support to peers. Good working and supporting relationships with the teams we work in. Pharmacy technicians supporting each other.
- There are good training opportunities - ACT, Meds Man, NVQ assessor.
- Ward work. Checking and medicines management courses, counselling patients on a day to day basis.
- I think the things that help the career development to be the qualified staff, the training provided out-side the organisation NVQ, ACT, MM training.
- APTUK. GPhC. WCPPE.
- Reflective practice, written reflective work in particular. Working alongside their peers. A good career development structure can be helpful so that new pharmacy technicians can see the development opportunities for the future. Pharmacy technicians are a new profession, they need to be responsible for their own profession and not hand their professional development to others.
- Appropriate funding for training as well as to attend seminars and conferences. Time. Management willing to give opportunities.
- Continuing education throughout career.
- Legally being allowed to follow in the jobs of pharmacist. Such as ACT, checking of prescriptions.
- Working in an environment which supports career development and training and allows staff the time they need to do this.
- Training, collaborative working, good communication/networking.
- Good managerial support.
- A more positive attitude to what Techs are capable of doing.
- Individual confidence and willingness to learn. Faith in the role from senior management (Chief pharmacist).
- 1:1 mentoring.
- Further qualifications and increase public awareness of profession.
- Meaningful training, good support from line and senior management, good communication and staff buy-in, tailoring training to needs of department.

- Opportunities being given. Individuals that believe in the profession and understand what can be gained by giving pharmacy technicians the development and appointments as opposed to dumbing down and employing quantity over qualified.
- 1. Opportunity to develop. 2. Training and reflecting on objectives. 3. Self-motivation. 4. Investment.
- Value based training. More Technicians at 8A level and acting as a mentor to the lower graded staffs. Having a role model that acts and supports the aspiring technician.
- Forward thinking pharmacists and also forward thinking pharmacy technicians in management.
- Ongoing training and developing new skills help technicians gain experience. NES training night are great and are very informative. Having managers/pharmacists who are happy to support technician's career development and to see the training through is important.
- Technical Leads who are involved at national level to ensure there is a clear understanding of the role required and the authority to ensure the correct post registration qualifications are in place and accessible to all technicians.
- Pharmacists. Pharmacists who will highlight training needs and requirements and help us prove our point.
- Good training and support.
- Innovative thinking and allowing technicians to have a say as they have a different perspective and training base which allows different roles to be undertaken to those of pharmacist and assistants. I think assistants should be given more responsibility in some areas so that they too are developed which in turn would free up technicians more to undertake new duties. We have started doing this in our trust and it is proving to be very useful and is allowing our staff to develop at all levels.
- Good/frequent training opportunities.
- Further courses.
- Managers that have faith in their pharmacy technician workforce being able to deliver high quality healthcare and recognising the skills and knowledge that they have to bring to new posts. Pharmacy technicians need to be taught skills that they could apply in any scope of practice.
- Training. Educational course. A clear career progression. Increasing use of pharmacist working as prescribers. This gives a gap in the information chain which tech can cover.
- Support training. Encouragement. Progress in bands.
- A supportive team
- Supportive employers and line managers. Holistic approach to work - thinking outside of a dispensary or specialist area and looking how one role can support another - all grades of staff.

- In house training and CPPE are invaluable.
- CPD but further course need to be made available to keep the career development interesting.
- Good managerial support.

Appendix H – Barriers to Career Development: Community

Please note. We asked respondents to write what they thought in their own words. Although these comments have been checked for spelling and punctuation we have not changed anything else. Use of upper care lettering is the respondents' own.

- The calibre of community technicians, from experience, is lower due to lesser quality training.
- Lack of opportunity and time.
- In industry specifically there is a lack of roles suited to technicians and many leave to return to hospital work. I do not think industry recognises technicians for the skills they bring. Most roles in industry are filled by 'In-house trained' individuals and not technicians.
- Pharmacists not wanting to give up responsibilities.
- Lack of information or resources to improve knowledge.
- Pay isn't good enough, not enough time for training/education opportunities and not enough investment in further qualifications or training.
- The main barrier is the lack of engagement from some pharmacists as they think this will erode their stance within the profession.
- Pharmaceutical bodies would barrier development.
- We aren't given as many opportunities for further development and training beyond ACT.
- Not enough training programmes.
- That I do not have a pharmacy degree.
- That I do not do enough hours to warrant the ACT course.
- Management's lack of understanding and communication/training team also, no support.
- Community pharmacy.
- Locum pharmacists who don't know/trust their technicians. Pharmacists not willing to relinquish roles. Potential distrust by patients to increased roles. Lack of opportunity to attend courses. Hard to move from community pharmacy role to equivalent hospital position.
- Money.
- Attitudes to knowledge gained by on the job experience and distance learning courses versus the knowledge and certificate gained from a university degree. I have both and I know which one turned out to be more useful in my career.
- We can only practice if the responsible pharmacist on duty allows this. I have often found that newly qualified pharmacists were reluctant to allow me to use my qualification - mainly due to a lack of understanding of my role.
- Funding for new roles, people already in the job.

- Money. Pharmacy Technicians not feeling as valued as pharmacists.
- Pharmacists who lack the understanding of the level of training that a technician has, and companies who do not make their pharmacists aware that the role of the technician is different to that of a dispenser or counter assistant.
- Attitude of commissioners
- The company they work for.
- Managers who don't want to develop the role will not put forward Techs for extra training. We've been asking for years for extra clinical training and documented this in PDRs but to no avail. If the manager doesn't see the importance then they won't go down that route.
- Supermarkets are not prepared to fund the courses. If every Technician becomes an ACT will rescue the workload of the pharmacists giving them more time for Consultations with patients. Patients need time to explain things but pharmacists are too busy to spend enough time with each patient.
- Insufficient recognition of skill set especially when moving beyond the traditional dispensing centred practice.
- Recognition of the role (Public generally do not understand what a pharmacist technician is). Faith in the role (Career development in a trust/Community pharmacy entirely based on senior management perception of the role). Ultimate responsibility (e.g. Responsible pharmacist responsible for errors made by ACPT, responsibility should lay with pharmacy tech). Clinical knowledge.
- People in managerial positions with their own agenda and do not acknowledge the value of pharmacy technicians. NHS management that prefer low costing unqualified staff to boost number of bodies.
- Lack of support/ time constraints/bad management.
- Management often don't understand how to utilise knowledge and skills due to various reasons.
- Time. Lack of opportunities. Feeling of not know where are can progress next.
- Some pharmacists don't allow technicians to use the knowledge they have gained.
- Pharmacist like us to take responsibility but not let us progress with more training.

Appendix I – Facilitators to Career Development: Community

Please note. We asked respondents to write what they thought in their own words. Although these comments have been checked for spelling and punctuation we have not changed anything else. Use of upper care lettering is the respondents' own.

- Support from mentors
- In industry there is nothing specific to help technicians develop their career.
- Improvement of knowledge.
- CPD, hands on experience, any pharmacy/medicines related qualifications.
- Technicians need to be challenged more with the level of work that is expected of them during training. There needs to be a separate qualification for community and hospital as some of the information is not required in either setting. A conversion module could then be offered for transfer between the two areas.
- The WCPPE, Local health boards, Pharmacy magazines and the internet are very informative, up to date and help in career development.
- Finding our own CPD and going to training events
- Pharmacist's work load.
- Extra learning courses with WCPPE.
- On the job training asking if you are not sure what a medicine is used for.
- Management understanding what actually happens in the pharmacy and listening to staff members properly.
- Leaving and moving in to primary care.
- Pharmacy technicians' enthusiasm. Opportunities for advancing knowledge and experience.
- Motivation, place of work that encourages progression, access to learning courses.
- Working for the NHS or a larger chain of pharmacies might help. In Northern Ireland it is only really pharmacists that have worked in hospitals or in England/Scotland that seem to value the skills of technicians.
- Work colleagues who appreciate your role and who realise that we are a valuable member of the team.
- Training and the need for the role.
- Groups such as APT providing support to peers. Good working and supporting relationships with the teams we work in. Pharmacy technicians supporting each other.
- A manager who knows what technicians can do, and knows how to utilise their training.
- Over stressed pharmacists and cost cutting-call me cynical!
- A company who value the experience and expertise of a technician.
- A more positive attitude to what Techs are capable of doing.

- For having an open mind, giving us a chance to show what we can achieve. Speaking to the Pharmacy Managers on what can be done to improve development.
- Access to CPPE training, recognition of suitability of pharmacy technicians to a wide range of roles available throughout NHS and commercial organisations, so not limiting to the 'traditional dispensing' roles. The improved status since mandatory GPhC registration has been a massive step up in credibility. This will continue to be heightened with pharmacy-based tasks being restricted to GPhC registrants only e.g. access to SCR.
- Individual confidence and willingness to learn. Faith in the role from senior management.
- Support and other staff and opportunity
- Further training - and having a willing pharmacist to support you in that training.
- When we've finished NVQ 3 there doesn't seem any were else to go.

Appendix J – Barriers to Career Development: Primary Care

Please note. We asked respondents to write what they thought in their own words. Although these comments have been checked for spelling and punctuation we have not changed anything else. Use of upper care lettering is the respondents' own.

- Ignorance of others.
- Pharmacists' old school views. The NHS drive for everything to be done cheap, cheap, cheap (forces wages down and means that organisations recruit technicians instead of pharmacists as an excuse to pay less). Lack of available and decent post-qualification courses.
- Senior managers not understanding the role of a pharmacy technician.
- Being unable to have the time to expand the role of the technician as in some areas it can be simply supply medications.
- Limited options and advice post qualification. There is little provision for clinical training. I feel like the only option to progress further than I have now would be to go to university to be a Pharmacist but I cannot afford to do this.
- Management prevent career development.
- Some pharmacists do not want to let go of traditional roles and allow technicians to run the day to day organising of a dispensary/ community pharmacy. There is a barrier also regarding grades of pay. This is more prevalent in community pharmacy. Most technicians know their boundaries and will not make a decision regarding a clinical issue but I think pharmacists are wary about this. Legal requirements are also a boundary to our development.
- Lack of courses in Wales. Lack of courses for those working in CCG/Health Board role. Low level of courses that are available, lack of those at degree level.
- Limited possibilities within the role.
- I think the inability to undertake further specialist qualifications once the original technician and ACT qualifications are undertaken.
- I think that the pharmacy is ever expanding and changing and I think that the role of the technician needs to move with this.
- Pharmacists and other health care professionals without vision for or belief in the pharmacy technician's ability and capability to develop.
- Limited courses for technicians to further themselves.
- Funding (not much for progression in Wales and concerned our English counterparts may have more opportunities). Staff that don't like change. Staff that don't want their staff to develop.
- Lack of support from pharmacists to develop and enhance the role. Lack of appreciation of skills and capabilities of technicians - in a recent conference I noted a pharmacist refer to technicians as 'the little people' who undertake the routine

things so pharmacists are released to do more of the advanced/specialised work. Technicians with the right training and support are able to undertake more specialised work and need not be tied to dispensary benches.

- The current NVQ process is not fit for purpose and too restrictive. The restriction is also shown within the academic learning which has not kept up with the pace of change within the pharmacy profession. There is still much work to be done around the integration of pharmacists and technicians. The role of the ACT Technician the process for achievement should be less discriminating and applied to ALL. Both groups have professional recognition and subject to the same professional standing and responsibility for actions.
- Time off work if full time. No room for progression. Distance learning or day releases courses. Funding! No NHS funding available for pharmacy technicians.
- Attitudes, options and training available. More than just Band 5.
- Lack of funding. Appropriateness of training to role (some roles are too specialised)
- Time, money, support and lack of focus/support for the profession/pharmacy technicians.

Appendix K – Facilitators to Career Development: Primary Care

Please note. We asked respondents to write what they thought in their own words. Although these comments have been checked for spelling and punctuation we have not changed anything else. Use of upper care lettering is the respondents' own.

- Publicising more about what techs are and what they can do.
- Get rid of the prehistoric outlook in community pharmacies! Get people to realise that a technician is not 'just a tech' but a qualified, registered healthcare professional in their own right, who deserves to be taken seriously.
- Senior managers understanding the role of a pharmacy technician and trying new initiatives.
- Seniors managers who aren't pharmacy professionals understanding the role of a pharmacy technicians and the potential of the role.
- Rotation around areas to give a greater in-depth of knowledge within the team they are working.
- Peer support as very little support is given from management.
- Medicines Management has enhanced all pharmacy technicians' careers over the last few years. There is more emphasis on the cost and the rising prescribing budgets in the NHS. Sometimes this requires a pharmacists input but sometimes there are a lot of aspects that can be managed by a pharmacy technician. There is also more co-working between different healthcare professionals and this has helped our careers.
- Working experience in my role at CCG level.
- A supportive team.
- Pharmacists that work alongside great technicians help to further the role, as they see the benefits we can bring to teams especially when the techs have much experience. A Principal pharmacist that believes in the tech role and what we can achieve can open many more windows of opportunity for us to develop and grow the positions.
- In house training and CPPE are invaluable.
- Pharmacists and other health care professionals with vision. WCPPE.
- CPD but further course need to be made available to keep the career development interesting.
- I think having technicians (like myself) that want to learn more, take on more responsibility help the career development.
- Innovation and support from pharmacists.
- 1. Improved Career Structure. 2. Improved training manuals for both learning academic and practical activity. 3. Improved documented bespoke learning for emerging roles particularly with improved autonomy in multi-disciplined healthcare.

4. There is a pattern emerging with over turns the gains of the early 2000's with the shortage of pharmacists, pharmacists are being used at the expense of Techs.

- NHS staff to progress up banding through competency that are actually followed - evidence submitted. In CCG there are no trainers to mentor technicians. In the past I set up a network group for pharmacy support staff -which was very well received we trained staff that helped support there pharmacy contract. Currently CCG role - I train prescription clerks /admin sometimes GPs, nurses from GP practices - an accreditation for training staff or health care professionals.
- People willing to have technicians work in those roles. Some Pharmacists are reluctant to embrace expanded roles for Pharmacy Technicians.
- CPD - regular personal updating and reflective practice, self-directed learning, attendance at relevant courses and maintaining awareness of professional audit.
- Good supporting pharmacist, experience, constructive feedback, reflection & further education.

Appendix L – Task Table

Task	Community	Hospital	CCG	GP Practice	Education & Training	Other
Technical						
Ordering/procurement (including invoice reconciliation & dealing with invoice queries)	y	y		y		y
Procurement contract monitoring		y				
Updating pharmacy IT systems	y	y	y	y	y	
Stock management	y	y		y		y
Ward stock top ups		y				
Fridge management (e.g. temperature monitoring)	y	y		y		y
Manage medicines waste		y	y			
Order medicines for patients	y	y		y		y
Dispensing	y	y		y		y
Accuracy Checking of Dispensed Items	y	y		y		y
Handing out medicines	y	y		y		y
Maintain ACPT competencies in dispensary	y	y		y		
Dispensing adherence aids	y	y		y		
Prescription administration (collection & filing, repeat supply)	y	y	y	y		
Communication (MDT)	y	y	y	y	y	y
General Communication (patients)	y	y	y	y		y
Dispensing controlled drugs		y		y		
Maintain legal registers	y	y	y			
Selling OTC	y	y				
Problem solving	y	y	y	y		y
Processing prescriptions for payment	y			y		
Eye clinic discharge prescriptions		y				
Clinical check of meds before faxing to satellite pharmacy (prison)						y
Medicines Management						
Medicines optimisation (assisting with MURs, drug history taking)	y	y	y			
Medicines Management (nursing homes)	y		y	y		
Patient home visits liaising with MDT teams including social workers and patient's families			y	y		
Check allergies and interactions		y	y	y		

Patient counselling (Handing out prescriptions)						
Follow up domiciliary visits with GPs			y			
Issue anticipatory Rxs for end of life care and arrange same day delivery				y		
MARS chart management			Y			
Compliance reviews in patients home			y			
Medicines optimisation (checking patients own drugs for use)		y	y			
Medicines optimisation (medicines reconciliation)		y	y	y		
Monitoring Clozapine		y				
Reconciling and ordering Clozapine for inpatients		y				
Complete medicines Reconciliation at off site rehab units for new admissions		y				
Visit community mental health team & provide support for safe and secure audits, FP10s		y				
Provide support to Clozapine & depot clinics: changes to doses and supplies		y				
Training on Antibiotics and infection control (MDT)		y			y	
Problem solving transfer of care of patients		y	y			
Warfarin counselling and training for staff		y	y			
Generate supply of meds for individual patients	y	y	y	y		y
Prescribing advice		y	y	y		y
Attend MMT and MDT meetings		y				y
Assist nurses with medicines administration (mental health)		y				
Discharge planning		y				y
Demonstrate use of appliance aids e.g. inhaler training		y	y			
Examples of clinical specialities (anticoagulant clinics, antimicrobial stewardship, renal/dialysis unit)		y	y	y		
Pastoral support with patients	y	y	y	y		y
Prepare discharge summary		y				
Undertake financial transactions	y	y		y		
Check MHRA Alerts	y					
Advising & liaising with Doctors on formulary medications and chart rewrites (prison)						y
Order pathology requests				y		
Managing warfarin administration by care workers including Point of Care testing for INR			y			
Return named CDs from ward		y				
Paediatric oncology trouble-shooter role		y				
Liaise between hospital, patients and community pharmacies regarding prescriptions	y	y	y	y		
Provide MI to a range of healthcare professionals including GPs		y				
Responding to queries via phone, email, face to face	y	y	y	y		

Provide pharmaceutical technical advice, support and information to care home staff		y				y
Liaising and communicating with MDT and patients, manufacturers	y	y	y		y	y
Updating supply issues for end of life medication	y					
Check endorsing on prescriptions	y	y	y			y
Co-ordinating across sectors for patient pathway (e.g. setting up patients with Hep b with community pharmacies,)	y	y	y	y	y	y
Providing healthy lifestyle advice (Essential services, patient consultations)	y	y	y	y	y	
Enhanced Services(e.g. palliative care service, minor ailments)					y	
Initiation of Audit, for example prescribing for asthma patients		y		y		
Data collection and management		y	y	y		
Assisting with audits	y	y	y	y	y	
Training on Antibiotics and infection control (MDT)		y				
Provide lunchtime learning sessions	y					
Frail and elderly patients referral		y	y			
Care home medication order reviews		y	y			y
Oncology clinic		y	y			
Travel advice		y	y			
Organisational Management						
Overseeing a service		y		y		y
Manage a regional Pharmacy Technician education Unit					y	
Staff management (appraisals, recruitment, return to work)		y	y			y
High level HR (e.g. disciplinary)		y	y	y		y
Budget control		y	y	y		y
Writing/review policies & procedures inc. SOPS		y	y		y	
Strategic planning (e.g. capacity issues, workload planning)		y				
Attending organisational meetings e.g. MDT		y	y			
Attending external meetings		y	y	y	y	
Chairing meetings		y	y			
Writing business cases		y				
Monitoring KPIs (HR)		y	y			
Preparing staff rotas & time sheets		y		y		
Accountable officer (CDs)			y			
Witness CD destruction by others e.g. nurses	y	y	y	y	y	
Controlled drugs (dispensing methadone and administration supervision))	y					
Report Trust drug spend			y			

Controlled drugs Destruction	y	y	y	y		y
Organisational related activities (supply figures to senior team)		y	y			y
Training and Development						
Training of care home staff to administer meds			y			
Training and development (in-house training)	y	y	y	y		y
Training other healthcare professions (ward based for nurses, OTs Physios)	y	y	y		y	
Lecturing for the Level 3 Diploma		y	y		y	
Supervise and train pre reg pharms and techs, marking work		y	y		y	
Undertake Assessment and verification for Level 4 Diploma		y	y		y	
Undertake NVQ Assessment	y	y	y		y	
Undertake IQA Verification		y	y		y	
Train prescription clerks			y			
Teaching/training pre-reg pharmacists/pharmacy technicians/pharmacy assistants in-house: MMS, Level 2 & 3		y	y	y	y	y
L2 assistant expert witnessing	y	y		y		
Facilitator for ACPT		y			y	
Training and assessing competency of support workers to administer medication						
Mentoring staff		y	y			y
Manage the quality assurance of education programmes		y			y	
Writing & updating training programmes		y	y		y	
Clinical Governance						
Quality assurance (error investigation and management)		y	y			
Compliance to medicines and CD policies		y	y			y
Datix/Incident reporting (investigating and reviewing)						
Participate in risk Management work relating to prescribing		y				
Lead on medicines management clinical governance issue relating to care homes, liaising with CCG Safeguarding Adults Lead and CQC			y			
Data analysis and writing reports (prescribing/incidents/usage and wastage and also for medicines management incentive schemes)			y			
Manufacturing & Aseptics		y				y
Checking of batches		y				y
Extemporaneous dispensing		y				
Manufacturing aseptic products		y				y
Check Customer service team orders (4 x a day)		y				
Calculate costs for chemotherapy prescriptions						

Health and safety risk assessments		y				y
Attend daily senior webex meetings						y
Building IT software						y
Primary Care						
Medicines Switches CCG incl letters to patients			y	y		y
Monitoring of Care Home with nursing prescribing incentive scheme			y			
Training carers on medication			y			
Admission avoidance team referrals			y			
Media campaigns			y			
Service Improvement advice			y			y
Regional drug contract amendments		y	y			
Review high cost drug data from acute trusts & identify anomalies			y			
Advise Care home staff on legal, safe and secure handling of medicines			y			
Admin/audit of Community Pharmacy Local enhanced services			y			
Coordinate patient and work load		y		y		
Other						
Academic research					y	
Research and clinical trials		y				
Project management/ project work		y	y		y	y
Visit Community mental health team	y					
Cleaning	y	y				
Monthly monitoring forms (company)	y					
Actioning tasks from lead pharmacist e.g. emergency drug boxes		y				
Adios reporting - providing evidence and justifying use of abusable drug usage on wards when usage increases						y
Weekly QT interaction lists for adaction teams (methadone)	y		y			
Perform user satisfaction survey		y				
Licensed and unlicensed quality review meetings		y				
Source new item requests		y				
Quality improvement work		y				
Error investigation		y				
Deal with complaints	y	y	y			
Spot checks on wards		y				
Mentoring staff		y				
Liaise with nursing staff re medication		y				

Process high cost medication requests		y				
Clear out medicines trolleys		y				
HIV clinic		y				
Represent department at external meetings		y	y			
Visit 4 main hospitals each week		y				
Haematology clinic		y				
Compile fridge data weekly		y				
Emergency cupboard supply		y				
Checking clozapine bloods		y				
Wastage reduction		y				
Environmental monitoring		y				
C Diff ward round		y				
Abx training for nurses		y				
Updating microguide app		y				
Formulary work		y				
Maintaining training databases		y				
Horizon scanning		y				
Vaccine storage and handling		y				
Read health protection bulletins			y			
Falls reviews		y	y			
Authorising staff payments on SSTS trials activities		y				
Home visits following discharge = adherence		y				
Answering Freedom of information requests			y			
Checking that medication is safe to administer		y	y			
Visits to patients at the request of GP practices and hospitals			y			
Train nurses, physios and OTs to check meds against Rx on transfer of care		y	y			
Collect prescribing data			y			
Respond to parliamentary questions						y
Respond to media questions						y
Represent HSCIC at industry exhibitions						y